THE ACQUISITION PROCESS

by

Gopinath Balasubramanian

B.E. (HONS.), Madras University (1978)

M.S., Memphis State University (1979)

M.S., Memphis State University (1980)

SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF

MASTER OF SCIENCE IN MANAGEMENT at the

MASSACHUSETTS INSTITUTE OF TECHNOLOGY

June 1985

C Gopinath Balasubramanian

The author hereby grants to M.I.T. permission to reproduce and to distribute copies of this thesis document in whole or in part.

Signature of Author:

Alfred F. Sloan School of Management
May 1, 1985

Certified by:

Raymond Alain-Thietart
Thesis Supervisor

Accepted by:

Jeffrey A. Barks
Director of Master's Program
THE ACQUISITION PROCESS

by

Gopinath Balasubramanian

Submitted in Partial Fulfillment of the Requirements for the Degree of Master of Science in Management at the Massachusetts Institute of Technology

ABSTRACT

This thesis is mainly concerned with studying the Process perspective in Acquisitions. The basic premise is that the Process itself impacts the outcome of Acquisitions in addition to the traditionally understood impacts of "strategic" variables and "organizational" variables.

There are four chapters in the thesis. Chapter 1 is a commentary on the available evidence on the Acquisition Process. While the research is by no means exhaustive, the principal viewpoints are highlighted. The main point brought out here is that there is a lot of prescriptive information on "how acquisitions should work" as opposed to descriptive evidence on "how acquisitions actually work" in specific companies.

Chapter 2 outlines a generalized framework for studying the Acquisition Process in any acquisitive company. This chapter delineates the basic Research Questions that are considered important in the Study of the Acquisition Process in specific companies.

Chapter 3 describes the process in two major companies, A and B. Their identities are masked to preserve confidentiality. The level of detail in this chapter is only constrained by the extent of information available. All possible evidence revealed to the author is documented in this chapter.

Chapter 4 attempts to analyze the company information and deduce certain Process generalizations. While it is understood that a sample of two companies is insufficient for broad generalizations, the analysis helps to highlight and clarify the role of various issues that affect the Acquisition Process in the two companies.

Thesis Supervisor: Raymond Alain-Thietart
Title: Visiting Professor of Management
ACKNOWLEDGEMENT

I wish to sincerely acknowledge the invaluable assistance rendered by my Thesis Adviser, Dr. R. A. Thietart and my Thesis Reader, Dr. W. F. Pounds. Without their timely assistance, the conceptual and analytical elements of this thesis could not have been completed successfully.

I wish to thank the Senior Executives of Company A and Company B. They provided unique insights into how the Acquisition Process worked within their respective companies. The descriptive literature on Acquisitions will be benefited by their willingness to participate in this study. Here, a special note of thanks is due to the Vice-President of Advanced Planning at Company A for the extra-ordinary amount of time given by him to clarify the Process Description at Company A.

I also wish to thank Lenner Laval for her quick "turnarounds" on my draft versions and last, but not the least, my wife Pushpa, for having guided me unscathed through two years of the Sloan Master's Program.
## TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abstract</td>
<td>2</td>
</tr>
<tr>
<td>Acknowledgement</td>
<td>3</td>
</tr>
<tr>
<td>Table of Contents</td>
<td>4</td>
</tr>
<tr>
<td>List of Figures and Tables</td>
<td>5</td>
</tr>
<tr>
<td>Chapter 1 - Introduction</td>
<td>7</td>
</tr>
<tr>
<td>1. Overview of Diversification, Mergers and Acquisitions</td>
<td>7</td>
</tr>
<tr>
<td>2. Why Study the Acquisition Process?</td>
<td>8</td>
</tr>
<tr>
<td>3. Available Literature on the Acquisition Process</td>
<td>12</td>
</tr>
<tr>
<td>Chapter 1 - Footnotes</td>
<td>23</td>
</tr>
<tr>
<td>Chapter 2 - A Framework for the Study of the Acquisition Process</td>
<td>26</td>
</tr>
<tr>
<td>1. Introduction</td>
<td>26</td>
</tr>
<tr>
<td>2. A General Process Framework</td>
<td>27</td>
</tr>
<tr>
<td>3. The Research Methodology</td>
<td>31</td>
</tr>
<tr>
<td>4. The Subject Companies Introduced</td>
<td>34</td>
</tr>
<tr>
<td>a. Company A</td>
<td>34</td>
</tr>
<tr>
<td>b. Company B</td>
<td>35</td>
</tr>
<tr>
<td>5. Conclusion</td>
<td>37</td>
</tr>
<tr>
<td>Chapter 2 - Footnotes</td>
<td>38</td>
</tr>
<tr>
<td>Chapter 3 - Company Reports</td>
<td>39</td>
</tr>
<tr>
<td>1. Introduction</td>
<td>39</td>
</tr>
<tr>
<td>2. The Acquisition Process at Company A</td>
<td>41</td>
</tr>
<tr>
<td>a. Evolution of Corporate Strategy</td>
<td>41</td>
</tr>
</tbody>
</table>
b. The General Process Description ...................... 44

c. The Acquisition of Firm Al ............................ 59
   i. Introduction to Firm Al ............................ 59
   ii. A Longitudinal Construct of the Acquisition ...... 60

