INFORMATION TO USERS

This was produced from a copy of a document sent to us for microfilming. While the most advanced technological means to photograph and reproduce this document have been used, the quality is heavily dependent upon the quality of the material submitted.

The following explanation of techniques is provided to help you understand markings or notations which may appear on this reproduction.

1. The sign or "target" for pages apparently lacking from the document photographed is "Missing Page(s)". If it was possible to obtain the missing page(s) or section, they are spliced into the film along with adjacent pages. This may have necessitated cutting through an image and duplicating adjacent pages to assure you of complete continuity.

2. When an image on the film is obliterated with a round black mark it is an indication that the film inspector noticed either blurred copy because of movement during exposure, or duplicate copy. Unless we meant to delete copyrighted materials that should not have been filmed, you will find a good image of the page in the adjacent frame.

3. When a map, drawing or chart, etc., is part of the material being photographed the photographer has followed a definite method in "sectioning" the material. It is customary to begin filming at the upper left hand corner of a large sheet and to continue from left to right in equal sections with small overlaps. If necessary, sectioning is continued again—beginning below the first row and continuing on until complete.

4. For any illustrations that cannot be reproduced satisfactorily by xerography, photographic prints can be purchased at additional cost and tipped into your xerographic copy. Requests can be made to our Dissertations Customer Services Department.

5. Some pages in any document may have indistinct print. In all cases we have filmed the best available copy.
FARKAS, SHEVA

INNOVATION IN THE COMMERCIAL TELEVISION NETWORKS: AN ANALYSIS OF ORGANIZATIONAL CONSTRAINTS AND STRATEGIES USED TO MINIMIZE THE IMPACT OF NEW AND DEVELOPING TECHNOLOGIES

The Ohio State University

Copyright 1980

by

FARKAS, SHEVA

All Rights Reserved
INNOVATION IN THE COMMERCIAL TELEVISION NETWORKS:
AN ANALYSIS OF ORGANIZATIONAL CONSTRAINTS
AND STRATEGIES USED TO MINIMIZE THE IMPACT
OF NEW AND DEVELOPING TECHNOLOGIES

DISSERTATION
Presented in Partial Fulfillment of the Requirements for
the Degree Doctor of Philosophy in the Graduate
School of The Ohio State University

By
Sheva Farkas, B.F.A., M.A.

* * * * *
The Ohio State University
1980

Reading Committee:
Dr. Joseph M. Foley
Dr. James L. Golden
Dr. Victor D. Wall, Jr.

Approved By
Adviser
Department of Communication
To

Mom, Dad, and Harry
ACKNOWLEDGMENTS

As with any research study of this size, there were people whose assistance was invaluable and must be noted. Foremost, I would like to thank Dr. Joseph M. Foley whose advice and guidance, though often frustrating, resulted in work that reflected the importance of the subject. His faith in me as a researcher made an overwhelming task almost manageable. Also, I would like to thank Drs. James L. Golden, Victor D. Wall, Goodwin Berquist and Leslie Berkes of the Ohio State University for their assistance throughout my graduate studies.

The assistance given by the commercial networks, especially research personnel, made the acquisition of data a less difficult task. Melvin A. Goldberg, Vice President of Primary and Social Research for the ABC Television Network, was an important source of information and guidance throughout the study period, and his help is gratefully acknowledged. Other network persons assisting me included Drs. Thomas Coffin and Sam Tuchman of NBC, and Earle Marsh of CBS.

On a personal level, I would like to thank Dr. Dorothy Painter, and Mimi Morris, whose unquestioning
friendship was the glue that kept putting the pieces back together; and Alexandra Coe who proofread the entire study. Finally, I would like to thank my family whose support, both financial and emotional, was an inspiration during difficult times. I hope we all find that it was worth it.
VITA

December 29, 1949........ Born - Elizabeth, New Jersey

New York City, New York

1972....................... M.A., New York University
New York City, New York

1972....................... Associate Director, WKYC-TV
Cleveland, Ohio

1972-1974................ Producer/Director, WSRE-TV
Pensacola, Florida

1974....................... Producer/Director, WLWC-TV
Columbus, Ohio

1974-1975................. Producer/Director, WJZ-TV
Baltimore, Maryland

1975....................... Producer/Director, WTOP-TV
Washington, D.C.

1977-1980................. Teaching Assistant, Department of Communication, The Ohio State University
Columbus, Ohio

1978-1979................. Research Assistant, OCLC, Inc.
Columbus, Ohio

FIELDS OF STUDY

Major Field: Communication

Studies in Mass Communication. Dr. Joseph M. Foley

Studies in Communication Theory. Dr. Victor D. Wall, Jr.

Studies in Rhetoric. Dr. James L. Golden
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACKNOWLEDGEMENTS</td>
<td>ii</td>
</tr>
<tr>
<td>VITA</td>
<td>v</td>
</tr>
<tr>
<td>LIST OF TABLES</td>
<td>x</td>
</tr>
<tr>
<td>LIST OF FIGURES</td>
<td>xii</td>
</tr>
<tr>
<td>INTRODUCTION</td>
<td>1</td>
</tr>
<tr>
<td>Background</td>
<td>5</td>
</tr>
<tr>
<td>Purpose</td>
<td>9</td>
</tr>
<tr>
<td>Research Plan</td>
<td>10</td>
</tr>
<tr>
<td><strong>PART I COMMERCIAL NETWORKS AS ORGANIZATIONS.</strong></td>
<td>14</td>
</tr>
<tr>
<td>Chapter</td>
<td></td>
</tr>
<tr>
<td>1. ORGANIZATIONS</td>
<td>15</td>
</tr>
<tr>
<td>Organization Theory</td>
<td>21</td>
</tr>
<tr>
<td>The Study of Organizations</td>
<td>26</td>
</tr>
<tr>
<td>Innovation in Organizations</td>
<td>31</td>
</tr>
<tr>
<td>2. THE COMMERCIAL NETWORKS - AN ORGANIZATIONAL PERSPECTIVE</td>
<td>37</td>
</tr>
<tr>
<td>The History of Network Broadcasting</td>
<td>38</td>
</tr>
<tr>
<td>The Corporate Positions of the Networks</td>
<td>43</td>
</tr>
<tr>
<td>RCA</td>
<td>48</td>
</tr>
<tr>
<td>CBS</td>
<td>58</td>
</tr>
<tr>
<td>ABC</td>
<td>68</td>
</tr>
<tr>
<td>Chapter</td>
<td>Title</td>
</tr>
<tr>
<td>---------</td>
<td>-----------------------------------------------------------------------</td>
</tr>
<tr>
<td>8.</td>
<td>THE DEVELOPMENT OF COLOR TELEVISION</td>
</tr>
<tr>
<td></td>
<td>Methodology</td>
</tr>
<tr>
<td></td>
<td>Results</td>
</tr>
<tr>
<td></td>
<td>Conclusions</td>
</tr>
<tr>
<td></td>
<td>Organizational Response</td>
</tr>
<tr>
<td>9.</td>
<td>THE ABC-ITT MERGER ATTEMPT</td>
</tr>
<tr>
<td></td>
<td>Methodology</td>
</tr>
<tr>
<td></td>
<td>Results</td>
</tr>
<tr>
<td></td>
<td>Conclusions</td>
</tr>
<tr>
<td></td>
<td>Organizational Response</td>
</tr>
<tr>
<td></td>
<td><strong>PART IV CURRENT THREATS TO THE COMMERCIAL TELEVISION NETWORKS</strong></td>
</tr>
<tr>
<td>10.</td>
<td>Technologies currently affecting the commercial television networks</td>
</tr>
<tr>
<td></td>
<td>Background</td>
</tr>
<tr>
<td></td>
<td>Methodology</td>
</tr>
<tr>
<td></td>
<td>Results</td>
</tr>
<tr>
<td></td>
<td>Analysis</td>
</tr>
<tr>
<td></td>
<td>Conclusions</td>
</tr>
<tr>
<td>11.</td>
<td>Strategies used to minimize the organizational impact of new and developing technologies</td>
</tr>
<tr>
<td></td>
<td>Environmental Strategies</td>
</tr>
<tr>
<td></td>
<td>Analysis</td>
</tr>
<tr>
<td></td>
<td>Conclusions</td>
</tr>
<tr>
<td>12.</td>
<td>SUMMARY, DISCUSSION, AND CONCLUSIONS</td>
</tr>
<tr>
<td></td>
<td>Summary</td>
</tr>
<tr>
<td></td>
<td>Discussion</td>
</tr>
<tr>
<td></td>
<td>Conclusions</td>
</tr>
<tr>
<td></td>
<td><strong>APPENDIX A - FREQUENCY COUNTS FOR THE COLOR CONTROVERSY</strong></td>
</tr>
<tr>
<td></td>
<td><strong>BIBLIOGRAPHY</strong></td>
</tr>
<tr>
<td>Table</td>
<td>Page</td>
</tr>
<tr>
<td>----------------------------------------------------------------------</td>
<td>------</td>
</tr>
<tr>
<td>1. Network Pre-Tax Earnings 1959-1978</td>
<td>46</td>
</tr>
<tr>
<td>2. RCA: Revenue and Profit Breakdown by Business Segment</td>
<td>51</td>
</tr>
<tr>
<td>3. RCA: Broadcast Segment's Profits, Share of RCA's Profits, Sales, and Share of RCA's Sales for 1979</td>
<td>55</td>
</tr>
<tr>
<td>4. CBS: Revenue and Profit Breakdown by Business Segment</td>
<td>61</td>
</tr>
<tr>
<td>5. CBS: Broadcast Segment's Profits, Share of CBS's Profits, Sales, and Share of CBS's Sales for 1979</td>
<td>65</td>
</tr>
<tr>
<td>6. ABC: Revenue and Profit Breakdown by Business Segment</td>
<td>71</td>
</tr>
<tr>
<td>7. ABC: Broadcast Segment's Profits, Share of ABC's Profits, Sales, and Share of ABC's Sales for 1979</td>
<td>75</td>
</tr>
<tr>
<td>8. The Gross National Product (GNP) and Network Television Advertising Expenditures From 1964 Through 1979</td>
<td>96</td>
</tr>
<tr>
<td>10. Percent of U.S. Homes With Television and Color Receivers</td>
<td>192</td>
</tr>
<tr>
<td>11. Cable Television Growth</td>
<td>235</td>
</tr>
</tbody>
</table>
12. Pay Television Growth.......................... 236
13. Overview of Technologies Affecting the Commercial Television Networks............... 239
14. Diversification at the Networks.................. 279
15. Environmental Constraints on the Commercial Networks................................. 307
16. The Color Controversy- Data from Category 1: Competition.............................. 315
17. The Color Controversy- Data from Category 2: Economic Impact......................... 316
18. The Color Controversy- Data from Category 3: Technology............................. 317
19. The Color Controversy- Data from Category 4: Regulatory Concerns ................. 318
# LIST OF FIGURES

<table>
<thead>
<tr>
<th>Figure</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>RCA: Revenue Breakdown By Business Segments for 1979.</td>
<td>53</td>
</tr>
<tr>
<td>2.</td>
<td>RCA: Profit Breakdown By Business Segments for 1979.</td>
<td>54</td>
</tr>
<tr>
<td>3.</td>
<td>CBS: Revenue Breakdown By Business Segments for 1979.</td>
<td>62</td>
</tr>
<tr>
<td>4.</td>
<td>CBS: Profit Breakdown By Business Segments for 1979.</td>
<td>63</td>
</tr>
<tr>
<td>5.</td>
<td>ABC: Revenue Breakdown By Business Segments for 1979.</td>
<td>72</td>
</tr>
<tr>
<td>6.</td>
<td>ABC: Profit Breakdown By Business Segments for 1979.</td>
<td>73</td>
</tr>
<tr>
<td>7.</td>
<td>The Competitive and Economic Environments</td>
<td>90</td>
</tr>
<tr>
<td>8.</td>
<td>Levels of Technological Complexity</td>
<td>106</td>
</tr>
<tr>
<td>10.</td>
<td>A Model of the Interactive Environments Affecting Commercial Network Television</td>
<td>126</td>
</tr>
<tr>
<td>11.</td>
<td>Organizational Responses to Events During the Color Controversy</td>
<td>195</td>
</tr>
</tbody>
</table>
INTRODUCTION

Commercial network television is a unique industry from a variety of perspectives. Economists see it as a highly profitable industry which seems to be unaffected by recessions and changes in the general economic health of the nation as a whole. Organizational behaviorists, whose research focuses on productivity of organizations, find the study of television networks to be unrepresentative of normal organizations since the programs are given free to consumers while the organization still maintains high profitability in spite of constant changes in personnel and organizational structure. Communication scholars are overwhelmed by research into the social impact of television programs on audiences, virtually ignoring the networks except as purveyors of the programming. Legal research recognizes broadcasting as unique, but focuses on problems the industry has faced since the government recognized it as a "natural monopoly" in 1918, but decided not to put it under government control.

This study focuses on innovative strategies used by the networks to minimize the impact of new and developing technologies on their survival and competitive position.
In order to identify and analyze the threats the networks perceive as being significant to their survival, this study will discuss in detail the environmental influences on the networks and the history of innovative behavior at the networks.

Television, especially commercial network television, is a business before all else. Each of the commercial networks is owned by a different corporation with goals and strategies that may not be the same as its network's. The parent corporation is a major influence on how the network organization behaves in all situations. Although it is not a classic product-oriented business, network broadcasting is an excellent example of free enterprise worthy of studies whose orientation is not either negative to the corporations involved or written by persons dependent on the networks for their livelihood.

There are books written about the networks, usually oriented to a general audience, but they tend to fall into clear categories: (1) gossip; (2) expose; (3) hero-worship; and (4) history and how-to. The information presented in examples of these categories are as follows:

(1) gossip: Robert Metz CBS: Reflections in a Bloodshot Eye; and Barry Cole and Mal Oetinger The Reluctant Regulators
(2) expose: A. Frank Reel The Networks: How they Stole the Show; and Les Brown Television: The Business Behind the Box
(3) hero-worship: Eugene Lyons David Sarnoff; and Sterling Quinlan Inside ABC
(4) history and how-to: Erik Barnouw Tube of Plenty; and Bob Shanks The Cool Fire
this body of literature is often difficult to use since it is not usually documented and often prejudiced by the author's reason for writing the book. The result is a limited literature base that is scholarly. The scholarly research that does exist appears to be "trendy," emphasizing topics such as violence, diversity and children's television. The wealth of research on selected issues appears to be both limited and self-perpetuating (an example being George Gerbner's annual "Violence Profile"). Research studies also follow disciplinary lines and rarely study the effects of one aspect of television broadcasting on another.

A noteworthy example of research that does span disciplines is the work of Bruce Owen on economic issues of broadcasting and their effect on legislation. Owen uses an economic base to evaluate proposed legislation and the effect of that legislation on the network organization, the regulators and the public. Owen's studies encompass the disciplines of communication, economics, law and sociology.  

Finally, there is a lack of availability of data from the networks themselves, since disclosure of some

---

information could compromise the network's economic and competitive position. Data are, however, readily available from other sources.\(^3\)

There is a need for a broad based approach to the study of television networks encompassing communication, economic, legal and organizational research traditions to better understand how so powerful and pervasive a force as network television operates. This study will attempt to use this approach to analyze the networks as organizations which have had to innovate and adapt to environmental changes in order to survive and maintain their competitive positions with other networks and the communication industry as a whole.

Also, this study will analyze the perceptions of network officials of how new and developing technologies will affect their operations in the future to identify what they feel should be their course of action to best survive and remain competitive in a changing environment.

---

\(^3\)Each of the networks has a public information office which will provide copies of press releases and speeches which were delivered by network officers. Additional sources of data include corporate reports, trade press articles, research reports by ratings companies and reports in newsletters from lobby groups representing the networks. Some of this data could be considered as only second sources and must be evaluated in light of this. One means of verifying a report which might be from a secondary source is to check newspaper accounts of the event.
Background

The networks must exist as a part of a dynamic environment constantly changing and adapting to modifications. This environment is actually made up of four separate environments, each affecting the networks in different ways, but still interrelated. The four environments are: (1) the competitive network environment consisting of the three networks interacting, each trying to gain the competitive edge at the expense of the other two; (2) the economic environment consisting of the organizations outside of the network's corporate control that affect the network's financial health; (3) the technological environment; and (4) the regulatory environment in which the networks must operate.

The three networks have been called both monopolistic and oligopolistic. The difference between being a monopoly, with exclusive control over a service by one group; and an oligopoly, where there are a few interdependent sellers of a service, is significant. The networks cannot be monopolies in the sense of the phone company (where the consumer has only the choice of having or not having a telephone) but they do have attributes of an oligopoly in that they (1) are responsive to actions taken by one of their competitors; (2) attempt to maintain the status quo; (3) have a product which is homogeneous across all competitors; and (4) make outside entry from new competitors difficult, if not
impossible. Although there is some competition from cable television, videocassette recorders, videodisc players, pay television, and independent television stations, the majority of television programming currently viewed by the public is provided by the three commercial television networks and, to a lesser degree, by public television. This could change in the future with wider availability of alternative media. The degree of change, as perceived by the networks and by the developers of these alternatives, has become an important point of disagreement. However, it is the impact as perceived by the networks that is especially significant since organizational change and strategies will be based on them.

The power of the networks is based on their ability to show programs to many viewers simultaneously with stable program and distribution costs. Increases in viewer numbers result in increased prices the networks can charge advertisers, but does not affect the cost of producing the program immediately, nor does it affect the cost of distributing it to owned stations and affiliates. Manning and Owen note that "the networks exist only to the extent that their brokerage function serves the interests of local stations."^5


The technological environment in which the networks must exist is one of constant change. For many years the television set was used exclusively for viewing network television programs. With the advent of new technologies, this is changing. William Donnelly, Vice-President of Young and Rubicam, feels that "the current set will become the modular display device for a whole host of electronic information and entertainment resources."\(^6\) If there is an upper limit on the number of television viewers, the networks face an uncertain future. Predictions of the demise of network television are, perhaps, extreme. It is possible, as expressed by Douglass Cater, that "computer may be talking to computer by cable and satellite, but householders will still watch 'I Love Lucy' on their TV sets."\(^7\) Some technology-inspired changes are likely. FCC Chairman Charles Ferris, speaking in March, 1979 before the National Association of Television Program Executives summed up the problem facing the television networks:

Anyone who is content with the status quo is always going to feel unsettled by change. The existing entities certainly can meet any challenge if they're willing to accept the environment as a dynamic one. I don't think one can retard science and technology. It's there. \(^8\)

\(^6\)Broadcasting 96:1 (January 1, 1979): 42.


Whether the networks recognize the inevitability of change is important to this study as is their perception of the future directions for network broadcasting. The recognition that the environments are dynamic is key to the analysis of the networks's strategy development.

The major constraints on the networks come from government regulations which affect the structure of the networks and the organizations which own them. Although the Supreme Court declared "the field of broadcasting is one of free competition," the networks are a part of one of the most highly regulated industries in the United States, answering directly or indirectly to all three branches of government and numerous regulatory agencies. The corporations which own the networks are limited in their attempts to diversify and adapt to changes in broadcast technologies by these regulations. Therefore, the survival of not only the networks, but also the corporations owning them is constrained by the regulatory environment.

---

9 FCC v. Sanders Brothers (309 U.S. 470, 474 (1940)).

10 The Federal Communications Commission (hereafter, FCC) enacted the Prime Time Access Rules, for example, which prevent the networks from owning cable and syndication businesses.
Purpose

The general purpose of this study is to analyze the constraints and strategies the networks have used to minimize the impact of new technologies in the past and present in order to evaluate and project trends of organizational change and innovation the networks might use in their present situation. More specifically, the study will:

(1) identify and analyze the environmental constraints in network television which have, in the past, affected organizational innovation and adaptation using a theoretical foundation developed from the fields of communication, economics, law and organizational behavior;

(2) identify and analyze changes in technology which are currently threatening the established network structure; and

(3) identify and analyze strategies currently being employed to minimize the impact of the new technologies and those potentially useful to the networks.
Research Plan

This study is focused on innovative behavior at the commercial television networks. The networks are viewed as organizations operating within larger, more diverse organizations. To understand how organizations operate, this study will examine the major theories of organization to develop a means of studying organizations in general and innovation in organizations in particular. Innovation is defined as "the adoption of a new idea or behavior by an organization."\(^1\)

Unlike organizational change, which usually deals with finding the best means of utilizing organizational resources (both human and technological) to improve productivity, organizational innovation requires some aspect of newness. Becker and Whisler further define organizational innovation as "the first or early use of an idea by one set of organizations with similar goals."\(^2\)

Historically, network television has been faced with situations created by environmental changes which have required some organizational innovation.

Through the theoretical base established, each of the networks will be analyzed using financial data and information obtained from the networks and from statements


made by network officials (as reported in annual reports and in the press). The analysis of each of the networks as an organization provides background material to assist in understanding the rationale behind past innovations as well as providing an understanding of the problems facing the parent corporations presently that could affect future innovative behaviors.

The networks are not only affected by the parent organizations, they exist in a dynamic environment that constrains innovative behavior. To discern the impact of the environment on the network organizations the environment will be divided into three separate entities for description and analysis. Because of their close relationship, the economic and competitive environments will be treated together. The technological and regulatory environments will be studied independently. Each environment will be analyzed according to theories significant to the area and according to behaviors the networks have used in adapting to environmental changes. From this analysis, a model of the environments affecting the networks will be developed and described according to the strategy developed to study organizations.

Evaluation of past innovations provides a means of ascertaining which strategies have and have not been used successfully by the networks. To provide the information for that analysis, innovation will be surveyed within the four environments affecting the networks. To provide a
more detailed description of past innovations, two events will be studied in detail: the development of color television; and the attempted merger of ABC with ITT. These two events were selected because they are representative of innovative actions in all four environments. For these two studies, theme data will be generated from statements made in Broadcasting, The New York Times, and in legal documents directly related to the event. The themes will be categorized and analyzed using data on the eventual outcome of the event for comparison. Content analysis will be used to generate the thematic statements since it is likely to be especially appropriate for...research problems...when data accessibility is a problem and the investigator's data are limited to documentary evidence.13

Since the purpose of this study is to identify and analyze the effects of technology, content analysis offers a viable means of generating data on network perceptions where such perceptions are not clearly stated. The methodology used in this study will be further explained in chapters 8, 9 and 10 since each study part has a different data base and some different methods of evaluation.

The background studies of organization, the networks as organizations, the environments affecting the networks

analyze current technologies seen by the networks as having the potential of affecting the networks. These technologies as well as what the networks perceive as their threat will be compared to the strategies the networks have identified as being significant to the survival of the network organizations. This section will use the sources previously identified as well as speeches and articles written by network officials. From this data, conclusions will be made regarding the future of the commercial television networks in the changing environments.

Each of the study parts provides detailed information integral to the purpose of studying the constraints and strategies used either in the past, present or planned for the future when environmental changes necessitate innovation. Part I provides a detailed background of the commercial networks as organizations behaving, to some degree, along theoretical lines. Part II defines the environments affecting the networks and describes the impact each environment has on the operation of the network organizations during times of change. Part III details the history of innovation in the commercial networks and how the networks reacted to the need for innovative behavior. These three parts are not only are descriptive, they provide the means for Part IV, the identification of current threats to the existing broadcast structure and the strategies planned to minimize their impact on the organization's owning the networks.
PART I
COMMERCIAL NETWORKS AS ORGANIZATIONS

An analysis of the commercial television networks requires some foundation in organization theory since the networks are concerned with the corporate goals of survival and competitive growth. Chapter 1 discusses organization theory to explain what functions are considered integral to the overall operation of organizations. Also, it explains what innovation is, why it is important to the organization and how organizations accomplish it.

Chapter 2 describes the commercial networks from an organizational perspective. Each network is described as a unique organization with problems and strategies of organizational development that relate to the larger corporation's goals.
CHAPTER 1
ORGANIZATIONS

The response of the commercial television networks to change is related to the organizations that own them. Therefore, information on organizations is necessary to ascertain the behavior of organizations when confronted with the need to adapt and innovate. This chapter will discuss some of the key organizational theories and traditions that have influenced the field of organizational behavior. Many of the concepts described are of limited value to this study because of their emphasis on productivity and job satisfaction (areas of minimal importance to the networks), but what emerges is a viable means of studying the networks as innovative organizations. The use of organization theory in this study is also limited because the networks are not traditional organizations, they are unique with behavior that is not generalizable to other organizations. However, nearly all organizations face the need to innovate at some time in their history, and the networks are no exception.
Organizations are pervasive in our society, emerging in a variety of forms, all having some degree of formality. Informal organizations, referred to as social organizations, have shared goals, orientations and beliefs which cause a group of people to unify to accomplish some task. Formal organizations are defined as "those social organizations that have been established for the explicit purpose of achieving given tasks." Organizations are assumed to be open systems interacting within the organizational sub-systems and with the organization's environments. They are oriented toward goal achievement and are structured to maintain stability while perpetuating the existence of the organization within its competitive environment. Katz and Kahn consider the environment as a supersystem impacting on the organization. They state that in the study of organizations and their environments

(t)he first step should always be to go to the next higher level of systems organization, to study the dependence of the system in question upon the supersystem in which it is a part, for the supersystem sets the limit of variance of behavior of the dependent system.  


The study of formal organizations must first identify what the organization consists of. Max Weber's description of the components of an organization presents an interesting perspective:

the corporate group (with) a social relationship which is either closed or limits the admission of outsiders by rules.\(^3\)

Weber's ideal organization is a bureaucracy with strict rules and regulations. He stresses structure in the form of hierarchy and order as integral parts of an organization. The result, as evidenced by the United States Government (which is a bureaucracy), is an organization that does not adapt well to change. The networks are, to some degree, bureaucratic since there are specialized functions that are most efficiently accomplished by dividing the organization into operational sub-units. However, the field of organizational behavior offers more than descriptions of ideal organizations. It is a new discipline with research and theory on many dimensions of the field both theoretical\(^4\) and practical.\(^5\) For this study, the organization is viewed


\(^5\)an excellent example of applied techniques is the Addison Wesley series on Organization Development.
as a systemic entity existing within environments that constrain and force change in order to maintain the organization's survival and competitive position. Stogdill states that "the viability of an organization is firmly rooted in the relationships that it maintains with its environment." He identifies three variables which account for problems in that relationship: (1) external constraints, or factors outside of the organization itself which alter the organizations activities either limiting them or providing a means of organizational growth; (2) exchange with the environment where inputs of the organization are provided by members of the society and outputs have some impact on that society; and (3) survival mechanisms which "many organizations regard ... as a fundamental objective." The relationship between an organization and its environment depends heavily on the impact each has on the other. In some cases survival of the organization depends on sensing changes in the environment and adapting the organization to those changes. This is a process which is systemic in nature. Sensing changes, evaluating them, and recommending organizational adaptation does not guarantee organizational survival. The adapta-
tion to change is cyclical and must be continuous if it is to be an organizational strategy. However, organizations tend to be conservative and resist change. Roeber points out that

(t)he paradox of planned organizational change is that the need for it is generated at all levels but the responsibility for initiating it must rest with the managers - who are, no less than other people, the enemies of change and guardians of established practice. The threats to the existence of the organization must be recognized and change initiated at the appropriate level.

There are a variety of approaches to organizational change emphasizing either what is to be changed, or how to accomplish the change.

The study of organizational development comes from the recent recognition that reaction to changes facing the organization need to be planned if they are to be effective. Bennis defines organizational development as

a response to change, a complex educational strategy intended to change the beliefs, attitudes, values, and structure of organizations so that they can better adapt to new technologies, markets, and challenges, and the dizzying rate of change itself.9

---


But the field is still new and there is controversy within it on many issues which Kahn categorizes as: (1) an undeveloped literature base with omissions and repetition substituting for theoretical development; (2) a lack of valid research studies with well-developed research plans that do not rely on packaged independent variables of questionable worth; (3) a lack of organizational stress, relying on individual experiences without researching the effects and applicability of various interventions; and (4) the misleading separation of structure and process.10

Kahn defines organizational structure as

the pattern of actual behaviors as that pattern is created and recreated by the human beings we call members of the organization.11

Change in organizations, therefore, is change in the recurring behavior of members of the organization. In many cases change is initiated by a person from outside the organization hired to institute certain techniques of organizational change.


11 Ibid., p. 330.
Organization Theory

Early theories of how groups and individuals behave in organizations were almost totally task-oriented. The classical-structuralists dealt with work efficiency through technical improvements. Starting with Scottish economist Adam Smith's 1776 contention that

(1)he greatest improvement in the productive powers of labour, and the greater part of the skill, dexterity, and judgement with which it is any where directed, or applied, seem to have been the effects of the division of labour

the classical-structuralists stressed that it was management's obligation to find the best method of accomplishing a task. Fredrick Taylor's scientific management (1911), which was based on time-and-motion studies of workers to improve efficiency, stressed the goal of increased productivity.

However, it was Henri Fayol who developed the first comprehensive theory of management in 1916. Fayol theorized that work must be centered on the ability of management to administer rules of procedure. The functions of management, according to Fayol, were: (1) planning, (2) organizing, (3) staffing, (4) directing, and (5) controlling.

---


Max Weber's analysis of bureaucracy found it to be the ideal organizational structure because of its efficiency and rationality. According to Weber, the characteristics of a bureaucracy include: (1) the division of labor with an hierarchy of authority; (2) written documentation; (3) training of administrators; and (4) written rules and procedures. Weber recognized the ideal bureaucratic development of political and religious organizations while noting that in the private economy, bureaucracy was not fully developed. ¹⁵ As with the theories of the classical-structuralists, bureaucracy does not recognize the needs of the workers as human beings, but rather stresses the task achievement and productivity of organizations through structure. The recognition of the human element by organization theory came later.

The second group of organization theories, the human-relationists, recognized not only the workers as having human needs, but also that organizations exist within a larger environment that affects its operation. Douglas McGregor developed two theories of organizational behavior. Theory X, his traditional perspective of management control in organization, is based on the assumption that people

inherently dislike work and must be coerced and directed. Theory Y, on the other hand, integrates the worker with organizational goals. It is based on the assumption that work is natural and, if the worker is committed (through some type of reward), s/he will seek responsibility and be self-directed.\textsuperscript{16} Rensis Likert's studies of leadership in the 1950's at the University of Michigan found that leader effectiveness was related to the style of the leader. Employee-centered managers were found to be more effective than job-centered managers, resulting in increased work performance and job satisfaction.\textsuperscript{17} Likert's early studies are of limited use, since more recent studies at the University of Michigan and elsewhere have found that leadership style varies according to the situation and because leadership is more complex than Likert assumed.\textsuperscript{18} Chris Argyris feels that organizational behavior is affected by human relationships which are motivated by positive and negative means (positive means include direction and reward; negative means include control and penalties).\textsuperscript{19} Much of Argyris's work has been in sensitivity training, an organi-


\textsuperscript{18}see David Bowers and Stanley Seashore, "Predicting Organizational Effectiveness with a Four-Factor Theory of Leadership," \textit{Administrative Science Quarterly} (September, 1966): 238-263.

rational development technique aimed at individual change, is based on the assumption that the important human relationships in an organization are those which maintain the organization's internal system and adapt to the organization's environment. The emphasis on the human aspects of organizations can be justified quite simply by noting that it is not the organization which behaves, but rather the individuals and groups of individuals within it that behave. But the perspective of the human-relationists is often criticized for being too narrow to view the whole organization as it "behaves."

The third theoretical group is the behavioral-decisionists, whose theories of organizational behavior are based on the organization being functionally specialized and goal oriented. Cyert and March's behavioral theory of the firm assumes that organizations are made up of coalitions interacting and conflicting over separate goals which result in an incompatible set of organizational objectives. March and Simon found that organizational decisions are made under conditions of bounded rationality, in sequential form with information that is the most convenient and least

---

expensive to the manager. The manager, with information that is incomplete, is, therefore, motivated to find alternatives only when there is dissatisfaction with performance. March and Simon believe that organizations do not seek maximum performance as much as they seek only to attain acceptable or desirable performance. Thompson extends the work of Cyert, March and Simon, using the perspective of the "organization as a problem-facing and problem-solving phenomenon." His focus on organizations as open systems facing decisionmaking that is constrained by a lack of complete information to determine the effects of those decisions, recognized the relative importance of environments outside of the immediate organization. With an understanding of systems theory, Thompson's open-strategy system of studying organizations offers a starting point in the study of the commercial television networks that is both theory-based and relevant.


The Study of Organizations

General systems theory, based on the work of Ludwig von Bertalanffy, finds that systems can be closed or open. A closed system does not consider the environment outside of the system while an open system is continually changing and adapting to environmental change. Katz and Kahn identify nine characteristic of open systems which are important to the study of organizations:

1. There is importation of energy from other systems, people or the material environment;
2. There is "through-put," the system transforms energy into a new product;
3. There is "out-put"; the system's product is exported into the environment;
4. The system is cyclical, with a regeneration of energy;
5. There is negative entropy; the organization conserves energy to prevent entropy, or organizational death;

---


(6) there is information input, negative feedback and coding to keep the organization functioning;
(7) there is a steady state, with inflow and output of energy remaining equal, resulting in a dynamic homeostasis;
(8) the system moves toward differentiation and elaboration of roles with more specialization;
(9) there is some equifinality, "a system can reach the same final state from differing initial conditions and by a variety of paths."25

Two models of organizations are identified by Thompson: (1) the rational model, a closed system where everything is functional with predictable outcomes (an example being scientific management); and (2) the natural-system model which expects uncertainty and views the complex organization as:

a set of interdependent parts which together make up a whole because each contributes something and receives something from the whole, which in turn is interdependent with some larger environment.26

The assumption that the organization is a natural system requires viewing the organization as an open system with expectations of uncertainty. The organization must, therefore, be homeostatic, or self-stabilizing, when there are disturbances in the environment.

25Ibid., p. 170.
26Thompson, p. 6.
While both models offer insights into the operation of organizations, neither model alone adequately explains the complex organization. For that reason Thompson attempts a newer approach focusing on organizational processes related to choice of courses of action in an environment which does not fully disclose the alternatives available or the consequences of those alternatives.27

The organization becomes an information seeking entity, gathering and processing information to assist in decision-making in a complex environment where total information is an unrealistic goal. This function is limited by the organization in what is called bounded rationality, which replaces "the maximum-efficiency criterion with one of satisfactory accomplishment."28

Thompson defines complex organizations as open systems, hence indeterminate and faced with uncertainty, but at the same time subject to criteria of rationality and hence needing determinateness and certainty.29

The means of evaluating organizations Thompson stresses are through the study of (1) uncertainties faced by the organization; (2) the organization's rationality; (3) the organizational domain and task environment; and (4) the organizational design.

27Ibid., p. 9.
28Ibid.
29Ibid., p. 10.
To study the commercial networks as organizations, the uncertainties they face must first be identified and the coping mechanisms they use to deal with those uncertainties must also be studied. Uncertainty results from the organization having little or no control over the events in its environment.

The way an organization achieves desired outcomes is that organization's technical rationality. Thompson identifies two criteria for evaluating technical rationality. First, instrumental rationality evaluates "whether the specified actions do in fact produce the desired outcome."\(^{30}\) Second, economic rationality evaluates "whether the results are obtained with the least expenditure of resources."\(^{31}\) These criteria are interrelated since the economics are only relevant if something can be accomplished. Organizational rationality, as part of the study of organizations, is "some result of (1) constraints the organization must face, (2) contingencies which the organization must meet, and (3) variables which the organization can control."\(^{32}\)

\(^{30}\)Ibid., p. 14.

\(^{31}\)Ibid.

\(^{32}\)Ibid., p. 24.
All organizations depend, to an extent, on products produced by other organizations. The task environment of an organization includes parts of the environment which affect achievement of organizational goals. For instance, the networks are constrained by advertisers, program suppliers, competitors, and regulators. In turn, each of the elements in the task environment are interdependent with task environments of their own. The organization's domain is the technical matrix of related organizations needed to support the organization's existence.

The ability of outside organizations to influence the productivity and existence of an organization often leads it to seek alternatives to that dependence. An example is RCA's development of a radio station network and radio programming to support its central business, manufacturing radio receivers. This diversification is part of the organizational design. Thompson proposes that

Organizations under norms of rationality seek to place their boundaries around those activities which if left to the task environment would be crucial contingencies. 33 By expanding its boundaries, the direction of organizational change is, therefore, predictable. There exist some circumstances when organizational change is not as predictable. Under these circumstances the organization might innovate.

33Ibid., p. 39.
Innovation in Organizations

Organizational innovation is directly related to the organization's ability to adapt to its environment. This ability to adapt, in turn, is the result of the organization's recognition that change must be implemented to either maintain the organization's corporate well-being or to gain a competitive advantage over similar organizations. However, as Stogdill states:

although numerous organizations maintain specialized functions or departments that are responsible for sensing, evaluating and predicting change, few maintain specialized functions for adapting to change.34

This break in the dynamics of change is at least partially the result of poor communication channels within the organization and often results in inadequate adaptation to change.

Organizations tend to be conservative, with the need to innovate usually being the result of problems with the overall health of the organization. For example, during the 1960's ABC was forced to be innovative in the scheduling of programming because of poor ratings that threatened corporate profits. They changed programming in the middle of the traditional television season, calling the change the "second season." The other networks did not adopt this innovation until they had proof that the public had accepted the concept. Therefore, ABC's innovation was merely an adaptation for CBS and NBC.

34Ralph Stogdill, "Dimensions of Organization Theory" p. 47.
Although innovation can be a rational strategy organizations employ to achieve some corporate goals, it requires some amount of intuition and poses some amount of risk since decisions are made under some degree of uncertainty and might not work. The reasons for innovation are, therefore, based on the assumption that conditions have reached a point where existing operations are inadequate and the risk of innovating outweighs the certain danger of maintaining the inadequate procedures. The organization expects that the innovation will, if successful, be both profitable and prestigious for the organization.

The three stages of innovation are "the conception of the change...the proposing of the change, and the adoption and implementation of the change." According to Wilson, innovation occurs more often in organizations with more professional personnel. He hypothesizes that if there is greater diversity in an organization, there is a greater probability of conceptions and proposals of innovations but less probability of those conceptions and proposals being adopted. Diversity is described as "a function of both the complexity of the task structure (the sum of all tasks) and the incentive system (the sum of all rewards)."  


37Ibid., p. 198.
To evaluate an innovation, it is necessary to (1) find the reasons for the innovation; (2) identify the end state, or goal of the innovation; and (3) identify the dynamics of the innovation. The reasons for the innovation provide information on conditions in the organization. Some of that information is usually proprietary, but becomes available when the organization attempting the innovation faces threats from the regulatory environment. Once such case is the attempted merger of ABC with ITT (see chapter 9), when financial data normally not available was presented to the FCC to enhance ABC's chances of gaining approval of the merger.

The goal of the innovation, as it is perceived by the organization explicitly states what the organization expects from the innovation. For example, ABC expected that a merger with ITT would provide them with financial stability and the ability to be more competitive with NBC and CBS.