3. The Acquisition Process at Company B .................. 70
   a. The Evolving Corporate Strategy .................... 70
   b. The General Process .................................. 73

4. Limitations of the Data .................................. 78

Chapter 3 - Footnotes ...................................... 80

Chapter 4 - Analysis and Generalizations .................. 81

1. Introduction .............................................. 81

2. Analysis of the Process in Companies A and B ............... 82
   a. A Note on Corporate Goals ................................ 82
   b. The Role of the CEO ................................... 82
   c. A Graphical Construct of the Players Involved ...... 83
   d. Process-Based Impediments ............................. 85
   e. Other "Framework" Comparison .......................... 90

3. Conclusions and Future Directions ........................ 92

Chapter 4 - Footnotes ...................................... 94

Bibliography .................................................. 95
# LIST OF TABLES AND FIGURES

| Table 1-1: | Potential Benefits of Diversification | 8 |
| Table 1-2: | Alternate Operating Modes for the Acquisition Process | 13 |
| Table 1-3: | An Example of Functional Roles in Stages of the Acquisition Process | 15 |
| Exhibit 2-1: | Process Influences on a Company in the Acquisition Mode | 28 |
| Exhibit 3-1: | Company A Organizational Structure | 40 |
| Exhibit 3-2: | Factory Automation Strategy | 47 |
| Exhibit 3-3: | Outline for Candidate Presentation | 48 |
| Exhibit 3-4: | Management-Related Issues in Pre-Acquisition Checklist | 49 |
| Exhibit 3-5: | Pre-Acquisition Reporting Chain | 56 |
| Exhibit 3-6: | Structure of Firm Al | 63 |
| Exhibit 3-7: | Players Involved in the In-Depth Pre-Acquisition Study of Firm Al | 68 |
| Exhibit 3-8: | Key Events in the Acquisition of Firm Al by Company A | 71 |
| Exhibit 4-1: | Involvement of Key Actors at Different Stages of the Acquisition Process | 84 |
| Exhibit 4-2: | Occurrence of Impediments to Acquisition Success | 86 |
| Exhibit 4-3: | Typical Decision-Making "Locations" | 92 |
CHAPTER I
INTRODUCTION

1. OVERVIEW OF DIVERSIFICATION, MERGERS AND ACQUISITIONS

Over the last twenty five years a number of companies have diversified --mainly through acquisitions-- as an answer to the need for corporate growth. Many reasons have been given for this phenomenon. These include the need to:

- alleviate a slowdown in sales and earnings that come with maturity
- build on an existing franchise
- react to competitive pressures forcing moves into new product/markets
- avoid takeovers attempts
- attract and retain new managerial talent, react to anti-trust laws, etc.¹

"Mergers provide an important part of the market for corporate assets and contribute to making capital markets efficient".² They are considered a means whereby entrepreneurs are rewarded for their success, investment capital flows into areas of the economy where it is needed, poor managers of publicly (and privately) held companies are displaced and capital formation is encouraged thereby lowering the risks associated with supplying capital to small and medium sized businesses.³ The basic motivation for any acquisition or merger is that the sum of the joint entity is expected to be worth more than the individual parts. This so-called "synergy" has been referred to
as the "2 + 2 = 5" effect.\(^4\) One of the major difficulties in any case is measuring whether these "synergy effects" have actually been borne out in practice.

Diversification can be classified as related or unrelated.\(^5\) The relatedness issue is based on the perception of the operating managers of the diversifying company. Diversification is considered related if it:

- Involves businesses serving similar markets and/or using similar distribution systems.
- Involves businesses using parallel or similar production technologies.
- Involves businesses utilizing similar science-based research.
- Involves businesses operating at different points of the same value-added chain.

If these conditions are not operant, i.e. if the diversification is into businesses not falling into any of the above four categories, then it is considered unrelated. Table 1-1 provides a brief capsule of the potential benefits of the two major forms of diversification. This thesis is primarily concerned with related diversification of companies through the acquisition of other companies.

2. **WHY STUDY THE ACQUISITION PROCESS?**

Pre-acquisition analysis whether done internally within the company or aided by outside consultants has traditionally focussed on two issues\(^6\):

- strategic fit
- organizational fit
<table>
<thead>
<tr>
<th>Related Business Diversification</th>
<th>Unrelated Business Diversification</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Product-market orientation</strong></td>
<td>Diversification into product markets with key success variables unrelated to the key success variables of the acquirer's principal business.</td>
</tr>
<tr>
<td>Diversification into product markets with similar marketing and distribution characteristics, or similar production technologies, or similar science-based research activities.</td>
<td></td>
</tr>
<tr>
<td><strong>Transferable resources with greatest potential for creating value</strong></td>
<td>General management skills; surplus financial resources.</td>
</tr>
<tr>
<td>Operating and/or functional skills; excess capacity in distribution system, production facilities, or research operations.</td>
<td></td>
</tr>
<tr>
<td><strong>Nature of potential benefits</strong></td>
<td>More efficient cash management and allocation of investment capital, reduced cost of debt capital, and growth in profits through cross-subsidization can lead to a larger income stream than that available from simple portfolio diversification. Reduction of systematic (market-related) risk is unlikely.</td>
</tr>
<tr>
<td>Increased productivity of corporate resources through operating efficiencies, improved competitive position occurring from increased size of business, and reduction in long-run average costs can lead to a reduction in the variability of a company's income stream and/or a larger income stream than that available from simple portfolio diversification.</td>
<td></td>
</tr>
<tr>
<td><strong>Relative ease of achieving potential benefits</strong></td>
<td>Relatively easy to achieve capital efficiencies and benefits of cross-subsidization.</td>
</tr>
<tr>
<td>Relatively difficult because of organizational problems associated with integrating formerly self-sufficient companies into the acquiring company.</td>
<td></td>
</tr>
</tbody>
</table>

**Source:** Salter, M. S., Weinhold, W. A., Diversification Through Acquisition, Strategies for Creating Economic Value, p. 145.
The notion of strategic fit suggests that the acquiring company is fundamentally interested in how the selling company will augment its financial outlook. It suggests that the acquiring company has a clean-cut strategy for acquisitions and that through a careful analytical study of the selling company's finances, goals, industry, markets, customers, etc., rational conclusions can be reached on whether there is a "strategic fit" between the entities. Based on this, the acquiring company can decide whether or not to acquire the selling company. Most of the literature on this subject directly or indirectly seem to suggest that sound strategic (mainly economic) analysis can lead to sound acquisition decisions, because of perceived or calculated synergies.

Organizational fit issues can be defined as issues concerned mainly with post-acquisition integration. Given different planning and control systems, organizational culture and management style in the selling company (vis-a-vis the acquiring company) there are bound to be difficulties in meshing the two operations together. A number of papers and articles have dwelt on different topics on this subject, either in generality through the usage of specific case studies. The topics include:

- Quality and skills of management talent, management relationships and plans and controls.
- Fear of a takeover in the target company.
- Corporate culture shock, especially associated with the acquisition of high-technology companies by large corporations in mature industries. This article in particular, suggests the possible need to allow the selling
company to function independently at least in the immediate post-acquisition period, in order to aid the integration process.

- The need for a "temperamental" fit between companies as a criteria for acquisition success.\(^\text{17}\)

- The problems of post-merger management that may lead to only partial success of the acquisition.\(^\text{18}\)

- The management of the human side of acquisitions in both pre and post acquisition phases and its impact on acquisition success.\(^\text{19, 20, 21, 22, 23, 24}\) Motives, attitudes and other human issues have been dealt with in detail in these articles. Comprehensive research on the need for extensive evaluation of Human Resources in pre-merger and acquisition analysis has been done by Sadick.\(^\text{25}\)

In spite of the evidence that acquiring companies are doing a lot of homework in order to ensure strategic and organizational compatibility, the fact remains that a number of acquisition outcomes are "disappointing".\(^\text{26}\) This may partly be due to the fact that until recently, strategic fit considerations dominated the thinking of acquisition-minded companies. Post-acquisition integration questions had essentially taken a back-seat in most acquisitions. The third dimension that companies usually may not actively consider as a factor contributing to the ultimate success of any acquisition strategy is the Process itself.\(^\text{27}\) This is the process of analyzing, negotiating, acquiring and integrating the selling company.
The aim of this thesis is to study the acquisition process in two specific companies in order to see how they formulate and implement their acquisition strategy. Process variables are exposed in order to explore their individual roles and impact on the acquisitions. Specific case histories wherever available are reconstructed from company records in order to assess personality and timing issues. Chapter 2 discusses the framework for analysis and introduces the two companies involved in the study. The company identities have been masked in order to preserve the confidentiality of the information received by this author.

Chapter 3 describes the Acquisition Process in the two companies. Information on the Process were drawn from three sources:

- Company records on specific acquisitions, wherever available.
- Informal interviews with senior acquisition specialists in the companies, both on general acquisition strategy and information on specific acquisitions.
- Publicly available articles, etc.

Chapter 4 concerns itself with drawing inferences from the findings in the two companies. Future research directions are also indicated here.