The dynamics of the innovation includes analysis of the organizational areas involved in the innovation process and their priorities. The development of color television (see chapter 8) is a good example of many organizational areas involved in an innovation. The technological development of color was combined with the economics of that development. Finally, the need for regulatory approval joined many of the separate areas together to accomplish the innovation.
It should be noted that in diverse corporations, such as the networks, the emphasis on different corporate areas is dynamic. For example, when the networks recognized the potential for television networking to surpass radio networking in attracting audiences, they shifted the organizational stress to the more lucrative area. It is logical to assume that each separate area of a corporation attempts to improve its relative position within the larger organization. The dynamics of an organizational innovation also includes the cost of the innovation, both in financial and personnel costs; the readiness for the innovation, both by the organization and the consumer; and, the capability of the organization to innovate.

Analysis of past innovations in the commercial television networks is important to this study since it gives some insights into the reaction of the networks to environmental change. It is clear that most organizations are conservative and would rather let other organizations innovate while they merely adapt to successful innovations. The past innovations of the networks, therefore, are useful in assessing the impact of environmental changes they may face in the future.

Any analysis of the networks as organizations must be conducted with the realization that the networks are a unique set of organizations. The majority of research on organizational change and innovation involves methods
of organizational change affecting personnel attitudes, effectiveness and productivity. This study focuses on the organization as a system that has minimal impact by its personnel. Some assumptions can be made about the networks based on their actions in the past. First, individual members of the network organizations are of minimal importance. Network television is a glamour field with entry into the organizations highly sought after and difficult to achieve. There is a significant amount of trading of personnel. One executive, Fred Silverman, who is currently president of NBC has had similar posts with all three networks. Although he was highly successful at CBS and then ABC, Silverman has not met with success at NBC as was hoped by Edgar Griffiths, RCA's Chairman, who saw the recruitment of Silverman as a means of improving ratings at NBC. Second, the product of the networks is limited. There is only a certain amount of advertising time available during the day. Programming is not the product of the networks; rather, it is the ability to provide the largest audience possible for advertisers. The networks compete by affiliate number and the resulting audience size as determined by the ratings.

The organizational change and innovation to be studied do not directly relate to television network broadcasting, which is assumed to be stable. The changes relevant to this study are alternatives the parent corporation can use to
maintain the corporate profits. Organizational innovation, therefore, is at least partially the ability of the parent companies to diversify and change according to the changes in their environments.

This chapter has surveyed the major theories of organization to find a means of evaluating the networks within a theoretical framework. It has shown that while the networks are unique, they do behave according to some of the prescribed behaviors of large, diversified organizations and, therefore, can be evaluated according to criteria used in the study of other organizations. Innovation has been shown as a rational organizational strategy used to minimize impact on the organization from environmental change. By using criteria from organization theory on innovative behaviors, the networks can be evaluated on their past innovations and projections of future innovations can be made.
CHAPTER 2

THE COMMERCIAL NETWORKS - AN ORGANIZATIONAL PERSPECTIVE

To understand the commercial television networks as organizations, it is important to consider the larger organizations that own the networks. This provides a basis for analyzing organizational strategies that appear to minimize the importance of network broadcasting. Each of the networks is a part of a parent corporation involved in diverse activities broadcasting related and not. Each organizational activity is expected to increase the profits of the parent corporation as well as improve the stability of the corporation.

This chapter will survey the history of network broadcasting to establish a base for the discussion of the corporate roles of the networks within their parent corporations.
The History of Network Broadcasting

The start of commercial broadcasting has been set at August 28, 1922 when radio station WEAF, New York City, broadcast a ten-minute message for a real estate developer. The start of network broadcasting, an experimental program of music and bird calls between WEAF and WNAC, Boston, was on January 4, 1923. However, it was not until November 15, 1926, that the first permanent commercial network, NBC, went into operation, the result of a long sought-after agreement between RCA, General Electric, and Westinghouse on one side and AT&T on the other, for lease of telephone lines and the sale of WEAF to NBC, a new company formed by RCA, GE and Westinghouse.

Network broadcasting was developed as an economical alternative to radio stations individually trying to program and sell time on their stations. The cost of production for one program was more reasonable when it was broadcast over more than one station. Also, radio advertising had become acceptable as a means of publicity and sales. Merlin Aylesworth, the first President of NBC noted, in 1928, that radio offered the sponsor consumer acceptance, dealer cooperation and increased the value of space advertising:
The broadcast feature, with its constant appeal promotes a pseudo-friendship, idyllic in nature, between the listeners and certain performers whom they have come to associate with a definite company or product.¹

Finally, network broadcasting would stimulate the sales of radio receivers. In 1926, it was estimated that five million homes had radioleaving, as RCA put it, "21,000,000 homes...to be supplied."² With paid advertising good programming was practical; and with good programming, more radios would be sold. Therefore, network broadcasting was, and is, the most economical means of providing the public with programming and supplying advertisers with an audience.

The permanence and professionalism of the radio industry was needed to assure the economic stability of radio manufacturers. Aylesworth noted that broadcasting "had to evolve an industry out of the nascent broadcasting art, which, in many respects was still an experiment."³ A network would not only provide stability, the programming would be of higher quality and more diversity.

On November 15, 1926, NBC debuted at 8:05 p.m. on twenty-one affiliates reaching as far west as Kansas City. NBC settled down to regular network broadcasting, adding the "blue" network in 1927. The "red" network, fed by WEAF, had, by 1927, twenty affiliates connected by 3,370

²The New York Times, September 13, 1926.
miles of permanent lines. The blue network, fed by WJZ, had eleven affiliates connected by 2,890 miles of permanent lines. With supplementary stations, the Pacific Coast Network, the Southwest group and the Southeast group, NBC had a total of forty-nine affiliates (out of 732 broadcast stations in the United States). Generally, the events between 1927 and 1929

stirred such dreams of wealth and glory that rumor mounted on rumor, all adding momentum to an accelerating stock market spiral. In that delirium, radio stocks were among the leaders.4

Network broadcasting proved to be a sound investment, surviving the stock market crash of 1929 and continuing to be profitable. By 1928 NBC was broadcasting coast-to-coast fulfilling its own "manifest destiny."

The development of network broadcasting was an important diversification for RCA, which used the network as a means of increasing radio receiver sales by assuring an adequate supply of programming. Using Thompson's criteria for evaluating the technical rationality of an organizational change, the instrumental rationality of RCA's decision to develop the network was to be a logical means of reducing uncertainties that could affect the sale of radios. The

economic rationality of the development is less clear, since the network concept was an innovation without precedent.

The formation of CBS was not a rational organizational development and it suffered as a result. The first two years showed that Arthur Judson, who formed the network as a result of a disagreement with David Sarnoff of RCA, did not have the expertise to form a radio network. After one year of development, Judson was looking for a buyer, even before it premiered. Without the financial help of a variety of entrepreneurs the network would never have debuted. However, sponsors did not respond and, by 1928, backers of the new network were withdrawing their support. Judson sold controlling interest in the network to Jerome Louchheim, a Philadelphia subway builder, and the owners of WCAU (Philadelphia) Isaac and Leon Levy. In September, 1928, William S. Paley, Leon Levy's brother-in-law, became president of CBS, the result of a $400 thousand investment by the Paley family, owners of the Congress Cigar Company. Paley had the business expertise to give CBS stability. The organizational development of CBS, therefore, really began when Paley became president and began working to form a competitive network.

ABC was formed as a result of proposed regulations that would force NBC to divest itself of one of its two radio networks in 1943. Edward J. Noble, a highly successful business executive, purchased the network for $8 million, a cost well above the value of the network but stubbornly
demanded by RCA's president David Sarnoff. For that price Noble received the radio network with 116 affiliates, and two and one-half radio stations (WJZ, New York; KGO, San Francisco; and WENR, Chicago which shared the frequency with WLS). When he sold ABC to United Paramount Theatres (UPT) in 1953, he asked for $25 million. ABC was not very profitable when Leonard Goldenson, president of UPT started to negotiate with Noble, but Noble, in a move reminiscent of Sarnoff's actions, would not lower his price. Goldenson knew that the network was not worth the price, but also recognized that UPT needed to diversify, and the potential of broadcasting was significant. He agreed to Noble's terms.5 Although the purchase appeared to be economically unsound, the technical rationality of it was positive.

Although all three networks were formed to distribute radio programs, the diversification to include television was natural. The radio networks faced the uncertainty the new medium of television presented by expanding their domains to include it and control it. The history of the networks shows that from the instability of their beginnings, the three organizations developed into viable corporations capable of developing organizational strategies to enhance their corporate positions.

The Corporate Positions of the Networks

The three commercial networks are all parts of larger organizations and play varying roles within the larger corporate structure. For example, in 1979, broadcast operations accounted for the following percentages of corporate revenues and pre-tax profits:

<table>
<thead>
<tr>
<th>Network</th>
<th>Corporation</th>
<th>Percent of Revenues</th>
<th>Percent of Profits</th>
</tr>
</thead>
<tbody>
<tr>
<td>NBC</td>
<td>RCA, Inc.</td>
<td>18%</td>
<td>22%</td>
</tr>
<tr>
<td>CBS</td>
<td>CBS, Inc.</td>
<td>41%</td>
<td>63%</td>
</tr>
<tr>
<td>ABC</td>
<td>ABC, Inc.</td>
<td>87%</td>
<td>101%</td>
</tr>
</tbody>
</table>

The wide range of percentages significantly affects how the network operates within its corporate structure. A drop in viewership (and the resulting drop in ratings) would have more adverse effects on the economic stability of ABC which relies heavily on broadcasting for its revenues and profits than on NBC which accounts for a relatively small percentage of RCA's revenues and profits. The effect of a drop in ratings is dramatically shown below. ABC suffered a severe ratings drop during the 1974-1975 television season. The percentage of industry profits during

---

6 all financial data in this section comes from corporate 10-K Reports filed with the Securities and Exchange Commission; and annual reports except where noted.
that period reflected ABC's ratings problem:

<table>
<thead>
<tr>
<th>Year</th>
<th>Percent of Industry Net Profits</th>
</tr>
</thead>
<tbody>
<tr>
<td>1973</td>
<td>26.10%</td>
</tr>
<tr>
<td>1974</td>
<td>22.47</td>
</tr>
<tr>
<td>1975</td>
<td>7.61</td>
</tr>
<tr>
<td>1976</td>
<td>18.88</td>
</tr>
</tbody>
</table>

ABC's net profits fell from $49,945,000 in 1974 to $17,096,000 in 1975, with the broadcasting division accounting for 69% of the net profit loss.

The three networks form a competitive environment with some striking similarities in programming and in organizational characteristics. The three corporations imitate each other feverishly, buy their programs from the same sources, interchange their personnel, and operate not only from the same city but from the same neighborhood (along with other major corporations broadcasting-related, such as A. C. Nielsen, and not.)

Brown finds that the buildings housing the network offices reflect the corporate image of that network: NBC is in the RCA building along with all of the divisions of the corporation; CBS owns its own starkly modern black skyscraper; and ABC rents.

---


The actions of the three parent corporations throughout their histories shows that they recognize the need to diversify, but each corporation has met with different levels of success. First, it must be clear that the networks themselves cannot diversify, only the parent corporations can. The desirability of diversification for the parent corporation is because a more diversified organization has less fluctuation in overall profits during years when the network is less competitive. An example of a corporation's ability to absorb a drop in network earnings occurred in 1978 when NBC's earnings dropped 20 percent. Edgar H. Griffiths, president and chief executive officer of RCA, responded by stating

the ability of RCA to absorb NBC's decline in 1978 and move forward to a new high (in profits) speaks eloquently for the health of the company as a whole.9

Network television is a consistently profitable industry, although the percent of change in profits from year to year is very high. Table 1 shows the total network pre-tax earnings and the percent of change from 1959 through 1978. These data are significant because they show that network television is: (1) very profitable; and (2) generally increasing its earnings at a tremendous pace. The profitability of network broadcasting is a strong incentive for these corporations to maintain the status quo broadcasting system.

Table 1
Network Pre-Tax Earnings
1959-1978

<table>
<thead>
<tr>
<th>Year</th>
<th>Pre-Tax Earnings (in millions)</th>
<th>Percentage Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>1959</td>
<td>$32.0</td>
<td>---</td>
</tr>
<tr>
<td>1960</td>
<td>33.6</td>
<td>5.0%</td>
</tr>
<tr>
<td>1961</td>
<td>24.7</td>
<td>(26.5)</td>
</tr>
<tr>
<td>1962</td>
<td>36.7</td>
<td>48.6</td>
</tr>
<tr>
<td>1963</td>
<td>56.4</td>
<td>53.7</td>
</tr>
<tr>
<td>1964</td>
<td>60.2</td>
<td>6.7</td>
</tr>
<tr>
<td>1965</td>
<td>59.4</td>
<td>(1.3)</td>
</tr>
<tr>
<td>1966</td>
<td>78.7</td>
<td>32.5</td>
</tr>
<tr>
<td>1967</td>
<td>55.8</td>
<td>(29.1)</td>
</tr>
<tr>
<td>1968</td>
<td>56.4</td>
<td>1.1</td>
</tr>
<tr>
<td>1969</td>
<td>92.7</td>
<td>64.4</td>
</tr>
<tr>
<td>1970</td>
<td>50.1</td>
<td>(46.0)</td>
</tr>
<tr>
<td>1971</td>
<td>53.7</td>
<td>7.2</td>
</tr>
<tr>
<td>1972</td>
<td>110.9</td>
<td>106.5</td>
</tr>
<tr>
<td>1973</td>
<td>184.9</td>
<td>66.7</td>
</tr>
<tr>
<td>1974</td>
<td>225.1</td>
<td>21.7</td>
</tr>
<tr>
<td>1975</td>
<td>208.5</td>
<td>(7.4)</td>
</tr>
<tr>
<td>1976</td>
<td>295.6</td>
<td>41.8</td>
</tr>
<tr>
<td>1977</td>
<td>406.1</td>
<td>37.4</td>
</tr>
<tr>
<td>1978</td>
<td>373.5</td>
<td>(8.0)</td>
</tr>
</tbody>
</table>

 Threats to the established order are threats to the organizations and their profits. The networks have faced threats to the established order in the past, the result of environmental changes, but they have responded in a manner consistent with Thompson's definition of organizations as problem solving phenomena. Often the reaction of the organizations has been diversification and innovation.

Since each network is part of a different corporation with individualized corporate structure and goals, each parent organization will be described in detail separately. The information is current as of June 30, 1980.
RCA

RCA is a diverse corporation with operations in seven major segments:

(1) Electronics - Consumer Products and Services
(2) Electronics - Commercial Products and Services
(3) Broadcasting
(4) Vehicle Renting and Related Services
(5) RCA Communications
(6) Government Systems and Services
(7) Other Products and Services

The Electronics - Consumer Products and Services division of RCA is divided into four parts: (1) television products, including the manufacture and sale of television receivers, home videocassette recorders and products, and videodisc players (to be introduced in 1981); (2) phonograph records and tapes, including classical and popular records and tapes; (3) consumer services, including 160 branches in the United States which install and service RCA television sets, videocassette recorders and other home entertainment equipment; and (4) parts, accessories and distributor products in support of RCA consumer products.

The Electronics - Commercial Products and Services division of RCA manufactures tubes, solid state and electro-optic devices, commercial broadcast systems and services the equipment.

The Broadcasting division of RCA includes NBC, which reaches 99% of the homes in the United States with
over 200 affiliated stations. RCA's Broadcasting division also includes five television stations (in Chicago, New York, Cleveland, Los Angeles and Washington, D.C.), a radio network with over 275 affiliates, four AM and four FM radio stations (in Chicago, New York, San Francisco and Washington, D.C.). RCA could acquire two more radio stations and still be within the FCC limitations on radio and television station ownership.

The Vehicle Renting and Related Services division owns Hertz, a subsidiary that rents cars and trucks in the United States and abroad.

RCA Communications division includes two parts: RCA Globcom which is an overseas voice/record communication service using satellites, cable and radio circuits; and RCA Americom which is a domestic communications satellite service, with two satellites and numerous earth stations for support. On December 10, 1979, four days after a successful launch, a third RCA satellite lost communication with its earth station during a maneuver to place it into a stationary orbit. The loss was covered by insurance.

A third section of RCA Communications, RCA Alascom, was sold on June 1, 1979.

RCA's Government Systems and Services division designs, engineers and manufactures military and space electronics equipment and systems for the United States and foreign governments. It also manages and administers government programs and installations.
Other products and services owned by RCA includes Banquet Foods, Coronet Industries (carpeting), Oriel Foods Group and Random House publishers. On January 1, 1980, RCA acquired CIT Financial Services which culminated a long and intensive search for a financial services company that could reduce cyclicality in our earnings and expand our business base for future earnings growth.\(^{10}\)

Table 2 shows the breakdown of revenues and profits of RCA by business segments. While the pre-tax revenues have remained relatively stable by business segment for the past five years, the pre-tax profits have shown some interesting changes. First, the electronics - commercial products and services division has become profitable after losing money in 1975. Second, broadcasting, which accounted for over 31 percent of RCA's profits in 1975 accounted for only 17 percent in 1979. Third, the communications division has lost profitability over the five years. Finally, the vehicle renting division surpassed broadcasting profits for the parent company. Some of these changes have been the result of changes in RCA. For instance, RCA's sale of Alascom might have been the result of what RCA termed "rising costs and a long delay in the award of an 87-percent interim intrastate rate increase"\(^{11}\) that held profits to the same level in 1978 as in 1977.

\(^{10}\)RCA, 1979 Annual Report pp. 2-3.

\(^{11}\)RCA, 1978 Annual Report, p.15.
## Table 2

**RCA: Revenue and Profit Breakdown by Business Segment**

<table>
<thead>
<tr>
<th></th>
<th>Pre-tax Revenues (Percent of Total)</th>
<th>Pre-tax Profits on Income (Percent of Total)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electronics - Consumer Products and Services</td>
<td>23.6%</td>
<td>24.1%</td>
</tr>
<tr>
<td>Electronics - Commercial Products and Services</td>
<td>14.9</td>
<td>14.5</td>
</tr>
<tr>
<td>Broadcasting</td>
<td>18.3</td>
<td>18.4</td>
</tr>
<tr>
<td>Vehicle Renting and Related Services</td>
<td>15.1</td>
<td>14.2</td>
</tr>
<tr>
<td>Communications</td>
<td>3.8</td>
<td>4.9</td>
</tr>
<tr>
<td>Government Systems and Services</td>
<td>8.9</td>
<td>7.9</td>
</tr>
<tr>
<td>Other Products and Services</td>
<td>15.4</td>
<td>16.0</td>
</tr>
</tbody>
</table>

The breakdown of revenues and profits for RCA in 1979 is graphically shown in Figures 1 and 2. It is significant that RCA seems to be attempting, with some success, to keep all business segments balanced so that no one segment can adversely affect the corporation as a whole.

Table 3 shows the broadcasting segment's change in position over the six years from 1974 through 1979. During that time, the broadcasting segment went from providing 47 percent of RCA's profits to providing only 22 percent. This change is the result of competitive problems. In 1975, the network, which had been the second highest rated network for about twenty years, fell into third place when ABC (which had been in the third place) took over the top position. NBC has remained the third rated network (in a three network race) in spite of major efforts by NBC to improve their position, including the hiring of Fred Silverman (who was successful at programming both CBS and ABC).

RCA has been involved in the development of technology since its formation. Therefore, its continued emphasis on manufacturing and development of new technologies is not surprising. RCA Chairman and Chief Executive Officer Edgar H. Griffiths noted that not since the advent of color television has such a vista of opportunity appeared on the electronic landscape, and RCA is strongly positioned to make the most of it— in manufacturing, marketing, service, broadcasting, and communications.\(^{12}\)

\(^{12}\)RCA, 1978 Annual Report, p. 3.
1979 RCA Annual Report.

NOTE: All data for this figure comes from the RCA: Revenue Breakdown by Business Segments for 1979.

Figure 1

Percent of Total Revenue

0 20 40 60 80 100

Electronics - Consumer Products and Services

Electronics - Commercial Products and Services

Broadcasting

Vehicle Renting and Related Services

Communications

Government Systems and Services

Other Products and Services
NOTE: All data for this figure comes from the 1979 RCA Annual Report.

Figure 2
RCA: Profit Breakdown By Business Segments for 1979

<table>
<thead>
<tr>
<th>Percent of Total Profits</th>
</tr>
</thead>
<tbody>
<tr>
<td>10 20 30 40 50 60 70 80 90 100</td>
</tr>
</tbody>
</table>

Electronics - Consumer Products and Services

Electronics - Commercial Products and Services

Broadcasting

Vehicle Renting and Related Services

Communications

Government Systems and Services

Other Products and Services
Table 3

RCA: Broadcast Segment's Profits, Share of RCA's Profits, Sales, and Share of RCA's Sales
For 1979

<table>
<thead>
<tr>
<th>YEAR</th>
<th>BROADCAST PROFITS</th>
<th>TOTAL PROFITS</th>
<th>BROADCAST SHARE OF PROFITS</th>
<th>BROADCAST SALES</th>
<th>TOTAL SALES</th>
<th>BROADCAST SHARE OF SALES</th>
<th>NET PROFITS</th>
<th>PERCENT CHANGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1979</td>
<td>$105.6</td>
<td>$471.5</td>
<td>22%</td>
<td>$1,367.6</td>
<td>$7,454.6</td>
<td>18%</td>
<td>$283.8</td>
<td>+ 2.0%</td>
</tr>
<tr>
<td>1978</td>
<td>122.1</td>
<td>514.6</td>
<td>24</td>
<td>1,212.8</td>
<td>6,600.6</td>
<td>18</td>
<td>278.4</td>
<td>+11.3</td>
</tr>
<tr>
<td>1977</td>
<td>152.6</td>
<td>470.4</td>
<td>32</td>
<td>1,097.4</td>
<td>5,880.9</td>
<td>19</td>
<td>247.0</td>
<td>+28.2</td>
</tr>
<tr>
<td>1976</td>
<td>120.4</td>
<td>343.1</td>
<td>35</td>
<td>954.5</td>
<td>5,328.5</td>
<td>18</td>
<td>177.4</td>
<td>+38.6</td>
</tr>
<tr>
<td>1975</td>
<td>106.9</td>
<td>188.6</td>
<td>57</td>
<td>794.1</td>
<td>4,789.5</td>
<td>17</td>
<td>110.0</td>
<td>-3.0</td>
</tr>
<tr>
<td>1974</td>
<td>94.2</td>
<td>201.7</td>
<td>47</td>
<td>725.1</td>
<td>4,626.9</td>
<td>16</td>
<td>113.3</td>
<td>-62.1</td>
</tr>
</tbody>
</table>

1all profits and sales are pretax in millions of dollars.

RCA's major entry into this new field is "SelectaVision" videodisc player system which they plan to introduce in 1981. RCA already manufactures a home videocassette recorder and has held a major share of the United States market for more than a year.

RCA intends to sell Random House publishers and Banquet Foods because they "do not relate to our conception of the RCA of the future." The RCA of the future, according to Griffiths will focus on four basic areas: Hertz, NBC, financial and consumer products and services and telecommunications.

The organizational structure at RCA has historically been able to absorb changes that have threatened it. They have recognized the problems with NBC and have initiated actions meant to minimize the impact of NBC's loss of profits on the organization.

Of the three networks, NBC appears to have the most stable organizational environment. Uncertainties faced by all the networks regarding the future of network broadcasting have been used by RCA to develop strategies which could minimize the loss of any portion of their broadcasting business. For example, if the audiences are attracted to videocassette recorders or video disc players, RCA manufactures them. Diversification does not appear to be difficult for RCA

14Ibid., p. 3.
which appears to disprove Wilson's belief that a corporation as diverse as RCA should have less probability of having innovations adopted. However, it must be noted that many of the diversifications made by RCA are related to the broadcast segment. The close relationship of four of RCA's business segments (electronics - consumer products, electronics - commercial products, broadcasting and RCA communications) can be considered to be an expansion of organizational boundaries to include the activities that might affect the organization.
CBS is part of CBS, Inc. a less diversified but profitable corporation with five major divisions:
(1) CBS/Broadcast Group, (2) CBS/Records Group, (3) CBS/Columbia Group, (4) CBS/Publishing Group, and (5) Other.

The CBS/Broadcast Group has six divisions. The CBS television network has 204 affiliates including five television stations owned by CBS. The CBS entertainment division produces and acquires entertainment programs for the television network. CBS sports is responsible for production of sports programming. The CBS television stations division operates the owned stations and serves as a sales representative for them. The CBS radio division operates fourteen AM and FM stations owned by CBS and also operates a radio network. It also operates as the sales representative for the fourteen radio stations owned by CBS and sixteen independently owned AM and FM stations. The CBS news division produces news and informational broadcasts for both radio and television.

The CBS/Records Group has three divisions. The CBS records division operates recording studios, manufactures and distributes records and tapes. The CBS records international division is responsible for sales outside of the United States. CBS video enterprises division, formed on January 31, 1980, has three functions: (1) manufacturing and distribution of existing programming for videocassette and video disc players; (2) development and production of
original programming for videocassette and video disc players; and (3) acquisition and/or production of programs for other U.S. and foreign outlets.

The CBS/Columbia Group has four divisions. Columbia House operates a record club and other operations which sell records, tapes and other products by mail along with handi­craft kits, hobby craft tools and other products. The CBS musical instruments division manufactures and markets musical instruments under such brand names as Steinway (pianos) and Fender (guitars). The CBS toys division, under the trade name of Gabriel Industries, produces toys, games and home playground equipment; and markets them wholesale. The toys division manufactures under brand names such as Tinkertoys, Erector and Gym-Dandy. The CBS specialty stores division sells audio equipment and related products through Pacific Stereo.

The CBS/Publishing Group was reorganized in 1979 into two divisions. The CBS educational and professional publishing division has five operating units which publish scholarly journals (through BFA Educational Media) and textbooks (through Holt, Rinehart and Winston el/hi operations and Winston Press). The CBS consumer publishing division publishes paperback books (through the Fawcett Books and Columbine Books) and magazines (including Women's Day, Mechanix Illustrated, Field & Stream, and Family Weekly). CBS also has divisions which research technologies that might be useful to CBS; operates cable systems in Canada; and operates as the distributor of films produced by CBS.
CBS's revenue and profit breakdown by business segments from 1975 through 1979 (see Table 4) shows that broadcasting has remained fairly constant in both. This is the result of the competitive position the CBS television network has held. Although it was the number two network, the ratings difference between CBS and top rated ABC was minimal and the continuing series on CBS were much more competitive with ABC's than were NBC's:

<table>
<thead>
<tr>
<th>Year</th>
<th>ABC %</th>
<th>CBS %</th>
<th>NBC %</th>
</tr>
</thead>
<tbody>
<tr>
<td>1974-5</td>
<td>3 12%</td>
<td>15 60%</td>
<td>7 28%</td>
</tr>
<tr>
<td>1975-6</td>
<td>11 44</td>
<td>12 48</td>
<td>2 8</td>
</tr>
<tr>
<td>1976-7</td>
<td>15 60</td>
<td>7 28</td>
<td>3 12</td>
</tr>
<tr>
<td>1977-8</td>
<td>13 52</td>
<td>9 36</td>
<td>3 12</td>
</tr>
<tr>
<td>1978-9</td>
<td>15 60</td>
<td>8 32</td>
<td>2 8</td>
</tr>
</tbody>
</table>

If the networks should share the top rated programs, a percentage share of 33 percent would be competitive. CBS has remained relatively stable above the 33 percent cut off. The broadcast profit improvements shown on Table 4 are also the result of CBS selling more time to advertisers over the period.

CBS is more heavily dependent on broadcasting for both revenues (Figure 3) and profits (Figure 4) than is RCA and is less diversified (with four major divisions compared to RCA's seven). However, the two corporations have some similar operating groups including broadcasting, records, and publishing. While RCA feels that publishing is not in their future, CBS is expanding its publishing activities. Since 1977, with the acquisition of Fawcett, the publishing profits have begun to rise as have publishing revenues. Other
Table 4

CBS: Revenue and Profit Breakdown by Business Segment

<table>
<thead>
<tr>
<th></th>
<th>Pre-Tax Revenues (Percent of Total)</th>
<th>Pre-Tax Profits on Income (Percent of Total)</th>
</tr>
</thead>
<tbody>
<tr>
<td>CBS/Broadcast Group</td>
<td>40.8%</td>
<td>40.0%</td>
</tr>
<tr>
<td>CBS/Records Group</td>
<td>27.9</td>
<td>28.6</td>
</tr>
<tr>
<td>CBS/Columbia Group</td>
<td>19.2</td>
<td>18.1</td>
</tr>
<tr>
<td>CBS/Publishing Group</td>
<td>12.1</td>
<td>13.3</td>
</tr>
</tbody>
</table>

Figure 3

CBS: Revenue Breakdown By Business Segments for 1979

NOTE: All data for this figure comes from the 1979 CBS Annual Report.
Figure 4

CBS: Profit Breakdown By Business Segments for 1979

NOTE: All data for this figure comes from the 1979 CBS Annual Report.
attempts at diversification were less successful. Attempted mergers with IMS International and Crum & Forster were not successful. However, CBS is diversifying within its own corporate boundaries. In October, 1979, CBS announced three major developments. First, experiments using teletext technology were announced. Second, they announced plans to produce three or four theatrical motion pictures a year at a cost of $5-8 million each. Finally, James Rosenfeld, President of the CBS television network announced that CBS anticipated the acceptance of new technologies and was entering the video disc business.

Table 5 shows that although attempts have been made to diversify, broadcasting still provides the majority of CBS profits and revenues, but the trend has been to lessen the emphasis. The attempts to focus CBS attention on new technologies, which is CBS's strategy, were predicted by CBS officials as being risky. For the next few years uneven financial reports are expected. For the first quarter of 1980 these predictions were coming true. As with all three networks, revenues and profits are down.

CBS's plans for the future were summarized by Chairman William S. Paley:

CBS looks to the business potentials of the 1980's from the vantage point of a decade of solid growth and diversification. Since 1970, revenues and net income have tripled and the Company has added balance and breadth to its business base in the diverse fields of entertainment and information. Hence CBS is in a strong position
### Table 5

**CBS: Broadcast Segment's Profits, Share of CBS's Profits, Sales, and Share of CBS's Sales For 1979**

<table>
<thead>
<tr>
<th>YEAR</th>
<th>BROADCAST PROFITS</th>
<th>TOTAL PROFITS</th>
<th>BROADCAST SHARE OF PROFITS</th>
<th>BROADCAST SALES</th>
<th>TOTAL SALES</th>
<th>BROADCAST SHARE OF SALES</th>
<th>NET PROFITS</th>
<th>PERCENT CHANGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1979</td>
<td>$253.6</td>
<td>$399.7</td>
<td>63%</td>
<td>$1,525.5</td>
<td>$3,729.7</td>
<td>41%</td>
<td>$200.7</td>
<td>+1.3%</td>
</tr>
<tr>
<td>1978</td>
<td>225.7</td>
<td>400.2</td>
<td>56</td>
<td>1,327.5</td>
<td>3,290.1</td>
<td>40</td>
<td>198.1</td>
<td>+8.1%</td>
</tr>
<tr>
<td>1977</td>
<td>218.1</td>
<td>366.9</td>
<td>59</td>
<td>1,183.9</td>
<td>2,826.3</td>
<td>42</td>
<td>182.0</td>
<td>+10.0%</td>
</tr>
<tr>
<td>1976</td>
<td>215.6</td>
<td>334.1</td>
<td>65</td>
<td>1,044.7</td>
<td>2,274.5</td>
<td>46</td>
<td>164.0</td>
<td>+25.1%</td>
</tr>
<tr>
<td>1975</td>
<td>172.7</td>
<td>254.5</td>
<td>68</td>
<td>871.0</td>
<td>1,974.9</td>
<td>44</td>
<td>122.9</td>
<td>+11.6%</td>
</tr>
<tr>
<td>1974</td>
<td>163.0</td>
<td>221.8</td>
<td>73</td>
<td>816.2</td>
<td>1,788.6</td>
<td>46</td>
<td>108.6</td>
<td></td>
</tr>
</tbody>
</table>

*All profits and sales are pretax, in millions of dollars*

to take full advantage of the new markets that commu-
nications technology is opening for the 1980's in both entertainment and information.15

CBS appears to recognize the importance of diversification to the survival of the corporation. While they do not have the profit stability of RCA, CBS has a stronger broadcast segment, with the number one rated network for the 1979-80 season (by a statistically insignificant 0.1 over ABC).

The emphasis CBS places on its network is organizationally more significant than RCA's attempts to make NBC more competitive. First, CBS had a twenty year tradition of being the top rated network. The prestige of that position, and the desire to regain it, appears to be a factor in CBS's corporate emphasis. Second, broadcasting is CBS's primary business and, unlike the more diversified RCA, changes in that business could have a significant impact on the total organization. The organizational domain of CBS is more restrictive than RCA's. Attempts at diversification into media technology have met with limited success (see chapter 8). CBS is not primarily known as a technological innovator, as is RCA, although it was CBS that invented the long playing record. Finally, CBS's diversification plans are centered on programming for new technologies, an area more closely related to the network business than

15CBS, 1979 CBS Annual Report, p. 3.
is the manufacture of the hardware. The agreement CBS signed with RCA in January, 1980, to manufacture and distribute SelectaVision video discs is an example of both the difference in corporate goals of the two organizations, and the ability of two competing organizations to cooperate when the larger corporate goals can be served by it.
ABC

ABC, Inc. is the most heavily dependent on broadcasting for revenues and profits of the three networks. There are four segments of ABC: (1) Broadcasting, (2) Publishing, (3) Leisure Attractions, and (4) Recorded Music.

The broadcasting segment of ABC includes the network with 204 primary affiliates including five stations owned by ABC. Also included in the broadcast segment is the radio network (with 1,697 affiliates) and thirteen AM and FM stations. ABC is currently looking for another radio station to purchase. ABC Motion Pictures, formed in 1979, plans to produce moderately budgeted films for theatrical and other types of distribution. Finally, ABC Video Enterprises, also formed in 1979, plans to produce and distribute programming for new technologies.

The publishing segment of ABC includes a variety of specialized publications for agriculture (including Prairie Farmer), photography (Modern Photography), music (the Schwann Record and Tape Catalogues) and other areas.

The Leisure group, formed in 1973 to implement a corporate policy of diversification in non-broadcast areas, has consistently lost money for the corporation. In 1979, ABC sold one of its scenic attractions, the colonial town of Smithville, leaving three facilities in Florida (Silver Springs, Weeki Wachee Spring and Wild Waters).
In March, 1979, ABC sold almost all of its recorded music business. ABC Records and Tapes was a highly profitable business segment until there was an industry-wide change in the distribution area during the 1960's. The record area profits dropped steadily during that time and continued during the 1970's but still contributed to the organizational profits. However, as inventories began to grow, ABC began to expand its record business in an attempt to find a more diversified audience for its product. In 1975, ABC records began to lose money at an alarming rate:

<table>
<thead>
<tr>
<th>Year</th>
<th>Net Profits (in millions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1974</td>
<td>$ 4.4</td>
</tr>
<tr>
<td>1975</td>
<td>(27.4)</td>
</tr>
<tr>
<td>1976</td>
<td>( 6.6)</td>
</tr>
<tr>
<td>1977</td>
<td>(29.8)</td>
</tr>
<tr>
<td>1978</td>
<td>(32.7)</td>
</tr>
<tr>
<td>1979</td>
<td>( 2.6)</td>
</tr>
</tbody>
</table>

It became apparent that the losses were too significant to the organization to be allowed to continue. In 1978, ABC sold part of its record and tape business, and on March 4, 1979 it sold nearly all of the rest of the segment to MCA, Inc. The sale of the segment resulted in no "material gain or loss in connection with the sale."16

Although both CBS Records and RCA Records remained profitable throughout the same period, they also suffered a decline in profits during 1979. The decline in the

16ABC, 1979 Annual Report, p. 32.
total record and tape industry affected ABC more severely than either CBS or RCA. Both CBS and RCA have recording artists under contract that appeal to a wide range of listeners (including John Denver, Elvis Presley and Paul McCartney and Wings for RCA; and Barbra Streisand, Neil Diamond and Willie Nelson for CBS). ABC's record division was less successful in contracting artists (although they did have Ray Charles). ABC's record division was not as diversified as either CBS or RCA (both of which have record clubs as a major means of distribution). The failure of ABC to remain competitive in the recorded music industry is at least partially the result of these factors. The sale of the division was a logical organizational move in light of ABC's inability to turn the losses around in five years. If the corporation kept the division, the larger organization would suffer. Since every operating segment must contribute to the organization's overall profits, the sale was necessary.

The revenue and profit breakdown by business segments for ABC from 1975 through 1979 (Table 6) shows that ABC has problems with diversification. Of the four operating units, only two are contributing to the profits of the total organization. Figures 5 and 6 show the problem graphically. ABC's broadcasting segment is responsible for nearly all of the organization's revenues and profits, a situation that differs greatly from the other, more diversified, network organizations.
## Table 6

ABC: Revenue and Profit Breakdown by Business Segment

<table>
<thead>
<tr>
<th></th>
<th>Pre-Tax Revenues (Percent of Total)</th>
<th>Pre-Tax Profits on Income (Percent of Total)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Broadcasting</td>
<td>88.3%</td>
<td>87.5%</td>
</tr>
<tr>
<td>Publishing</td>
<td>9.5</td>
<td>4.7</td>
</tr>
<tr>
<td>Recorded Music</td>
<td>1.3</td>
<td>6.4</td>
</tr>
<tr>
<td>Leisure Attractions and Others</td>
<td>0.9</td>
<td>1.4</td>
</tr>
</tbody>
</table>

Percent of Total Revenues

Leisure Attractions and Others

Recorded Music

Publishing

Broadcasting

Business Segments for 1979
ABC Revenue Breakdown By

Figure 5

1979 ABC Annual Report.

Note: All data for this figure comes from the

Figure 6

ABC: Profit Breakdown By Business Segments for 1979

NOTE: All data for this figure comes from the 1979 ABC Annual Report.
ABC is a very profitable organization as the result of its success in broadcasting. Table 7 shows the role the broadcast segment has played within ABC from 1974 through 1979. From this table it becomes obvious that the broadcasting segment not only contributes to the organizational profits, it has maintained organizational stability by compensating for losses in other segments. ABC is the only network organization that has business segments operating at a loss. The heavy dependence on broadcasting of ABC makes it vulnerable to organizational problems if there are changes in the profitability of broadcasting.

The trend of rising profits in broadcasting took a turn in 1980 that was especially important to ABC. While revenues rose 21 percent in the first quarter of 1980, ABC's profits were down 4.7 percent from the first quarter of 1979. ABC blamed the decline on "increased program costs, development of our late night news program and the coverage of the Persian Gulf crisis." Network television, although still highly profitable, appears to have reached a point where economic uncertainties exist and contingency plans must be made. ABC has had a history of innovation, mostly because of necessity (see chapter 7). The future of ABC, according to Goldenson, is in broadcasting primarily but includes opportunities in the new technologies. Fred

Table 7

ABC: Broadcast Segment's Profits, Share of ABC's Profits, Sales, and Share of ABC's Sales
For 1979

<table>
<thead>
<tr>
<th>YEAR</th>
<th>BROADCAST PROFITS</th>
<th>TOTAL PROFITS</th>
<th>BROADCAST SHARE OF PROFITS</th>
<th>BROADCAST SALES</th>
<th>TOTAL SALES</th>
<th>BROADCAST SHARE OF SALES</th>
<th>NET PROFITS</th>
<th>PERCENT CHANGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1979</td>
<td>$321.3</td>
<td>$319.4</td>
<td>101%</td>
<td>$1,791.9</td>
<td>$2,053.6</td>
<td>87%</td>
<td>$159.3</td>
<td>+ 14.9%</td>
</tr>
<tr>
<td>1978</td>
<td>310.9</td>
<td>271.2</td>
<td>108</td>
<td>1,546.6</td>
<td>1,784.0</td>
<td>87</td>
<td>135.6</td>
<td>+ 19.0</td>
</tr>
<tr>
<td>1977</td>
<td>273.6</td>
<td>226.8</td>
<td>110</td>
<td>1,283.7</td>
<td>1,535.7</td>
<td>83</td>
<td>109.8</td>
<td>+ 34.7</td>
</tr>
<tr>
<td>1976</td>
<td>173.7</td>
<td>141.8</td>
<td>104</td>
<td>1,024.2</td>
<td>1,269.8</td>
<td>81</td>
<td>71.7</td>
<td>+ 76.2</td>
</tr>
<tr>
<td>1975</td>
<td>82.2</td>
<td>26.5</td>
<td>173</td>
<td>773.1</td>
<td>981.7</td>
<td>79</td>
<td>17.1</td>
<td>-191.8</td>
</tr>
<tr>
<td>1974</td>
<td>102.3</td>
<td>91.8</td>
<td>94</td>
<td>730.5</td>
<td>911.2</td>
<td>80</td>
<td>49.9</td>
<td></td>
</tr>
</tbody>
</table>

1all profits and sales are pre-tax, in millions of dollars.

Pierce, executive vice-president of ABC, and president of ABC Television stated that

it is our philosophy that through refinements in technology, such as home video devices, cable television and informational systems, television will evolve into a multipurpose home information-entertainment center. Our planning is directed toward this expanded use of the medium. 18

This chapter has shown that the three networks are owned by three very different corporations with organizational goals and philosophies that are unique. There are similarities among the parent corporations. First, they all operate television and radio networks and owned stations that must compete. Second, the organizations all have interests in publishing and recorded music, but they differ on the future of these areas. Finally, all three recognize the new technologies as an area of diversification, but have individualized means of achieving it.

Obviously, all three networks have some similar goals, such as survival, profitability, and increased stock values. However, it is important to understand that the means used to achieve organizational goals are affected by constraints within the control of the organization and by those that the organization must accommodate and adapt to.

PART II
ENVIRONMENTS AFFECTING THE COMMERCIAL TELEVISION NETWORKS

The commercial television networks are open systems which are affected by influences external to the organization. The relationship among the networks and their environments is important since innovative behavior is the result of the interactive effects of environmental change.

The economic and competitive environments (chapter 3) include all organizations that have an impact on the economic health of the networks. The difference between the two is that the competitive environment includes only the three networks and their parent organizations while the economic environment includes organizations outside of the competitive environment that directly affect the networks' economic well-being. Although the parent organizations compete in other areas such as publishing and recorded music, they will not be included in the competitive environment since these competitive activities have a minimal impact on the inter-network competition. The economic environment will be limited to the organizations outside the network and their activities affecting the operation of network tele-
vision. Parts of the economic environment have their own environmental influences not directly related to the networks. For example, advertising agencies must supply a service to advertisers in an efficient manner. The choice of which medium to use for advertising is the result of environmental influences on the agencies. Where these external environmental influences affect the networks, they will be included.

The technological environment (chapter 4) is a systematically progressive environment, unlike the economic environment, since developments are planned and researched over a period of time. It is relatively stable because changes in technology are known before they are developed to the point of being economically viable. For this study, criteria will be established to identify the technologies currently being developed that could affect the networks economically. The technological environment will then be described according to criteria that determine the dissemination of new technologies.

The regulatory environment (chapter 5) is described according to theories of regulatory behavior with emphasis on the effects of regulation on the network organizations and on the developing technologies.

Chapter 6 develops an organizational model of the environments and their interactive effects on the networks. The model is evaluated according to variables Thompson identifies as significant in the study of organizations.
This detailed analysis of the environments is an extension of the study of the commercial television networks as organizations since it is change in the environments that force innovative behavior.
CHAPTER 3

THE COMPETITIVE AND ECONOMIC ENVIRONMENTS

This chapter will discuss two separate environments that are closely related and interdependent. Using theories of network behavior, competition will be described as it applies to the commercial networks as organizations. The components of the economic environment will then be identified and their influence on the competitive environment will be analyzed.

Competition

Competition is defined by Thompson as "a situation in which the decision unit and at least one other seek to influence the behavior of a third party."\(^1\) In network television, three networks compete to gain the largest audience to sell to advertisers. There are two types of competition identified by Thompson, perfect and imperfect. In perfect competition, no one action by one of the competing organizations affects the price of the others. This is an unrealistic situation since, in the past, any rise in prices charged advertisers by one network has been countered by price rises by the other two networks.\(^2\) The competitive


\(^2\) Usually, the network which first raises its advertising prices is the network with the highest program ratings throughout the previous season.
situation among the networks, therefore, is imperfect with actions by one of the networks affecting the others.

Theories of Network Behavior:

Owen, Beebe and Manning state that any viable theory of network behavior must recognize the interdependence of the three networks. If this assumption is accepted, the networks can compete in three ways: (1) the type, quality and scheduling of programs; (2) the prices charged advertisers; and (3) the payments made to affiliates for broadcasting the network's programs. They note that rivalry occurs largely in terms of quality, and in this rivalry the networks recognize their interdependence.

Three theories of product competition have been used to explain competitive behavior within the networks with limited success.

H. Hotelling's studies of stability in competition resulted in his theory of "excessive sameness." Where competing firms eventually reach a point of stability, Hotelling noted that the products produced by those firms

---


4Ibid.

tended to resemble each other. The tendency of the three networks to produce similar programming could be attributed to stable competition. In a two network situation, if one network deviates in programming, one of two reactions occurs: (1) the other network will attract enough of the deviating network's audience to cause that network to return to its original programming; or (2) the second network will follow the deviation in programming resulting in stable competition again. Hotelling's theory requires that specific demand assumptions must be fulfilled if the theory is to be valid. These assumptions require only two competitors. Where a third competitor is present, the model is no longer stable since the equilibrium of the two firm competition cannot be extended to three without some effects not present in Hotelling's model. Therefore, the theory of excessive sameness is of limited value.

A. Cournot's 1938 model of duopolistic behavior\(^6\) is based on two competitors limiting the product supply independently without expecting the other competitor to react. Cournot's model has been used in studies of network behavior by Rolla Park\(^7\) and Robert Crandall.\(^8\) The Cournot

---


model does not recognize the interdependence of the networks in their competitive activities, making its value limited to studies where network interdependence is insignificant.

P.O. Steiner's model of product competition is a more realistic extension of Hotelling's theory of excessive sameness. One time period is used with stations trying to maximize their audience size by selection of program types. According to Manning and Owen, the usual procedure is to make assumptions about the distribution of program preferences among the audiences as well as about the cost of programming.

The researcher then compares the equilibrium of program patterns under monopoly or competition with reference to diversity and duplication. Steiner assumes that viewers have no second choice, there is a limited channel capacity, that duplicated programs would share the audience equally, and that all viewers are of equal value to advertisers. If these assumptions are accepted, Steiner's model shows that "competition tends to produce less diversity...than monopoly control." He concludes that "a discriminating monopoly controlling all stations would produce a socially more

---


11Ibid., p. 45.
beneficial program patterns.\textsuperscript{12} Steiner's assumptions are unrealistic when compared to the reality of network television, and his conclusion would be difficult to put to a test since the regulation of network broadcasting seeks to avoid monopolistic practices.

Owen, Beebe and Manning discuss their model of dynamic interdependence in \textit{Television Economics}. This model is based on the assumption that the "networks constitute a small-group oligopoly with only marginal competition from the syndication market and independent stations."\textsuperscript{13} As an oligopoly, the networks play a competitive "game" with each other by either cooperating with its rivals or by cheating on tacit or explicit agreements, seeking rewards from either action. There exist certain variables which the networks individually control that result in competitive behavior (such as the price the networks charge advertisers and payments made to network affiliates). The oligopolistic rivalry described by Owen, Beebe and Manning results in slowly increasingly higher program quality (with higher program costs). To maintain their high profits, the networks must either reach some agreement on program quality which is highly unlikely, or limit their expenditures in other ways, such as decreasing the number of new programs while increasing the number of re-runs. In recent years, this trend has increased.

\textsuperscript{12}Steiner, p. 206.

\textsuperscript{13}Owen, Beebe, and Manning, \textit{Television Economics}, p. 103.
These theories of network behavior offer a variety of theoretical approaches that center on programming as the product of the television networks. The networks do compete in their programming, but competition extends beyond programming to include competition for advertisers, affiliates and audiences.

The Economic Environment

The economic environment encompasses the competitive environment and extends it to include those organizations which affect operations and the growth of the commercial networks. Noll, Peck and McGowan state that networks occupy the dominant position in American broadcasting by supplying an audience for national advertisers and by originating much of the programming broadcast by local television stations. Therefore, the economic environment consists of five major components: advertisers, advertising agencies, program suppliers, local affiliated stations and audiences.

Advertisers purchase segments of network time to present commercial messages for their products and/or services. Although television advertising is not the major force in advertising, it provides nearly all of the broadcasting revenues of the network organizations.

A company or organization wishing to advertise on television contacts an advertising agency which serves as a broker between the advertiser and the network. The advertising agency develops the advertising campaign and produces, or hires a production firm to produce, commercials. The agency then purchases segments of commercial time from the networks based on the audience size for that time. The unit used in measuring the cost is "cost/m" or cost per thousand viewers. The program ratings determine the actual cost of advertising.

Early in the history of television, advertisers sponsored entire programs, often producing the programs outside of the network. The program content was totally under sponsor control. By 1960 this trend changed, with only one out of five prime time programs sponsored totally by a company. Currently advertiser-financed programming is a rare exception because of four reasons identified by Owen, Beebe and Manning: (1) the rising cost of network time; (2) the risk advertisers take in being associated with a program; (3) the desire of the networks to program their own schedules; and (4) the need for the networks to assume responsibility for their programming, a need recognized by the FCC.15

The commercial networks produce some of the programming they broadcast, notably news programs, but the majority of entertainment programming is purchased by the networks from suppliers. Owen states that programs are bait - an intermediate product used to attract audiences...The Hollywood program production industry...is the same industry that produces theatrical motion pictures. It is a highly competitive industry, with frequent entry of new firms and exits of old ones.

Television programming, other than locally produced programs is supplied to the stations by two means: networks and syndication. Syndication is the distribution of programming to individual stations by selling stations local rights to broadcast that programming. Since television recycles media in the form of re-runs of off-network programs and movies, syndicators provide a service to these local stations by filling time which could not be economically filled locally. Networks can afford to purchase expensive new programming from program suppliers. Noll, Peck and McGowan state that the small number of potential purchasers of programming and the concentration of network affiliates among them tend to tip the balance of market power in favor of broadcasters.17

The networks select programs that they believe will increase viewer numbers and thereby increase revenues.

There is a symbiotic economic relationship between the networks and their affiliated stations. The networks


17 Noll, Peck and McGowan, p. 74.
provide local stations with programming and compensation for clearing (broadcasting) the network programs. The affiliate provides audiences for the networks to sell to national advertisers. Just as the advertising agency is a broker between the advertiser and the networks, the affiliate is a broker between the networks and the audience.

The FCC limitations on affiliate contracts reduces the stability of the network-affiliate relationship. The networks must provide the affiliates with programs and compensation that are competitive with the other network affiliate contracts locally. Changes in the stability of the competitive environment affect the network-affiliate relationship. For example, when ABC achieved ratings dominance in 1975 there were some changes in affiliation. ABC, formerly the weakest of the three networks, had more UHF affiliates (considered to be less desirable) and secondary affiliations than the other two networks. Once it achieved and maintained ratings dominance, some affiliates of NBC and CBS changed their network affiliation to ABC as their contracts expired. Therefore, there is some competition for affiliates within the competitive environment.

From the economic standpoint, the audience is the primary product the network has to sell to advertisers. Therefore, the network must attract the largest possible audience through its programming. Actual viewer behavior according to Owen, Beebe and Manning is not as important as
the perception of that behavior the network executives and advertisers have of it. The accuracy of these perceptions is suspect, given the high turnover of programs in one season.

Figure 7 shows the components of the competitive and economic environments in a process model that emphasizes the dynamic nature of the environments. The most competitive network is that which draws the greatest number of the viewers the advertisers want to buy. Most advertisements appeal to persons between the ages of 18 and 49 since the advertisers believe these people are the major purchasers of products. Competition results when the networks compete for advertising revenues which are the direct result of payments made to the networks for commercial time sold during the network programming. It should also be noted that the competition for advertising dollars is not limited to the three networks, rather it includes all types of media (newspapers, magazines, and radio to name a few) that compete to gain advertising revenues. All three networks engage in activities designed to lure advertisers into more expenditures on television. They compete with each other by the rates charged, which vary competitively according to the number of viewers as reflected in the program ratings and share. Program ratings are

18 Owen, Beebe and Manning, Television Economics, p. 95.
Figure 7
The Competitive and Economic Environments
established unit of audience measurement in TV...which represents the percentage of households tuned to a given program in a time period from the universe of households equipped to receive television.\textsuperscript{19}

If a program receives a national rating of 30, the program is being viewed by 30 percent of all homes equipped to receive television. The share is a more direct reflection of a program's competitive position, reflecting the comparative evaluation of the program with all other programs available to viewers. A program receiving a 33 share is being watched by about one third of the available audience (those watching television at that time). Two companies provide ratings services: A.C. Nielsen and Arbitron. A.C. Neilsen's Television Index uses an audience counting device attached to television sets in a sample of homes. The sample size and methodology used by Nielsen has met with some controversy regarding validity, but the networks exclusively use the Nielsen ratings as a measurement of their audience size. Arbitron competes with Nielsen in the measurement of local market stations but does not compete on national ratings.

The direct relationship in competition ends with program ratings, since actual achievement of the ratings is by a variety of means. Three variables significant to the environment are: (1) program scheduling; (2) program type and quality; and (3) affiliates.

Program scheduling includes the placement of program material to improve the competitive position of the network. Two strategies used are counterprogramming and adjacencies. Counterprogramming is

the tactic of scheduling programs opposite those of rival stations or networks in a manner that would win audience away. If two networks are competing with dramatic series in a time period, the third might counter with a comedy or variety show. Sometimes (it) is achieved through bridging, that is, by starting a 60- or 90-minute program a half-hour earlier than the competing hit. 20

An example of counterprogramming would be where two networks have sports events on while the third offers a movie. The viewers then have a choice. Since the two networks offering the same type of program will likely split the audience attracted by that type, the third network, which has counterprogrammed, will attract a larger audience. It is interesting to note that program schedules for the three networks are usually first released in May for the season starting in September. From May until the premiere week, the networks rearrange their schedules based on the information provided by the other networks on their schedules. Adjacencies are programs which, at least initially, rely on the program airing before it for a ratings advantage. For example, if a program airing at 8:00 p.m. is highly rated, the network will usually schedule a program at 8:30 p.m. which is either new (and unproven) or in ratings trouble. If the program that is not proven is placed between two highly rated programs it is said to be "in the hammock."

20 Ibid., p. 102.
Program type and quality are less clear variables. Although research has found that the number of program categories, or "types," has declined, there has been an increase in the quality of the programming and an increase in the number of re-runs. Dominick and Pearce, in their study of trends in prime time television found that diversity in program types is strongly correlated with industry profits. As profits rose, diversity declined, resulting in more programs in fewer categories. The networks compete by the stress they place on program types within the limited number of categories they have previously been successful with. For example, if a network has been successful with situation comedies, it will likely continue to increase programming of them until their information is no longer valid. Program quality is increased by increasing the amount of money spent on programming. To minimize the impact of increased costs, the networks face two alternatives: agreement among the networks on program quality, which is not likely; or increasing reruns to limit the expenses of new programs.

The number of affiliates and whether they clear network programs is the final variable in the competitive environment. Affiliates are stations which sign contracts with the networks (limited to two years by the FCC) and

broadcast ten or more hours of the network's programming each week. Affiliates are paid by the networks to broadcast the network's programming. The amount paid is proportional to the number of viewers the affiliate has. Primary affiliates are those stations which affiliate with only one network. In some markets, there are only two stations. One station then affiliates with two networks. The network which has the lesser amount of programming broadcast by that affiliate is at a competitive disadvantageous position. Although it would appear logical that the network with the most affiliates would have the largest audience, this is not the case. In May, 1977, ABC had only 192 affiliates compared to 210 for CBS and 216 for NBC, yet ABC had the highest ratings of the three. Changes in affiliation are not as rare as would be expected. When ABC's ratings position changed in 1976, many of their primary affiliates were on the UHF band. They actively sought and in some cases achieved affiliate changes to the VHF band. Changes in affiliation seem to be the result of changes in leadership within the networks competitive environment. Clearance is whether an affiliate broadcasts the network's programming. From the affiliate's viewpoint, broadcasting the network's programming is not as profitable as broadcasting local programming with local advertising. Clearing network programming is the result of viewer demand for that programming. If the networks are providing programs that appeal to local viewers, the
affiliates will clear them. However, if the local affiliate has programming available to it that is of equal or more demand in its viewing area (such as local baseball games) it is more economical for the affiliate to broadcast the alternative programming.

The competitive environment described operates under the assumptions that there are only three television networks and there is only a fixed number of viewers. If additional networks are formed, and the possibility is no longer remote with the development of transmission means and other technologies that improve the economic feasibility, the audience size could become fragmented and result in a loss of viewer numbers by the networks. Changes in technology have had an impact on the competitive and economic environments in the past. For example, the development of color (see chapter 8) forced CBS and ABC to spend an enormous amount of money for conversion to color if they were to remain competitive with NBC. Color conversion was especially significant to ABC since it forced them to seek capital, which they did by attempting to merge with ITT (see chapter 9).

The economic environment affecting the networks is affected by changes in the economic environment of the nation as a whole, a factor which though not controlled by the networks does affect their profitability. For example, if the economy goes into a recessionary trend,
stock prices fall and the network organizations want to keep the prices as high as possible. John Blair and Company research has compiled data on the gross national product (GNP) and network television advertising expenditures for 1964 through 1979 (see Table 8) which is highly correlated (with a +.987 Pearson Product Moment Correlation).

Table 8

The Gross National Product (GNP) And Network Television Advertising Expenditures From 1964 Through 1979

<table>
<thead>
<tr>
<th>Year</th>
<th>GNP (in billions)</th>
<th>Network Advertising (in millions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1964</td>
<td>$635.7</td>
<td>$1,132</td>
</tr>
<tr>
<td>1965</td>
<td>688.1</td>
<td>1,237</td>
</tr>
<tr>
<td>1966</td>
<td>753.0</td>
<td>1,393</td>
</tr>
<tr>
<td>1967</td>
<td>796.3</td>
<td>1,455</td>
</tr>
<tr>
<td>1968</td>
<td>868.5</td>
<td>1,523</td>
</tr>
<tr>
<td>1969</td>
<td>935.5</td>
<td>1,678</td>
</tr>
<tr>
<td>1970</td>
<td>982.4</td>
<td>1,658</td>
</tr>
<tr>
<td>1971</td>
<td>1,063.4</td>
<td>1,593</td>
</tr>
<tr>
<td>1972</td>
<td>1,171.1</td>
<td>1,804</td>
</tr>
<tr>
<td>1973</td>
<td>1,306.6</td>
<td>1,986</td>
</tr>
<tr>
<td>1974</td>
<td>1,412.9</td>
<td>2,145</td>
</tr>
<tr>
<td>1975</td>
<td>1,528.8</td>
<td>2,306</td>
</tr>
<tr>
<td>1976</td>
<td>1,706.5</td>
<td>2,857</td>
</tr>
<tr>
<td>1977</td>
<td>1,887.2</td>
<td>3,460</td>
</tr>
<tr>
<td>1978*</td>
<td>2,107.6</td>
<td>3,970</td>
</tr>
<tr>
<td>1979*</td>
<td>2,341.1</td>
<td>4,505</td>
</tr>
</tbody>
</table>

*Blair Estimate

This correlation is significant since it underscores the interdependence of the environments. Although television advertising represents less than one half of one percent of the GNP, other economic factors affect the potential advertisers and, in turn, the amount of money spent on television advertising. The loss of any segment of advertising has an impact on the total revenues of the network organization. Although it was not caused by economic factors, the loss of cigarette advertising revenues in 1971 shows the economic effect of an advertising segment's loss on the money spent on television advertising. Table 9 shows the percent of change in advertising expenditures from 1965 through 1975. The drop in revenues for 1971 was attributable to the loss of cigarette advertising. The relatively swift recovery in 1972 shows that the setback, while significant, was temporary.

In evaluating the economic environment, the general economic health of the nation is an important factor to be considered. This consideration must not be limited to the effect on advertisers. It is possible that a decline in economic conditions nationally might result in an increase in television viewing at the expense of other forms of entertainment. If the audience is offered a variety of programming on their television sets (including programming on cable and pay-television), the potential audience for network television will increase. However, the developments
Table 9
Advertiser Expenditures And
The Percent of Change
From 1965 Through 1975

<table>
<thead>
<tr>
<th>Year</th>
<th>Advertising Expenditure (in millions)</th>
<th>Percent of Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>1965</td>
<td>$1,237</td>
<td>8.5%</td>
</tr>
<tr>
<td>1966</td>
<td>1,393</td>
<td>11.2%</td>
</tr>
<tr>
<td>1967</td>
<td>1,455</td>
<td>4.3%</td>
</tr>
<tr>
<td>1968</td>
<td>1,523</td>
<td>4.5%</td>
</tr>
<tr>
<td>1969</td>
<td>1,678</td>
<td>9.2%</td>
</tr>
<tr>
<td>1970</td>
<td>1,658</td>
<td>-1.2%</td>
</tr>
<tr>
<td>1971</td>
<td>1,593</td>
<td>-4.1%</td>
</tr>
<tr>
<td>1972</td>
<td>1,804</td>
<td>11.7%</td>
</tr>
<tr>
<td>1973</td>
<td>1,968</td>
<td>8.3%</td>
</tr>
<tr>
<td>1974</td>
<td>2,145</td>
<td>8.3%</td>
</tr>
<tr>
<td>1975</td>
<td>2,306</td>
<td>7.0%</td>
</tr>
</tbody>
</table>

NOTE: The advertising expenditures in this table are from statistics compiled by John Blair & Company.
in cable and pay television give rise to the possibility that this enlarged audience will be fragmented and the networks would not gain by the increase. It should be noted that while viewing has historically increased in cycles of economic slowdown, the availability of other types of entertainment was limited and the resulting gain by the networks could be changed as new technologies are more widely available.

The competitive and economic environments have been shown as dynamic, affected by organizations with organizational goals and behaviors that may conflict with those of the network organizations. The networks are unable to acquire total information from the competitive and economic environments forcing the networks to make choices that are fraught with uncertainties (as explained by Thompson, see chapter 1). A highly visible example of the uncertainties is in programming. The networks do not have total information on: (1) what audiences will watch; (2) what programs advertisers will buy time on; or (3) what programs the other networks are scheduling. The result is that the networks often change their program schedules drastically before the season starts as information is gained.

Although these environments are interdependent, the networks are affected by technological developments and regulations that form separate environments.
CHAPTER 4
THE TECHNOLOGICAL ENVIRONMENT

The technological environment consists of technological innovations which affect the audience size attracted by the commercial television networks. This chapter will survey the major technological innovations that have, in the past, caused the networks to change their operations. Also, criteria will be established to identify those technologies which have the potential of affecting the network audience size (and therefore its profits). Finally, factors will be identified which constrain the distribution of new technologies.

Levels of Technological Development

Three criteria are used to distinguish the levels of technological development affecting the commercial television networks: speed, quality and diversity.

Speed of transmission is the relative amount of time needed to distribute a message from one source to another. As was previously discussed (chapter 3) the economic power of the commercial networks is based on their ability to simultaneously broadcast a program to many viewers. Other examples of the effect of speed of transmission on television broadcasting are syndication, where
a videotape or film program is "bicycled" from one station to another via mail for separate viewing by audiences of the station broadcasting the program; and satellite-to-home transmission of a live sports event from one continent to another.

The networks have had to adapt to changes in the speed of transmission throughout their histories. When radio networking began, and later television networking, it was feasible only because of developments in telephone technology by AT&T. As the result of agreements first signed in 1925, AT&T leases telephone lines to the networks for the majority of their transmissions. The first major change in the speed of transmission was the development of coaxial cable (1936) and microwave relays (1947) which increased the transmission capacity at a lower cost. The impact on the network operations was minimal, since the telephone lines the networks used were guaranteed to be available. However, as will be discussed in chapter 7, coaxial cable and microwave relays were significant to the development of cable television. The next major development was satellite transmission, the full effects of which have not been totally felt by the commercial networks. Satellite transmission is a means of transmitting signals between two or more points without the use of land lines by beaming the signal from an earth station to the satellite which then beams it back to earth. It is far
more efficient than land lines because it is technically superior and, in most cases, less expensive to use. The networks use satellite transmission for remote broadcasting and a variety of other uses with the notable exception of distributing their network programming to affiliates. This includes NBC, whose parent corporation RCA is one of the largest satellite operators. Networking by satellite is feasible and is in operation. The Public Broadcasting System has used satellite transmission as its major means of distribution since 1978. It should be noted that satellite operators, unlike the monopolistic AT&T, are competitive with the possible result of improved economic feasibility of networking by satellite.

The quality is the technological ability to improve reception and enhance the picture as it is received by the viewer. It is not the quality of programming in the sense of what is shown, but rather how well it is presented technically. Television is the result of experimentation conducted as far back as 1919 by Vladimir Zworykin for Westinghouse. When the technological developments needed for television were combined with telephone lines capable of transmitting pictures and voice, network television began. The next major quality improvement was the development of color television, covered in detail in chapter 8. Color enhanced television, adding a new dimension to it. Since
the development of color, changes in quality have been limited to improvements in existing services, including the development of videotape recording and improvements in UHF technology (see chapter 7 for detail on these developments).

Diversity, as it relates to the technological environment, is the ability of a user/viewer to have access to information and/or entertainment on demand. The commercial networks do not have the technical ability to allow a viewer to watch programs when that viewer desires to. However, a viewer with a videocassette recorder can record programs and play them back at will. With new technologies programming becomes more diverse, since minority interests can be economically supplied with programming by means other than broadcast television. Since the purpose of this study is to evaluate the impact of new technologies on the networks, some criteria must be established to identify the technologies most likely to have that impact. Therefore, the new and developing technologies relevant to this study will be limited to those fitting the following criteria:

1) the technologies must use a television set as an integral part of the originator to user system;
2) they must be designed for use by the general public with minimal training;
3) they must provide information and/or entertainment for the general public; and
4) they must be feasible only by using a technology fitting the first three criteria.
All technologies referred to in speeches by network officials and in articles published in the trade press (Broadcasting and Variety) from January, 1978 through June, 1980 were evaluated according to the above criteria. Four technologies met all the criteria:

(1) cable and interactive cable television
(2) pay television and subscription television
(3) videocassette recorders
(4) videodisc players

Four other technologies were identified as having some effect on network broadcasting but did not meet all of the criteria: satellite transmission of programming (including satellite-to-home and re-transmission of independent television stations), video games, home computers and videotext. For a more detailed explanation of these technologies, see chapter 10.

Factors Affecting Technological Dissemination

With the development of new technologies the user/viewer has access to programming from a more diverse set of sources with some technological changes to the television set. The commercial network broadcasters now are forced to share the television set with an increasing group of receiver-centered technologies. However, availability of a technology is not the sole criterion for successful dissemination of that technology. Other factors affecting public acceptance include cost of the technology, the level of complexity and program appeal.
The cost of a new technology is usually considered to be an economic factor. However, it becomes a technological consideration when the refinements in the technology result in lower costs and, therefore, access to the technology becomes easier for users. For example, color television receivers initially cost about $1,000 in 1953. With solid state technology and other advances, the cost has declined drastically. In the case of cable television, the initial cost of wiring an area to be able to receive cable is quite high, but once wired the price of adding subscribers is reduced. Technological advances in fiber optics promise to lower the initial cost of installing cable in the future.

The level of complexity of a new technology affects the public's acceptance of the new technology. Of the technologies relevant, the least complex is cable television, requiring only the connection of the cable to the television set. The user then selects the channel by using the tuner on the television set or a tuner modeled after the one on a television set. The most complex would be the videocassette recorder which requires the installation of a record/playback unit and requires the user to do a variety of functions in recording and playing back the videocassette tapes. The levels of complexity shown in figure 8 show the increased user participation and relative difficulty in the use of different technologies affecting network broadcasting.
<table>
<thead>
<tr>
<th>Level</th>
<th>Technologies</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>Home Computers</td>
</tr>
<tr>
<td>5</td>
<td>Videocassette Recorders</td>
</tr>
<tr>
<td></td>
<td>Videotext</td>
</tr>
<tr>
<td></td>
<td>Satellite-to-Home</td>
</tr>
<tr>
<td>4</td>
<td>Videodisc Players</td>
</tr>
<tr>
<td></td>
<td>Video Games</td>
</tr>
<tr>
<td>3</td>
<td>Pay-Television</td>
</tr>
<tr>
<td></td>
<td>Subscription Television</td>
</tr>
<tr>
<td></td>
<td>Interactive Cable</td>
</tr>
<tr>
<td>2</td>
<td>UHF-TV</td>
</tr>
<tr>
<td></td>
<td>Cable Television</td>
</tr>
<tr>
<td>1</td>
<td>VHF-TV</td>
</tr>
</tbody>
</table>

Figure 8
Levels of Technological Complexity
The interactive effects of the new technologies on the existing technological structure of network broadcasting result in multiplicative effects rather than additive. For example, satellite transmission of pay-television programming results in rapid multiple distribution of programming from a central location to diverse locations without greatly increasing the cost of added locations. Some multiplicative effects are evident in the networks themselves, such as the use of satellites to transmit news stories from various locations world-wide to the central news operation in New York City. Figure 9 shows the possible interactive effects of the major new technologies and the commercial networks.

The commercial networks exist in a technological environment that is rapidly changing. In recent years cable penetration has increased to over fourteen million subscribers. The U.S. Department of Commerce predicts that by 1983 there will be twenty million subscribers to basic cable service with 7.3 million subscribers to pay-television.\(^1\) In 1978 there were 2.6 million pay-television subscribers. An FCC study of cable television has found that cable diverted between three and twelve percent of the network audience and would increase to between six and twenty-seven percent with the importation of more distant signals.

\(^1\)reported in Broadcasting 96:7 (February 2, 1979):23.
Figure 9

Interactive Effects of New Technologies
The conclusion of the FCC study is that "there is room in the economy for both cable and broadcast television."²

Currently, the technological environment is the most stable of the environments affecting the networks since the changes in technology most likely to impact the networks are already known. The dissemination of the new technologies, however, is a slow and costly process. For example, the cost of wiring a city for cable television has to be considered by cable operators along with the ability of cable to provide enough incentive for subscribers to pay for additional service. The growth of cable in metropolitan areas was not feasible until new services were offered. However, if the economic constraints are minimized, the technological environment could lose its stability. The diverse technologies currently in various stages of dissemination are beginning to reach the point of economic feasibility and, therefore, present a threat to the networks. These threats are unique in the history of broadcasting since other technological changes either augmented or improved network television.

The relationship between the economic and technological environments has been shown to be a significant factor in this study since the degree of impact each has on the networks is affected by the other. However, there is one final environment whose impact is the most constraining: the regulatory environment.

²Broadcasting 97:3 (July 16, 1979): 35.
CHAPTER 5
THE REGULATORY ENVIRONMENT

Of all the environments affecting the networks, the regulatory environment is potentially the most influential because of the power it holds over the network organizations in a variety of areas. The Federal government is a classic bureaucracy (see chapter 1) with conflicting regulatory goals that result in confusion and uncertainty for the networks and their parent organizations. This chapter will identify and describe the parts of the regulatory environment that affect network broadcasting. Also, it will describe regulatory behavior as described by Noll, Peck and McGowan, and finally, the regulations relevant to this study will be discussed.

Regulatory Influences

The regulatory environment affecting the commercial television networks consists of the three branches of government (executive, legislative and judiciary); four regulatory agencies (the Federal Communications Commission, the Federal Trade Commission, the Securities and Exchange Commission and the Equal Employment Opportunities Commission); plus lobbies (such as the National Association of Broad-
casters) and public interest groups (such as Action for Children's Television).

The Executive branch of the government appoints FCC commissioners and names the Chairman of the FCC. The Department of Justice, the agency responsible for the enforcement of Federal laws, is also a part of the Executive branch. Krasnow and Longley state that "the Justice Department's Antitrust Division has taken an activist role in FCC proceedings"\(^1\) including challenges of FCC decisions and deciding

which cases the Federal Government should ask the Supreme Court to review and what position the Government should take in cases before the Courts.\(^2\)

The Legislative branch is directly involved in the regulatory environment since it writes and enacts the laws regulating the broadcast industry and controls the amount and purpose of funding for the FCC.

The Judicial branch of government is responsible for reviewing FCC decisions and interpreting the laws regulating broadcasting. Appeals of FCC decisions on licensing are filed with the D.C. Court of Appeals while appeals of FCC decisions on compliance of rules are filed with the Federal District Court. Decisions by these courts are subject to review by the Supreme Court.


\(^2\)Ibid.
The regulatory agency most affecting the broadcast industry is the FCC, formed by Congress in the Communication Act of 1934, to be responsible for licensing broadcast stations; and creation of rules, regulations and policies for the interstate commerce of communication.

The FTC affects broadcasting by its concern with false or misleading advertising. Recent Congressional actions have minimized the effect of the FTC on broadcasting.

The SEC is of concern to the networks because of its regulations regarding disclosure of financial information. If a corporation offers securities for sale (as do all three networks) they are required to file certain financial information with the SEC, some of which is published in "10 K Reports."

The commercial networks are required to file forms with the FCC regarding the employment of women and minorities. Therefore, although the question of FCC jurisdiction in equal employment practices is unclear, the networks are under scrutiny by the FCC regarding employment practices. In February, 1980, the FCC voted to study the employment practices at the networks in order to ascertain whether and/or how the networks employ minorities and women in upper level positions. The question of jurisdiction is unclear, the result of a Supreme Court decision involving the Federal Power Commission, but regulation by raised eyebrow is possible as is involvement by the Equal Employment Opportunity Commission.
The lobbying efforts of the networks have met with some success if the criteria of success include maintaining the status quo in broadcast regulation. The efforts of lobbying groups such as the NAB often plead the network's viewpoint to FCC Commissioners and other regulators.

The public interest groups affect the networks almost exclusively in the area of programming; especially violent programming. The success of public interest groups in the areas of license renewal and FCC standing for the public, while significant do not directly affect the networks.

Networks are not directly regulated by the FCC, but indirectly are regulated by it since affiliated stations must be licensed and must follow prescribed guidelines.

**Regulatory Behavior**

Intentionally or not, the regulatory environment has historically maintained the status quo in broadcasting. For example, cable regulations have limited the growth of this potential competitor with network broadcasting. However, recent FCC actions have indicated shifts in policy from the status quo to a more competitive environment including new and developing technologies and de-regulation of broadcasting.

Noll, Peck and McGowan have developed a theory of FCC behavior based on two assumptions: (1) "the FCC's decisions are the result of rational, optimizing behavior;"³

---

and, (2) "the potential for economic gain motivates not only purely economic behavior, but much of political behavior as well." These assumptions center on the FCC as an organization which seeks to not only operate in the public interest but also to improve upon the organization's stature and power within the political system. The FCC, according to Noll, Peck and McGowan, is motivated to make decisions which are not controversial whenever possible, noting that "the preferred state for regulators is one that minimizes visibility and change." If there is no controversy, the FCC budget passes through Congress easily, no new laws are considered which might constrain FCC power, and the possibility of extending FCC authority is improved. The result of this FCC motivation is "behavior patterns that inhibit socially desirable change." The FCC is more likely to respond to groups which lobby heavily (such as the networks) and will make decisions in their favor if that decision does not threaten the FCC organization. Also, the FCC will seek compromises to lessen the chance of one party appealing the FCC decision, since that would put the FCC in a more visible position. Finally, if a decision seems to be controversial and would most likely be appealed, the FCC will delay the decision and try to shift responsibility for the decision outside of the FCC by asking for

4 Ibid., p. 121.
5 Ibid., p. 124.
6 Ibid.
direction from Congress, the Courts, other regulatory agencies or the Executive branch of government.

The regulatory environment is significant because of its impact on the development and dissemination of new and developing technologies. Rowe states that the challenge "is to devise public policies and instrumentalities which can maximize the benefits of innovation." 7

Broadcast Legislation

The center of broadcast legislation is the Communications Act of 1934, considered by some experts to be hopelessly outdated. Lionel van Deerlin attempted a re-write of the Communications Act in 1979, but failed to get congressional approval. Therefore, with additions, the main piece of legislation governing the broadcast industry has not changed since before the invention of television. The history of FCC behavior has not been conducive to the development of new technologies, especially cable. As McGillem and McLauchlan point out

it appears very difficult to obtain political support for innovations if they threaten established telecommunications industries. 8

The need for changes in existing legislation is discussed by some researchers. Owen's study of cable

_______________________________
television provides a history of the technological, economic and political issues as well as alternatives to present regulation based on research studies conducted by himself and others. His findings included conclusions about four specific issues: (1) distant signal importation (freeze the number of stations imported, gradually increase them, or deregulate); (2) pay-television (totally ban it, allow unrestricted growth or special program allowances); (3) jurisdictional issues (most studies stress inclusion of localism wherever possible, but Federal Regulations where necessary); and (4) content (separate from or controlled by cable companies).

Schmidt agrees that the law is behind the times, pointing out that the divergent legal approaches to print and broadcast media should be changed in view of pluralistic (i.e. cable) programming and the resulting change in the concept of scarcity on the broadcast spectrum. With cable, the number of channels is no longer limited by the scarcity of space, but rather by economics and viewer preference.

---


Two regulatory areas significant to this study are (1) antitrust and monopoly regulations; and (2) legislation dealing with the development of new technologies.

Regulation for Competition

Section 313 (a) of the Communications Act of 1934 states that

All laws of the United States relating to unlawful restraints and monopolies and to combinations, contracts, or agreements in restraint of trade are hereby declared to be applicable to...interstate or foreign radio.

The Supreme Court's 1940 declaration that "the field of broadcasting is one of free competition"\(^{11}\) coupled with Section 313(a) should make the FCC an agency which enforces the antitrust laws of the Clayton Act.\(^ {12}\) However, under the Sherman Act, enforcement authority is not given to the FCC. According to Perry, "the industry is not regulated by those competitive forces which the antitrust laws seek to preserve."\(^ {13}\) The FCC has described as its purpose in this area:

to prevent undue concentration of control in the broadcasting industry, and to encourage the development of the greatest diversity and variety in the presentation of information, opinion, and broadcast material generally.\(^ {14}\)

\(^ {11}\)FCC v. Sanders Brothers Radio Station, 309 U.S. 470, 474 (1940).