3. AVAILABLE LITERATURE ON THE ACQUISITION PROCESS

What should constitute the Acquisition Process has been written about in varied forms in the literature. These relate to functions and roles and operating modes within organizations. Table 1-2 suggests alternate operating modes for the Acquisition Process as envisioned by Bradley and Korn.
Rochelle O'Conner's overview of the Acquisition Process includes the following step by step procedure:

- Preliminary Market Research
- Development of Criteria for Acceptance of Candidates
- Identification of Candidates
- Initial Contact With Prime Candidates
- Detailed Information Collection
- Financial and Market Analysis
- Negotiation of Agreement in Principle
- Confirmation Studies
- Closure

Prescriptive literature also has an acquisition protocol suggested by Robert N. Mueller. He too classifies an acquisition as being a rational step-by-step procedure. The various stages that he envisions are:

- A Determinative stage, to clarify and state objectives and determine top management and board commitment.
- A Scouting stage for potential candidates and preliminary assessment of fit.
- A Consultation stage with outside parties such as consultants, investment bankers, etc.
- A Strategic stage when strategic, indepth analysis of the selling company (may encompass a set of several potential candidates at any given time) is done.
- A Sensor stage when "interest" is gauged in the selling company (or companies) being investigated.
Table 1-2
Alternate Operating Modes for the Acquisition Process

<table>
<thead>
<tr>
<th>Mode</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>A. Active</strong></td>
<td></td>
</tr>
<tr>
<td>1. CEO, Chairman, or President makes commitment to program, but delegates major authority and responsibility to Corporate-Development department.</td>
<td>Typically an effective mode. Particularly useful in getting an acquisition program off the ground. Makes use of full corporate resources.</td>
</tr>
<tr>
<td>2. CEO, Chairman, or President carries out and takes full responsibility for the program.</td>
<td>Can be a good approach where strong CEO exists, but can lead to an overly opportunistic emphasis. However, the development of internal-staff expertise is usually required for ongoing programs.</td>
</tr>
<tr>
<td>3. Corporate Development develops, presents and supports recommendations and is involved in implementation.</td>
<td>Appropriate for ongoing efforts in organizations that have a record of past success and management support.</td>
</tr>
<tr>
<td><strong>B. Passive</strong></td>
<td></td>
</tr>
<tr>
<td>1. Investment bankers, brokers, finders, &quot;friends,&quot; and others bring situations to the attention of CEO and/or directors.</td>
<td>Without goals and commitment to acquisitions, this opportunistic approach is a long shot. Where specific corporate interests are articulated, this sometimes can be a satisfactory approach.</td>
</tr>
<tr>
<td>2. Internal staff generates and presents ideas, but no commitment to specific acquisition plans or goals has been made by the CEO or the corporation.</td>
<td>Least-effective approach. Without top-management commitment and support this approach is unlikely to produce significant results, except possibly over the very long term.</td>
</tr>
</tbody>
</table>

- A **Vamp** stage for the actual "lovemaking" between the entities involved along with regulatory notices and approvals.
- A **Proposal** stage to the selling company.
- A **Deal** stage when the acquisition is executed and personalities involved get to know each other much better.
- A post-acquisition **Management** stage, after the acquisition.

Table 1-3 shows an example of the typical functional roles at various stages of the Acquisition Process.

Other prescriptive literature includes Baumer and Northhart and Gussow. These deal mostly with strategic issues to be considered in the process along with a recognition of the "negotiation" and "personality" variables involved. Both use a plethora of examples from previous mergers and acquisitions.

Mace and Montgomery suggest that apart from strategic elements such as finances, sales, advertising/promotion, competitors, products, markets, etc., an in-depth evaluation of the selling-company's personnel should be a major prerequisite in the acquisition process. They emphasize the personal involvement of the president as a key criteria for acquisition success. They help identify potential problem areas in post-acquisition integration.

Power suggests that the decision process employed by the acquiring company can serve as a predictor of future acquisition success or failure. He postulates that almost all decision processes involving acquisitions fall into one of the four categories suggested below:

- the impulse decision process, whereby strategic scan and search is minimal and decisions are made rapidly.
### Table 1-3

An Example of Functional Roles in Stages of the Acquisition Process

<table>
<thead>
<tr>
<th>Stage</th>
<th>Party Involved</th>
<th>Planning and Corporate Development</th>
<th>Finance/Accounting</th>
<th>Legal</th>
<th>Technical</th>
</tr>
</thead>
<tbody>
<tr>
<td>Determinative</td>
<td>+</td>
<td>++</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>Scouting</td>
<td>+</td>
<td>++</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>Consultation</td>
<td>+</td>
<td>++</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>Strategic</td>
<td>+</td>
<td>++</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>Sensor</td>
<td>+</td>
<td>++</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>Vamp</td>
<td>+</td>
<td>++</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>Proposal</td>
<td>++</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>Deal</td>
<td>++</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>Post Merger</td>
<td>++</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
</tbody>
</table>

++ - Primary Responsibility

+ - Participation and/or Approval

- the rational or analytical decision process, whereby the strategic scan and search are fairly extensive and detailed.
- the confirmatory decision process involving a pre-sold buyer whereby the strategic scan or search is directed towards pre-set objectives to acquire a specific company. Contrary information or data that suggest "a lack of fit" may be suppressed.
- the cyclical or iterative decision process involving the indecisive buyer. This usually occurs when acquisitions are not driven by a suitable corporate strategy; Information collection seems to be an end, in and of itself. Prospects are screened and rejected for various reasons. Ultimate "buy" decisions are seldom reached.