\(^ {14}\)"Commission to Designate for Hearing Applications to Acquire Interests in a Second VHF Station in Major Markets," FCC 64-1171, December 18, 1964.
Perry points out that competition policies considered by
the FCC tend to be based on First Amendment principles in
order to achieve diversity of information rather than
"promoting competition in the commercial sense."\(^{15}\)

The monopoly potential of broadcasting was recognized
early in its history. In 1918, a bill was introduced in
the House of Representatives (H.R. 13159) which would give
the U.S. Navy monopoly control of radio. The bill failed
and broadcasting has remained under public control. Other
regulatory attempts have dealt with concentration of power
in broadcasting, including the Chain Rules of 1941 and the
with the Department of Justice's Antitrust Division, in
a discussion of antitrust policy states that

> broadcasting is not a natural monopoly or otherwise an
activity in which the application of competitive
principles is somehow likely to produce perverse re­
sults.\(^{16}\)

In light of evidence to the contrary, Turner feels that laws
and policies which currently are used to protect competition
"can appropriately be applied to the broadcasting industry
with substantially their full force."\(^{17}\) Turner expresses
concern about the monopolies he claims do not exist stating

\(^{15}\)Richard L. Perry, p. 3.

\(^{16}\)Donald F. Turner, "The Role of Antitrust Policy in
the Communications Industry" Antitrust Bulletin 13:871

\(^{17}\)Ibid.
that the Department of Justice should assist in devising and implementing the kind of regulatory methods that are necessary if we are to have any success at all in keeping monopoly to the bare minimum and getting monopolists to behave like firms which have to compete.\textsuperscript{18}

In 1941, the FCC adopted the "Chain Broadcasting Rules" after a study of the potentially monopolistic practices by the networks. According to Emanuel Cellar they were

designed to remedy competitive abuses disclosed by a three-year investigation, forbid licensing of any station whose relations with a network violate specified principles.\textsuperscript{19}

Since the FCC did not have the power to regulate the networks it resorted to regulating the area of station licensing, a power it did (and does) have.

In 1955 the FCC initiated a second study of network broadcasting to determine whether the present operation of television networks and their relationships with stations and other components of the industry tend to foster or impede the development of a nation-wide, competitive broadcast system.\textsuperscript{20}

\textsuperscript{18}Ibid., p. 879.


The report submitted by the Network Study Staff to the FCC on October 3, 1957 concluded that the networks are a necessary and desirable part of broadcasting and that any changes should be made within the existing structure.

The results of the Network Study Staff conflict with the results of hearings held during 1955 before the Antitrust Subcommittee of the House Judiciary Committee. The Chairman of that committee, Emanuel Cellar, stated that testimony presented during the hearings showed that regulatory agencies, including the FCC

not only had become unduly industry-minded, but had, contrary to antitrust principles, sanctioned excessive concentration in the industries subject to their jurisdiction.21

Cellar noted that the spectacular growth of the television industry was at least partially the result of the FCC removing obstacles which, in effect, retarded competition. Although the regulations of the FCC which are called into question do affect the potential entrants into network broadcasting, they have also, in effect, stifled the growth of new and developing technologies.

Regulation of New and Developing Technologies

In 1959 the FCC stated that it did not have the authority to regulate cable since it was neither a broadcast facility nor a common carrier.22 At that time cable television was mostly used to improve signals and did not include


22"Report and Order" Docket 12443, 26 FCC 403 (1959).
clude any programming by the cable companies or importation of distant signals across state lines.

However, the situation changed between 1959 and 1966. Through the use of microwave relays, cable system operators could import distant signals thereby offering cable subscribers more programming. Local broadcasters protested to the FCC requesting restrictions. In 1962 the FCC began to regulate cable by stating that they did have jurisdiction over microwave relays. Finally, in 1965-1966 the FCC asserted full regulatory jurisdiction over cable television and "froze" all such systems in the largest one hundred television markets, forbidding importation of additional signals. These actions were upheld in court.23

In 1972 further regulations were enacted which set the number and type of signals a cable system could import and required cable systems to provide space for public access programming. Recently, the FCC initiated rulemaking to repeal the limitations on distant signal importation. If the limitations are repealed, the only limit to the number of stations offered by a cable system is channel capacity. The majority of regulations affecting cable television are local regulations since the courts struck down many of the rules enacted by the FCC in 1977. The goal of these FCC regulations that continue to exist are to protect the

broadcasters from economic harm and to maintain the public interest standards required of cable operators.

Pay-television was highly regulated by the FCC until 1977 to prevent the pay channels from showing programs which might otherwise be shown on broadcast television. After the regulations were lifted, pay-television experienced a major growth in subscrib ership and, ironically, in 1977 Home Box Office, the largest pay-television company, had its first profits.

There has been a change in the policies of the FCC regarding new and developing technologies in the past few years. FCC Chairman Charles Ferris stated that

the public interest can most effectively be voiced by the public itself as it turns the dials of television sets across the country to choose among an abundance of program choices.24

Former U.S. Court of Appeals Judge David L. Bazelon whose judgements have affected broadcasting for many years stated that

for the first time in fifty years of regulation, we stand on the brink of major changes in the regulatory framework governing telecommunications. New technologies call into question time worn assumptions about the need for government regulation.25

---


Current Regulatory Constraints

In the most basic terms, the networks must abide by the laws of the United States Government. This means that the networks are subject to review of all actions which might interfere or be of questionable legality according to laws and regulations enacted by Congress, the FCC, the FTC, the SEC and the Department of Justice. The regulatory influence on the networks, therefore, is very significant.

If the networks were static in their organizational behavior, the regulatory environment would be of less significance than it is in the present dynamic situation. The entry of the networks into the jurisdiction of the new technologies raises significant questions as to whether they will be allowed to participate in the dissemination of the new technologies and what limitations will be placed upon them. For example, currently, the telephone companies are prohibited by law from entering cable television. If the laws were changed, the ability to transport signals by the telephone companies could severely damage the competitive environment of cable television. The networks are careful not to overstep their own legal constraints either. For example, ABC was prohibited from producing motion pictures until it sold all of its theatres, which was done in 1979.

Besides the overt regulation of networks, there are regulatory constraints not directly attributable to laws that affect the networks. The FCC indirectly regulates the
networks by regulating the network affiliates (through the granting of licenses). The lobbying efforts of the networks are, at least in part, to prevent what is called "regulation by raised eyebrow." If the FCC feels there is an issue which should be regulated, it has the ability to "inspire" self-regulation by the networks. An example of this is the family viewing hour, which resulted from meetings between the networks, the National Association of Broadcasters and the FCC. Although no legislative action was taken, the FCC had an influence on the self-regulatory action taken.

Obviously, the regulatory environment is the most constricting of the environments discussed. The reaction to decisions made by regulatory agencies is severely limited. If the networks do not feel the actions taken are in their interest, they must yield to those actions. Litigation to change regulations is extremely costly and time consuming. Also, litigation gives the networks attention they might not want and could result in regulatory action the networks would have avoided.
CHAPTER 6
AN ORGANIZATIONAL MODEL OF THE INTERACTIVE ENVIRONMENTS AFFECTING NETWORK TELEVISION

Each of the four environments affecting the networks and their parent organizations has been evaluated independently and the ability of these environments to constrain the organizational development of the networks has been shown. This chapter will further the analysis by developing a model of the interaction of these environments. Also it will evaluate the interactive influences of the environments according to variables identified by Thompson (see chapter 1) as significant in the study of organizations.

If the networks are information seeking organizations with bounded rationality (as assumed by Thompson), the influence of the four environments affects how the networks seek to accomplish their organizational goals. Figure 10 is a model of the interactive environments affecting both commercial network television and the organizations that own the networks. The four environments are represented as progressively constraining circles around the network organizations. Each of the environments has a different type of influence on the networks. The model depicts the
Figure 10

A Model of the Interactive Environments Affecting Commercial Network Television
scope of influence each of the environments has on the other environments. For example, the economic environment affects the competitive environment in that the advertisers must be attracted both through competition among the networks and by competition with other types of advertising media. The regulatory environment, the most constraining environment in this model influences all of the other three environments through either direct or indirect legislative activity. Using Thompson's open system strategy for studying organizations and the model, the interaction among the networks and their environments can be identified and evaluated. The environments can be considered to be more dynamic than the model represents since the influence of each environment takes on differing power at different times in the organization's history. For example, during the late 1940's and early 1950's, color television was being developed. Initially, the technological developments of color were of great influence on the organizational actions of RCA and CBS. However, when the competition over which system was to be adopted reached the FCC, the regulatory environment became more important. (See chapter 8)

To evaluate the networks, the four variable identified by Thompson as significant to the study of organizations will be used (see chapter 1): (1) uncertainties faced by the organization; (2) organizational rationality;
(3) organizational domain and task environment; and (4) organizational design.

Uncertainties

Uncertainties faced by each commercial network are due to the inability of the network to control parts of its environments. The competitive environment presents some uncertainties, since program ratings and the advertiser revenues generated by high ratings cannot be totally controlled by the networks. The networks attempt to have some control over the competitive environment by relying on program types that have proved to be successful in the past and by discovering the schedules of the competing networks to adjust its schedule accordingly. However, the relatively high turnover of programming presents the network with a degree of uncertainty they must try to minimize. This is done by developing programming from already established programs (spin-offs); feature films; or by broadcasting pilot programs to give the network information it needs to evaluate its programming. Research is conducted at many levels of program development to acquire information on the potential a new program has for success. This research is not always a reliable guide to success and the network schedule remains flexible, with changes in programming common throughout the year.
The uncertainties faced by the network regarding the economic environment include advertiser demand for commercial time; availability of and quality of programming from suppliers; affiliate stability and audience desire. The advertisers are not obligated to continued purchase of time on the networks. If the sales of a product do not reflect positive change over an advertising period, the advertiser might not renew purchase of time on the network. Although the majority of commercial time on the network and select other media for their advertising.

Although the majority of commercial time on the networks is currently purchased well in advance, the possibility does exist that advertisers might begin to distribute their commercials among some of the newer technologies, thereby minimizing the amount of money spent on network advertising. Program quality is difficult to measure in any quantitative way. Therefore, the networks attempt to find some successful program type and imitate it with the hope that the success will continue. The resulting situation is that the program supply market is unstable. "In" production houses are highly successful for a period of time but then seem to disappear when their distinct program style is no longer considered by the networks to be a successful program type. For example, MTM Productions was one of the most highly successful production firms during the early 1970's (with "The Mary Tyler Moore Show," "Rhoda," "The Bob Newhart Show," and "Phyllis" all airing in that period) but soon found its programming unacceptable at the networks when audience tastes changed.
and the program type produced by MTM was no longer as strong in the ratings.

There is less uncertainty in the number of affiliates a network has, since contracts with them run for two years and, in most cases, are renewed. However, when the ABC network moved from third place in the ratings to first, there were some changes in affiliation.

The current uncertainties in the technological environment are discussed in detail in chapters 10 and 11. For the purposes of this chapter, uncertainty in the technological environment results from the network's inability to diversify into some new technologies because of prohibitions from the regulatory environment. Threats from the technological environment are long range, as opposed to those from the competitive environment where a change in ratings can be dealt with by program changes. The relatively quick changes in competing network positions in the ratings causes less problems since action can be taken immediately. However, changes in technology require actions that are long term, and the results of those actions may not be apparent for some time. Within the technological environment the most stable of the three networks is NBC because its parent company, RCA has interests in many of the new technologies. CBS and ABC are less certain of the problems facing them, but have attempted to minimize the uncertainty by developing organizational divisions to develop programming for the new technologies.
The regulatory environment is a functioning bureaucracy complete with long delays in action. Therefore the uncertainties the networks face from this environment are rarely threatening to the organization's survival. Part of this security is the result of lobbying efforts by organizations including the networks and the NAB. Contingencies are usually developed well before any regulatory action is taken. For example, when the FCC threatened to regulate violent programming, the networks (along with their lobby group, the NAB) were able to self-regulate to the satisfaction of the FCC and rulemaking was never initiated.

Organizational Rationality

Organizational rationality deals with how the desired outcomes of an organization are achieved. For the networks and their parent organizations the desired outcomes are corporate survival and maintaining a competitive position in profits and stock prices. Two types of rationality relevant are instrumental (whether actions taken achieve the desired result) and economic (whether the results are achieved at the lowest cost). The networks desire to achieve the highest audience numbers of viewers the advertisers wish to appeal to. This audience is then sold to advertisers. The competitive environment assumes that the three networks must divide a static audience total. To better their competitive position, a network might attempt to improve its program quality. However, improved program quality must
require increased program costs. Therefore, if this means were chosen, the network must consider the potential benefits of improved ratings as opposed to the cost of those ratings. Other alternatives the network might consider include changes in program scheduling and promotion of programs with the potential for higher ratings. These alternatives would not entail expenditures as great as the improvement of program quality would and might achieve the same results.

The economic aspects of organizational rationality are close to the competitive aspects. The cost of program development and the resulting audience gains affect the desire of advertisers to purchase commercial time during programs with higher ratings. The advertisers seek the most viewers possible for their advertising at the lowest cost. Therefore, the competitive position of a network significantly affects how the advertiser perceives of the network's potential to increase the advertiser's sales.

Within the technological environment, the organizational rationality of the network relates to the ability of the network to use new technological developments or to minimize the impact of those developments. For example, when the FCC finally approved color broadcasting, the networks converted to color (see chapter 8). ABC did not have the funds needed for the conversion, but recognized that it must convert to remain competitive (see chapter 9), and sought funds.
The networks have attempted to avoid direct regulation by the government wherever possible, a move which keeps the networks in a more powerful controlling position of their activities. Requests for legislation by the networks have always been the result of the network's inability to self regulation as the major means of retaining control of organizational rationality in the networks. By self regulation, the networks can control the organizational rationality with minimal outside interference.

**Organizational Domain and Task Environment**

The organizational domain is made up of supporting organizations needed by the networks such as program producers, suppliers, advertisers and regulatory agencies. The technical matrix of these organizations needed for the network's existence are shown in the model. Without the audience, the advertisers would have no need to purchase commercial time and the networks would cease to exist. The task environment views the supporting organizations separately and evaluates each organizations impact on the achievement of goals. For example, the advertiser needs to sell a product or service, using commercials to introduce their product to the public. The network is heavily dependent on these advertisers for profits.

The competitive environment is a reflection for each of the networks of how the competition is operating. They use the competition as a source of ideas and a guide to industry trends.
The economic environment is most significant as an organizational influence on the networks. Each of the organizations in the economic environment directly affects the outcome of network profits. For example, the most direct indicator of network profits is ratings of programs which are produced by the program suppliers. Because the networks are brokers between advertisers and audiences the organizational domain is of greater importance in the network business than in a business with a more concrete product. The task environment directly affects the stability of the networks, since those organizations supporting the network's goals change with some degree of frequency. Changes in programming and advertisers are some examples of this dynamic environment.

The regulatory environment acts as a constraining force in the organizational domain and task environment, limiting activities of the networks. For example, the FCC limitations on the length of time affiliates sign network contracts for affect some network actions.

Organizational Design

Organizational design is the diversification attempts of the organization to expand its boundaries to include activities that if not controlled by the organization could affect the health of the organization.
The networks realize the threat of new and developing technologies to their organizations. This recognition has resulted in action by all three networks to accommodate the public acceptance of these technologies. CBS has formed CBS/Cable to provide programming for cable television. ABC formed ABC Video Enterprises and RCA has entered satellite transmission as a means of lessening the impact of lost network audiences on the corporate stability. Each of the networks recognizes the need to diversify in areas other than broadcasting and have attempted to do so (see chapter 2 for detail on these diversification attempts).

Within the competitive environment, RCA is the most diversified corporation while ABC is the least diversified. The design of the corporations and the amount of diversity within them affects the competitive environment by affecting the network's ability to withstand changes in their competitive rating position. NBC has continued to have problems with ratings but remains a viable network sheltered by the RCA corporate structure. However, ABC's profits are more directly affected by changes in ratings.

The economic environment is influenced by the networks' entry into program production and owned and operated stations. Although the majority of entertainment programming is still produced outside of the networks, the networks have entered some aspects of film production for television.
Also, they maintain some control over the programs produced outside of the networks by selection of programs to be broadcast and censorship. All three networks own five television stations in the top markets in the U.S. These stations are enormously profitable and give the networks some control over affiliate clearance in these markets. A network owned station is highly likely to clear all of the network's programming. The sale of commercial time to advertisers in these large markets adds capital to the broadcast profits of the networks.

Diversification within the technological environment is most applicable to RCA whose business has always centered on technology. CBS's attempt at entry into the technological segment of the broadcast industry in the 1950's (with the development of mechanical color) was not successful (see chapter 8). Its diversification attempts in areas other than technology have been more successful. ABC has not entered the technological areas of television broadcasting.

The regulatory environment affects the organizational design of the networks directly through regulations aimed at preventing monopolistic behavior in the industry; and indirectly through regulations affecting affiliated stations.
The model of the interactive environments affecting the commercial television networks shows that the industry is extremely dependent on variables outside of its direct control. The networks exist in a dynamic environment which constrains activities and requires adaptability to changes. Although network broadcasting has been a major source of entertainment and information for the public, the true environments affecting the networks are more broadbased and profit oriented. The product of the networks (brokerage of time) is limited, resulting in a sellers market. However, the networks have attempted to minimize the potential effect of changes in the market structure by diversification into areas related to new technologies and areas outside of broadcasting. Innovation has been the key to the adaptability of the networks in their environments in the past. It is possible that the innovative attempts of the networks may predict actions they are currently considering to protect their organizational survival.
PART III
THE HISTORY OF INNOVATION IN THE COMMERCIAL TELEVISION NETWORKS

The commercial television networks face an uncertain future organizationally. However, they are innovative organizations that are, to some degree, protected by larger parent organizations that are also innovative. This part of the study will survey the history of innovation at the commercial networks (chapter 7) to better understand how the organizations respond to environmental changes.

The history of the development of commercial network television provides many examples of innovative behavior. Two events have been selected for detailed study: (1) the development of color television (chapter 8); and (2) the attempted merger of ABC with the International Telephone and Telegraph Company (ITT) (chapter 9). These two events, while not totally representative of innovation at the networks, provide examples of innovative organizational behavior within all four environments. The development of color television stresses the technological innovativeness of both CBS and RCA, with the competition between the two
corporations for economic dominance in the field of color broadcasting finally being determined by the regulatory environment. The attempted merger of ABC with ITT details the competitive and economic problems faced by the network organization and the inability of the regulatory environment to deal with the issues raised by the merger attempt.
CHAPTER 7
INNOVATION IN THE COMMERCIAL TELEVISION NETWORKS

Innovation has been described as the response to environmental change where that response has some degree of newness (see chapter 1). This chapter will survey the innovative behavior that the networks have used to respond to environmental changes in the past. These innovations show that the television networks have a long history of facing changes in their environments and developing strategies that minimized the impact and, in some cases, added to the organizational strength.

Competitive Innovations

Competitive innovations in the commercial television networks are actions that relate to three areas: (1) the number of competing networks; (2) the number of affiliates each network has; and (3) programming.

The number of commercial networks affects the share of the total audience each network has. If all things were equal, each network in the three network competition could expect to have one-third of the viewing audience. If a
fourth network were added, and all things were still equal, theoretically, each network would then receive only one-quarter of the available audience.

In 1945, NBC began television network broadcasting to four cities (New York, Philadelphia, Schnectady and Washington). By 1948, there were four commercial networks in operation, with NBC having 16 affiliates out of 47 stations on the air. ABC launched its television network on April 19, 1948 with two affiliates. CBS had established its place in network television through emphasis on talent acquired in a series of talent raids on NBC in the early 1940's which netted them such stars as Jack Benny, Red Skelton and Amos 'n' Andy. The fourth network was DuMont.

The DuMont Television Network, formed in 1946 by Allen B. DuMont, had no radio network to draw affiliates from. The network's programming was noteworthy only for Bishop Fulton J. Sheen and Jackie Gleason. In 1953, when ABC merged with United Paramount Theatres (UPT), ABC gained a more competitive standing with NBC and CBS. DuMont, which was partly owned by Paramount Films, found itself no longer able to compete and, in 1955, ceased broadcasting. The DuMont owned stations eventually formed the Metromedia Television Group, one of the major groups of mostly independent television stations.
Other attempts at a fourth network were made with little success. In 1967, UHF station owner Daniel Overmeyer and Oliver Treyz (once president of ABC) formed the Overmeyer Television Network which broadcast for eleven nights over 127 stations and then folded because of low ratings and low advertiser revenues. Some occasional networks do operate successfully. These networks are mostly sports oriented, including the Hughes Television Network and TVS.

The number of affiliates each network has determines the size of the audience the network has to draw viewers from. The early history of network television had the three surviving networks increasing their affiliate numbers to develop an even competitive situation. In 1953, there was a wide range in affiliate numbers with NBC and CBS each having over five times as many stations as ABC. This was partly the result of the FCC's television licensing freeze from 1948 through 1952, and partly the result of ABC's change in ownership which was delayed from 1951 until 1953.

After the ABC merger with UPT was approved in February, 1953, ABC began to increase its affiliate numbers, but had to settle for UHF and secondary affiliations since most markets with two VHF stations selected the two strongest networks (CBS and NBC) for their primary affiliations. In 1976, with less affiliates than the other networks, ABC became the top rated network, a position they held for
four years. Between 1976 and 1979, twenty-nine affiliates of CBS and NBC changed their primary affiliation to ABC\textsuperscript{1} resulting in a more competitive distribution of affiliates. It is significant that ABC achieved the top rated position with fewer affiliates than either of the other two networks.

The third level of innovation in the competitive environment is programming, which is important to this study only because of the ability of programming innovations to improve the network's competitive position. In early network history, CBS developed its pool of talent by raiding NBC. ABC could not afford to raid the other networks, nor could it afford to produce quality programming. Leonard Goldenson, who became president of ABC when it merged with United Paramount Theatres, had strong connections with Hollywood producers and attempted to override the animosity felt by the film community towards television. In 1953, Goldenson got Jack Warner to agree to set up a television production subsidiary of Warner Brothers which produced a program titled "Warner Brothers Presents" in 1955. "Warner Brothers Presents" as actually three rotating series ("Kings Row," "Cheyenne" and "Casablanca") with a 10-15 minute segment at the end of each program promoting Warner Brothers theatrical films. After

\textsuperscript{1}from ABC, 1979 ABC Annual Report. When an affiliate changed in a three market area, the common practice was for the former ABC affiliate to contract with the network whose affiliation was now with ABC. Therefore, the improvement for ABC was in gaining VHF stations.
protests, the end segment was quickly dropped. Of the three programs, only "Cheyenne" was successful, leading to another innovation: the "spin-off" program. From "Cheyenne" came "Sugarfoot" and "Bronco." Warner Brothers' entry into television was highly lucrative for both the producer and for ABC. However, it was most significant because it opened up Hollywood as a major source of television programming.

In 1954, ABC entered into a contract with Walt Disney resulting in the first corporate diversification of ABC since the ABC-UPT merger and the first Hollywood produced program to be broadcast on network television ("Warner Brothers Presents" did not air until 1955). Disney needed capital to build an amusement park in Anaheim, California (Disneyland). ABC (the parent organization) agreed to pay Disney $5 million per year for seven years with an option on the eighth year in exchange for stock in Disneyland. Disney produced a weekly program for ABC's television network titled "Disneyland" using new and previously released filmed and animated segments. In 1961, when the option was finished, Disney switched networks (to NBC). Although ABC has remained active in the amusement park business, it sold its 35 percent of Disneyland (the amusement park) in 1960 for a profit. Aside from the profit for the parent organization, the Disney programs ("Disneyland" was joined by "The Mickey Mouse Club"
in 1955) were enormously successful and resulted in increased secondary affiliations for the ABC network.

ABC's innovativeness in programming was not limited to developing Hollywood as a program source and developing "spin-offs," they have also been responsible for developing the "second season," movies for television, and miniseries. The second season, called the replacement season until then president of ABC-TV Thomas Moore coined the new phrase as less derogatory, is the period in December and January when unsuccessful or marginal programs are replaced by new programs. The second season was especially important to ABC when its corporate profitability was threatened by poor program ratings. Aside from the second season as a chance to replace ailing series with potentially more successful programs, it has been used as a network promotion vehicle by stressing "newness" in programming on the networks.

Movies had always been on television in some form. Early television relied on low-budgeted features and two-reelers from the early 1930's, mostly Westerns, to fill time. When major feature films became available to television in the early 1950's, producers limited the availability of feature films to those produced before 1948. Slowly the feature film made an impact on network television, especially
when color television was developed. By 1963, the demand for feature films was so great the made-for-television film was developed. These films usually serve a dual purpose. First they are original programming with the ability to fill large segments of time. Second, they often serve as pilots for proposed network series. The film producers also released the films theatrically abroad. The first series of made-for-television movies was "The ABC Movie of the Week" in 1969, which promoted itself as having a world premiere each week.

The miniseries format was developed by British television and brought to the United States by public television. The first American produced miniseries was the ABC adaptation of Leon Uris' QB VII broadcast during the 1974-1975 season. The success of the miniseries format was most notably exemplified by "Roots" which ABC broadcast on eight consecutive nights in January, 1977. "Roots" received the highest rating for any program in the history of television. This achievement gave ABC a prestigious position in the competitive environment.

In an economic sense, the formation of Public Television was not significant to the commercial networks, but in the competitive sense, it merits some mention. In 1952 educational television existed with each station independent of other educational stations. The majority of educational stations were on the UHF band, a handicap shared with many non-network affiliated television stations.
In 1962, when Congress passed the All Channel Receiver Law, and the Educational Television Facilities Act; it was hoped that educational television would no longer be a weak substitute for network commercial programming. This was not the case, and educational television faced a slow and painful growth. In 1964 the Carnegie Corporation funded a study of educational television to outline its needs and how they might be met. The report of the Carnegie Commission recommended legislation to provide funding for public television. In 1967, Congress passed the Public Television Act which created the Corporation for Public Broadcasting (CPB) to provide funding and develop a means of interconnecting the stations. The CPB formed the Public Broadcasting Service (PBS) to manage and program the interconnected stations. In 1978 public television became the first network to use satellite distribution for the majority of its programming. The term network does not really apply to PBS in the strict sense, since there are no affiliate contracts and each public television station programs its station independently. The threat of public television to commercial network television comes from its unique ability to innovate, an ability not fully used by PBS for a variety of reasons. If PBS does succeed in developing programming that draws audiences from the commercial networks, the result would be a lower audience total for the networks to divide, and lower rates charged to advertisers.
Economic Innovations

Innovations in the economic environment include actions (1) to protect the stability of the network organization's profits when threatened by organizational actions in the economic environment; (2) to improve that stability; and (3) to diversify in order to increase the network organization's domain.

The stability of organizational profits was threatened by two events during the 1950's that emphasized how heavily the networks depended on their economic environment. During the 1950's, network television programming relied heavily on programs first developed in radio. One of these program types, the quiz show, was very popular and, therefore, quite lucrative. The quiz show was inexpensive to produce when compared to programs produced on film which required large outlays of money. It is not surprising that by the 1955-56 season CBS's "The $64,000 Question" was the top rated program.

In 1959, an investigation by the New York grand jury and later by a congressional subcommittee found that there was fixing on the quiz shows at all three networks. The networks claimed that the rigging was partly the result of trying to keep sponsors happy. When this information was made public, sponsors were openly criticized by rival companies. The networks were almost immediately faced with a second scandal. Radio disc jockeys were found to be
accepting bribes, called payola, from record companies in exchange for playing records.

All three networks took action, removing all quiz shows from their schedules, filling the time with filmed programs. CBS and NBC announced formation of documentary units. The result was a dramatic increase in Hollywood produced film programs on the networks, a trend that would survive at the networks. The change in the network economic environment was an increased dependence on program suppliers at higher production costs per program.

The second event that threatened the organizational stability of the networks was blacklisting.\(^2\) Blacklisting was significant because it showed the power advertisers had over programming decisions at the networks. In 1947, three former FBI employees, Kenneth Bierly, John Keenan and Theodore Kirkpatrick, with financial backing by Alfred Kohlberg, formed a consulting company to provide information on communist infiltration, first in business generally, then focusing on the broadcasting industry, through the publication of a newsletter called Counterattack. The work done by the Counterattack staff was praised by sponsors and even by some network stars including Ed Sullivan.

On June 22, 1950, the publishers of Counterattack released a 215 page "expose" of communist infiltration in the broadcasting industry titled Red Channels: The Report

of Communist Influence in Radio and Television. Listed were 151 names of writers, performers and directors the authors claimed were communists or communist sympathizers.

The publication of Red Channels had two major results:

(1) those listed were no longer able to work in the industry since advertisers would not sponsor programs with them; and

(2) Senator Joseph McCarthy found a means of advancing his communist hunting activities. Red Channels was used by the networks when hiring personnel. CBS even required loyalty oaths from employees.

McCarthy continued the work done in Red Channels before congress, with great personal success. On March 9, 1954, CBS, which had abided by the blacklist, broadcast a program exposing McCarthy on "See It Now" reported by Edward R. Morrow. The negative image projected by McCarthy on this program was furthered by the ABC broadcasts of the Army-McCarthy hearings telecast in their entirety for 35 days from April 22, 1954. ABC used the hearings to fill its meager daytime schedule while the other networks used excerpts. The public's fear of communist infiltration was soon overshadowed by their dislike of McCarthy's tactics. Soon after the hearings, the communist witch hunt ended.

\[^3\]for a personal, and more detailed description of this see Fred Friendly, Due to Circumstances Beyond Our Control... (New York: Vantage Press, 1967): 23-67.
The blacklisting was neither caused nor welcomed by the networks, but they were severely constrained in their brokerage function by advertisers and agencies whose economic well-being precluded the employment of "subversives" in any capacity. The emotions of the time must be considered when evaluating the economic impact blacklisting could have had on the networks. The real threat of communist infiltration was blown out of proportion, but the Soviet Union's successful explosion of a nuclear bomb and the start of the Korean War contributed to the mass hysteria the public felt. The networks reacted by protecting their survival through any possible means.

Of the three surviving networks, improving the stability of its organization was of prime concern to ABC, which was the weakest of the three. In 1951, Edward Noble, who purchased ABC from NBC in 1943, entered into a merger agreement with United Paramount Theatres. The merger which cost United Paramount Theatres an astounding $25 million, was delayed for more than two years by the FCC. The resulting network (called AB-PT until the name was changed to ABC in the 1960's) was still weaker than either CBS or NBC, but now had the capital to develop its network. Leonard Goldenson took over as president of AB-PT bringing his vast experience with Hollywood production and knowledge of the personnel needed to the relatively new medium of television.
With the merger of ABC with UPT, the DuMont network was in trouble. Economically, the DuMont network could no longer compete and the network ceased broadcasting only two years after the merger.

ABC's financial problems were not totally solved by the merger with United Paramount Theatres. With the advent of color television and relatively low profits from the network, ABC found itself in need of assistance again in the 1960's. The result was the attempted merger of ABC with ITT. Chapter 9 deals with this attempt in detail.

Innovative attempts to increase the organizational domain of the networks have included diversification into fields related to broadcasting (such as publishing) and into fields totally unrelated (such as vehicle rental). However, one of the most innovative diversifications was attempted by CBS in 1970. The FCC, in its Second Report and Order on Docket 18397 (19 RR 2d 1775) forced CBS to divest itself of all cable television and syndication activities. CBS/Television Services Division operated and owned twelve cable systems, partly owned five more and operated a syndication service with a total revenue of over $30 million a year. On June 29, 1970, CBS announced the formation of a separate company which was described by Broadcasting:

The spin-off plan, a direct result of the FCC's adoption of rules to eject networks from domestic syndication and CATV ownership, appeared to startle other industry executives with its apparent simplicity and what one observer
called "the net effect of giving the commission its cake and keeping it too."\textsuperscript{4}

The spin-off would form Viacom International Inc. with CBS still in control. But, on December 31, 1970 just one hour before the stock in Viacom was to be distributed, the FCC halted the spin-off action.

The commission said it wanted to make a determination as to whether the spin-off of CBS's CATV and syndication business to Viacom would, in fact, constitute compliance with the new rules.\textsuperscript{5}

In June, 1971 the FCC gave CBS conditional approval to spin-off Viacom. The CBS directors, broadcast division presidents and persons with one percent or more of CBS common stock must divest within two years all their Viacom stock. On June 4, 1971 Viacom International was formally divested. But CBS did not succeed in its innovative means of complying with FCC rules. Viacom is now active in pay-television, syndication and cable television with great economic success.

Attempts at diversification in fields closely related to broadcast television have, in the past met with minimal success. For example, both CBS and ABC attempted to diversify into production of feature films in the 1960's. The attempt was abandoned in the early 1970's because of antitrust suits, and a lack of commercial film successes.

\textsuperscript{5}Broadcasting 80:2 (January 11, 1971):32.
Technological Innovations

Major technological innovations are those developments which made television broadcasting feasible and those which enhance or improve the quality. From the first development of television, each technological innovation has been considered either a welcome addition or a threat. The most active corporation engaging in both network television and technological development is RCA. CBS attempted entry into the technological area by developing a color television system, but was eased out of the market by RCA (see chapter 8).

The development of television required many technological innovations. The work accomplished by Vladimir Zworykin, first with Westinghouse and then, after 1929, with RCA, directly led to television broadcasting. Zworykin patented the kinescope (picture tube) and iconoscope (electronic camera) which, in 1935, made television viable. At the New York World's Fair on April 20, 1939, David Sarnoff, president of RCA, dedicated the RCA exhibit and television by stating

> today we are on the eve of launching a new industry, based on imagination, on scientific research and accomplishment.\(^6\)

The receivers manufactured by RCA were put on sale for $625 and NBC began television broadcasting to a few hundred

---

families in 1939. World War II temporarily stopped the development of television.

Also in 1939, the first full powered FM (frequency modulated) radio station began broadcasting. Edwin Armstrong, the inventor of FM radio, had already invented a variety of circuits used in radio broadcasting, many of which were sold to RCA. When David Sarnoff expressed a desire for some invention to eliminate static, Armstrong began work on FM. When Armstrong's invention was ready, he took it to Sarnoff who decided to begin field testing FM in 1934. By 1935, RCA was heavily involved in television and FM testing was discontinued. Armstrong decided to develop FM without RCA. RCA fought Armstrong before the FCC in 1936, claiming television needed the spectrum space Armstrong was requesting for FM. Armstrong was initially denied an experimental license for an FM station, a decision overturned later. When FM broadcasting began in 1939, Armstrong, with the support of the newly formed FM Broadcasters Association went to the FCC and successfully petitioned that channel 1 be moved from the television band and be given to FM. RCA joined other manufacturers in negotiating with Armstrong to manufacture FM receivers. In 1940, the FCC gave FM commercial status and decided that television would have FM sound. Technically, FM broadcast signals are static free but require more bandwidth than AM. Further developments in FM included the development of stereo (in 1961) and quadrophonic FM (in 1973).
Commercial television broadcasting began after World War II, limited to live programming or programs recorded on film or kinescoped (filmed directly off a television receiver). Research was started on a means of recording programs that would result in immediate playback and a more immediate quality, videotape. The first demonstration of videotape was in 1951 by Bing Crosby Laboratories. However, the form of recording demonstrated in 1951 and again in 1953 by RCA was of poor quality. In 1956, Ampex Corporation developed a quadruplex videotape recorder, the system still used in many broadcast facilities. RCA's system was developed soon after, and in 1958 both RCA and Ampex added color to videotape recording.

With the advent of commercial television broadcasting came the possibility of crowded frequencies, and, therefore, reception problems as more VHF stations were licensed. In theory, with VHF broadcasting there could be only 650 television stations in the United States. However, in September 1952 the first UHF station, KPTV, began broadcasting on channel 27 in Portland, Oregon. With the addition of the UHF band (470-890 mega-Hertz, channels 14-83) three thousand more television stations were possible. The vast majority of stations operating on the UHF band are non-commercial stations (of the 374 UHF stations operating in July, 1979, 216 were non-commercial and 158 were commercial operations).

7KPTV later moved to channel 12 on the VHF band where it currently operates.
The growth of UHF broadcasting was not as spectacular as might have been expected since television sets were not equipped to receive the UHF band. By 1958 the number of UHF stations had dropped to 86 from 119 in 1954. The FCC and Congress recognized the need for legislation to help UHF broadcasting and, in 1962 enacted the All Channels Law which required all television sets manufactured after 1964 to be capable of receiving UHF frequencies. In 1975 all receivers were required to have click dials for UHF. The tuning difficulty of UHF constrained its growth, but by the end of 1978, 94 percent of homes using television (approximately 74 million homes) had UHF capability. Growth on the VHF band is technically difficult, since all frequencies have been allocated, but a Broadcasting survey in 1979 found that 691 UHF channels are still unused and have not been applied for. They predict that UHF "is the likely place where broadcast television will grow in the coming years." With cable distribution, UHF is of equal technical quality with VHF making UHF station ownership more economically desirable for commercial operators.

Cable television first became feasible with the development of coaxial cable, a copper tube with a wire and insulating material capable of carrying nearly five thousand voice channels. Coaxial cable was developed during World War II as a part of radar technology. Since cable television

---

8Broadcasting 96:9 (February 26, 1979): 43.
was originally used to make reception possible in areas where natural obstacles prevented traditional reception by antenna. Coaxial cable brought only local television service to those areas. However, in the 1950's, microwave relays were developed and the ability to import more distant signals changed the structure of cable technology. Microwave relays use high carrier frequencies to radiate signals from tower to tower. By 1960, technical advancements in cable technology made possible the broadband capacity and two-way capability of cable television and the regulation of cable was considered. From 1966, when the FCC asserted its jurisdiction over cable, until the late 1970's, when cable rules were relaxed, developments in cable and the growth of the cable industry was severely restricted. Recent technical developments in fiber optics promise to replace coaxial cable with a thinner, more flexible means of transporting signals. In 1977, the first experimental use of fiber optics was successful.

A final major technological development that affected the networks was the development of satellite transmission. The successful launching of Project Score in 1958 started satellite transmission. Project Score, and intercontinental ballistic missile equipped with radio receivers, transmitters and a tape recorder was a repeater satellite that could record, hold and transmit messages. In 1960, two types of satellites were launched. Echo I was a passive satellite capable of reflecting unamplified radio and television signals. The Courier, also launched in 1960, was an active
satellite capable of receiving, amplifying and re-transmitting signals on a delayed basis. In 1962, Telstar I was launched and, on July 10th, provided the first trans-Atlantic broadcast of a television signal. However, Telstar was in a non-synchronous orbit and could not provide satellite transmission on a regular basis. In 1963, Syncom became the first satellite in synchronous orbit 22,300 miles above the equator. Currently there are eight communication satellites in synchronous orbit, capable of transmitting television signals. The use of satellite transmission of independent stations to cable companies has resulted in the "superstations," local television stations that are being "networked" around the country. The major technological benefit of satellite transmission is its cost effectiveness. Satellite transmission is distant insensitive, meaning that the cost of transmission does not increase with the distance involved. The result, in many cases, is that the cost of satellite transmission is lower than by use of traditional land lines. The major drawback of satellite transmission is that the space allocated for communication satellites is limited as is the life expectancy of the satellites in operation. This limitation was dramatically shown by the loss of RCA's Satcom III whose transponders were already rented to a variety of cable companies and other satellite users. The resulting scramble for transponder space on existing satellites shows the limitations of satellite transmission.
Regulatory Innovations

Regulatory innovations are actions by regulators, the networks and stations which achieve desired regulatory goals by means which are considered to be non-traditional.

The regulation of broadcasting centers on the Communications Act of 1934 which replaced the Federal Radio Commission (FRC) with the FCC and gave it the power to regulate licensing of broadcast stations. To provide the FRC and later the FCC with input from the network and stations the National Association of Broadcasters (NAB) was formed. Although the NAB's major purpose is to present the industry in a favorable light, it has also taken on the role of guiding industry self-regulation. For example, in 1974, FCC Chairman Richard Wiley, under congressional pressure, wanted the industry to limit violent and sexually-oriented materials. After meeting with network officials, Wiley persuaded the NAB to add the agreed upon rules to the NAB's Television Code. Although the "family viewing time" was declared to be illegal, the industry decided to keep the rules. The decision was praised by Wiley and resulted in the networks regulating themselves. The FCC was quite innovative in this case since attempted regulation of program material would have been of questionable constitutionality because of the first amendment. The pressure put on the FCC by congress and other groups opposed to violent and sexually oriented television programs was eased by Wiley's actions and a
confrontation over censorship was avoided.

The FCC has enacted regulations requiring the networks to rely on innovative strategies to minimize the potential impact of those regulations. When the FCC adopted the Chain Broadcasting Rules of 1941, both NBC and CBS were forced to change their organizational policies and structure. NBC was forced to sell one of its radio networks (see chapter 2). Because the FCC does not regulate networks directly, they were unable to require NBC to sell one of its networks to improve competition in broadcasting. Instead of directly requiring divestment, the FCC proposed that no license be issued to stations affiliated "with a network organization which maintains more than one network." If NBC wanted to keep its affiliates and enlarge its network, it was forced to sell one network. NBC fought the proposal publicly while searching for a buyer to purchase the NBC-blue network, the weaker of the two networks, at $8 million. On October 12, 1943, the NBC-blue network's sale to Edward J. Noble was approved by the FCC. The new network was soon renamed the American Broadcasting Company, and the proposed rule was dropped.

The Chain Rules also proposed changes in network option time, a change that would seriously affect CBS which still controlled all time periods in their affiliation contracts. Although CBS fought the option rules, they were

---

adopted and, in 1945, network option time was limited.

A third area of the Chain Rules dealt with artists' bureaus representing talent appearing on network programs. Both networks sold their artists bureaus in 1941 to concentrate on the other more important areas of the Chain Rules.

A second report by the FCC issued in 1946 had some impact on the networks: the so-called Blue Book, titled "Public Service Responsibility of Broadcast Licensees." The Blue Book outlined what local stations were obligated to do to fulfill their public service obligations. The networks, although not directly affected, did tighten their own codes (through the NAB).

The FCC was required to license broadcast stations by the Communications Act of 1934. The allocation of frequencies for television were decided in 1945 by the FCC to be in the VHF (very high frequency) band on channels two through thirteen. Stations were licensed and built. By 1947, problems with interference were brought to the FCC's attention and were dealt with through revised allocations based on erroneous technical information. Problems continued to arise, resulting in an FCC freeze on licensing of television stations from October, 1948 until it was lifted in July, 1952 when the FCC's new allocation plan was revealed. When the freeze was started, there were 108 television stations operating in the United States. Because of the
freeze, many communities did not have television until the mid-1950's while other communities had only one or two stations. The networks having affiliates had the advantage of gaining an audience without the competition of the other two networks. The networks with affiliates also had a stronger position after the freeze was lifted because they were technically more advantageous by being on the VHF band. The new allocation plan required intermixture of VHF and UHF (ultra high frequency) stations in the same areas. ABC's poor competitive position in the 1950's and 1960's has been attributed, at least in part, to having many of its affiliates on the UHF band.

When cable television began to have an impact on local station audiences, the stations and networks requested regulatory action by the FCC. In 1958, the FCC ruled that cable was not a common carrier and refused to regulate it. The broadcasters continued to request FCC action and, in 1962, it began to regulate cable systems that used microwave carriers to get signals. The FCC decided to take jurisdiction over cable in 1966, regulating the industry for the next six years in a haphazard fashion that stifled the growth of cable while protecting the traditional broadcasters. In 1972, the FCC adopted comprehensive cable regulations that were revised in 1974 and 1976. Currently, attempts are being made to deregulate cable and open competition.

Pay-television regulations were closely linked to cable regulations. The FCC authorized pay-television service
on December 12, 1968, causing a furor among traditional broadcasters. The NAB appealed to the Supreme Court which upheld the FCC's authorization. When pay-television began in 1972, it was severely restricted by regulations designed to minimize the possibility of pay-television affecting broadcast television. The pay-television rules included the following requirements: (1) there could be no advertising; (2) sports and movies could constitute only 90 percent of programming; (3) sports events were severely limited; and (4) no feature films could be shown that were between four and ten years old. The FCC decision to regulate pay-television programming was based on two assumptions: (1) it was supposed to supplement, not replace, broadcast television and therefore needed different programming; and (2) revenue raised from subscription operations would allow subscription operators to bid away the best programs, thus reducing the quality of conventional television.10 Home Box Office, the largest pay-television operator, sued to have the restrictions lifted and, in 1977, the D.C. Court of Appeals found the pay-television rules to be unconstitutional.

A proposal by Donald McGannon, president of Westinghouse Broadcasting Company, to divide prime time between stations and networks led to the FCC's adoption of the Prime Time Access Rules (PTAR) in 1970. FCC Chairman Dean Burch recognized the network monopoly of prime time and sought to find a compromise between McGannon's proposal and the existing practice. The original intent of the PTAR was to

open a new market for independent producers who complained of being at the mercy of three customers, to stimulate the creation of new program forms, and to give the stations the opportunity to do their most significant local programming in the choicest viewing hours.\[11\]

Instead of programming between the hours of seven and eleven at night, the networks began to program between eight and eleven. The local stations were restricted in the use of the extra hour they were required to program. In non-top fifty market affiliates, off-network re-runs were allowed; but in the top-fifty market affiliates only first run programming, locally produced or syndicated was permitted. The result was a rebirth of game shows. The noble attempt at localization was answered with inexpensively produced programming sold to local stations on a barter basis (where some commercials are placed within the program by the syndicator in exchange for inexpensive program costs to the stations). At first the networks protested the loss of

the hour of prime time, but these protests stopped when the networks realized that rather than cause them economic losses, the rules actually benefitted them. Alan Pearce, communications economist for the Chairman of the FCC reported that

overall network power has been strengthened, not weakened by the prime time access rule. Network originated programming has become scarce, resulting in greater advertiser demand for commercial minutes within prime-time programming, and ratings are generally better for such programs. It has, in addition, strengthened the network's bargaining position with program producers, who are now required to compete for fewer prime-time network hours. ...The rule, by limiting the number of network supplied entertainment hours to three (3) per night, has relieved the networks of making difficult programming decisions for what has been, traditionally, the most difficult programming slot.12

The end result was, therefore, an improved economic position for the networks.

The Congress has long recognized the need to update the Communications Act of 1934 but differing ideas of the degree of updating has resulted in little action. In 1978 Rep. Lionel van Deerlin attempted to re-write the Act. The innovative re-write did not pass congress, but did emphasize the direction many regulators felt the broadcast industry should be directed. The center of the re-write was the eventual deregulation of television, radio and cable. It was van Deerlin's intention that the new

Communications Act eliminate the "public interest, convenience and necessity" basis for regulation with telecommunication policy to be developed by the National Telecommunications Agency (an independent policy making agency of the executive branch) and the Communications Regulatory Commission (a five member agency replacing the FCC). The networks were upset by the deregulation of cable; the cable operators were upset by the move to local regulation of cable; and the public interest groups were upset by the virtual elimination of the fairness doctrine and requirements that the local television stations ascertain their communities to find problems the community leaders feel should be covered by the television stations. This re-write was doomed to fail. However, Senators Hollings and Goldwater have suggested a renovation of the Communication Act of 1934 that might have more success in congress.
This chapter has shown that the commercial television networks have used innovative organizational behavior to respond to environmental changes. Many innovative actions have been shown to span environments. For example, although programming innovations are considered to be a part of the competitive environment, they have also been shown to be usually the result of changes in the economic environment. This interdependence of environments shows that the networks and their parent organizations must recognize that actions taken to minimize the effects of change in one environment will affect the other environments. From an organizational standpoint, therefore, rational change strategies must consider whether the planned effect of an innovation will negatively affect some other aspect of the organizational environment. The following case studies (the development of color and the ABC-ITT merger attempt) show this problem more clearly.
CHAPTER 8
THE DEVELOPMENT OF
COLOR TELEVISION

The development of color television broadcasting in the United States offers an example of innovation in all four of the environments affecting the commercial networks. This chapter seeks to identify the themes stressed by the industry at the start of regulatory actions meant to establish standards for color broadcasting. Also, the themes will be compared with events leading to the eventual availability of color television.

Of the three network organizations, two were directly involved in competition to develop the color system each hoped the FCC would adopt as the system for use in the U.S.: RCA and CBS.† RCA had developed the monochrome (black-and-white) system approved by the FCC. In fact, RCA had a history of technological innovation in the broadcast industry which General David Sarnoff, president of RCA and chairman of NBC, wanted to continue. RCA had the facilities to develop their all-electronic color system, and also the ability to manufacture receivers and transmitter equipment.

†ABC did not participate since it was having financial problems establishing itself as a viable network.
CBS had no such capability, but was interested in the development of a mechanical color television system which, if adopted by the FCC would place CBS in the prestigious position of having developed a major technology in television. The color television system selected by the FCC would give the developing corporation virtually a monopoly with an estimated worth of $150,000,000.2

In 1939, CBS demonstrated its color system, called a field sequential system. The sequential system is based on a spinning wheel with three color segments rotating at high speed in front of the camera lens. A similar wheel was in the receiver. This system was not compatible with monochrome television. In other words, programs broadcast in sequential color could not be seen on existing black-and-white receivers.

The RCA all-electronic color system used three separate pick-up tubes in the camera and three kinescopes in the receiver. This system was compatible with monochrome television, but was not fully developed when CBS petitioned the FCC to set standards for color television.

The FCC began to set standards for monochrome broadcasting in 1941. During those hearings, CBS offered information about sequential color. The FCC, at that time, said that

---

more research was necessary. World War II put a halt on color development and television broadcasting totally. After the war, CBS and RCA renewed development of color and began the battle for FCC approval.

Methodology:

In order to establish the themes present during the start of the corporate struggle for dominance in color television broadcasting, all articles relating to color were identified and coded from The New York Times, The Wall Street Journal and Broadcasting for the years 1946 and 1947. These two years were selected because in September, 1946, CBS petitioned the FCC for permission to broadcast in color. The FCC denied that petition in March, 1947. The two year period, therefore, includes nine months of pre-petition statements, seven months of statements by both CBS and RCA regarding the FCC hearings, and nine months of after-decision reaction statements.

All relevant statements by officials of CBS, RCA, the FCC and corporations directly involved in the decision (such as DuMont and Westinghouse which manufactured television sets) were identified and coded. Where there was duplication, the most complete source was used along with any non-repetitious statements from the second source. In some cases, direct quotations were not available. In these cases themes were only used if they were clearly from one of the sources. For example, if the article used statements prefaced by "CBS officials stated that" they were included even if paraphrased.
Initially, four categories with thirty-seven sub-categories were used to code 170 theme statements. After initial coding, sub-categories were combined and theme statements were re-coded into fourteen sub-categories. The categories and sub-categories finally used were as follows:

(1) competitive strategies - all theme statements dealing with the relationship between CBS and RCA during the development of their separate color systems.
   1.1 CBS as the better system and the CBS view that quick introduction of color was needed
   1.2 RCA as the better system and the need to delay color and develop black-and-white television
   1.3 threats from each side if it loses, name-calling and insults to the other system or corporation
   1.4 alternatives either to the corporation's system or augmenting it

(2) economic impact - all theme statements dealing with financial effects of color commercialization on the:
   2.1 public, such as the cost of receivers and the need to buy separate sets for color and monochrome television
   2.2 networks, including the viability of network operations and the cost of research and development
   2.3 industry, including receiver manufacturers, the effect of a decision on sales of receivers and transmitters, and broadcast station growth and profitability

(3) technological development - all theme statements dealing with technological issues of color and the color/monochrome technology controversy
   3.1 monochrome, including the effects of color on monochrome technology, which is a better technology and the potential for obsolescence of monochrome equipment
   3.2 level of development, including readiness of the technology for commercial use and the ability to network color
3.3 quality of the color system, including statements regarding technical superiority
3.4 continued research and development, including the need to continue and various approaches to research and development of color

(4) regulatory concerns - all theme statements which dealt with the FCC's decision, statements by the FCC on the level of color development and their rationale for judgement

4.1 standards, including the need for the FCC to establish some color standards satisfactory to nurture development and commercial distribution of color
4.2 quality, including comparison of the quality of the systems, their readiness for commercial operation and the effect of an FCC decision on public interests
4.3 effects of a decision on the networks, monochrome television and its related industries and frequency allocations

The statements were coded by category, sub-category and source to clearly delineate the themes each side of the issue stressed. A theme statement was defined as "a single assertion about some subject." In some cases, a sentence contained many theme statements, each fitting into a separate category. An example of a multi-theme statement is General Sarnoff's response to rumors that RCA would cease network operations if the CBS system was approved:

this is not a controversy between any two rival companies, but represents a fundamental difference of technical opinion as to what is best in the public interest between one company that has been doing work with mechanical color and the major companies of the industry working on the development of television who are interested in advancing it as a new art and industry.

---

This statement was coded into two separate categories. First, it is an insult to CBS and, as such, fits into category 1.3. Second, it stresses the public and RCA's past history in developing the television industry. This theme was coded as 2.1 because the theme really is the economic impact on the public which will have to purchase the receivers. Although the reason for the statement was the existence of the NBC network, it was not a theme in this statement. Also, although Sarnoff does mention technology, the statement is really an appeal to the public for its support for RCA. Implicit in the statement is the theme that RCA has historically been the guardian of the public interest in broadcasting. While this might mean a reference to the regulatory issues, his continuation reference to television as an art and industry does not fulfill the requirements of the regulatory category.

Theme statements were initially counted for frequency (see Appendix A). However, the frequency counts did not prove to be a significant indicator of the emphasis the networks placed on certain themes, since the sources used only quoted partial statements they deemed important. Since the purpose of this chapter is to identify the perceptions of network officials, it was determined that identification and analysis of themes did not require frequency analysis.
CBS stressed the quick introduction of color in 1946 to protect the public from non-convertible monochrome television sets, realizing that a delay in color development could give monochrome the time to become established. In 1946 only 6,000 black-and-white receivers were sold compared to 179,000 in 1947.\(^5\) CBS realized that public and industry acceptance of their non-compatible system depended heavily on getting their system into commercial operation as quickly as possible. Their competitive strategies included (a) denial of the existence of all-electronic color, calling it "only a slogan,"\(^6\) (b) stressing that color is "ready right now,"\(^7\) and (c) that their system is "the only real hope."\(^8\)

RCA needed time to develop their color system but rushed to demonstrate it before they had planned to because of the CBS petition before the FCC. They stressed the need for time to develop color, repeatedly stating that commercial color was still five years away. RCA continued to manufacture


\(^8\)Broadcasting 31:24 (December 16, 1946): 16.
and sell black-and-white receivers, which would not become
obsolete if their (RCA's) color system was adopted by the FCC.
If they delayed the FCC decision, RCA could mass market the
black-and-white receivers and, they believed, develop a
better, compatible system. The RCA strategy was centered
on delaying FCC action by (a) denying that color is ready,
calling "pure bunk" any claim otherwise; 
(b) stressing that
adoption of the CBS system would slow development of a better
system; and (c) establishing black-and-white television as
a viable industry.

During the petition hearings before the FCC,
both sides engaged in competitive behaviors to present
their side to best advantage. One of the means they used
was the use of threats and name-calling. CBS threatened
to stop all experiments with color if the petition were
denied. RCA emphasized that acceptance of the CBS petition
would retard, or even stop, development of other color
systems. The name-calling used by CBS centered on accusations
that RCA was lying about its color development and the need
for delay. It should be noted that William Paley, chairman
of the board of CBS, did not comment to the sources used in
this study at any time while General David Sarnoff, chairman
of the board of RCA, did comment, often in "colorful" language. 


10 Some examples of General Sarnoff's language include
calling "pure bunk" the CBS contention that color was ready;
and when comparing the two systems stating that "Mechanical
color compared to electronic color is the horse and buggy
compared to the railroad." (NYT, 10/31/46, 27:3)
This is significant because it reflects on corporate images. CBS seemed to want to be the innovative corporation fighting threats from the larger, more powerful, less prestigious RCA. RCA, on the other hand, was the established innovator fighting the upstart CBS.

Both sides stressed two issues regarding the economic impact on the public: (a) the obsolescence of black-and-white receivers, and (b) the cost of color receivers. The positions taken by the two sides varied. CBS stressed the need for quick approval by the FCC before the public buys black-and-white receivers which would be obsolete if mechanical color was approved. The cost of color receivers, according to CBS, would be 10-15% more than black-and-white, but the public would pay more for color since it has more program appeal. In 1954, when color sets were first marketed, the average cost was $400 compared to $141 for black-and-white, an increase of 283%. In 1946, CBS noted that mass production of color sets in quantities of 500,000 was needed to keep the costs of color sets at 10-15% above black-and-white.

---

11 CBS stated that "the investment of the public (in) black and white television may be in jeopardy." Broadcasting 31:15 (October 14, 1946): 20.


13 From Broadcasting Yearbook 1977 data. This data is for all-electronic color since mechanical color was never really mass marketed.
RCA stressed the existence of monochrome (black-and-white) service and the future development of color without obsolescence of existing equipment. The public, according to Dr. C.B. Jolliffe, executive vice president of RCA Labs, should be offered "an excellent and practical system... without penalty to existing service and without jeopardy to the investment of the public and broadcasters in black and white television." The CBS color system "never can render a satisfactory commercial service to the public." RCA was obviously protecting its own manufacturing interests in black-and-white receivers and transmitters. After the FCC denied the CBS petition, RCA stated that the decision was a go-ahead for the manufacture of black-and-white receivers. CBS would put all their emphasis on color. CBS did not stop color development after the FCC denied their petition, continuing research and development until the FCC met again in 1950 to decide which color system to adopt.

RCA saw as a major problem the operation of a television network "on the higher frequencies (UHF), whether in black-and-white or color." The RCA investment in black-and-white

---

15Ibid.
was of concern to them as evidenced by their stress on the issue of color's compatibility with "existing service."\textsuperscript{20}

The economic impact on the industry, which includes manufacturers of receivers (color and monochrome) and other broadcast equipment and potential and existing broadcast stations centered on compatibility and the relative costs of the color system to the industry. CBS felt that granting their petition would give the broadcasters the choice of which type of television they wish to enter. They also stressed that "so long as color television continues in an experimental status the entire industry will be subject to uncertainty."\textsuperscript{21}

RCA recognized that color would cause "a change in the entire system."\textsuperscript{22} The vast majority of manufacturers aligned themselves with RCA, recognizing that adoption of the CBS petition would negatively affect their businesses.

After the denial, RCA, along with other manufacturers, began to predict increased manufacturing and sales of black-and-white receivers. RCA expected to produce 100,000 sets with an estimated value to RCA of about $41 million.\textsuperscript{23} CBS did not react, but Westinghouse's manager of the Industrial Electronics Division, C. J. Burnside stated that the FCC call for further experimentation in color "points to the eventual acceptance of this medium."\textsuperscript{24}

\textsuperscript{20} 

\textsuperscript{21} 

\textsuperscript{22} 

\textsuperscript{23} 

\textsuperscript{24} 
The level of development was a major technological issue. CBS felt that color was "fully practical" now, while RCA maintained that neither mechanical nor all-electronic color was ready for commercialization. The CBS position was that their color system could be in homes by early 1947 "if the industry puts its shoulder to the wheel" while RCA felt that color needed four to five years of further development. RCA's demonstration of its color system in November, 1946 was a response to the CBS demonstration of its color system in September, 1947. Although Sarnoff stated that he believed that RCA regained its initiative in video by the demonstration. Dr. C.B. Jolliffe, executive vice-president of RCA Labs, felt that they were forced to demonstrate their system before it was ready by the "premature" introduction of the CBS color system.

Each side stressed the technical superiority and quality of their color systems. CBS felt that their color system was better than RCA's and more flexible for networking. RCA was developing a large screen color system which, they felt, when combined with the superiority of all-electronic

---

color held more promise. E. W. Engstrom, vice-president in charge of research for RCA Labs, stated that RCA's color system already is demonstrably superior in performance characteristics and in promising possibilities for the future quite unattainable by CBS under the handicaps imposed by limitations inherent in the sequential (mechanical) system.  

When the petition was denied, The Wall Street Journal noted four economic effects: (1) black-and-white television would begin major growth; (2) new stations would not go on the air until the FCC decides on a color system; (3) black-and-white set obsolescence would be avoided; and (4) the "public will have to wait another five years before it will get television in natural life-like hues." While this evaluation is not a part of the study data, it clearly shows the reaction of reliable forecasters of economic trends.

The need to set standards was acknowledged by both sides. CBS felt that their color system was developed enough to propose standards to the FCC. RCA disagreed stating that no standards should be set until other systems (including their own all-electronic) have been fully developed and tested. The FCC agreed with RCA stating that "the

danger exists that the standards will be set before funda-
mental developments have been made." The system that they
adopt should, the FCC stated, be flexible enough to incorpor­
ate improvements without requiring changes in standards.

The issue of quality was stressed significantly more
by the FCC than by CBS or RCA. CBS felt that the problems
of color quality would be erased by giving it commercial
status. RCA realized that its electronic color system
was not ready for commercial use. Many allied industries
agreed with RCA and testified before the FCC. One monochrome
television set manufacturer, and future television network
owner, Allen B. DuMont, president of DuMont Laboratories,
noted that no color system "has yet reached the degree of
perfection which justifies the adoption of commercial
standards." The FCC noted three quality issues when they
began hearings on the CBS petition: (a) the speed with which
color could be made available to the public; (b) whether the
CBS system "represents the most satisfactory standards which
can be (put into operation) within the reasonably near
future;" and, (c) whether CBS's color system will have
"sufficiently high quality to satisfy the reasonable expec-
tations of the viewing public." The FCC concern for the
public interest was virtually limited to these statements.

36 Ibid.
The FCC felt that they could not "escape the conclusion" that many of the fundamentals were not tested and needed experimentation. They further stated that

in the commission's opinion the evidence does not show that they (CBS) represent the optimum performance which may be expected of a color television system within a reasonable time.

Although they had stressed the speed of color availability in October, 1946, they changed their emphasis by March, 1947, to system quality stating that they must be satisfied that "it is as good as can be expected within any reasonable time in the foreseeable future." 

The effect of an FCC decision was quite diverse. CBS stated that a positive decision by the FCC would give broadcasters a choice, whether to adopt monochrome or color. RCA stated that FCC approval would result in no television rather than improved television. This statement was, in part, based on the FCC recognition that adoption of one system meant virtual elimination of any other system since there are "not enough frequencies available in the 480-920 megacycle band for more than one color system." If the CBS petition was granted, RCA believed that it would result in the failure of color television and, since sets were to be only UHF, the elimination of black-and-white broadcasting also.

---

41 Ibid.
The effect on black-and-white television represents a fundamental disagreement between the sides. CBS did not feel that black-and-white television could compete with color and, therefore, felt that the FCC should act before black-and-white set sales became a significant factor. RCA and other manufacturers felt that black-and-white was a viable industry and should be protected by the FCC. The FCC agreed with RCA in 1947 and, perhaps unintentionally, gave RCA time to increase black-and-white receiver manufacturing and sales significantly, as CBS predicted.

44 Ibid.
45 The manufacturing and sales of black-and-white receivers increased as follows:

<table>
<thead>
<tr>
<th>Year</th>
<th>Number of Sets Sold</th>
</tr>
</thead>
<tbody>
<tr>
<td>1946</td>
<td>6,000</td>
</tr>
<tr>
<td>1947</td>
<td>179,000</td>
</tr>
<tr>
<td>1948</td>
<td>970,000</td>
</tr>
<tr>
<td>1949</td>
<td>2,970,000</td>
</tr>
<tr>
<td>1950</td>
<td>7,355,000</td>
</tr>
</tbody>
</table>

Conclusions:

The results show only one side of the corporate behavior engaged in during the start of the color controversy: the public side as reported in the press. However, as Lawrence P. Lessing reported in *Fortune* Offstage the battle was less decorous. The CBS faction accused RCA of trying to clamp prewar TV standards into that portion of the spectrum where its patents, investment, and control were dominant. The RCA camp came back with the charge that these johnnys-come-lately were trying to stall off TV indefinitely until they could gain a position. Both sides, of course, were pursuing their corporate interests. 46

An analysis of the organizational behavior during the color controversy must, therefore, consider not only the public facade but, where possible, the private actions and strategies used to achieve the organizational goals. From the data in the study period the obvious goals of the two networks were:

1. CBS - to get the FCC to approve sequential (mechanical) color as the system of color for use in the United States, and;
2. RCA - to delay the FCC approval of a color system until their simultaneous (all-electronic) color system was at a level of development where it could compete on an even level with the already developed sequential system.

Both companies had less obvious goals which significantly affected their organizational behavior. CBS wanted to

virtually eliminate black-and-white television while they entered the highly lucrative manufacturing end of television and establish CBS as an innovator, gaining the prestige associated with being first. RCA wanted to keep its reputation as an innovator in broadcasting while increasing its earnings on the manufacture and sales of black-and-white receivers and transmitters.

The denial of the CBS petition, and the resulting delay on setting standards, therefore, was clearly a victory for RCA. Why the FCC decided in favor of the denial is not clear. The level of development of CBS's color system is the obvious reason, but certain events after the decision make this reason questionable. In October, 1947, less than seven months after the FCC decision, FCC Chairman Charles Denny resigned to become a vice-president of NBC (RCA's television network). In 1952, Congress amended the Communication Act to prevent commissioners from representing a firm under FCC jurisdiction for one year after their resignation except where their full term was served. If the hiring of Charles Denny was a strategic maneuver by RCA, and verification was not found, it was highly successful.

47 the result of Denny's action was outrage by CBS. The Senate passed the McFarland Bill which would prevent future resignations of regulatory agency commissioners to work for firms under their jurisdiction during the unexpired term of office. The FCC opposed the bill stating that it would hurt morale. It was never enacted in the original form.

48 Communications Act of 1934, Title I, Sec. 4 (b) amended 1952.
CBS was not strategically in the better position during the study period. They had an awkward color system which was to be their first major venture into technological innovation in broadcasting. By petitioning the FCC, they were put in the defensive position, always having to prove their system's level of development and quality. By taking the initiative they were put in a relatively poor competitive position.

RCA, on the other hand, could merely say that the CBS system was not ready for commercial use and that they (RCA) were developing a compatible system. Television was just starting to have an impact on the public when CBS petitioned, and the FCC would have seemed to be cutting off monochrome before giving it a chance if they had decided in favor of CBS. RCA used this to their advantage parading representatives of monochrome manufacturing firms before the FCC during the hearings, while repeating that their system would not affect black-and-white set owners.

The FCC faced a decision that would doubtlessly have an impact on the whole broadcasting industry. If they made a set of standards in favor of CBS they could have been accused of not ruling in the public interest. RCA and the other manufacturers would probably have appealed the decision. As was, and is, the habit of the FCC, they took the safest course available to them: deny the petition and put off any decision on color until the dust settled.
Immediately following the FCC decision to deny the CBS petition, both companies faced decision points regarding color. Rumors abounded that CBS wanted to sell its system and concentrate on monochrome television service, which officials at CBS denied. RCA continued development of its color system. Early in 1949 CBS sold some color broadcasting equipment to the pharmaceutical company Smith, Kline and French for use at a convention of the American Medical Association in Atlantic City. The system used at the convention had some improvements; notable among them were the use of 6 megacycle wide band (10 megacycles less than the system demonstrated before the FCC) and a converter which, when slid in front of a monochrome television set would make it a color receiver. News of the color demonstration was made public and there were demands for commercial color television. RCA was still not ready to show a perfect system, but, in September, 1949 demonstrated what they had. General David Sarnoff, acknowledging the shortcomings of his system, stated that "the monkeys were green, the bananas were blue, and everyone had a good laugh." The chairman of the Senate Interstate and Foreign Commerce Committee appointed, in September 1949, a committee of scientists to appraise the status of color and estimate when it would be ready for commercial use. Their report, delivered on July 14, 1950 stated that of the available systems, the CBS system was the best available color system. On 49

October 10, 1950, the FCC adopted the CBS color system for use in the United States. Sarnoff reacted immediately stating

we regard this decision as scientifically unsound and against the public interest...The hundreds of millions of dollars the present set owners would have to pay to obtain a degraded picture with an incompatible system reduces today's order to an absurdity...RCA will continue its efforts to advance the bedrock principles on which the sound future of color television can be built and will be built.50

RCA appealed the decision to the Supreme Court, a time-consuming process, while they continued to sell black-and-white television sets. Color broadcasting was stayed by a court injunction. Once more, RCA was delaying to put itself in a better position. They needed to win the appeal before the Supreme Court not only because of their own expenses in developing color and selling black-and-white sets, but also because their seventeen year patents on black-and-white picture tubes was running out and fees would fall off. But on May 28, 1951 the Supreme Court upheld the FCC decision, but did not stop development of other color systems because if another acceptable system were developed the FCC maintained the option of withdrawing CBS's permission to broadcast in color or allowing both to operate. According to Charles Kirshner, the Supreme Court decision "served only to increase the activity on the part of RCA...to find a way to circumvent the effect of the order."51

50Ibid., pp. 343-344.
CBS began colorcasting on Monday June 25, 1951 on channel 2 in New York City, the day that the FCC's color standards went into effect. On June 15, 1951, CBS purchased Hytron Radio and Electronics by giving 25% of CBS stock for the acquisition. The rationale for the purchase was to assure the availability of color receivers for the public. The acquisition was an organizational error. Inventory problems showed up almost immediately, and the quality of the color sets was highly suspect.

The next major event benefited both corporations in very different ways. Defense Mobilization Chief Charles E. Wilson sent a letter to CBS on October 19, 1951 asking them to suspend the manufacturing of color sets to conserve materials needed for the United States defense program. Robert Metz stated that CBS believed the letter was inspired by David Sarnoff, but, again, no evidence could be found to substantiate the accusation. In any event, CBS suspended production and, since the number of color sets was too low to sustain CBS costs, they suspended broadcasting in color. The problems CBS was having with Hytron made the government request easy to abide by. RCA, once more, had time to complete development of their color system.

In 1950, the Radio Manufacturers Association directed the National Television Systems Committee (NTSC) to develop compatible color. The specifications developed by the NTSC were submitted and finally adopted by the FCC on December 17, 1953. Three years and one month after the FCC decision
adopting the CBS color system, the FCC reversed itself and adopted the RCA all-electronic color system. Robert Metz, noting that RCA had tied up in court the implementation of CBS's color system while mass marketing black-and-white sets and running a public relations campaign geared to confuse the public about CBS's color system, stated that "RCA managed to salvage victory...after several years, $150 million in development and a brilliant selling job in Washington." 52 RCA started manufacturing color sets in 1954 (see Table 10) costing about $1,000 per unit. For five years no other manufacturer joined RCA in the manufacture of color sets. Finally, in 1961 Zenith joined them. Color programming was another problem. By 1965, NBC had 95% of its prime-time schedule in color. CBS had announced that only two weekly programs and one movie feature would be in color, changing that to 50% of its schedule within a few weeks of the announcement. ABC lacked the capital to colorize its network (an estimated $134 million). The need to colorcast was cited as one of the reasons ABC needed to merger with ITT in 1966. In 1968, when the merger with ITT fell through, ABC began a slow switch to color.

Color was the last major technological innovation in broadcast television. The organizational strategies used by the two networks fighting for dominance in that development were creative, if not, in some cases, devious.

Table 10

Percent of U.S. Homes With Television and Color Receivers

<table>
<thead>
<tr>
<th>Year</th>
<th>Percent With Television</th>
<th>Percent With Color</th>
</tr>
</thead>
<tbody>
<tr>
<td>1955</td>
<td>64.5%</td>
<td>.02%</td>
</tr>
<tr>
<td>1956</td>
<td>71.8%</td>
<td>.05%</td>
</tr>
<tr>
<td>1957</td>
<td>78.6%</td>
<td>.20%</td>
</tr>
<tr>
<td>1958</td>
<td>83.2%</td>
<td>.40%</td>
</tr>
<tr>
<td>1959</td>
<td>85.9%</td>
<td>.60%</td>
</tr>
<tr>
<td>1960</td>
<td>87.1%</td>
<td>.70%</td>
</tr>
<tr>
<td>1961</td>
<td>88.8%</td>
<td>.90%</td>
</tr>
<tr>
<td>1962</td>
<td>90.0%</td>
<td>1.20%</td>
</tr>
<tr>
<td>1963</td>
<td>91.3%</td>
<td>1.90%</td>
</tr>
<tr>
<td>1964</td>
<td>92.3%</td>
<td>3.10%</td>
</tr>
<tr>
<td>1965</td>
<td>92.6%</td>
<td>5.30%</td>
</tr>
<tr>
<td>1966</td>
<td>93.0%</td>
<td>9.70%</td>
</tr>
<tr>
<td>1967</td>
<td>93.6%</td>
<td>16.30%</td>
</tr>
<tr>
<td>1968</td>
<td>94.6%</td>
<td>24.20%</td>
</tr>
<tr>
<td>1969</td>
<td>95.0%</td>
<td>32.00%</td>
</tr>
<tr>
<td>1970</td>
<td>95.2%</td>
<td>39.20%</td>
</tr>
<tr>
<td>1971</td>
<td>95.5%</td>
<td>45.10%</td>
</tr>
<tr>
<td>1972</td>
<td>95.8%</td>
<td>52.80%</td>
</tr>
<tr>
<td>1973</td>
<td>96.0%</td>
<td>60.10%</td>
</tr>
<tr>
<td>1974</td>
<td>96.1%</td>
<td>67.30%</td>
</tr>
<tr>
<td>1975</td>
<td>97.1%</td>
<td>70.80%</td>
</tr>
<tr>
<td>1976</td>
<td>97.3%</td>
<td>73.30%</td>
</tr>
<tr>
<td>1977</td>
<td>97.9%</td>
<td>76.00%</td>
</tr>
</tbody>
</table>

It is interesting to see RCA's description of the events as published in one of their public relations pamphlets:

As the commercial television system expanded, RCA undertook an energetic post-war program of color television research and development. Although mechanical techniques offered promise in terms of early commercial advantage, RCA decided, soon after the war, to strive for an all-electronic color system fully compatible with black-and-white. Outstanding progress was achieved at RCA Laboratories during 1947 and 1948. Several demonstrations were held, showing a color system employing three kinescopes and combined with an optical system to present a composite color picture.

In 1949, the FCC scheduled a series of hearings to consider, among other matters, the establishment of standards for color television transmission. At issue were two competing systems - a noncompatible mechanical system of color, and the all-electronic compatible color system advocated by RCA...

Despite the basic technical superiority of all-electronic color transmission, the FCC gave its approval to the mechanical, noncompatible system. In effect, this banned the compatible system from the market place.

Through court action, RCA vigorously sought reversal of the FCC decision. Meanwhile, it proceeded with further refinements in compatible color transmission. In December, 1953, the FCC finally approved new and compatible standards recommended by the NTSC. 53

The RCA system has proved to be an efficient color system.

In essence, they were right about all-electronic color.

Their means to achieve the end efficiently cleared obstacles which should have eliminated them from competition.

---

Organizational Response:

The development of color affected each of the two corporations according to where the color technology fit into the organization. CBS had no manufacturing interests in 1946, with its income mostly from its radio network. RCA, on the other hand, was already a diverse corporation whose income was mostly from the manufacture and sale of radio equipment. CBS hoped to enter the lucrative manufacturing end of broadcasting by getting FCC approval of their color system. If their petition had been granted in 1947, it is possible that there would be no monochrome television; only color with CBS holding patent rights to the color system. RCA, which held patent rights on much of the monochrome system accepted by the FCC, would lose a significant portion of their corporate income. Therefore, many of the strategies and responses CBS and RCA had to events during the controversy were firmly based in profits, both real (for RCA) and potential (for CBS). The issue of whose system was really the "best" would be of little relevance when considering the organizational response. Given enough time, both systems were capable of giving the public an acceptable product. Also, each corporation selected its color system early in the controversy and defended its choice throughout.

Figure 11 shows the major organizational responses to events in the color controversy across time. Starting with the standards for monochrome television
Figure 11
Organizational Responses to Events During the Color Controversy
set by the FCC in 1945, CBS and RCA took very different positions on the future of television. CBS did not feel that monochrome television could compete with color, a feeling shared by the FCC in their hearings during 1944-5 to set standards for television. CBS owned only one VHF television station (in New York City) before the color hearings in 1946-7, preparing for the advent of commercial color broadcasting on the UHF band (required by their color system). The choice between color systems was not difficult for CBS: they had to establish early and clear dominance. Mechanical color was ready for commercialization while all-electronic color needed further development.

RCA, faced with the decision of whether to develop color or continue development and commercialization of monochrome television, decided to limit its risk of losing large parts of its profits by continuing to manufacture and sell monochrome receivers and equipment while developing a compatible system. When CBS petitioned the FCC to set color standards, RCA responded in two ways: first, they continued to mass market monochrome receivers hoping to have enough sets sold to have some impact on the inevitable FCC decision; and, second, implicitly, they attempted to delay the FCC decision to give RCA's scientists the time they needed to develop all-electronic color. It is possible that RCA went so far as to offer FCC Chairman Charles Denny a position with NBC before the hearings, since he left the FCC seven months after the decision to accept a vice-presidency with NBC, but there is no evidence to support this.
When the FCC denied the CBS petition, CBS responded to the set-back by purchasing four VHF stations at prices greatly inflated by the FCC decision; and it continued refinement of mechanical color trying to eliminate the problems noted by the FCC. The four VHF stations protected CBS from losing its position as a network if the FCC decided in favor of RCA.

RCA had its delay and continued its strategies of selling monochrome while developing all-electronic color. When CBS showed its color system before a convention, RCA rushed to show its system to the FCC even though it was not fully developed.