Power's paper also hints that the method (process) of investigating and evaluating the acquisition prospect can and does lead to acquisition failure, if not carried out properly.

Allison\textsuperscript{34} postulates three paradigms for explaining the decision-making process in Government. Extending the idea to the acquisition process in any organization, it may be inferred that the basic unit of analyses is as follows:

- Organizational action as choice with regard to objectives or
- Organizational action as output determined largely by Standard Operating Procedures within the acquiring company or
- Organizational action as a political resultant (of bargaining between players internal to the acquiring company
Jemison and Sitkin postulate that there are four major process-related impediments. According to them, these are as follows:

a) Activity Segmentation
"The technical complexity of the activities surrounding an acquisition and the traditional roles of the participants lead to task segmentation. This segmentation produces conceptually and operationally different analyses and a disproportionate attention to strategic fit over organizational fit, thereby decreasing the possibility of successfully combining the businesses."

b) Escalating Momentum
"The forces which stimulate momentum in the acquisition process are stronger than those forces which retard its momentum. The net effect of these forces is an escalating desire to complete the process quickly which, in turn, results in premature solutions, less consideration of integration issues, and lower chances for a successful outcome."

c) Expectational Ambiguity
"The presence and use of ambiguity during the negotiating phase of an acquisition is often quite purposeful. But this same ambiguity, when carried to the integration phase, can be dysfunctional and reduces the chances for successful integration."
d) Management System Missapplication

"The parent's desire to help the new subsidiary and their confidence about their own capabilities often leads to a misapplication of management systems which reduces the chances for the acquisition's ultimate success as a subunit of the parent firm."

Jemison and Sitkin's study of the Process Perspective of Acquisitions is the only definitive and comprehensive research on process-based issues that may lead to the failure of acquisitions. They use the above framework on impediments, to explain why many acquisitions are still considered disappointments or failures, inspite of careful homework of the strategic variables involved. The implication is that the managers of acquisitive firms must be aware of the role played by organizational fit issues and more importantly, process-related issues.

Howell\textsuperscript{36} gives practical insights into pitfalls in the acquisition process. The use of line management as an important constituent in the acquisition decision-making is stressed here. His accent on decentralized acquisition activity as a key to successful acquisitions is partly in opposition to Jemison and Sitkin's conclusions regarding activity segmentation.

Hayes\textsuperscript{37} suggests that sound management appraisal of the selling company is key to overall success. According to him "the people crunch is often cited as a prime reason for failure". He raises issues of post-acquisition management autonomy, physical location of pre-merger talks (both formal and informal), management
style on both sides, acquisition announcements, timing and negotiation strategy as important process variables. His paper also suggests key pre-merger human resource issues that the acquiring company should focus on.

Levinson\textsuperscript{38} explores the psychological underpinnings of an acquisition. According to him "unrecognized motives of fear and obsolescence lead to impulsive actions which magnify the very problems partnerships should solve." On the premise that psychological assumptions impact the process and the acquisition outcome, Levinson suggests ways to circumvent hasty or improper decision-making. He points out that "the senior executives of the dominant (acquiring) company should:

- Probe their own motives for merging.
- Review the psychological assumptions that they have about the other party in the merger.
- Assess the psychological relationships and attitudes of the people in the junior organization and note how they may differ from those in their own (the senior) organization.
- Out of open, honest discussion of these motivations, assumptions, and differences, create a harmonious atmosphere in which problem-solving mechanisms are set up so that the anguish of the junior organization can be heard and acted on, and operating modes can be evolved rather than operated."

A number of issues raised in Levinson's paper are tied to the process-related problems of "Expectational Ambiguity" and "Management System Misapplications" suggested by Jemison and Sitkin.
Markes in reviewing the current research on mergers and acquisitions, presents findings related to the following issues:

- the management of the merger process
- the organizational issues in mergers
- the personal issues in mergers.

On the first issue he suggests that "the tendency to consummate mergers too hastily...is a major contributor to a large number of failed or disappointing corporate mergers". He further identifies planning, communication and mutuality as three crucial factors affecting acquisition response during the process. According to him "in our own study of corporate mergers....we are finding that the process through which a merger or acquisition is managed is more strongly related to employee response to the combination --either positive or negative-- than is the degree of change experienced directly as a result of the event." He suggests that a crucial reason for a successful merger is "...the emphasis on task or process orientation."