The FCC set its color standards on October 10, 1950 favoring the CBS mechanical color system. RCA responded immediately by appealing the FCC decision. This move not only might have changed the FCC decision, it also delayed the debut of CBS's color broadcasts for a few months. CBS now faced the problem of manufacturing and selling color receivers. Since one of the major purposes of getting FCC approval of mechanical color was to give CBS an entry into manufacturing, CBS purchased Hytron Radio and Electronics by giving the owners one-fourth of CBS's stock for the acquisition. This proved to be a major organizational error for CBS. Hytron had major contracts with Sears and Montgomery Ward when it was acquired by CBS. However, as CBS later learned, the contracts were the result of the two stores being unable to get television sets from
more reputable manufacturers. Hytron's quality was poor, and inventory problems showed up within the first few months, running into millions of dollars of overvalued merchandise. When the government requested CBS to stop manufacturing color sets, it was a graceful escape valve for CBS which immediately ceased production.

The cause of that government request has been attributed to General Sarnoff of RCA, but support for this assertion is minimal.

When the FCC reversed its decision on mechanical color, CBS attempted to remain in manufacturing, building and selling black-and-white sets through Hytron while trying to upgrade the product and image. Neither was successful. CBS finally sold off their manufacturing subsidiary in 1961 after enormous losses.

RCA, meanwhile, was in a perfect corporate position when they got FCC approval. They began to manufacture color sets along with monochrome. Since they were not only a network, but a manufacturer, RCA essentially had a monopoly on color for the first few years. The possibility that color programming would not keep up with the manufacture and sale of color receivers was virtually eliminated by both being somewhat under control of the same company.

What this study shows is organizational adaptation in light of constraints imposed on the networks by the four environments. The competition between the two organizations shows that each used the environmental constraints to their own advantage. When CBS was given
FCC approval, RCA used the regulatory environment to delay commercialization of color. Both companies used the technological environment to advance their corporate profitability, since without technological developments in color, neither could profit from the new development. The economic environment was best used by RCA, which had a history of economic supremacy in the manufacture and development of receivers (radio and television). The FCC had to consider that CBS had no background in manufacturing and, therefore, might not be able to deliver on its promises. CBS recognized this economic problem and attempted to diffuse the issue by licensing Westinghouse Electronics to manufacture their color sets on a five year royalty basis. Finally, the regulatory environment was used by both corporations. CBS petitioned the FCC to set standards with the obvious intention of being the sole owner of the mechanical color system. RCA used the regulatory environment to delay commercialization of color. The results of this study show that RCA used its environmental constraints more effectively, and, therefore, succeeded in having its color system adopted by the FCC and commercially developed for use in the United States.
CHAPTER 9
THE ABC-ITT MERGER ATTEMPT

The growth of the organizations which own the networks has been partially the result of diversification strategies that attempted to reduce the effects of environmental changes. However, in some cases, diversification has been attempted as a response to threats that might affect the survival of the parent corporation. The ownership of the networks presents an interesting study of organizational response to these threats (see chapter 7). Although no network has actually changed owners since the merger of ABC with United Paramount Theatres (UPT) in 1953 (see chapter 2), the more recent attempted merger of ABC with the International Telephone and Telegraph Company (ITT) presents a unique perspective of the reaction a network has to organizational threats to survival. This chapter will identify the themes that emerged during the merger attempt and compare them to the eventual outcome.

During the 1960's, color had made an impact on network television. Two of the networks, NBC and CBS,
already converted their broadcast operations to color. ABC, however, was unable to convert to color because of the cost, estimated at $134 million. ABC was not competitive with the other networks during the 1960's in acquisition of programming, ratings and advertiser revenues. The network had losses in the millions each year, but these losses were offset by profits from the five owned-and-operated television stations. When advertisers and the public demanded color, ABC found itself in a vulnerable position, facing takeover threats by larger corporations with the capital to buy large blocks of ABC stock. In 1964, industrialist Norton Simon attempted such a takeover, which, while unsuccessful, made ABC officials realize that ABC needed the protection of a large corporation, but one that ABC selected, not a corporation that would takeover ABC without ABC's approval.

On December 3, 1965, The New York Times reported the impending merger of ABC with ITT. Until the withdrawal of the offer on January 1, 1968, much debate was centered on the controversial nature of such a merger.

ITT, an international conglomerate with diverse holdings, both domestic and foreign, began as a holding company in the early 1920's. In 1959, Harold Geneen became president. Geneen, considered a loner with restless ambition, operated under the assumption that

management must manage (with) a philosophy of aggressive anticipation of goals and problems, and of effective advanced counteractions to...(attain) objectives.  

During the 1960's, in the United States, mergers were increasing and ITT was heavily involved, merging with companies ranging from car rental firms to finishing schools. ITT wanted to enter U.S. broadcasting because it appeared to be lucrative and would increase ITT's domestic earnings which amounted to only 40% of its 1965 earnings. If ITT was to enter broadcasting, its options were (1) to buy or build a group of stations (most probably UHF) with the possibility of forming a fourth network; (2) to invest in cable or pay-television; or (3) to merge with an existing network. The decision to merge was considered the most economic means of entering the industry and, after talks with CBS did not lead to an agreement, Geneen turned to ABC.

ABC was formed in 1943, the result of the FCC's Chain Broadcasting Rules of 1941. In 1953, after two years of litigation, ABC merged with United Paramount Theatres, a corporation formed when Paramount Pictures signed a consent decree with the Department of Justice to separate its studio production facilities from its theatrical distribution system. The resulting corporation, after merging with ABC, was headed by Leonard Goldenson, whose experience with television was limited. In 1964, McCall Corporation (a publishing company) began to purchase ABC stock. Goldenson did not appear amenable to a merger with McCall's. At about the same time, Norton Simon (whose Hunt Foods owned 29% of McCall's) began purchasing ABC stock in an attempt to gain
a seat on ABC's Board of Directors. Since ABC was, and is, a publicly held company, other corporations could purchase the available stock in what is termed a "corporate raid," resulting in a takeover. To best evaluate his position, Goldenson needed to find out how much ABC stock was held by Simon and those affiliated with him. During the annual stockholders meeting in May, 1964, Goldenson proposed the elimination of the cumulative voting rule (where each share of stock was entitled to one vote) to force the opposition to vote in a block. The vote, (3,204,039 for and 517,382 against²) let Goldenson know how much of ABC's stock was held by the "corporate raiders." Although they held less than 14% of the ABC stock, Goldenson recognized a need for protection and entertained a merger proposal by ITT, since the merger was safer than the seemingly inevitable battle for control between the existing powers at ABC and Norton Simon. An agreement to merge was made on February 14, 1966, and on March 31, 1966, applications were filed with the FCC to transfer seventeen broadcast licenses to the new corporation. Stockholders of both ITT and ABC voted overwhelmingly for the merger on April 27, 1966. The Wall Street Journal reported on April 28, 1966 that ITT would issue 0.5719 share of common stock and 0.5719 share of convertible preference stock for each share of ABC common stock, ABC preference stock being convertible share for share into ITT common stock.³ Goldenson's profit would personally exceed $3 million.

Since the merger included the transfer of seventeen broadcast station licenses (radio and television), the application to the FCC was necessary as was FCC approval if the merger was to be consummated. According to the Communications Act of 1934:

No construction permit or station license, or any rights thereunder, shall be transferred, assigned, or disposed of in any manner, voluntarily or involuntarily, directly or indirectly, or by transfer of control of any corporation holding such permit or license, to any person except upon application to the Commission and upon finding by the Commission that the public interest, convenience and necessity will be served thereby.\(^4\)

If there had been no transfer of licenses involved, the merger would not have required FCC approval.

Following this chapter is a chronology of the major events during the merger attempt compiled from data in the dissenting opinion of FCC Commissioner Nicholas Johnson and from information published in other major sources.

\(^4\)The Communications Act of 1934, Sec. 310 (b).
Methodology:

All articles relating to the merger published in *The New York Times*, *The Wall Street Journal*, and *Broadcasting* between December, 1965 and February, 1968 were surveyed to identify themes. The themes were then categorized by environment. Additional theme data came from the official FCC decisions on the merger (including dissenting opinions) and articles published in legal journals. The categorized themes were then compared to the events which occurred after the merger proposal was withdrawn by ITT.

The themes were also identified by source to best identify the issues relevant to the different sides. Three source categories were identified: the corporate officials, the FCC Commissioners voting for the merger, and the FCC Commissioners and Department of Justice officials opposed to the merger.

Results:

The following themes emerged from the published accounts of the ABC-ITT merger case according to the four environmental categories:

(1) competitive:

   (A) ABC needed more money to become competitive with NBC and CBS.

   (B) If ITT does not merge with ABC, it might enter broadcasting as a new network.
(C) Two conglomerate controlled networks might upset the established balance in network television.

(D) If the merger were approved, there would be a change in the relationship among the environments affecting the networks.

(2) economic:

(A) The merger would be profitable for both ABC and ITT.

(B) ABC would have a broader financial base and would be less affected by fluctuations in earnings.

(C) ABC needed money to convert to color.

(D) ABC and ITT would have reciprocal dealings if the merger were approved.

(E) The profitability of the merger depended on swift action by the FCC.

(3) technological:

(A) Color technology was developed to the point of acceptance by advertisers and the public.

(B) If the merger were approved, ITT might stop its development of technologies for satellite and cable television.

(C) ITT would support UHF development if the merger was approved.

(D) ITT was a potential force in new technologies.
(4) regulatory:

(A) The only regulatory issue before the FCC was the transfer of seventeen broadcast licenses.

(B) The Department of Justice had the authority to deal with any antitrust aspects of the merger.

(C) The public interest must be served by the transfer of the licenses.

(D) ABC's autonomy within ITT, especially in the area of news, must be assured.

(E) Conglomerate control of the networks must be considered.

(F) ITT's financial position could be influenced by foreign governments.

(G) The relationship between the FCC and the industry it is to regulate is questionable.

(H) The relationship between the FCC and the Department of Justice is unclear and lacks communication and cooperation.

These twenty-one themes were stressed at various times by one or more of the theme sources. It should be noted that two votes on the merger were taken by the FCC, both with the same results. In each of the votes, the seven FCC Commissioners broke along party lines (four republican Commissioners voting for the merger and three democratic Commissioners voting against the merger). Also, the regulatory proceedings for the merger were unique and, depending on which of the sources is quoted, either a streamlining measure or legally defective.
The broader question of antitrust was not at issue before the FCC. The FCC has the right to deal with concentration, merger and monopolistic network practices, but it does not have Congressional antitrust immunity (that is, it cannot grant immunity) as does the Department of Justice. The resulting overlap of jurisdictions required accommodation. Donald Turner, in charge of the Department of Justice's antitrust division during the ABC-ITT merger case, felt that rather than bring an independent antitrust suit (against ABC and ITT), the Department intervened in the Commission's proceedings where it offered evidence to show that the merger was not justified by public convenience and necessity, considering its competitive and other effects.  

However, during the proceedings, the FCC repeatedly noted that the Department of Justice was noncommittal. The Department of Justice did not intervene until the FCC voted to permit the merger, although it has the power to intervene by use of the Clayton Act which states that  

No corporations engaged in commerce shall acquire, directly or indirectly, the whole or any part of the stock or other share of capital and no corporation subject to the jurisdiction of the Federal Trade Commission shall acquire the whole or any part of the assets of another corporation engaged also in commerce, where in any lines of commerce in any section of the country, the effect of such acquisition may be substantially to lessen competition, or to tend to create a monopoly.  

On November 3, 1966, Turner told the FCC in a letter to FCC Chairman Rosel Hyde that his division's analysis of the  

---

615 USC, sec. 18 (1964).
proposed merger

indicates a sufficient possibility of significant anticompetitive effects to indicate that substantial antitrust questions are presented. The letter was the first reply from the Department of Justice that was not non-committal. It resulted in an FCC delay in deciding to allow the merger. ABC and ITT both protested.

On December 20, 1966, Turner sent another letter to the FCC concluding that

There are several anticompetitive consequences that may possibly flow from an ITT-ABC merger, effects which might conceivably be substantial. The possibility of such anticompetitive consequences seems sufficiently speculative that we are not presently contemplating an action under the antitrust laws to enjoin consummation of the merger. On the other hand, we believe that possibilities of adverse effects are significant enough that we should call them to your attention, and that they deserve full and serious consideration by the Commission in making its determination whether, in light of these and other pertinent factors, the acquisition of ABC by ITT would serve 'the public interest, convenience, and necessity.'

The possible anticompetitive effects Turner mentioned were:

(1) elimination of the possibility that ITT would enter broadcasting without the merger as a fourth network or in cable television; (2) integration with ABC might slow down ITT's efforts to develop technology for competitive broadcast systems using cable or satellite; (3) possible price fixing for transshipment services and equipment (satellite charges) and (4) the possibility of adverse economic impact on networks by ITT's placing of advertising only on its own network (reciprocal dealing). Turner stated that the letter

---


was not meant as Department of Justice clearance, but the FCC voted on the following day to approve the merger.

Walter B. Emery stated that "the basic question in all transfer cases is whether the proposed change of ownership will serve the public interest." Therefore, the burden of proof was on ABC and ITT to prove public benefit from the merger (as opposed to corporate benefit), with the FCC acting as the public's protector. ITT stated that it felt the merger would be "a continuation of our acquisition policy of seeking companies with good, but not necessarily leading positions in their industry." Goldenson felt that "ABC, as part of the diversified ITT organization will have a broader financial base, and therefore, will be less affected by wide fluctuations in earnings typical of the television network business."
The public interest aspects were not stressed in the early stages of the merger attempt. ABC felt that it needed to be part of a conglomerate to be competitive since, as Goldenson stated, "survival in this dynamic industry will go to the fittest, those with the know-how (and) the capital." ABC's competitive position was graphically shown during the FCC hearings when officials of ABC noted that ABC's percentage of the total-television revenues between 1962 and 1965 was 13.6% compared to 37.9% for CBS and NBC.

---


Broadcasting announced on July 25, 1966, that no full hearing would be held on the ABC-ITT merger. This was significant because it was a violation of the Communications Act of 1934 since a petition to deny was filed against the merger. On May 11, 1966, Hubbard Broadcasting Inc., owner of KOB (AM), Albuquerque, New Mexico filed the petition to deny or defer the application to transfer WABC(AM)'s license. Both KOB and WABC share the 770 kilocycle frequency and had been in litigation since 1941 over preference on that frequency. WABC is a 50 watt clear channel station, therefore requiring KOB to be a daytime-only station. The KOB petition to deny was removed from hearing status in July, 1966, by the FCC which felt the issue of preference could better be resolved through rulemaking. The decision on this frequency, according to the FCC, had no bearing on the ABC-ITT merger case.

The FCC decided not to hold a full hearing, but rather to request more written information. Two Commissioners (Cox and Bartley) dissented from the majority of the Commissioners (Hyde, Loevinger, Lee and Wadsworth), expressing concern about potential conflicts of interest and domination of ABC by ITT. Commissioner Johnson, new to the FCC, did not vote. With the exception of Johnson, this vote clearly established the "sides" on the issue and continued throughout the case.

The questions sent to ITT by the FCC (1) reflected Commissioner Bartley's concern about conflict of interest, asking Geneen to send the FCC the same representations made to ABC (that ABC would remain autonomous) referring
to the following passage in Geneen's letter to Goldenson:

the broadcast operations of ABC will be kept separate from other ITT operations and the operations of ABC as a licensee will be performed unaffected by commercial or other interests of ITT.¹³

The FCC also asked (2) to what extent ITT would be bound by that statement; (3) how ITT would provide financial support for ABC program expansion, and (4) Goldenson was asked to explain "the manner in which the financial resources of ITT will enable ABC to improve its program service and thereby better serve the public interest."¹⁴

The next scheduled FCC discussion of the merger was on August 7, 1966 when they met to discuss the answers sent by ITT and ABC, and to consider the failure of the Department of Justice to express an opinion. In the answers to the FCC questions, ITT assured the FCC of ABC's autonomy and of ITT's commitment to provide financing. Geneen and Goldenson both felt that the concern about ITT's acquisition of ABC was misplaced, citing the precedent of RCA's ownership of NBC. ITT made the promises it had previously made to ABC directly to the FCC regarding ABC autonomy and its public service responsibilities. ABC said that its network operations had lost $18.6 million in the past three years (1962-1965). Goldenson calculated (from FCC statistics) that the combined profits of CBS and NBC showed a steady increase during that same period (from $33.4 million in 1962 to $68.6 million in 1964). However, the profits from ABC's

¹⁴Ibid.
owned and operated stations more than made up the losses during that period ($63.5 million).\textsuperscript{15}

On September 19 and 20, 1966, "oral hearings" were held before the FCC, described in Broadcasting as a "unique procedure, hybrid of hearing and oral argument, (that) has (the) obvious aim of establishing (a) record on which (an) expedited decision can be reached."\textsuperscript{16} Little new evidence was presented at the hearings, but through cross examination specific commitments were made by Geneen: (1) ITT would make $50 million available to ABC over the next three years; (2) newsroom independence would be guaranteed; and (3) ABC would make all decisions, but ITT could override them.\textsuperscript{17}

Congressional critics were wary of the monopolistic possibilities of the merger. Senator Gaylord Nelson, Chairman of the Monopoly Subcommittee of the Senate Small Business Committee, called for a full hearing with the Department of Justice and the Federal Trade Commission participating. He further felt that the oral hearings brought out the "facts" that: (1) ABC was not in financial difficulty; (2) the government could influence ABC programming, since half of ITT's domestic earnings was from government contracts; and (3) the only apparent advantage to the merger was an increase in the value of Goldenson's stock.\textsuperscript{18}

\textsuperscript{15}Broadcasting, 71:5, (August 1, 1966): 27.

\textsuperscript{16}Broadcasting, 71:11, (September 12, 1966): 52.

\textsuperscript{17}Broadcasting, 71:13, (September 26, 1966): 48.

Senator Nelson was joined by Senator Wayne Morse in criticism of the merger in general and the FCC's handling of it.

After receiving a letter from the Department of Justice, the FCC sent a letter to Geneen on November 3, 1966, requesting information about ITT's foreign interests and more details about topics covered in the oral hearings. Geneen responded by stating that if the government trusted ITT on the "most sensitive security programs in the Free World" the FCC should trust it to operate ABC in the public interest.\(^{19}\) His further responses did not satisfy Commissioners Cox and Johnson so they requested still more information, adding a hypothetical question of major concern to the dissenting minority:

> whether the merger, in view of ITT's extensive foreign holdings, would have an adverse effect on ABC's news-and-public-affairs programming.\(^{20}\)

Commissioner Loevinger accused Cox and Johnson of "trying an adjudicatory proceeding by press release" protesting the additional questions and the hypothetical question.\(^{21}\)

On December 21, 1966, the FCC met to vote on the transfer of ABC's licenses and it was passed 4-3.

The majority decision to approve the transfer of the licenses followed procedures they felt went beyond normal steps and heightened the effectiveness of FCC methods.

\(^{19}\) *Broadcasting*, 71:21 (November 21, 1966): 42.


The December 20, 1966, letter from Donald Turner was interpreted by the majority as meaning the Department of Justice was not contemplating antitrust action to stop the merger, but the FCC should consider the merger carefully, since the Department of Justice and the FCC standards differ. Having considered Turner's letter, the majority concluded

that the merger proposed here would enhance, rather than lessen, competition in the field of communications, and would serve the public interest and the purposes of the Communications Act.22

Although technically only the transfer of seventeen radio and television station licenses were involved, in reality, the FCC was transferring a network operation, and, therefore, their regulatory domain was in question.

The majority felt that the basic issue was whether the merger would "increase concentration of control of the mass media or tend to decrease or discourage diversity of broadcasting."23 They concluded that there was no "horizontal competition" (competition within one market) and the "vertical competition" was unsubstantial (ABC buys ITT products and ITT advertises on ABC). The assurances of ABC autonomy were accepted by the FCC majority.

According to the majority, ABC established a need for funds to improve its news and public affairs programming and to convert to color. ITT committed itself to finance

22ABC-ITT Merger Case, p. 250.
23Ibid., p. 251.
the changes.

The public benefits of the merger outlined in the opinion were:

(1) ITT's larger financial resources will strengthen ABC's capacity to compete effectively with the other two national television networks...
(2) the merger promises for the broadcast public even more tangible benefits (better programming service, more news and public affairs, speedier color conversion and new production facilities...
(3) the added support ITT has undertaken to give to the advancement of UHF broadcasting.24

The majority felt that the FCC should encourage free competition in broadcasting even if it requires changes in a network's financial structure. Therefore, the FCC should allow licensees and networks to "achieve competitive equality by their own efforts."25

The final issue basic to the case was whether broadcast licensees should be restricted to broadcast activities or should be permitted to have other business interests.26

The majority felt that the practice was previously permitted (with RCA's ownership of NBC) and they could not in good conscience forbid ABC to merge with ITT without instituting proceedings to separate NBC from RCA.27

Therefore, they granted the transfer.

Of the three dissenting commissioners, two (Bartley and Johnson) wrote extensive dissenting opinions disputing

24 Ibid., p. 256.
25 Ibid., p. 257.
26 Ibid., p. 260.
27 Ibid.
the majority on the question of competition, ABC's financial need, independence of ABC broadcast operations and FCC procedures during the case.

Bartley felt that the FCC procedures did not comply with the Communications Act of 1934. The rush to approve the merger was, according to Bartley, unnecessary and led to a superficial study of the Turner letter. He felt that the merger would have the inherent danger of the broadcast operations becoming a public relations tool of and image builder for the corporate conglomerate and little attention given to the local needs of the public. 28

Bartley concludes that the majority opinion "is fatally defective to support a grand to consent to the proposed ABC-ITT merger." 29

Johnson points out in his dissenting opinion that ironically, the properties of greatest public significance, the ABC network and its affiliated stations, are not licensed property of ABC, and thus come within our jurisdiction only by virtue of their relation to the ABC owned-and-licensed stations. 30

Johnson's main objections were: (1) questionable procedures used by the FCC; (2) the failure to recognize the importance of the Department of Justice's fears; (3) the absence of evidence to support the applicant's case and "substantial evidence of probable harm to the public interest." 31

28 Ibid., pp. 263-4.
29 Ibid., p. 272.
30 Ibid., p. 280.
31 Ibid., p. 287.
that ABC did not prove the competitive advantages of the merger; and (5) the possibility of foreign government influence on ITT.

Reaction to the FCC merger approval was widely varied. Leonard Goldenson stated that we believe the merger will make it possible for ABC, in the public interest, to bring to the people of the nation the best of programming in entertainment, in sports, and in news and public information.32

Geneen felt the companies could now move to complete the merger. The U.S. Senate reacted against the FCC with accusations that the commission was subservient to the broadcast industry, disregarded the public interest, and lacked diligence.

On January 18, 1967, the Department of Justice's Antitrust Division filed an application for a stay of merger and petitioned the FCC to reconsider its decision. The request centered on five issues:

(1) ITT was considered to be a potential entrant in cable or pay-television which would conflict with its operation of a network or, at least, restrict the possibility of further ITT investments in these new technologies,

(2) ITT, as one of the few companies capable of the technological developments necessary, might not continue research in areas that would threaten the network broadcasting activities.

(3) By merging with ABC, ITT would not form a fourth network,

(4) Although merger with ABC would be the most economical means for ITT to enter the U.S. broadcast industry, it might not be the best means in the public interest, and

(5) The Department of Justice questioned ABC's competitive position as they described it.

On February 1, 1967, the FCC adopted the Department of Justice's petition to reconsider and, on March 16, 1967, they ordered an expedited hearing which was held from April 10 to April 26, 1967. The hearing resulted in 3,300 pages of text and 550 exhibits. Some evidence presented was damaging to ITT: ITT had, it was reported, little intention of putting money into ABC; because of ITT's highly centralized organizational structure, autonomy was highly improbable; and the Department of Justice found that ITT planned on taking $100 million from ABC in the next five years for reinvestment outside of the broadcast area.33

With all the new evidence, the FCC voted again on June 22, 1967, to allow the merger with the same dissenting votes. The Department of Justice appealed the FCC decision before the D.C. Court of Appeals. In its brief, the Department of Justice expressed its belief that ABC could

33Anthony Sampson, The Sovereign State of ITT, p.86.
finance its own needs; refused to believe that ABC could remain autonomous; and, questioned ITT's foreign holdings and their effect on ABC's news integrity.

Geneen answered the charges, but there were court delays. The profitability of the merger became less appealing to ITT. If the merger were approved, it would cost ITT $254 million more than the original cost in 1966. When the agreement expired on January 1, 1968, Geneen withdrew the offer.

ABC, which had delayed many corporate actions pending the merger, found that its competitive position was in serious trouble. Slowly debts were paid and ABC converted to color. From 1968 through 1976 ABC's growth was calculated by the organization to provide slow continual improvements.

Conclusions:

ABC faced a major threat to its survival with the advent of color broadcasting. It was the third network in a three network competition and, quite possibly, could be forced to cease its television operations if it did not convert to color. The attempted merger with ITT would have solved the financial problems faced by ABC if ITT really intended to keep the network competitive. There are questions about ITT's real intentions regarding ABC that were raised during the merger hearings and afterwards when ITT was found to be interfering with foreign governments (specifically Chile). Although ABC felt that it needed the protection of a financially stable corporation,
they found a way to become competitive without the merger. ITT did not form a fourth network, but has continued developments in cable and satellite.

Conglomerate control of the media has been of concern to the public and regulators alike. If ABC had become a part of ITT the balance of network broadcasting would have been under conglomerate control. It is impossible to estimate the results of such a balance, but obviously one possibility would be use of the media in the corporate interest. The FCC does not directly regulate the networks and must influence them through affiliates. The monopolistic tendency of network television, recognized by Donald Turner during the merger hearings, could be controlled by the government through regulations which would get "monopolists to behave more like firms which have to compete." 34

ABC was behaving in its own interest throughout the merger attempt. It recognized its financial difficulty and selected the most appealing solution available to it. It did not expect the difficulties encountered and continued to believe the merger would take place until the offer was withdrawn. Organizationally, that error could have cost ABC its television network. ABC was in a less stable economic position after the merger attempt than it was in before the attempt. The survival of the network was the result of corporate strategies designed to minimize the

34 Turner, p. 879.
economic effects of maintaining its competitive position. The cost of conversion to color was absorbed over a period of time, coverage of some political events (such as the 1972 Presidential conventions) was kept to a minimum, and programming was continually changed to improve the ratings. ABC used the profits from its owned-and-operated television stations to slowly improve its corporate health.

ABC did not face the financial problems of conversion to color and competition with stronger networks until it was forced to recognize its vulnerability by "corporate raiders." The key strategies ABC could have used were (1) planning for technological innovation; and (2) diversity within the corporation.

Planning for the conversion to color was apparently minimal at ABC, since it was still recovering from financial problems it had faced since its formation. CBS and NBC both had accepted the new technology as being imminent and planned conversions. The problems faced by CBS during the development of color were offset by the network's strong ratings position. NBC could rely on its parent company, RCA for financial backing. ABC had neither a secure financial base, nor a strong ratings position. Therefore, it needed to innovate in order to survive. When it finally did face its corporate problems, it began a series of innovative moves to retain and, later, enhance its competitive position. First, it formed four radio networks at a time when many believed that radio networks would cease to exist. Each of
the networks would be for a different audience at different
times, therefore allowing all four networks to operate on
one network line. This move lost $8 million in its first
year, finally breaking even after four years of operation.
The four radio networks have been a success for ABC,
remaining profitable since 1973. Second, ABC began the
"second season" in network television. Previously called
the "replacement season" by the television networks, ABC
recognized that its programming had to be more dynamic
than the other networks since ratings were not competitive.
By initiating a second season, ABC could replace programs
after thirteen weeks (instead of twenty-six) with all the
promotion and publicity of the start of the television
season. The trend, started out of necessity, is now
standard in the industry. Finally, ABC began to stress
sports programming, which was less costly than purchasing
movies and programming, and minimize news, which consistently
lost money. These innovative responses were at least partially
responsible for ABC's corporate survival.

Diversity within the corporation, especially in the
areas of research and development, would have given ABC
the information necessary for organizational adaptation
to changes in its environments. ABC's structure during
the merger period could not adapt well to technological
change. Recently, all networks have found that a more
diverse corporate structure, including separate divisions
dealing with new and developing technologies, to be better suited to the industry.

The relationship between the industry and its regulatory agency has not significantly changed since the ABC-ITT merger case. The themes present then still are being cited in cases before the FCC. The relationship between the FCC and the industry it is to regulate was considered by some to be too close during the merger case. The relative speed of the decisions and hearings raises questions about whether the FCC really considered the public interest or the corporate interest. The FCC seemed to be satisfied by assurances from both Goldenson and Geneen regarding autonomy. However, the merger involved corporations, not just the men, and might not have been followed after they left.

The relationship between the FCC and the Department of Justice resulted in an overlap of jurisdictions which was not accommodated well. Richard Perry explains that it is apparent that the differing policies pursued by the Department of Justice under the antitrust laws and by the Commission under the 'public interest' standard are capable of producing an uneven enforcement of the law. (Perry, p. 5)

The lack of cooperation between the two agencies during the merger case did not work to the advantage of ABC. When the FCC approved the merger, the Department of Justice intervened. Since quick approval of the merger was essential to ITT's profits, the delays sufficed in making the merger less appealing.
Organizational Response

The merger attempt must be evaluated as an innovation because all three principals involved (ABC, ITT and the FCC) used strategies that were new or without precedents. The innovative strategies used by ITT and ABC (the parent company, not just the network) will be evaluated using Wilson's criteria for evaluation of organizational innovation (see chapter 1).

The reasons for innovative behavior by ITT include its desire to enter the lucrative broadcasting industry in the United States, and the organizational goal of diversification. The merger attempt was a rational organizational strategy to achieve these goals in the most economical fashion. Therefore, ITT could expand without the uncertainty and risk it would have if it were to start a new network. ITT, as a conglomerate, was diversified enough to be able to accept network losses while still remaining profitable. This ability is similar to the current situation at RCA. Although network profits are down, the highly diversified organizational structure protects the larger organization from effects.

ABC's reasons were less planned and more urgent. Basically, ABC wanted a controlled takeover that would guarantee inputs of capital for conversion to color. The corporate raids showed that ABC was in a vulnerable position that, it appeared at that time, could only be solved by
a merger. In retrospect, it appears that the actions by ABC were meant to minimize the financial losses that were inevitable if ABC was taken over.

The goals of the innovation are difficult to assess, since the merger was never consummated. ITT, it appears, wanted to become a force in the broadcasting industry while improving corporate profitability. ABC wanted to survive and remain competitive in spite of changes in the technological environment (the development of color television). However, as was stressed throughout the FCC hearings, ABC also wanted to remain autonomous in spite of the merger. Considering the lack of autonomy NBC has from its parent corporation, this goal was highly unlikely.

Finally, the dynamics of the innovation show that the two corporations had little reason to suspect that the merger would run into trouble. Each phase of the merger attempt from December, 1965 (when the impending merger was reported) until July, 1967 (when the Department of Justice appealed to the D.C. Court of Appeals) was positive for the merger proponents. The merger was halted because of two major reasons: (1) it was no longer as profitable for ITT; and (2) Harold Geneen, it seems, was tired of the obstacles that kept appearing.

The effects of the environments during the merger attempt show the significant impact factors external to the organization have on its survival. The merger was attempted
as a response to environmental change. First, the development of color resulted in change in the technological environment. This change affected ABC's competitive position within the competitive environment. Finally, outside organizations affected ABC's economic environment. The net result was an unstable organizational environment which required action. The decision to merger, therefore, was a logical response to the situation. However, regulatory delays changed an otherwise rational organizational strategy into an impossible situation.

The failure of the merger to be completed shows that the network organizational strategies must take into account instabilities in the environments that are unpredictable. ABC's organizational responses throughout the merger attempt were centered on its belief that the survival of the organization necessitated the merger with ITT. Subsequent events showed that this was not the case. ABC remained a force in broadcasting. Sterling Quinlan noted that

the only failure ABC ever had was at the hands of the U.S. Court of Appeals, but this, ironically, turned out to be the most fortuitous piece of luck the company ever had!35

Perhaps it was fortuitous for the ABC network, but organizationally it represented the start of a difficult process of capital expenditures which severely constrained the

35Sterling Quinlan, Inside ABC, p. 117.
organizational development of ABC, Inc. However, through a process of budget tightening, and growth within the broadcast segment, ABC has reached a point of organizational stability and competitiveness. Organizational survival is no longer the near term possibility it was in 1966, but ABC, as well as the other networks face a new threat to their survival coming, once again, from developments in the technological environment.

This chapter has analyzed the attempted merger of ABC with ITT in an organizational framework that considered the move as an innovative organizational strategy that was not successful. Although the merger was the result of change in the competitive, economic and technological environments, it was the regulatory environment that was the catalyst for the withdrawal of the merger offer. The survival of ABC shows the overall stability of the broadcasting industry, and the ability of the company to overcome problems. However, this chapter has also shown that threats to the stability of the broadcast organizations are not predictable and organizational flexibility must not be overlooked as a rational organizational strategy.
CHRONOLOGY:
The ABC-ITT Merger Attempt

December 3, 1965...........The impending merger of ABC and ITT is reported

February 14, 1966...........Agreement to merge is reached by ABC and ITT

March 31, 1966.............The applications to transfer seventeen broadcast licenses is made by ABC to the FCC

August 18, 1966............The FCC orders an oral, en banc hearing

September 19-20, 1966....The FCC holds the oral hearings

December 20, 1966...........Letter from Donald F. Turner analyzing the antitrust issues of the merger

December 21, 1966...........The FCC, by a 4-3 vote, grants the transfer applications

January 18, 1967............The Department of Justice files an application to stay the merger, and petitions the FCC to reconsider

January 26, 1967............ABC and ITT file an opposition to the Department of Justice petition

February 1, 1967............The FCC stays the merger and orders further proceedings

March 16, 1967.............The FCC orders an expedited hearing

April 10-26, 1967..........The hearings are held

June 1-2, 1967.............Oral argument is heard by the FCC

June 22, 1967..............The FCC affirms its December 21, 1966 opinion

July 20, 1967..............The Department of Justice appeals to the D.C. Court of Appeals
CHRONOLOGY (2)

October 16, 1967........Hearings are held by the D.C. Court of Appeals
January 1, 1968........The merger agreement runs out
January 1, 1968........ITT withdraws the merger offer

NOTE: some of the information for this chronology comes from FCC Commissioner Nicholas Johnson's dissenting opinion, ABC-ITT Merger Case, 9 FCC 2d 546,581,10 (1967): 639-643.
PART IV

CURRENT THREATS TO THE COMMERCIAL TELEVISION NETWORKS

Technological innovations have been an important part of the growth of the networks and their parent organizations. However, the development of new technologies which are separate from the broadcasting industry have finally reached a point where they are recognized by the networks as a threat to the size of the audience the networks have traditionally had to draw from. This threat is not necessarily felt by the total organizations involved, since business segments of the organizations, especially RCA, are involved in these new technologies in a variety of ways. It is the network segments of these organizations that perceive the threats. The total organizational response to new technological developments (as described in chapter 2) is positive.

Chapter 10 identifies the current technologies the networks, and industry spokespersons aligned with the network position, perceive as threatening the audience size. Chapter 11 identifies the strategies the networks are using to minimize the impact of the new technologies
and evaluate them according to organizational goals they are meant to accomplish. Also, other strategies are discussed which offer the networks and their parent organizations an alternative to reactive measures. Chapter 12 summarizes the study and presents discussion and conclusions regarding the commercial networks as organizations reacting to the new and developing technologies.
CHAPTER 10

TECHNOLOGIES CURRENTLY AFFECTING
THE COMMERCIAL TELEVISION NETWORKS

Change in broadcast technology has, historically, been used by the networks to improve the quality of network transmission. However, a technological development that might initially be used to improve transmission can eventually become a threat to the networks. Cable television is an example of this deviation. Cable was originally used to provide television service to areas unable to receive broadcasts because of natural barriers. The networks increased their audience size and, therefore, benefited from it. It was not until cable operators began to use microwave relays to import distant signals, and the cable industry began to expand to areas that could receive broadcast signals that the networks recognized cable as a threat and initiated strategies to minimize the impact (see chapter 7). This chapter uses the methodology developed in chapters 8 and 9 to identify the technologies perceived by the networks and aligned organizations as threatening to their existence. These technologies will be evaluated regarding the perceptions of the networks and according to research being conducted by non-network researchers.
Background

New and developing technologies have developed to a point where the existing broadcast structure, especially network broadcasters openly recognize the inevitability of some impact on their audience size. The two most commonly mentioned technologies affecting the networks are cable and pay television. Table 11 shows the growth of cable television from 1952 through 1978. Cable television did not have a significant growth until the late 1960's when cable operators began to offer more than a community antenna service by importing distant signals and, in the 1970's offering pay television service. Table 12 shows the growth of pay television from 1973 through 1978. With the easing of cable rules severely limiting pay television, the growth of pay television has been dramatic. Figure 12 shows the growth in the percent of homes with television, color television, cable and pay television from 1960 through 1977. While the number of homes with television had already reached a relatively stable point, cable and pay television began their growth during this period.

Although the six major technologies identified in chapter 4 (cable, interactive cable, pay television, subscription television, videocassette recorders and videodisc
<table>
<thead>
<tr>
<th>Year</th>
<th>Number of Systems</th>
<th>Number of Subscribers in Thousands</th>
<th>Percent of TV Homes With Cable</th>
</tr>
</thead>
<tbody>
<tr>
<td>1952</td>
<td>70</td>
<td>14</td>
<td>0.1%</td>
</tr>
<tr>
<td>1953</td>
<td>150</td>
<td>30</td>
<td>0.2%</td>
</tr>
<tr>
<td>1954</td>
<td>300</td>
<td>65</td>
<td>0.3%</td>
</tr>
<tr>
<td>1955</td>
<td>400</td>
<td>150</td>
<td>0.5%</td>
</tr>
<tr>
<td>1956</td>
<td>450</td>
<td>300</td>
<td>0.9%</td>
</tr>
<tr>
<td>1957</td>
<td>500</td>
<td>350</td>
<td>0.9%</td>
</tr>
<tr>
<td>1958</td>
<td>525</td>
<td>450</td>
<td>1.1%</td>
</tr>
<tr>
<td>1959</td>
<td>560</td>
<td>550</td>
<td>1.3%</td>
</tr>
<tr>
<td>1960</td>
<td>640</td>
<td>650</td>
<td>1.4%</td>
</tr>
<tr>
<td>1961</td>
<td>700</td>
<td>725</td>
<td>1.5%</td>
</tr>
<tr>
<td>1962</td>
<td>800</td>
<td>850</td>
<td>1.7%</td>
</tr>
<tr>
<td>1963</td>
<td>1,000</td>
<td>950</td>
<td>1.9%</td>
</tr>
<tr>
<td>1964</td>
<td>1,200</td>
<td>1,085</td>
<td>2.1%</td>
</tr>
<tr>
<td>1965</td>
<td>1,325</td>
<td>1,275</td>
<td>2.4%</td>
</tr>
<tr>
<td>1966</td>
<td>1,570</td>
<td>1,575</td>
<td>2.9%</td>
</tr>
<tr>
<td>1967</td>
<td>1,770</td>
<td>2,100</td>
<td>3.8%</td>
</tr>
<tr>
<td>1968</td>
<td>2,000</td>
<td>2,800</td>
<td>4.4%</td>
</tr>
<tr>
<td>1969</td>
<td>2,260</td>
<td>3,600</td>
<td>6.1%</td>
</tr>
<tr>
<td>1970</td>
<td>2,490</td>
<td>4,500</td>
<td>7.6%</td>
</tr>
<tr>
<td>1971</td>
<td>2,639</td>
<td>5,300</td>
<td>8.8%</td>
</tr>
<tr>
<td>1972</td>
<td>2,841</td>
<td>6,000</td>
<td>9.6%</td>
</tr>
<tr>
<td>1973</td>
<td>2,991</td>
<td>7,300</td>
<td>11.1%</td>
</tr>
<tr>
<td>1974</td>
<td>3,158</td>
<td>8,700</td>
<td>13.0%</td>
</tr>
<tr>
<td>1975</td>
<td>3,506</td>
<td>9,800</td>
<td>14.3%</td>
</tr>
<tr>
<td>1976</td>
<td>3,651</td>
<td>10,800</td>
<td>15.5%</td>
</tr>
<tr>
<td>1977</td>
<td>3,800</td>
<td>11,900</td>
<td>17.3%</td>
</tr>
<tr>
<td>1978</td>
<td>4,617</td>
<td>14,500</td>
<td>20.0%</td>
</tr>
</tbody>
</table>

Table 12
Pay Television Growth

<table>
<thead>
<tr>
<th>Year</th>
<th>Number of Subscribers</th>
</tr>
</thead>
<tbody>
<tr>
<td>1973</td>
<td>18,000</td>
</tr>
<tr>
<td>1974</td>
<td>66,900</td>
</tr>
<tr>
<td>1975</td>
<td>264,575</td>
</tr>
<tr>
<td>1976</td>
<td>977,809</td>
</tr>
<tr>
<td>1977</td>
<td>NA</td>
</tr>
<tr>
<td>1978</td>
<td>2,600,000</td>
</tr>
</tbody>
</table>

Figure 12

Percent of U.S. Homes with Television Receivers, Color Receivers, Cable Television and Pay Television
players) represent some of the most recent threats to the established broadcast structure, other forces in the communication industry have the ability to draw audiences from the networks to other uses of the television receiver. These include independent television stations, satellite transmission, video games, superstations, videotext, home computers and satellite-to-home transmission. Each of these technologies has been identified by network officials or the FCC as possibly having an impact on the networks. Each of these technologies is described in Table 13 with its level of development as of 1979 and programming. For a more in depth discussion of these technologies see chapters 4 and 7. Some of the technologies described in Table 13 appeal to limited audiences (for example, the home computer) and are included only because the potential for the complexity of the technology to be lessened in the future makes them a future threat. Other technologies are so different from network television that the only common ground is the use of a television receiver (such as video games and videotext). These technologies are also recognized, but have minimal importance in this chapter. The technologies recognized as threats will, therefore, be limited to those which could draw audiences that would otherwise be watching network television.
Table 13
Overview of Technologies Affecting the Commercial Television Networks

<table>
<thead>
<tr>
<th>Technology</th>
<th>Description</th>
<th>Level of Development*</th>
<th>Programming</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cable Television</td>
<td>transmission of program signals by coaxial cable with broadband capacity permitting greater channel capacity</td>
<td>approximately 14 million subscribers (as of January, 1979) which is nearly 20% of U.S. television households</td>
<td>off-network programming, all local stations, access channels, imported distant signals</td>
</tr>
<tr>
<td>Interactive Cable Television</td>
<td>bi-directional cable which allows subscribers to respond (usually in a digital mode) to the head end</td>
<td>still experimental. The first commercial application (QUBE in Columbus, Ohio) has met with limited success.</td>
<td>local programming on access channels; off-network and local stations; pay channels</td>
</tr>
<tr>
<td>Pay Television</td>
<td>use of channels on cable systems for special programming paid for by the user</td>
<td>nearly 3 million subscribers which is nearly 4½% of U.S. television households</td>
<td>feature films, sports events and special programs produced for pay-television</td>
</tr>
<tr>
<td>Subscription Television</td>
<td>pay-television using an encoder-decoder system to broadcast pay channels</td>
<td>six operating stations (as of January, 1979) with approximately 335 thousand subscribers</td>
<td>same as pay-television but subscription stations are required to carry at least 28 hours of conventional programming per week</td>
</tr>
<tr>
<td>Videocassette Recorder</td>
<td>home videotape recorder attached to television sets</td>
<td>600 thousand sold (as of July, 1979)</td>
<td>programs can be recorded off the television set or user can purchase pre-recorded cassettes.</td>
</tr>
</tbody>
</table>

*as of June, 1979, except where noted.
<table>
<thead>
<tr>
<th>Technology</th>
<th>Description</th>
<th>Level of Development</th>
<th>Programming</th>
</tr>
</thead>
<tbody>
<tr>
<td>Videodisc Player</td>
<td>similar to the videocassette recorder, but cannot record.</td>
<td>introduced to test markets in December,</td>
<td>with the exception of recording programs, the same as videocassette recorders</td>
</tr>
<tr>
<td></td>
<td>plays videodiscs by use of laser beam or stylus</td>
<td>1978</td>
<td></td>
</tr>
<tr>
<td>Independent</td>
<td>stations not affiliated with a network</td>
<td>91 commercial independents as of 1976</td>
<td>re-runs of network programs; syndicated films and programs. Recently, some original programming</td>
</tr>
<tr>
<td>Television Stations</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Satellites</td>
<td>use of an orbiting space vehicle to relay signals</td>
<td>eight orbiting communication satellites with transponders at capacity</td>
<td>used for transmitting network programming; pay television; superstations and cable programming</td>
</tr>
<tr>
<td>Video Games</td>
<td>programmable cartridges which allow players to use the television set for games</td>
<td>highly developed</td>
<td>a variety of cartridges available to provide participants a large choice of games</td>
</tr>
<tr>
<td>Superstations</td>
<td>independent television stations carried via satellite to cable systems</td>
<td>six independent stations are in use as superstations as of June, 1979</td>
<td>same as independent television stations</td>
</tr>
<tr>
<td>Technology</td>
<td>Description</td>
<td>Level of Development</td>
<td>Programming</td>
</tr>
<tr>
<td>-----------------</td>
<td>-----------------------------------------------------------------------------</td>
<td>------------------------------------------------------------</td>
<td>----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Videotext</td>
<td>use of television screen for transmission of written information</td>
<td>some systems are in use in Europe. CBS announced experiments with a modified version of a teletext system in 1979</td>
<td>any information stored in a computer can be disseminated via videotext including news, captioning for the deaf, and other services</td>
</tr>
<tr>
<td>Home Computers</td>
<td>use of television screen as a means of displaying information</td>
<td>available</td>
<td>programmable by user</td>
</tr>
<tr>
<td>Satellite To Home</td>
<td>direct access to programs on satellites by installation of an earth receiving station</td>
<td>although developed, not widely used because of the expense involved</td>
<td>all programming on the satellites</td>
</tr>
</tbody>
</table>
Methodology

Although the methodology is the same as in chapters 8 and 9, the data base is, of course, different. All articles in Broadcasting were surveyed from January, 1978, through June 1980, and statements identified which dealt with the relationship between the networks and new technologies. Additional data sources were used where available, including speeches by network executives, articles in Variety written by network executives and persons involved in program production and distribution, and articles in NAB Highlights that quoted network sources or persons whose organizations are aligned with the networks regarding the new technologies.

Statements by network officials, members of the FCC and Congress, advertisers, media consultants, cable executives, and spokespersons directly involved with either the traditional broadcast structure or the new technologies were categorized according to the technology identified as the threat and the possible outcome of that technology's impact on the networks; and according to the interests of that source. Statements dealing with strategies used to minimize the impact of the new technologies were separated for analysis independently of the perceived threats. Finally, actions taken by the networks to minimize the effect of new technologies were noted and compared to the perceived threats and strategies stated by the sources.
Results

Five theme categories of perceived threats to the traditional broadcast structure (i.e. the networks) emerged from the data. The resulting themes were as follows:

(1) general - including those statements not specifying a technology; and regulatory threats

(A) network themes:

1. new technologies will result in greater segmentation and fragmentation of the audience
2. new technologies will result in increased government influence in the communication industry
3. new technologies will not likely be comparable to the networks

(B) regulatory themes:

1. are the networks engaging in monopolistic practices
2. new technology growth should not be restricted by regulation, but rather by open competition
3. new technologies should develop their own program sources and not rely on the traditional broadcasters for programming
(2) cable television, interactive cable, pay television and subscription television

(A) network themes:

1. cable takes network programs, it does not compete fairly
2. cable is given preferential treatment by regulators
3. the impact of these technologies is real
4. there will be an adverse effect on local station ability to serve the public interest
5. cable contributes to increased television viewing by improving reception
6. there is a diversion of audience resulting in a loss of revenues
7. pay television caters to minority tastes
8. will people pay for what they get free on the networks
9. there will be a degradation of over-air programming

(B) new technology operator themes:

1. broadcasters cannot accept the status quo, change is inevitable
2. there will be a video center in the home, not just a television
3. there will be more diversity of programming
4. cable is not a threat, it is beneficial to independents and UHF stations
5. pay and subscription television are not a substitute for networks they provide a different service
6. pay television responds to minority tastes in programming
7. cable is overregulated

(C) regulatory themes
1. viewers will benefit from new technology
2. there will be a more dynamic environment
3. cable needs to develop new services
4. new technologies will increase broadcaster competition
5. with less regulation, viewers can express their preferences

(3) superstations, independent television stations and UHF television stations
(A) network themes

1. superstations were created by government regulations on carriage of distant signals on cable

2. superstations exist because they take programs off traditional broadcast stations and receive the profits of a network

(B) new technology themes

1. superstations add competition to broadcasters

2. networks monopolize the program markets with unrestricted power over program schedules

3. independents and UHF stations should use the new technologies to gain a competitive advantage

4. UHF is the place where television growth is likely

(C) regulatory themes

1. superstations are networks

2. UHF should be equal technically equalized with VHF

(4) satellites including satellite distribution of programming to networks, cable operators and direct-to-home
(A) network themes

1. satellite distribution will change broadcast operations

2. satellites are useful now for news feeds, however, satellite distribution to affiliates is in the future

3. direct-to-home satellite distribution is not consistent with the regulatory stress on local broadcasting

(B) satellite operator themes

1. the potential uses of satellites are enormous

2. with deregulation of earth stations, the cost of installation will be reduced

(C) regulatory themes

1. there is a limit on the number of available orbit slots

2. deregulation of receive-only earth stations

(5) videocassette recorders, videodisc players and video games

(A) network themes

1. cost of videocassette recorders and videodisc players will limit
their usage
2. video games are an incursion into television watching time
3. videodiscs will be an educational tool for specialized audiences
4. videocassette recorders, video-disc players and video games will increase the time users use their television sets

(B) technology themes
1. regulations now encourage development
2. dissemination of these technologies will rise dramatically

(C) regulatory themes
1. there is a need for standard formats
2. it is legal to record programs for private use

These fifty themes represent the major responses to technological advances by the representatives of companies whose existence depends on adapting to changes in these technologies. The bottom line of all these themes is the audience that the networks potentially could lose to other technologies. That audience represents lost income to the networks which must be compensated for in some way.
Analysis
(1) General

The network position regarding the effects on audience size is that the possibility exists that the audience will be segmented with the result being "less time devoted to any one medium or channel."

The government is recognized by Melvin Goldberg, Vice President of Primary and Social Research at ABC, as a potential threat to the communication industry since the jurisdiction of federal agencies becomes unclear with the addition of new technologies. Leonard Goldenson, in a speech before the Academy of Television Arts and Sciences, clearly expresses the network view of the new technologies:

The promise was that the new technology would bring new and different messages, new programs and services into the living rooms. But where are these new programs and services? What are the new media's reasons for being? To date, justification has been extremely difficult to find.

The regulatory position towards the new technologies generally has been favorable in recent years. An exception is the antitrust suit filed by the Department of Justice in 1972 charging the networks with monopolistic practices. Although agreements have been signed by both CBS and NBC, ABC has decided to fight the suit. FCC Chairman Charles Ferris (who became chairman on October 17, 1977) states that his policy is "to remove any impediments to each (technology) so that each can maximize its potential fully." The FCC

---


appears to be interested in maximum competition with a minimum of regulation. FCC Commissioner Tyrone Brown states that a majority of commissioners are beginning to feel that "a free and open market normally is a far better referee of competing technologies that the commission could ever be." This is echoed by Chairman Ferris who feels that the government should not remain "in any electronic broadcasting or telecommunications market one day longer than is absolutely necessary to protect the public interest." However, Ferris also feels that there are problems with the new technologies especially in programming which he calls an "echo" of traditional broadcasting.

(2) Cable, Interactive Cable, Pay and Subscription Television

The network position on cable, interactive cable, pay and subscription television is that these new media do not compete fairly. Joel Chaifeman, President of Westinghouse Broadcasting states that it's time to end the fiction of competition between cable and television broadcasting. Cable pirates the great bulk of its programming from local stations and pays nominal fees for compulsory licenses. Cable is a billion dollar business with $400 million dollars in profits, yet it spends just $25 million dollars for all its programming. Let's end the subsidy. Motivate cable to go into the marketplace and either compete for programming or develop its own.

---

5Broadcasting 98:15 (April 14, 1980):68.
Whether the impact of cable television on local broadcasting is real is debated within the networks. ABC, in a filing for the FCC cable inquiry states that there is no doubt that the present and prospective impact of unrestricted CATV (cable) operation upon local television stations is real, not imagined, and that their ability to serve the public will be adversely affected if the distant signal or nonduplication rules are further eroded.8

But William Rubens, Vice President of Research at NBC feels that the main impact of cable is to improve reception and bring in more stations to smaller markets - thus the main effect of cable has been not to supplant regular TV viewing, but to contribute additional viewing.9

CBS-TV President James H. Rosenfield seems to agree with the NBC view on the impact of cable:

the number of television homes will be growing simultaneously so that the actual size of the networks' audiences will be about the same ten years out as it is now. And since the changes in any case will be quite gradual, commercial television should have no trouble adjusting (to the predicted 10 percent decrease in the networks' share of the audience).10

Pay television and subscription television present more of a threat to the networks since they do offer something different in programming. The networks recognize that "the force behind the current growth in cable is the

availability of a pay channel, whose main attraction is recent movies and sports.\textsuperscript{11} This type of programming has the potential of making television "a premium service to a few while degrading service to the nation."\textsuperscript{12} Everett Erlick, ABC Senior Vice President and General Counsel stated that
cable and, even more so, pay cable, are minority services. They are not, nor are they likely to become, national communications services comparable to the over-the-air television system, available to virtually every U.S. home.\textsuperscript{13}
The network position is that the public will be reluctant to pay for programming when they can receive almost identical programming free.
The operators of cable, and pay television operations feel that the networks are overprotective of the status quo. Thomas E. Wheeler, president of the National Cable Television Association (NCTA) states that

we're going to quit thinking about broadcasting, cable, microwave, videodiscs, and we're going to start talking about the video center in the home - and there will be a half dozen ways to reach the video center in the home.\textsuperscript{14}
The NCTA feels that no evidence exists linking cable with a decline in traditional broadcast services, but rather cable will benefit the industry by equalizing UHF and VHF stations improving programming by increasing competition.
The overregulation of cable, according to the NCTA, "harms

\textsuperscript{11}William S. Rubens, "I, the Viewer."

\textsuperscript{12}Broadcasting 94:10 (March 6, 1978):112.

\textsuperscript{13}Ibid.

broader public interest considerations by unnecessarily restricting freedom of choice." Of course the NCTA must make this claim if it is to prevent over-regulation of cable.

The regulatory position, as described by FCC Chairman Ferris, is that cable has stimulated competition among all the communication technologies, including network television. However, he states that

if cable does not show more foresight in designing new services and facilities, it may be bypassed in the marketplace by those who do.16

Continuing the theme of less regulation, Ferris feels that the public interest can most effectively be voiced by the public itself as it turns the dials of television sets across the country to choose among an abundance of program choices.17

This view is a radical departure from statements made in 1957 by Representative Emanuel Cellar regarding pay television services. Cellar stated that

the Communications Act does not clearly envisage television for a price. Moreover, subscription television involves such basic departures from existing practice and contains such a grave potential threat to the survival of traditional "free" television, that the decision whether or not to embark on the widespread tests should be made by Congress and not by the Federal Communications Commission.18

In fact, the FCC allowed experimentation with subscription television for ten years, eventually turning to the courts

and Congress for a decision on pay services. The result was that subscription television was not permitted until 1977.

(3) Superstations, Independents, and UHF Television Stations

Although many UHF stations are independent stations, the networks do not appear to be threatened by technological developments that equalize UHF with VHF since they stand to benefit from improvements through their UHF affiliates. However, they do recognize the threat of superstations. NAB President Vincent Wasilewski, speaking before the National Association of Television Program Executives (NATPE) stated that

TV superstations are a creation of government. They are possible only because of a series of misguided and mistaken government rulings...(which has) undermined its own basic concept of local broadcasting which is based on participation and contribution by stations to their own communities.\(^{19}\)

Ted Turner, owner of WTBS, the first superstation disagrees, stating that

the networks have had thirty years to improve the quality of television, and they haven't done it yet. They need competition to make them better, and I promise to provide that competition.\(^{20}\)

Program producers point out that independent stations offer new alternatives to program production, which has been severely limited by the power of the networks. They also feel that the independent stations have the opportunity to "lead in the use of satellites, to get a competitive advantage in the marketplace (since the networks) favor the

\(^{19}\)NAB Highlights 5:11 (March 19, 1979): 2.

status quo."21

The FCC recognizes the technical inequality of UHF and VHF broadcasting as evidenced by regulations that have attempted to achieve parity between the two. Under an FCC contract, Texas Instruments has developed a tuner which holds promise of parity. The FCC also recognizes the threat superstations present to the networks. However, FCC Chairman Ferris has stated:

what is a network? You have to define a network. A network is a path from a producer to a viewer. A superstation is a network. It's a path.22

(4) Satellites, including satellite distribution

The relationship between the networks and satellite operators is less clear and more complex. Although the only network using a satellite to distribute its programming is the Public Broadcasting Service, a major satellite operator is RCA, owner of NBC. All the networks recognize that satellites are useful to their operations. However, direct-to-home satellite distribution is considered a threat. William Rubens, of NBC states that

direct-to-home satellite distribution would run counter to the principle of local broadcasting, namely that the licensee is charged with providing programs responsive to the needs of the local community which has been the guiding principle in this country from the beginning of communication regulation.23

One of the most threatening development in satellite broadcasting is the proposed direct-to-home subscription

21 Broadcasting 94:6 (February 6, 1978):44.
television service announced by Comsat in 1979. Comsat, created by an act of Congress in 1963 plans to commit $200 million to make up to six pay channels available to subscribers for a projected monthly fee of $15 to $22.50 per month. Dr. Joseph V. Charyk, President of Comsat, stated that the service "would be different from and not a substitute for existing commercial network and local television service."\.24

Currently there are eight communications satellites in orbit. A ninth satellite was launched in 1979 by RCA but was lost eight days later. Ted Turner reacted to the loss by stating

I think it was the networks who shot the satellite down. We'll just have to keep building them as fast as they can shoot them down.\.25

Satellite broadcasting faces problems more real than Turner's statement implies. There is a limit to the number of orbital slots available for communication satellites. Regulations requiring licensing of earth stations were eased in 1979 in spite of protests by traditional broadcasters.

(5) Videocassette Recorders, Video Disc Players, and Video Games

Videocassette recorders and video disc players are recognized by the networks as threats to time spent watching commercial network television. Melvin Goldberg states that

\[\text{24} \text{Broadcasting 97:6 (August 6, 1979):27.}\]
\[\text{25} \text{Broadcasting 97:25 (December 17, 1979): 61.}\]
"I think the relevant question for broadcasters is not how many are sold, but how often they are used."\textsuperscript{26} William Rubens is more optimistic, stating that videocassette recorders will actually increase television viewing, since most usage of this product is to record programs off the television set for playback at a later time.\textsuperscript{27}

The cost of videocassette recorders is seen as a constraint to its wide dissemination. However, the less expensive videodisc player is also a threat. The networks see the videodisc players as "mainly providing programming aimed at special interest audiences, not the mass audiences served by the networks."\textsuperscript{28} Finally, the networks recognize video games, as well as videocassette recorders and videodisc players as representing "another incursion on the time people might otherwise use to view television."\textsuperscript{29}

The acceptability of these new technologies is reflected by Arbitron (ratings service) which, in 1979, changed its rating policy to include programs recorded on videocassette recorders for later viewing. Their research found that fewer than one percent of television homes have videocassette recorders, but they expect rapid growth. They also found that the most recorder programs are regular

\textsuperscript{26}Melvin A. Goldberg, "Technology and Mass Media Implication"

\textsuperscript{27}William S. Rubens, "I, the Viewer"

\textsuperscript{28}Ibid.

\textsuperscript{29}Melvin A. Goldberg
network series, followed by movies and sports. One problem faced by manufacturers of videocassette recorders and video-disc players is the failure of their own industry to use a compatible format. In other words, cassettes and discs purchased for use on one manufacturer's recorder or player cannot be used on another's.

In 1976 Universal City Studios and Walt Disney Productions brought suit against Sony Corporation of America, its Japanese parent company, Doyle Dane Bernbach and retailers to prevent the use of Sony's Betamax videocassette recorders to record programming off the air. In October, 1979 Judge Warren J. Ferguson of the U.S. District Court decided that viewers should be allowed to record programs broadcast for free when they are recorded for private use. The reaction of Sony was that

the decision will encourage future development of video technology, of which Betamax is an important part.30

Conclusions

The reactions of the networks to the new technologies clearly indicates that they feel that some impact is likely. The degree of impact depends on the technology, since there are factors which impact on whether the public uses a new technology, including the cost of using it.

30Broadcasting 97:15 (October 8, 1979):64.
The most threatening of the new technologies, as perceived by the networks, are cable and pay television. The networks are responsible to their local affiliates since these stations provide the audience sold to advertisers. Coupled with the fact that each network owns five highly profitable stations in the top television markets, the network interest in maintaining audience size is directly related to profits. Cable television is both beneficial and a threat. The ability of cable to equalize reception quality enhances the potential profitability of UHF network affiliates. Also, in areas with only two network affiliated stations, the network without an affiliate in the area can be imported by cable. It is a threat because the availability of more channels fragments the audience (which is assumed to be relatively stable in size). In a limited study of a cable system in California, Kaplan found that "independent stations imported from outside the local area compete with local network television." According to Park, the threat of cable's impact is not as strong in larger markets, but there should be concern for stations in smaller markets. As for UHF stations, Park finds that cable does little harm to network UHF affiliates while helping UHF independent stations substantially. The effect of...
cable on local programming could be a positive one according to Bruce Owen, who believes that

if in the future we begin to move toward multi-channel distribution systems, significant local programming may well begin to appear, most probably supported by local advertisers seeking to reach audiences in geographical areas much smaller than present television markets.33

In any case, the network's advertising revenues would suffer, since local revenues do not go to the networks.

Pay television is a threat because if offers subscribers something they are familiar with in programming in a location convenient for them. Network television has operated under the assumption that viewers resist changes in program types. Their programming has reflected that assumption. Pay television offers subscribers forms of programming that they already accept. Owen, Beebe and Manning recognize that

pay TV is likely to approach more closely an efficient allocation of resources in television production than is advertiser-supported TV.34

Pay television does not compete in the same manner as the networks compete with each other. It relies on the subscriber for direct revenues, not advertisers and must program to satisfy them. The subscribers to pay television are less diversified than the audience for network television

34Owen, Beebe and Manning, Television Economics, p.87.
programs. For example, networks must edit films to conform to time constraints and to eliminate controversial language or violent actions while pay television can show these films without editing. Showtime (a pay television operator) President Jeffrey Reiss states that

the basic principles behind the success of pay television have remained the same; quality programming, shown in its entirety, uncensored and uninterrupted by commercials.\(^{35}\)

The networks cannot compete with pay television's programming because the affiliates must abide by regulations limiting content for license renewal.

The other technologies discussed are not at the point of viewer/user acceptance that they are recognized as immediately threatening network broadcasting. However, consumer values are changing and the public is becoming more accepting of changes in technology. For that reason the networks face uncertainty and are employing strategies to accommodate changes in their environments.

This chapter has shown that the networks, which are considered to be open systems, appear to be behaving like closed systems by denying the impact to environmental change on the organizations. The strategies the networks are employing are, however, moving from the closed system concept but tend to be organization-wide, not just in the

---

broadcast segments of the parent organizations. The strategies will be discussed in detail in chapter 11.
CHAPTER 11

STRATEGIES USED TO MINIMIZE THE ORGANIZATIONAL IMPACT OF NEW AND DEVELOPING TECHNOLOGIES

The perception of a threat by a technological innovation does not necessarily mean that the network is able to, or will, initiate actions to minimize the impact on their segment of the parent organization. In some cases, the network is constrained by the larger goals of the parent company. For example, NBC's actions to minimize the effects of satellites, videocassette recorders and video disc players are influenced by RCA's diversification into these areas. However, within the constraints imposed by the parent organizations, and the environments, the networks have developed strategies they are using to minimize the impact of new technologies. This chapter will identify and analyze the strategies that the networks have identified as a means of accomplishing their goals (survival and competition). Strategies will be identified by the environmental influences the actions are meant to minimize. Also, these strategies, and strategies proposed as alternative reactions to environmental change will be evaluated according to Thompson's criteria for evaluating innovations (see chapter 1).
Environmental Strategies

(1) Competitive Strategies

The changes in technology affect the three network competitive environment in four ways: (1) the stability of the competitive environment is changed when the networks adapt to technological change at different times (for example when CBS and NBC had color, the competitive environment's stability was affected until ABC went to color, see chapter 9); (2) the efficiency is changed; (3) the need for innovative organizational behavior is increased; and (4) the possibility of new networks is increased. Fred Silverman, president of NBC, recognizes the need for stability in competition by stating that "how serious the challenge becomes will depend on how well we conduct our own business." ¹(Emphasis in original)

While other networks are at least acknowledging the diversification attempts by their parent organizations, Silverman believes that the network organizations should not expand into software production for the other media, because "we are broadcasters and we are going to remain broadcasters." ²

The stability of the network environment could be changed by changes in emphasis by one or two of the networks. For example, one issue discussed during the ABC-ITT merger attempt was the possibility of a change in stability if


²Ibid.
two networks were conglomerate owned (RCA and ITT). The competitive environment has been relatively stable with all three networks receiving program ratings that enhance that stability. If the audience size was changed as a result of new technologies, that stability would be in jeopardy.

The competitive environment would be affected if new, more efficient means of operating a network were not incorporated into the existing structure. Some of the new technologies, most notably satellite transmission, "would make operations more efficient and economical." The network or networks that use more efficient means of distribution have the competitive advantage by virtue of the lower costs. If the networks do not take the competitive initiative, other "networks" will be developed that will.

The need for innovation in the competitive environment is recognized by NBC Chairman Julian Goodman, who stated that "commercial broadcasting represents more than the survival of the tired, the timid and the imitative." Gene Jankowski, President of CBS/Broadcast Group, emphasizes that companies that survive and continue to grow are those with creativity, courage, integrity, foresight and enthusiasm who are willing to dedicate themselves to addressing issues and solving problems.

---


Jankowski feels that by providing the best entertainment and information, a network will thrive. However, Jankowski seems to be ignoring the threats, relying on emotional appeal instead of action.

The final way new technologies might have an impact on the competitive environment is by making new networks more feasible. Satellite distribution has already made distribution of programming by non-network sources readily available (for example, superstations and pay television) to cable operators. New networks were not feasible, since such a venture would be operating at an economic disadvantage (reaching fewer households and relying on UHF station allocations). However, developments in satellites and cable have minimized the UHF disadvantage. With the use of new technologies, the starting costs of new networks are minimized.

Many corporations not directly involved in broadcasting have, in recent years, taken actions that could affect competition. For example, much of the funding for programming on Public Television comes from big businesses. Mobil Oil, which contributes $2.5 million annually to Public Television, is now producing programs for broadcast on commercial television. These programs are given to individual stations, not the networks, for broadcast during specific time periods. According to Hurwitz,

> there is a discernible movement among major companies not only to find innovative uses for traditional media...but also to open up entirely new outlets for corporate expression.6

---

The production of programming by corporations is not unique in the history of television, but recent sponsor-produced programs have not met with an enthusiastic reception by the networks, especially since affiliates in some markets are pre-empting network programs to broadcast the special programming.

The majority of competitive strategies identified show that the networks seem to ignore the possibilities new technologies present in the competitive area. As was discussed in chapter 3, the competitive environment is imperfect, with actions by one network affecting the other two. If the networks do not face the possibility of more competition, planning cannot begin and the competitive environment will face further instability.

(2) Economic Strategies

The balance in the economic environment is also of concern to the networks. Advertisers, the major source of network revenues are taking notice of the new technologies. For example, Michael Moore, Senior Vice President of Benton and Bowles states that "it is no longer sufficient for us to sit back and watch the development of these new broadcast media." Advertising on cable and pay television is quickly becoming attractive to advertisers who can reach more specific audiences more cost effectively. The role of advertising agencies, according to Moore, might include becoming program suppliers for the new media, which he calls

a giant step forward toward insuring that we have protected our clients' interests in the face of the new technologies which some think of as a threat. I prefer to think of it as an opportunity.  

The problem of audience loss, recognized by the networks, is realistically appraised by Joel Segal, Senior Vice President of Ted Bates and Company who feels that advertisers should advertise on services offering pay television (such as Home Box Office and Showtime) and buy local advertising on cable systems. The networks cannot expect the advertisers to ignore the new outlets when they are efficient advertising vehicles.

Program producers and brokers, who once had only the networks as an outlet for their product, are now in a most advantageous position. Alan Courtney, of Yongestreet Productions, feels that "the networks may be forced to create a more amicable atmosphere and environment for producers to work in because they will have alternatives." Bud Yorkin of Tandem Productions agrees, concluding that "by 1985 or 86 our company will be producing...primarily for cable and special kinds of shows. We'll veer away from networks." Program producers are developing programming for new technologies, but also they have begun some innovations using the present broadcast structure. One example is Operation Prime Time, a venture initiated by Telerep, Inc. which has

10Ibid.
produced movies for broadcast on independent stations. Their first venture, Testimony of Two Men, was successful enough to give Operation Prime Time the funds to continue production. The threat to networks from such actions can happen in two ways: (1) the loss of audiences to independent stations broadcasting new material; and (2) the preempting of network programming by an affiliate in a market without an independent station. Currently, these programs are distributed by videotape and are not necessarily broadcast at the same time throughout the nation. However, if they are fed by satellite, it is possible that a fourth network-type situation could develop.

New technologies offer the program producer different opportunities to distribute programming. For example, a movie could be produced for distribution on pay television, videocassette and disc in addition to theatrical distribution. It is possible that these new levels of distribution could increase the amount spent on original production of programming.

The potential beneficiary of all the new technologies is the audience which will be offered more of a choice. The importance of the audience is emphasized by Goldberg:

> as a mass communications business, it is incumbent upon broadcasters to foster new developments and technological innovations. But the major factor is audience, not technology. The competition is not the hardware - but the software. The product is programming and that is where the future of television medium lies.11

11Melvin Goldberg, "Technology & Mass Media Implication"
Development of new technologies do not necessarily mean acceptance of that technology by viewers. In some cases, such as pay television, the viewer will have to decide whether the added cost of the technology is worth the added service. The relatively high cost of some technologies are expected to decline with mass marketing and increased competition. For example, the initial cost of videocassette recorders has dropped significantly as competition increased.

The economic environment for all media and technologies is affected by the economy of the nation as a whole. Increased inflation could affect the amount of money spent on entertainment in two widely varied ways. First, the public might not spend money on the new technologies, instead continuing to rely on free broadcast television for entertainment and information. The acceptance of new technologies would suffer. Second, the public might subscribe to cable and pay television as a substitute for more expensive forms of entertainment, resulting in wider acceptance of new technologies.
(3) Technological Strategies

The increase in subscribership to pay television reflects the multiplicative effects of new technologies on the networks. Pay television subscribers have nearly doubled in two years. The A.C. Nielsen Company has prepared a report on the effect of pay television on the networks which finds that

at present, because the level of pay cable penetration in relation to total U.S. TV households is not large the overall impact on commercial television is not great: within the pay cable universe, however, we have seen substantial viewing to pay programs and again with the rapid growth of pay cable and with the new ways of distributing pay cable programs we believe that demographics and viewing patterns will change to some degree in the future.12

The use of satellites is, perhaps, the most significant factor in the multiplicative effects of new technologies on the networks. Four examples of this are: (1) distribution of syndicated programming; (2) pay-television; (3) direct-to-home; and (4) new services. In March, 1979, RCA American Communications, Viacom and Post-Newsweek announced an experimental program to distribute syndicated programs on satellite. This type of distribution is potentially more cost efficient. Although pay television has been distributed by satellite since September 30, 1975 when HBO used a satel-
In April, 1980, the Getty Oil Company announced a joint satellite venture with four Hollywood studios (Columbia, MCA, Paramount and 20th Century Fox) to distribute films for a pay television service. They plan includes the provision that films of the four companies will not be exhibited on any other satellite-fed pay network programming service during a nine month period following their availability to the venture.\textsuperscript{13}

This would affect other pay television operators. HBO has claimed that the plan is illegal under the antitrust laws. Beside the effect on other pay television operators, these four film companies produce programming for the networks, and might decrease their production activities to focus on their pay television activities.

Technological developments in satellite transmission resulted in Comsat's proposed subscription television service using direct-to-home satellite transmission. The cost of earth receiving stations has been reduced from $5,000 to about $300. It is Comsat's hope that the cost will be reduced to $200 when its service begins. Finally, satellites have made possible new services such as Ted Turner's Cable News Network, an all-news service for cable television which debuted in June, 1980.

Although cable television has begun to penetrate urban areas, the cost is very high to wire cities. Also, even after franchises are awarded, there is a lag between the award and when service is started. Subscription television is being used as a vehicle for offering pay services in areas not wired for cable. One example is the purchase of one-half of Chicago's channel 44 by Time Incorporated's American Television and Communications Corporation (ATC) in June, 1979. Chicago has three million households with no cable service. ATC is the second largest cable operator in the U.S. The ATC plan is to use a new decoder and program channel 44 for pay services, possibly including another Time, Inc. service: HBO.

(4) Regulatory Strategies

Regulatory constraints on the networks appear to center on the trend toward deregulation. FCC Chairman Charles Ferris has repeatedly encouraged the development of new technologies as a means of achieving diversity and increased competition. Although the re-write of the Communications Act proposed by Rep. Lionel van Deerlin in 1978 is no longer an issue, amendments to the existing law appear likely, including regulations that would place the burden of proof regarding importation of distant signal's effect on local broadcasters on the local broadcasters. The policies of the FCC under Ferris mark a change from protection of the established broadcast system. It is difficult to predict
FCC actions and this inability could result in problems for the networks, since network broadcasting must abide by a variety of regulations constraining their activities.

In light of these environmental constraints, the strategies used by the networks to minimize the impact of new and developing technologies must be evaluated within the historical context of innovative behavior at the commercial networks. The following analysis is based on what the networks have perceived as their direction for the future. Obviously, what they say and what they actually do are not necessarily the same. Any stated strategies, then, must be considered as tentative. Also, the strategies are subject to limitations by regulation and developments in technology. The environments the networks exist in are in a period of rapid change and development. These changes could have a great deal of impact on how the companies react to the impact on their organizational survival. It is possible that the new technologies are merely in an early growth spurt, and public acceptance will reach a plateau. This possibility, though unlikely, must be considered by any corporation considering enormous financial investment in the new technologies.
Analysis

Analysis of innovation requires study of three separate areas of organization behavior: (1) the reasons for the innovation; (2) the desired outcome of the organizational innovation; and (3) the dynamics of the change.

The reasons for innovative changes at the networks are changes in the environments affecting them. These changes have resulted in increased organizational uncertainty and threats to corporate health. The networks are open systems that are impacted by environmental change. The environmental changes, as detailed earlier, all have potential effects on the organizations that must not only be recognized but also they must be dealt with.

The end result of any organizational change at the networks would be corporate stability and growth. Since the major threat is a loss of audience followed by a loss of revenues, the networks must seek some innovative changes which would either stop this loss of revenues or provide some new sources of income that would substitute for the loss of revenues.

The dynamics of change at the networks include two areas of innovation: (1) innovations within the network; and (2) diversification of the organization. Each area has been stressed by the networks as significant to the organizations as a means of minimizing the impact of
environmental change.

The network organizations all have denied that the new technologies will have a negative impact on their organizations. Statements made by network officials find four reasons for this. First the networks are presently in a strong position. Elton Rule, President of ABC, states that nothing that the new technologies can offer will diminish the need for (network) service and nothing that the new technologies can offer is capable of providing a replacement for it.14

Fred Silverman feels that television is "the only medium capable of reaching the whole country at one time."15 Gene Jankowski states that new technologies "will have little impact on free television as we know it today."16 The feeling of all three networks is summarized by Leonard Goldenson:

everything competes for people's time. But broadcasters have become sufficiently expert to meet all kinds of competition. I think we can do it if we stay on our toes.17

The second reason for denying the effects of the new technologies is that public acceptance of a new service is considered to be slow. Jankowski states that we must...remember that the public neither discovers nor accepts even the most marvelous technology overnight...

15Broadcasting 97:13 (September 24, 1979): 27.
The viewer is concerned with what the system delivers, not with the delivery system.\(^{18}\)

Third, the networks feel that the new technologies cannot compete with the networks economically. According to Jankowski:

the networks represent a system of mobilizing talent, energy, financial resources, assuming risks and providing broad coverage while still permitting the flexibility for local needs and services.\(^{19}\)

William Rubens doubts that

cable is interested in spending what it takes to duplicate the network service, particularly in the news area, and we certainly don't think cable is willing to assume programming risks.\(^{20}\)

Rubens appears to overlook the determination of some members of the new technologies. Ted Turner's Cable News Network (which debuted approximately one year after Rubens' statement) shows that someone is willing to risk losses estimated at $1 million per month to provide a news service on cable.

Finally, the networks feel that the audience loss will be minimal since they claim that the HUT (homes using television) levels will increase and people will use their television sets for longer periods of time.

Although they have denied the effects of new technologies on the networks, the officials stressed the need for improved programming on their respective networks as a means of minimizing the impact. Jankowski states that


\(^{19}\)Ibid.

the lesson of the past and the present is that there is not likely to be a creativity revolution keeping pace with the technological one. 21

Robert E. Mulholland, NBC-TV Network President feels that limited availability of good programming would make cable unable to compete with network television. He states that programming is improving on all three networks. They're getting closer together. It's much better to choose between three good shows than between one good and two bad ones. 22

The most concrete commitment to programming comes from NBC which has announced a separate entertainment division and improvements in their news division. The other networks have not stated their strategies in programming, rather they have found it sufficient to stress the need for improvements. In any case, commitments to improve programming are not innovative, but rather are commitments to maintain the status quo. Better radio programming did not improve that industry's survival when television was developed.