Ambiguity in dialogue between concerned parties is also reflected by Leighton & Tod. They suggest that ...(in most acquisitions) there is an unawareness of the motivations of the seller." They point to the role of "ambiguity" in the negotiation process and characterise it as a mistake. They stress the inclusion of group (operating) management in the process. According to them "...we cannot overstate the importance of getting to know the president (of the selling company) and his key personnel." They also stress the need to allay the anxieties of all concerned stakeholders:
the seller, the buying company personnel, the suppliers, the customers and the community. This underscores the need for effective and timely communication to all concerned and highlights communication as an important process variable.

CEO whims and influences on the acquisition process is explored by Hall.41 According to Jay Lorsch, Professor at the Harvard Business School, quoted in Hall's article "The Popular Imagination is that Managers are very analytic and very systematic.... I think a lot more decisions are made on serendipity than people think. Things come across the radar screens and they jump at them." The article gives several anecdotal examples of acquisition decisions and suggests that the speed of the acquisition process is also a function of CEO whim or impulse.

The above are references to the available evidence on the Acquisition Process. Jemison and Sitkin's work is seminal in this area because of their consolidated, integrative approach. However, there is little or no available evidence on how the process actually takes place in specific organizations (i.e., a descriptive mode) even though as suggested before, there is plenty of literature on how the process should take place (i.e., a prescriptive mode, depending on the specific author's point-of-view).

Chapter 2 describes a framework for the study of the Acquisition Process. The qualitative research methodology is explained followed by an introduction to the two subject companies under study.
CHAPTER ONE

FOOTNOTES


3. Ibid


27. Ibid.


35. Jemison and Sitkin, Footnote 26, Ibid.


37. Hayes, R. H., Ibid.

38. Levinson, H., Ibid.


40. Leighton and Tod, Ibid.

CHAPTER 2

A FRAMEWORK FOR THE STUDY
OF THE ACQUISITION PROCESS

1. INTRODUCTION

The first chapter was an overview of the available literature on the acquisition process. While the list of works on the subject is by no means exhaustive, the main topical areas have been exposed to suggest that there may be a distinct lack of a "process" bias in acquisition decision-making. That is to say, U.S. companies, in their zeal to make the "strategically" and "organizationally" correct acquisitions, may not be focussing quite as strongly on "how" they go about doing the acquisition. The literature suggests that such an acquisition mode may be a cause for a future lack of complete success or one of total failure of the acquisition. The process, if incorrect, may stop a good acquisition from proceeding or may hasten a bad one to its completion, to the detriment of the acquiring company. The term "process variables" has been used quite frequently in this study. Basically they stand for issues such as timing, communications, physical location of the meeting between interested parties, negotiating format, etc. (to name a few) that impact the course of acquisition decision-making. Many such variables were exposed in the first chapter. Many of these are brought to light in this and ensuing chapters.

There is some evidence that foreign acquirors, especially the Japanese, are much more keen on fostering a process bias in their acquisition strategy. That is, process variables such as
timing, methods such as low-keyed persistence and focus on the negotiating format etc., (apart from the strategic content) seem to play a crucial role. The outcomes take longer to happen. However, the key point of whether Japanese acquisitions of U.S. companies or vice versa are successful on average in the long run (the indicators suggest that this might be so because of the deliberate pace involved) is still open to question.

With this background in mind, the purpose of this chapter is three-fold:

-- First, to explain a general framework for the study of the acquisition process.

-- Second, to explain the qualitative research methodology involved, along with its strengths and shortcomings. The two sections taken together explain what is being studied and how, as opposed to why (which formed the basis for Chapter 1). The problems associated with locating "suitable" companies are mentioned here.

-- Finally, the two companies being studied are introduced at the end of the chapter.

2. A GENERAL PROCESS FRAMEWORK

The basic assumption that underlies this study is that the acquisition process is in itself a significant factor whose components affect the outcome of any acquisition. Hence, the need centers around identification of these component variables that comprise the process perspective, once the company in question moves into the so-called "acquisition mode". Exhibit 2-1 shows where
Exhibit 2-1

PROCESS INFLUENCES ON A COMPANY IN THE ACQUISITION MODE

ACQUISITION MODE

ACQUISITION DECISION GO/NOGO

PROCESS/VARIABLES

ORGANIZATIONAL VARIABLES

COMPANY IN PRE-ACQUISITION STAGE

ACQUISITION OUTCOME IN THE FUTURE COMPANY IN POST-ACQUISITION STAGE

PROCESS/PRE-ACQUISITION ISSUES
process-based influences impact the company, after it gets into the acquisition mode.

This exhibit further suggests that once in the acquisition mode, process issues impact the choice perspective with regard to strategic and organizational fit variables. At the same time, some process variables may also directly impact the acquisition decision. If the decision is GO, that is to acquire, then process variables impact the outcome in the post-acquisition phase. If the choice is NOGO, then depending on whether the company prefers to be back in the acquisition mode or not, process variables come into play here as well.

In short, process variables are instrumental in influencing decision-making at various stages within the acquisition mode. With this in mind, the key research questions are as follows:

-- What is the Acquisition Process in any organization that is in an acquisition mode?
-- How are decisions made at various stages both within the organizational structure and longitudinally over time at any level? (A related issue is the impact of timing in the sequence of events that comprise the process).
-- Who are the key players internal and external to the organization that are involved?
-- What (organizational) levels of decision-making are involved within the acquiring firm?
-- What are the critical factors affecting management behavior? What are the individual motivations and psychological assumptions behind each step of the process?
-- How is the acquisition activity segmented? Who delegates and/or coordinates the process?
-- What impacts the speed of the Acquisition Process?
-- How are negotiations (with the seller) handled?
-- What key post-acquisition management issues are at stake?
  How are they (potentially) to be handled?
-- When and where does the process begin? What is the impact of the (physical) meeting location?
-- Is process strategy an understood or preconceived criteria, prior to the actual process itself? In other words, do companies have a process plan-of-action in mind in an a-priori sense?
-- What is being "optimized" at various stages of the process?
-- How does management define "completeness" in its acquisition strategy?
-- What are the "communication" variables within the acquiring company? To other stakeholders? To the selling company? How do these variables change with time as the acquisition proceeds?
-- How important are intra-company attitudes to the acquisition? How do they impact the process? What, if any, is the impact of adverse or favorable employee reaction within the acquiring firm?
-- What are the management systems in the acquiring company that are (a) most likely (b) likely (c) least likely to impact the selling company?
-- How do personal risk assessments affect the acquisition decision process?

and finally, a broad general question:

-- What other (company-specific or external) criteria in the acquisition dynamics affect the Acquisition Process in the buying company?

Admittedly this is a very large set of research questions each of which addresses one or several process variables. It is not to suggest that the study of the two companies will reveal answers to all these questions or that the answers to these questions constitute the aim of this study in and of themselves. The basic point here is that these questions attempt to paint a broad framework within which the process in any company can be studied in-depth. They are used to conceptualize areas of focus in studying the Acquisition Process in Companies A and B.

Companies A and B are introduced toward the end of this chapter. The next section looks at the research methodology (given the above framework) used in studying the two companies.

3. **THE RESEARCH METHODOLOGY**

This study is oriented in the form of a research report that seeks to study the Acquisition Process in two specific companies in
order to elicit answers to some of the questions posed in the earlier section. The goal is to:

-- Provide as accurate a description as possible of the process within each company.

-- To seek from the available data and existing theory specific threads of evidence that may be a basis for an improved interpretation of the Acquisition Process in general.

The use of only two specific companies was driven by the need to explore in depth all of the factors playing a role in the acquisition - across time and across acquisitions within each company. An empirical study of the Acquisition Process in a larger, more "statistically significant" sample of companies was considered and rejected for the following reasons:

-- The time needed for research;

-- The impression that breadth would have compensated for depth in the case of each individual company and this was felt to be of limited utility.

The following criteria were considered important:

-- To learn as much as possible about each company from all available published sources and company contacts;

-- To discover where and how the Acquisition Process began;

-- To be aware of the fact that interviews produced, at best, partially objective evidence. Hence, the same interview theme was to be proposed to every individual questioned (in both companies) in order to rule out to
rule out to the extent possible, any interviews bias
towards his or her specific role in the
acquisition-decision-making.

The objective was to propose a scheme whereby each company
would provide information on two levels:

1) through semi-structured interviews;
2) through the perusal of documentary evidence on specific
past acquisitions, press articles, etc.

The actual field work was fraught with difficulty. Companies
A and B, who cooperated in this effort, were forthcoming in varying
degrees. The nature of this research necessitated that these
companies divulge the secret mechanisms driving their respective
acquisition strategies to an outsider. This fact had earlier
prompted several other companies to become very reticent in speaking
about the topic to the author, even after lengthy negotiations and
written assurances.

The method employed in studying the Acquisition Process in
Companies A and B being qualitative in character, essentially three
modes were employed in understanding the process in any one company:

-- unstructured interviews with key acquisition specialists in
the company. Their titles ranged from Vice President for
Advanced Planning, Senior Consultant, Senior Vice President
to Vice President of Finance.

-- Study of specific recent acquisitions done by the company.
Wherever possible, these acquisitions were reconstructed
 longitudinally (over time) in order to get a clearer picture of the forces at play.

-- Study of available written literature and articles on the company.