Unlike the television networks, the parent organizations are actively attempting diversification. Table 14 shows the major corporate diversifications which relate to new technologies. The actions of these organizations all have the potential to harm the networks, but it is possible that the organizations are expanding their domains in order

---


Table 14

Diversification At The Networks

<table>
<thead>
<tr>
<th>RCA</th>
<th>CBS</th>
<th>ABC</th>
</tr>
</thead>
<tbody>
<tr>
<td>NBC Enterprises (1979)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
establish themselves in the field of new technologies as an additional corporate activity. Of course it is also possible that the parent organizations feel that diversification is in the best corporate interest since the profitability of these new ventures is not as limited as network broadcasting.

Although the networks appear to have developed strategies, it is possible that they are faced with a situation they can do nothing about. If this possibility is accepted, the parent organizations are faced with a decision regarding their broadcast interests: should they continue to delay the new technologies, or take the profits from network broadcasting and invest them in other business areas. Of the three network organizations, RCA seems to be the most likely to exercise this option.

RCA, already a highly diversified company engaged in the manufacture and marketing of new technologies, announced the development of SelectaVision, a videodisc player, in December, 1979. RCA hopes to market SelectaVision early in 1981 at a cost of less than $500. RCA's NBC Enterprises will offer a catalogue of discs for sale with about three hundred titles (half of which are feature films) with each disc
costing between $15-$20. SelectaVision will compete with at least three other videodisc systems whether in the development phases or already on the market (Magnavision was first on the market in December, 1978 costing $695). RCA also manufactures a SelectaVision videocassette recorder and is a leader in that market with about 25 percent of all sales. However, in 1979, there was a profit decline in the sale of RCA's videocassette recorders. It should be noted that these technologies are under the control of RCA's Electronics - Consumer Products and Services Division, not the Broadcasting Division. The development of the SelectaVision videodisc player represents RCA's largest single investment in a new consumer electronic product - including color television.23 In 1978, RCA discontinued the manufacture of video games because it had become unprofitable. In May, 1979, NBC requested bids from its parent company RCA, AT&T and Western Union, for a proposed distribution system for the network on satellite. NBC is the first commercial network to seriously consider such a move. However, PBS is the first network to actually distribute by satellite. NBC hopes to be on satellite distribution by 1983.

---

CBS, less diversified than RCA, also has announced expansion into the new technologies. In October, 1979, CBS announced that it had been experimenting with a teletext system since March. Teletext experiments, if successful, would allow viewers nationwide to enter numbers into a hand-held keyboard to retrieve any of hundreds of pages of news, sports scores, stock quotations, weather reports, program schedules, shopping information, airline schedules - virtually anything that can be put in print, including television program captions for deaf viewers.24

Teletext experiments are in operation in Europe and Great Britain and interest in some form of the technology has been expressed by a variety of communication companies in the United States. In January, 1980, CBS formed the CBS Video Enterprises Division to manufacture and distribute videodiscs and videocassettes for the RCA SelectaVision system. In May, 1980, CBS formed CBS Cable, a new unit to provide a unique, high quality program service for cable systems; to develop and produce original programming for cable, and to present programming currently not available in any other medium.25

Finally, CBS entered the theatrical motion picture field in October, 1979, planning to produce three to four films annually for theatres, videodiscs and other technologies. This action could be considered to be more than diversification since with production capability, CBS now has the


ability to produce major programming for its network. With this ability, CBS is less uncertain in its economic environment.

ABC, the least diversified of the network organizations, also formed a theatrical motion picture unit in 1979 to produce moderately budgeted films for theatres, television and for use on new technologies. Also, ABC Video Enterprises was formed to provide software for new technologies. In July, 1979, ABC announced that it would market this software with Warner Communications Inc. ABC Video enterprises has started production on a series for the National Education Association and a joint venture with the Shubert Organization to produce and market tapes of theatrical productions.

Conclusions

The threats recognized by the networks appear to be real, and they require some action by the networks if the impact is to be minimized. The proposed actions by the networks are strategically sound, but appear to be less consolidated than they should be.

It is difficult to predict what programming the network should stress if they are to improve their ratings. In recent years, the dynamic scheduling the networks have engaged in is evidence to the inability of the networks to successfully program a television season. Audiences
are becoming more flexible in their tastes, but the network response is to continue with the tried and true. If they believe that programming is the key to strategies to minimize the impact of the new technologies then they must begin to use innovativeness in the development of programming and scheduling. The competitive environment, which has been relatively stable for twenty years must be upset and the oligopolistic results changed.

Each network must begin to develop what they believe is programming that will appeal to the audience they want. There is a precedence for this action. In the 1950's ABC felt that their programming would appeal to the younger families of post-war America. Their strategies, while not immediately successful did show foresight and innovation. This strategy could be combined with development of programming to compete with the programming on new technologies. The networks have a long history of production that is a distinct advantage to them. The new technologies have been concerned with the technical problems they have faced that program production has not been a primary concern. If the networks use their unique ability to produce mass appeal programming in innovative ways, they can enhance their competitive position.

Corporate diversification in recent years has been an interesting phenomenon. Although they deny the impact
the new technologies might have, all three companies have to varying degrees embraced them. However, the diversification strategies of two of the networks, CBS and ABC, have been haphazard.

RCA is in the best position of all the network organizations. Their diversification was accomplished over the history of the corporation with success. The main business of RCA is no longer the television network, but rather a variety of enterprises with equal shares of revenues and profits. The stress at RCA is, and should continue to be, in technological developments. Quite simply, RCA is successful in this area and has a long history of innovations that have improved upon the technological environment. They do not face any serious threat to their existence because of the diversity within the corporation. If the network business fails, unlikely as it is, RCA is involved in satellite transmission and home entertainment units which would make up the lost revenues of the network.

CBS, on the other hand, faces a more threatened existence, since the majority of its income comes from the CBS/Broadcast Group. CBS has been a major force in programming for over twenty years. This appears to be the area most promising for the network to emphasize in the future. For most of the years the networks have existed, CBS has held the number one position in the ratings. Their
ability to produce series that appeal to audiences is without question the best of the three networks. The diversifications in the past years have been less content-oriented and more technological than past performance would warrant.

ABC is in the most precarious position of the three networks, a position the company has held before and met with innovative strategies. However, they have not met with success in diversification. The history of diversification at ABC is reflective of unplanned development. ABC entered the publishing field in 1959 when, in order to acquire a radio station in Chicago, it was forced to buy all the stock of its partner the Prairie Farmer Publishing Company. It entered the Leisure Attractions field when it acquired partial ownership in Disneyland as a result of its deal with Walt Disney to produce television programs. The strength of ABC is its ability to innovate. Of the three networks, ABC has historically been the network to try new program types and innovative strategies in presenting programming.

All three networks have downplayed the ability of the regulatory environment to assist them in developing strategies as willing participants or as a means to an end. RCA used the regulatory agencies to delay the dissemination of CBS's color television system by tying up development with lawsuits. Regulatory actions are notoriously slow and could be used to delay actions by new technologies that could seriously impact on the networks.
From an organizational stand point, the means used by the networks to minimize the impact of new technologies are not structured enough to provide the organizations with stability during the processes of change. One means of providing that stability would be the formation of organizational units solely for the purpose of creative corporate development in the new technologies to insure the conception and adoption of innovations with maximum organizational stability and acceptance. These units would consolidate the activities of all units currently active in the development of hardware and software for the new technologies, but should also include creative personnel that could act as a liason between the programming departments of the networks and the organization management. The structure of the unit should emphasize open access from all organizational areas with a minimum of difficulty. The unit should have three major functions: (1) liaison activities; (2) research and development; and (3) divisions for on-going activities.

The liaison activities of the unit would include inter-organization communication of activities, and communication with advertisers, advertising agencies, program producers and studios. The liaison division would be responsible for reading the changes in the environments affecting the networks and ascertaining the needs of the organizations in the economic environment.
The research and development division would be responsible for analysis of the audience and technological developments as well as developments in the regulatory environment. It would also be responsible for the development of strategies used by the unit to diversify the organizational environment.

Finally, the divisions for on-going activities would be responsible for the implementation of programs developed in the research and development division and maintenance of those activities. As new strategies are attempted, new divisions could be formed.

The new organizational unit would provide a means of corporate development that is planned and strategically sound. It offers the benefits of innovation with a minimum of risk. Finally, it opens channels of communication both horizontally to corporate officials and vertically to other divisions affected by changes in either the organization or the environments affecting the organization. The acceptability of change is best achieved when the process is carefully planned and evaluated before it is implemented. The personnel directly affected would be a part of the change strategy and, therefore, would have an interest in the success of projects.

Network television is so pervasive in our society, that the thought of it disappearing is almost impossible.
to accept. However, change has occurred in the networks in the past without threatening the existence of the networks. That is the case presently. The predictions of the demise of the networks is the result of rapid changes in technology that present the appearance of "taking over." A more realistic appraisal of the situation is that the new technologies need the networks to provide resources for their own development. There could develop a symbiotic relationship beneficial to all participants. Planning is the key to this and it is likely that all the technologies recognize the need to nurture relationships with the networks to insure their own survival in a rapidly changing environment.

This chapter has identified the strategies the networks have openly publicized as their organizational response to the new technologies. These strategies have been shown to be inadequate, and, in some cases, a smoke screen. If the networks are to survive these threats much stronger actions are needed, and they must be planned using organizational strategies meant to accomplish goals. The corporate diversification proposed offers a viable means of planned diversification for the parent organization that could be used by the network divisions as a means of acquiring the information needed to adapt to the environmental changes. The networks can no longer use their parent corporations as shields against environmental change. It is their ability to innovate that will mean survival, if innovation is used as a planned organizational strategy.
Summary

Although there have been many studies of the impact of television on viewers, there have been few studies using a broad based approach to the study of the networks as organizations. The purpose of this study has been to look at the commercial television networks as organizations facing an uncertain future because of changes in their environments. Through content analysis studies, the history of innovation has been analyzed as well as current technological threats and the strategies the networks are using to minimize the impact of those threats. Four environments were identified as being significant to the operation of the networks: the competitive, economic, technological and regulatory environments.

The competitive environment includes the three television networks. These organizations are highly interdependent and compete in three areas: programming, advertising charges, and payments made to affiliates. The competitive environment is dynamic with the networks competing for audiences to sell to advertisers.
The economic environment consists of organizations outside of the competitive environment that directly affect the operations of the networks. These include advertisers, program suppliers, affiliated stations and audiences. The economic environment is influenced by changes in the economic environment of the nation with a direct correlation between the gross national product and network advertising expenditures.

The technological environment includes innovations which affect the size of audiences watching the networks. The technologies relevant to this study were identified as those technologies that use a television set as a major component of the system; are available to the general public; and provide information and entertainment to the public. Technologies fitting those criteria are cable television, interactive cable television, pay television, subscription television, videocassette recorders and videodisc players. Technological developments provide diversity in program sources and, in some cases, diversity in program types. However, public acceptance of a new technology is not only based on availability, but also the cost, complexity and appeal of the technology.

The regulatory environment consists of all three branches of government, regulatory agencies, lobbying organizations and public interest groups. The historic trends of regulatory behavior have been to maintain the status quo in
broadcast legislation. The center of regulation is still the Communications Act of 1934 which has been amended but is still out-dated. Areas of regulation important to this study are antitrust and monopoly regulations, and legislation regarding the development of new technologies. The regulatory environment is significant to the networks because it has the ability to constrain the networks' actions in developing strategies to minimize the impact of changes in the other environments.

The organizational model of the interactive environments affecting the networks (as detailed in chapter 6) shows that the environments are progressively constraining the networks. The total environmental influence is not clearly divided by environment, but rather is dynamic, with each environment having a different role. Evaluation of the networks can be achieved by evaluating the environments as they relate to four areas: (1) uncertainties in each environment; (2) organizational rationality (how goals in each environment are achieved); (3) organizational domain and task environment (how supporting organizations affect the goals of the networks). The key to adaptation to the environmental changes is innovation in the network organizations.

The commercial television networks are all parts of larger, more complex organizations with differing emphasis on network broadcasting for revenues and profits. All
three organizations have recognized the need for diversification, but they have met with different degrees of success. RCA, which owns NBC, is a highly diverse corporation with seven operating units. NBC provided only 18.3 percent of RCA's 1979 revenues and 17 percent of its profits. The diverse units of RCA includes some emphasis on new technologies that have some impact on the network, including satellite transmission, videocassette recorders and video-disc players (which they plan to market in 1981). CBS is less diversified, with five major divisions. The broadcast activities of CBS accounted for 40.8 percent of CBS's 1979 revenues and 66.5 percent of its profits. CBS has made recent changes in its emphasis, moving toward more diversification in the new technologies, especially programming for cable, videocassette recorders, video disc players and production of motion pictures. ABC, the least diversified of the three organizations, depends heavily on its broadcast operations for revenues and profits. In 1979, the broadcast operations provided 88.3 percent of ABC's revenues and 96.8 percent of its profits. Historically, ABC has not met with success in its diversification attempts. However, recently it has announced formation of units to produce theatrical motion pictures and to provide and market programming for new technologies.

The networks have a history of innovative behavior in all the environments discussed. In the competitive environment, the innovations have dealt with the number of
networks, the number of affiliates and innovations in programming. Of the three networks, ABC has been most innovative in the competitive environment, especially in programming. ABC opened Hollywood as a source of programming; invented the second season, made-for-television movies; and used the mini-series format with great success. Innovations in the economic environment have been centered on organizational stability and diversification. Some examples of innovation in the economic environment include the merger of ABC with UPT in 1953, and the attempted spin-off of Viacom from CBS in 1970. Technological innovations have included the development of television broadcasting, cable and satellite transmission. Finally, regulatory innovations have included actions by the regulators, the networks and the public. The regulators attempted innovative legislation with the Chain Broadcasting Rules of 1941 and the Prime Time Access Rules of 1970. Both regulatory actions were attempts by the FCC to improve television broadcasting while keeping the monopoly potential of the networks under control. The networks were innovative when they pressed for regulation of cable television as a means of protecting the established broadcast structure. Perhaps the most innovative action by the public was the successful suit to give the public standing before the FCC in cases of license renewal.

Two cases of innovation in the commercial networks detailed were the development of color and the attempted merger of ABC with ITT. The controversy over the development of color included innovative strategies by RCA to
change the decision of the FCC, which had approved the color system developed by CBS. The ABC-ITT merger attempt was an innovative attempt by ABC to overcome competitive problems and threats to the survival of the organization.

Currently, the networks face organizational threats from the development of new technologies. Using content analysis to identify the themes the networks have stressed regarding the threats from new technologies, it becomes clear that the networks feel that some impact is likely, especially from cable television and pay television. With wider availability, the networks feel that some impact is likely from videocassette recorders and videodisc players.

The networks have developed some strategies to minimize the impact of new and developing technologies on their organizations. These strategies are constrained by the environments of the commercial networks. The strategies were analyzed according to the reasons for the innovation; the desired outcome of the innovative behavior and the dynamics of the innovation. All actions are taken because of the threat (perceived or real) of a loss of audience to other technologies. Three basic strategies were identified: (1) denial of the impact; (2) improvements in the programming on the networks; and (3) diversification of the organization. The strategies identified by the networks show that they do feel that something must be done, but their actions
appear to be less consolidated than the situation warrants. Each network has distinct abilities to be innovative. RCA has been a technological innovator throughout the history of broadcasting; CBS has always been a leader in programming; and ABC has always been innovative in program development and in generating new sources and forms of programming. They should find and focus on their abilities, without such deep concern with the competition's actions. Another strategy would be to develop an organizational unit solely to develop corporate strategies to deal with the new technologies, a unit which would follow the conception of an idea through its development and implementation phases.

Central to any strategy used by the networks is the need for organizational planning for change. The survival of the network broadcasting structure is highly likely, but requires innovative behavior and change.
Discussion

This study has attempted to identify innovation at the commercial television networks in the past and present to allow limited prediction of that they will do in the future. Specifically, it has used a theoretical base to look as some innovative organizational behavior in the past to identify themes and compare them to the outcomes of the actions taken. The study was meant to be broad based, free to draw from the theories of all disciplines applicable. However, two disciplines emerged as most relevant and emphasis on them was used.

First, organizational behavior theories were an integral part of the analysis of the networks as organizations operating within larger, more diverse organizations. The theoretical base of organizational behavior provided insight into the study that guided the focus of research away from areas that were really irrelevant such as the survival of network broadcasting as an organizational goal of the parent organizations. It is not. Stock value and the survival of the parent organization are the goals the parent organization actually work to achieve. Network broadcasting is appealing only as long as it is profitable, no matter what the organization's officials proclaim to the contrary. This study shows that the parent organizations will embrace the new technologies if they provide, or have
the potential to provide, profits. Cyert and March's description of organizations being made up of coalitions interacting and conflicting over uncompatible goals applies to the situation at RCA most clearly. The electronics and broadcasting divisions are caught in a situation where increased use of new technologies (a goal of the electronics division) will impact on the audiences of the broadcasting division. This conflict does not involve RCA's organizational goals but does affect its organizational behavior.

Evaluation of the network organizations by the strategy suggested by Thompson showed the organizations to be very different in their organizational design. The net effect of this difference is that each organization responds differently to changes it must face. ABC, the least diversified organization, is the most innovative in short term changes (especially in programming) because it does not have the capital to maintain long term projects that are not immediately profitable. RCA does have the ability, and the technical developments they have achieved reflect the organizational ability to plan and execute long term projects (such as the development of video disc players) that require large expenditures of finances and time. CBS is more closely aligned with ABC in this area, as reflected by the recent drop in revenues suffered by the organization that was caused by its investment in new technologies. In light of this study, it was determined that the networks do behave as organizations. Of the theoretical areas in organizational behavior, the most applicable school is
the behavioral decisionists, especially Thompson. The emphasis in organization theory on human needs is not as significant as organizational goals as a force in decision-making. There is little evidence that the networks feel the satisfaction of employees is important to them. Evidence to the contrary is more plentiful. For example, from May through July, 1980, one network president, one network chairman of the board and one corporate president were all terminated (John Backe of CBS, Jane Cahill Pfeiffer of NBC and Richard Valente of RCA). There is much personnel trading at the networks, which, although not unique to broadcasting, presents the opportunity of posing a theoretical possibility of explaining the similar programming at the networks. Organizationally, the similar programming could be the result of the trading of personnel. However, if theories of network behavior are considered, the similar programming causes the trading of personnel.

Theories of network behavior, the second discipline relevant in this study, include Hotelling's theory of excessive sameness, which he states is the result of stability. This theory could be used as the basis for assuming that the trading of personnel results from stable programming. The majority of theories of network behavior assume that the audience size is fixed (Steiner, Owen, Beebe and Manning, for example). As new technologies develop, this assumption will be questioned. The theories
of network behavior do provide an interesting perspective on the interdependence and oligopolistic tendencies of networks. Network oligopolistic behavior, and the possible outcome of that behavior can be paralleled to the U.S. automobile industry which assumed that the demand for big cars was unlimited, even when evidence to the contrary demanded action. The "big 3" auto makers continued to dismiss the importance of the smaller competitors who were providing fuel efficient small cars until an environmental change, the cost of gasoline, forced their attention away from the large car. Their attempts to remain competitive come late in the game, perhaps too late. The networks have continued to deny the effects of new media technologies on their business. Unless they recognize that big-budgeted programs do not assure big profits; and that being big networks do not guarantee survival when challenged by little technologies, the parallel between the networks and the auto makers may continue to the end.

The environmental model developed for this study is the result of a broad based approach. It clearly shows that the networks must deal with many forces they cannot control. The environmental framework was a viable means of assessing the constraints and strategies. However, its future use depends on the ability of researchers to approach the environments as totally dynamic and situational.
The degree of influence each environment has can only be evaluated according to the event being studied. This study found constraints coming from all four environments that affect development of strategies. This is not always the case. For example, if, in the future, the parent organizations decide to discontinue network broadcasting, the regulatory and technological environments will be of minimal importance while the competitive and economic environments will be significant. In the past, this was true with the discontinued DuMont and Overmeyer networks. Overall, it is the recognition that there are environments that have an impact on the organizations that is significant, a concept stressed by organization theory but virtually ignored by theories of network behavior.

Compiling data for this study presented a major problem since much of the available information was incomplete and biased. It is difficult, under any circumstances to recreate an historical event from literature. In the cases used here, it proved almost impossible. The networks used strategies that could not be verified from the sources. For example, no matter how much circumstantial evidence exists, there is no proof that FCC Chairman Denny had an offer from NBC before the FCC vote on color television standards. There is also a lack of objective literature on the networks. It is extraordinary that a business
as pervasive in our society as network television is not documented in an objective fashion. This lack of objectivity presented many obstacles to this study. Authorized biographies of key personnel were used, but only to verify facts found in other, more reputable sources. However, the possibility does exist that some errors were made.

In the chapter on the color controversy a frequency count of themes was attempted. However, this method of assessing importance of themes proved invalid, since the available literature base did not evenly reflect the sides of the issue. However, the themes that did emerge appear to reflect the view of all sides on the issue, and analysis of themes proved a viable means of evaluating the organizational behavior. From the knowledge gained by the attempted frequency analysis, it was decided that identification of themes achieved the purpose of the study.

Prediction of actions by the network organizations presented another major problem in this study. Although the theme data was an accurate measure of actions taken in the historical portion of the study, there remains a question regarding its use for prediction. However, network decision-making is not available to researchers for scrutiny and, therefore, all predictions are made with a higher degree of uncertainty that would be optimal. Competitive factors dictate that the organizations keep their actions secret as long as possible so public statements must always be considered along with the reasons for the statements.
For example, statements made by ABC during the attempted merger with ITT gave the impression that if the FCC did not allow the merger, ABC's network operations were in jeopardy. This impression was an organizational strategy used by ABC, but it was not really truthful since the network did not merge and is still broadcasting. However, if research were conducted using statements from the network officials as the only source, the real situation would not emerge. Basically, the problem is that where alternate sources were available in the historic portions of this study, it is impossible to make predictions without qualifying them for the current threats.

The organizations want to keep a positive public image to enhance stock speculation, and thereby profits. Therefore, when a network organization has developed something (like color television), or even if it is in the process of developing it (like CBS's teletext experiments) the organization will announce the development and use it to show that the organization is innovative.

The changes in the network broadcasting business posed an interesting problem in this study. During the time period the majority of the study was being researched and written there were rapid changes necessitating re-writes and adjustment throughout the study. Aside from the changes in personnel, there were changes in organizational structure including the formation of CBS/Cable, and there were changes
in regulations that were significant to the perceived effects of new technologies, such as the deregulation of receive-only satellite earth stations.

Finally, an interesting sidelight to this study was the development of a logical means of predicting personnel changes at the networks. Each network has a unique relationship with its personnel that became obvious as the study of the organizations progressed. If each network organization is looked at individually, and the qualities of the executives are compared to the goals of the organization, it is possible to predict the potential for that person to be terminated. For example, CBS Chairman William Paley represents CBS organizational goals. He is conservative, goal oriented and likes to be in charge. When CBS President John Backe initiated moves to gain power, his days at CBS were numbered. At ABC, the corporate goals of the organization are epitomized by Chairman Leonard Goldenson, a man who can delegate authority but is willing to take risks. President Elton Rule fulfills the needs of Goldenson, not because he follows company policy as much as he offsets Goldenson. His position seems assured for now. At RCA the prediction is easy. RCA hired Fred Silverman to improve the network ratings at NBC. He has not fulfilled this goal and barring some unforeseen circumstance, his usefulness will end with his contract in June, 1981.
Conclusions

As a result of this study, certain assumptions can be made about the commercial networks as organizations, the environments affecting the networks, and innovative behavior at the networks.

The commercial networks are organizations that respond to change in an effort to cope with the effects, real or imagined, of environmental change. They are constantly interacting with their environments, since the business of network television is dependent on entities outside of the network's organizational control. The networks are bureaucratic structures, conservative in their decision-making processes and highly structured in their organizational structure. The result is a slow process of change. Finally, they are open systems that are parts of complex organizations with goals that may differ from the goals of the network. The result is that the commercial networks are forced to be innovative in order to maintain their role within their parent organization. The uncertainty faced by the networks is the result of the complexity of the organizational environments they must exist in. Therefore, since it can be assumed that the parent organizations will continue to diversify, the continued existence of the networks is highly dependent on whether they can continue to provide profits for the parent organizations.
The environments affecting the networks can be assumed to be dynamic and interdependent. Each environment plays roles of varying importance to the networks, depending on the situation. For example, in the development of color, the technological environment was the most important environment until it was surpassed by the regulatory environment. In the ABC-ITT merger attempt, the economic environment was the most significant environment, since ABC's financial problems caused the merger attempt, but the regulatory environment became significant when the merger was delayed. Because the information received by the networks from their environments is incomplete, the networks must operate with uncertainties they cannot totally compensate for. It was the unexpected delays in the merger that caused ITT to allow the merger agreement with ABC to lapse.

The environmental constraints (Table 14) affect organizational development and innovative behavior. The economic and competitive constraints affect the revenues and profits of the organization directly, and are the least predictable constraints. Evidence for this assumption comes from the high degree of change in network programming. Programming is used to draw audiences and the networks seek to achieve their goals (survival and competitive position) by changes in programming, which will improve ratings. The technological environmental constraints
Table 15

Environmental Constraints on the Commercial Networks

<table>
<thead>
<tr>
<th>Competitive and Economic Constraints</th>
<th>Technological Constraints</th>
<th>Regulatory Constraints</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) the cost of developing and producing programming</td>
<td>(1) the cost of research and development of new technologies in terms of time</td>
<td>(1) legislation affecting diversification</td>
</tr>
<tr>
<td>(2) program scheduling and counterprogramming</td>
<td>(2) cost of new technology to the user</td>
<td>(2) the slow changes in regulations</td>
</tr>
<tr>
<td>(3) advertising money spent on competing media</td>
<td>(3) the complexity of new technologies</td>
<td>(3) deregulation of new technologies</td>
</tr>
<tr>
<td>(4) affiliation contracts</td>
<td>(4) the public acceptability of new technologies</td>
<td>(4) antitrust legislation</td>
</tr>
<tr>
<td>(5) fragmentation of the audience by new technologies</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(6) the national economy</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
restrict the development of innovations which might affect the networks. Since organizations find change to be difficult it can be assumed that the public will also find it difficult to accept technological change, especially when they are satisfied with the status quo. The relative complexity of some competing technological developments also results in lower appeal to potential users. Regulatory constraints affect the diversification of parent organizations. For example, the network organizations are limited in the areas of new technologies they may enter. The slow regulatory process, seen as a constraint, allows the growth of certain new technologies without regulatory restrictions. However, the bureaucratic regulatory process can also be used by the networks to delay legislation that might nurture the new technological developments.

From the constraints identified and the recognition that the networks face uncertainties, it can be assumed that the commercial networks use certain strategies to minimize the impact of environmental change. Four phases of organizational reaction appear to be the result: (1) denial; (2) continued reliance on established practices; (3) delay; and (4) diversification and innovation. Initially, the organization denies the effect of environmental change on the network, offering detailed explanations of why the impact is insignificant. Next, the organization finds strategies that have been successful in the past, the tried
and true, to use again. Third, the organization uses its influence in other environments to delay the effect of the environmental change. Finally, when the organization's strategies are no longer effective, they diversify and innovate to encompass the change and use it to further organizational goals. The importance of diversification is centered on organizational goals, since changes in the environments affects profits.

Innovative behavior can be assumed to follow a similar pattern. If environmental conditions remained static, there would be no need for innovation, but in reality the need exists. First, all innovations have historically been organizational, the response of the total organization to change. The organizations need to use innovative behavior to the best corporate advantage through the use of public relations efforts. Basically, the organization wants to look as good as possible while taking the risks of innovative behavior. Therefore, although innovation is the result of necessity, the organization wants it to appear the result of planned organizational change. To protect the established businesses of the organization, they will deny the effects of change. RCA, when faced with competition in the development of color television, took actions to maintain and improve on the manufacture and sale of monochrome receivers (an established business) while repeatedly stating that color was not ready (see chapter 8).
The current threats to the network organizations from the new technologies also appear to be following the same pattern. The networks have denied the effects, protected their established businesses, delayed development by using the regulatory environment and now are diversifying and finding areas of new technologies they can use to improve their organizational profits.

The actions the network organizations have taken recently are the start of an innovative process since the areas of diversification are, to some degree, new to the organizations. However, as proposed in chapter 11, the diversification attempts are presently limited to exploratory actions, without the organization wide planning for change needed. An exception to this is the diversification of RCA into video disc technology. RCA's reaction to new technological change has followed the organizational development patterns they established with the development of radio. Because new technological developments have been a part of the corporate being for so long, it can be assumed that RCA will have a good chance of succeeding with the manufacture and sale of its video disc player. However, the manufacture of the hardware for new technologies poses less of a risk to an organization than would the development and production of programming for that technology. RCA does not directly deal with the software area. It has a catalogue of movie titles already available for both its videocassette recorders and video disc players. Also, it
has entered into agreements with other corporations (including CBS) to develop programming.

ABC and CBS face less certain futures with their diversification attempts. Both organizations have major emphasis on network broadcasting, which is the threatened segment of the corporation. If change is an organization wide process, it can be assumed that members of the organization will resist change when it threatens their own well being. The purpose of the proposed liaison activities described in chapter 11 is, in part, to help overcome the resistance to change within the organization by making those people threatened an active part of the change process. The risk both organizations are taking by diversifying into the software area is minimized by the expertise of the companies in the production of programming. However, if they continue to develop programming that is mass-oriented, the chances of success are less optimistic. With the availability of a new technology, the first purchasers are usually the "early adaptors," or people who are interested in the technology, not necessarily the programming available. The appeal of software availability is more significant to later purchasers. However, the industry has misread its purchasing public before. When videocassette recorders became available to the public, the manufacturers assumed that the majority of purchasers would be upper middle class families. To the surprise of the industry, the major group
buying the new technology was the blue collar shift worker, who now could record and watch prime time television even though s/he worked during those hours.

The diversification of CBS into cable television is fraught with risks from the environments. The possibility of crossing the line from legal activities into areas that are questionable have already been recognized by CBS. If they do engage in diversification that crosses the line, litigation is inevitable, and would cost the organization both financially and in the time spent justifying the diversification. Also, the networks have spent time and money emphasizing the difference between cable and network television. It is questionable whether cable operators will welcome the entrance of a network organization into the programming area of cable television.

From this study, it is logical to assume that the networks face an uncertain future. But they are well equipped to handle changes in their environments if they plan strategies that use their corporate knowledge and expertise. It is regrettable that for a long period of time the programming of the networks has been the focus of the majority of research, clouding the potential of the new technologies to have an impact on the broadcasting industry. Although change is a slow process, it has been initiated at the networks on an organizational level. This study has shown that the networks are established enough to generate innovative answers to the threats of new technology.
Many of the answers will probably involve changes in programming on the networks, and will be visible to the public immediately. Others will be organizational affecting the role the networks play in their organizations. In any case, it is the responsibility of researchers to discontinue their stress on programming studies and begin to look at the larger perspective of the networks as economic entities existing within larger organizations. If researchers are interested in program types, they should consider studying the causes of less diversity not the effects. This is not meant to minimize the societal impact television has, but rather it is meant to emphasize that the networks are motivated by profits. An example of this is the controversy over violence on television. Although many research studies were conducted on the effects of violent programming on children, it was not until the ratings of such programs dropped that the networks began to eliminate them from their schedules.

Although the welfare of the public has been shown to be of minimal concern to the organizations owning the networks, it is the public that stands to benefit from the new technological advances in the form of a more varied choice of programming, not only on the networks, but also through the use of new technologies. The future can be viewed with some degree of optimism as the threats of the new technologies are viewed as a means of organizational diversification, innovation and, finally, as a means of assuring high quality programming for the public.
APPENDIX A

FREQUENCY COUNTS FOR
THE COLOR CONTROVERSY
Table 16

The Color Controversy -
Data From Category 1: Competition

<table>
<thead>
<tr>
<th>Date</th>
<th>Source</th>
<th>Total Number</th>
<th>1.1 CBS</th>
<th>1.1 RCA</th>
<th>1.2 CBS</th>
<th>1.2 RCA</th>
<th>1.3 CBS</th>
<th>1.3 RCA</th>
<th>1.4 CBS</th>
<th>1.4 RCA</th>
</tr>
</thead>
<tbody>
<tr>
<td>2/4/46</td>
<td>NYT</td>
<td>1</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5/8/46</td>
<td>NYT</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5/19/46</td>
<td>NYT</td>
<td>2</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6/3/46</td>
<td>B</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9/16/46</td>
<td>B</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10/31/46</td>
<td>NYT</td>
<td>5</td>
<td></td>
<td></td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11/4/46</td>
<td>B</td>
<td>2</td>
<td></td>
<td></td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11/10/46</td>
<td>NYT</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12/11/46</td>
<td>NYT</td>
<td>2</td>
<td></td>
<td></td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12/16/46</td>
<td>B</td>
<td>9</td>
<td>1</td>
<td></td>
<td></td>
<td>4</td>
<td>2</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12/30/46</td>
<td>B</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1/25/47</td>
<td>NYT</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1/27/47</td>
<td>B</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2/11/47</td>
<td>NYT</td>
<td>2</td>
<td></td>
<td></td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2/12/47</td>
<td>NYT</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2/13/47</td>
<td>NYT</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2/14/47</td>
<td>NYT</td>
<td>3</td>
<td></td>
<td></td>
<td>1</td>
<td></td>
<td></td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3/24/47</td>
<td>B</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5/1/47</td>
<td>NYT</td>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td></td>
<td><strong>43</strong></td>
<td><strong>7</strong></td>
<td><strong>0</strong></td>
<td><strong>0</strong></td>
<td><strong>12</strong></td>
<td><strong>8</strong></td>
<td><strong>8</strong></td>
<td><strong>3</strong></td>
<td><strong>5</strong></td>
</tr>
</tbody>
</table>
Table 17
The Color Controversy—
Data From Category 2: Economic Impact

<table>
<thead>
<tr>
<th>Date</th>
<th>Source</th>
<th>Total Number</th>
<th>2.1 CBS</th>
<th>2.1 RCA</th>
<th>2.2 CBS</th>
<th>2.2 RCA</th>
<th>2.3 CBS</th>
<th>2.3 RCA</th>
</tr>
</thead>
<tbody>
<tr>
<td>2/4/46</td>
<td>WSJ</td>
<td>1</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7/23/46</td>
<td>NYT</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>9/16/46</td>
<td>B</td>
<td>1</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9/16/46</td>
<td>NYT</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>10/14/46</td>
<td>B</td>
<td>4</td>
<td>1</td>
<td></td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10/31/46</td>
<td>NYT</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11/4/46</td>
<td>B</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>11/18/46</td>
<td>B</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12/11/46</td>
<td>NYT</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12/16/46</td>
<td>B</td>
<td>9</td>
<td>2</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>1/25/47</td>
<td>NYT</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1/27/47</td>
<td>B</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>2/11/47</td>
<td>NYT</td>
<td>5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>2/14/47</td>
<td>NYT</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>3/24/47</td>
<td>B</td>
<td>5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>3/27/47</td>
<td>NYT</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>TOTAL</td>
<td></td>
<td>38</td>
<td>8</td>
<td>8</td>
<td>4</td>
<td>3</td>
<td>3</td>
<td>12</td>
</tr>
</tbody>
</table>
Table 18

The Color Controversy-
Data From Category 3: Technology

<table>
<thead>
<tr>
<th>Date</th>
<th>Source</th>
<th>Total Number</th>
<th>3.1 CBS</th>
<th>3.1 RCA</th>
<th>3.2 CBS</th>
<th>3.2 RCA</th>
<th>3.3 CBS</th>
<th>3.3 RCA</th>
<th>3.4 CBS</th>
<th>3.4 RCA</th>
</tr>
</thead>
<tbody>
<tr>
<td>2/4/46</td>
<td>WSJ</td>
<td>2</td>
<td>1</td>
<td></td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2/4/46</td>
<td>NYT</td>
<td>3</td>
<td>1</td>
<td></td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4/22/46</td>
<td>NYT</td>
<td>3</td>
<td>1</td>
<td></td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5/8/46</td>
<td>NYT</td>
<td>2</td>
<td></td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5/19/46</td>
<td>NYT</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9/16/46</td>
<td>B</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9/16/46</td>
<td>NYT</td>
<td>2</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10/14/46</td>
<td>B</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10/31/46</td>
<td>NYT</td>
<td>4</td>
<td></td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11/4/46</td>
<td>B</td>
<td>1</td>
<td></td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11/10/46</td>
<td>NYT</td>
<td>1</td>
<td></td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11/18/46</td>
<td>B</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12/11/46</td>
<td>NYT</td>
<td>2</td>
<td>1</td>
<td></td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12/12/46</td>
<td>NYT</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12/16/46</td>
<td>B</td>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2/11/47</td>
<td>NYT</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2/12/47</td>
<td>NYT</td>
<td>2</td>
<td></td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2/13/47</td>
<td>NYT</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2/14/47</td>
<td>NYT</td>
<td>13</td>
<td></td>
<td></td>
<td>11</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5/1/47</td>
<td>NYT</td>
<td>4</td>
<td></td>
<td></td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TOTAL</td>
<td></td>
<td>51</td>
<td>6</td>
<td>8</td>
<td>4</td>
<td>14</td>
<td>7</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>
### Table 19

**The Color Controversy—
Data From Category 4: Regulatory Concerns**

<table>
<thead>
<tr>
<th>Date</th>
<th>Source</th>
<th>Total Number</th>
<th>CBS</th>
<th>4.1</th>
<th>4.2</th>
<th>4.3</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>9/16/46</td>
<td>B</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td></td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>10/14/46</td>
<td>B</td>
<td>6</td>
<td>1</td>
<td></td>
<td>1</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>12/11/46</td>
<td>NYT</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>12/12/46</td>
<td>NYT</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>12/16/46</td>
<td>B</td>
<td>8</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>1/20/47</td>
<td>B</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td></td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>2/11/47</td>
<td>NYT</td>
<td>2</td>
<td></td>
<td>2</td>
<td></td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>2/13/47</td>
<td>NYT</td>
<td>2</td>
<td></td>
<td></td>
<td>1</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>3/19/47</td>
<td>WSJ</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>3/19/47</td>
<td>NYT</td>
<td>7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>7</td>
</tr>
<tr>
<td>3/24/47</td>
<td>B</td>
<td>4</td>
<td>1</td>
<td></td>
<td>2</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>3/27/47</td>
<td>NYT</td>
<td>2</td>
<td></td>
<td></td>
<td>1</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td></td>
<td><strong>38</strong></td>
<td><strong>4</strong></td>
<td><strong>4</strong></td>
<td><strong>3</strong></td>
<td><strong>15</strong></td>
<td><strong>4</strong></td>
</tr>
</tbody>
</table>
BIBLIOGRAPHY


________. ABC-ITT Merger Case. 9 FCC 2d 546, 581, 10 (1967).