A specific point has to be made concerning the interviews. Though the framework for the study of the process was broadly hinted to the participants in the interviews, they were asked to freely associate with the topic and not be bound to answering specific questions. The objective was to reveal directly or indirectly, all possible variables that affected the Acquisition Process in their respective companies without inflicting any kind of interviewer bias. They were also asked to voice their opinion on acquisitions in general, if they so desired. The story of specific acquisitions was then fleshed out from these interviews and from available evidence in the acquisition files that the participants chose to make available to the author. Another reason for not structuring the interviews very rigidly was to avoid "scaring off" company managers that the author spoke with.

4. THE SUBJECT COMPANIES INTRODUCED:

a. COMPANY A

Company A was incorporated in the 1920s and until 1969 was basically in the batteries industry. It branched out into electric motors, plastics, heat transfer equipment and electronics between 1969-74. Its acquisitions led it further into electronics and
instrumentation in the late 1970s and early 1980s. The focus of the firm is to become a leading high-technology company.

Currently, the company develops, manufactures, and markets electronic systems, components, and instrumentation. It is headquartered in the New England area and operates in over fifteen states with over fifty plants and in eight foreign countries.

The basic diversification moves over the last decade have been in related areas that use the company's distinctive competencies in computer hardware/software and electronic materials/devices. Products range from CAD equipment, test and measuring systems for health care, anti-submarine warfare communications systems and the application of VLSI technologies in consumer communications, industrial and data-processing systems. A number of products are manufactured abroad in countries such as Korea, the Philippines, and Canada, among others.

As part of its planning strategy, the company also enters into joint-ventures with manufacturers in other countries, notably Japan. The thrust is to exploit the availability of lower manufacturing costs abroad by joint-venturing with established, efficient manufacturing operations. Company A revenues are below $3 billion. Details of the organizational structure and chain of command are mentioned wherever appropriate in Chapters 3 and 4.

b. COMPANY B

This company was incorporated in the 1960s though the business had been established much earlier. It is headquartered in the New York area. The company has had a materials-driven strategy from the
start. Over the past twenty years, it has acquired businesses in various metals, plastics, and carbon black. It has asset holdings (metals, carbon black, etc.) in several countries around the world. It has subsidiaries in several states in the U.S. and over a dozen countries around the world.

Its businesses are "by choice, capital and technology intensive." The company also has an oil and gas business including exploration, production, and pipeline systems. Its metal products group has a full product line of steels, alloys, and other heat/corrosion resistant compound metals. The basic markets for this group are the electronics, electrical, automotive, and aerospace industries. This group also has a number of registered patents and trademarks. It also includes a mineral resource and raw materials supply division to major metals producers. The chemical group in this company is based around carbon black research, development, and technical services. All together the company is divided into three major groups. The basic acquisition strategy is driven from the top (CEO) and is geared toward the acquisition or development of materials-related companies that fall under the high-technology area. The idea here is to exploit in-house materials expertise (along with expertise obtained through contact with academia) to explore growth markets. Annual revenues are less than $2 billion. Specific organizational structure and chain of command issues within Company B are explored as needed, in Chapters 3 and 4.
CONCLUSION

This chapter lays the basic framework of analysis of the Acquisition Process. The research methodology, along with its pitfalls, has been explained in some detail. This was followed by an introductory sketch of the two companies who agreed to participate in this study. Specific company information and company identity has been masked to preserve confidentiality. However, sufficient information has been presented to put each company's current businesses in perspective and to give this thesis the necessary background to be able to delve into the Acquisition Process within each company. This is the subject of Chapter 3.
CHAPTER 2

FOOTNOTES


3. This methodology was given impetus by Bowers' work on the Resource Allocation Process. See Bower, J. L., Managing the Resource Allocation Process: A Study of Corporate Planning and Investment, Division of Research, Graduate School of Business Administration, Harvard University, Boston, 1970.

4. Ibid


6. Ibid.
CHAPTER 3
COMPANY REPORTS

1. INTRODUCTION

This Chapter devotes itself to a detailed explanation of the Acquisition process at the two major companies introduced in the last chapter. The general description of the process is supplemented by a reconstruction of specific acquisitions (wherever applicable).

Company A's data was obtained through several in-depth interviews with its VP for Advanced Planning. Functionally, he reported to one of four group Vice-Presidents at Company A but served all four functional groups. Exhibit 3-1 details the organizational structure at Company A. Almost all of the acquisition candidates were initiated by him for the company at large. Company A can be described as having a formal Acquisition Process in place. Company A also provided this author with memos and other literature on two specific acquisitions. The first Firm A1 was a computer manufacturing company and the latter Firm A2 was a manufacturer of Industrial Programmable Controllers (PC). Both acquisitions provided insights into how specific acquisitions were carried out at Company A, even though the collection of memos available for the Firm A2 acquisition were minimal. The acquisition of Firm A1 is described in some detail later in this chapter. Finally, process-related information was also obtained from a number of published articles on the company, shareholders' reports and other company literature made available to the author during the course of the study.
Company B's acquisition strategy was smaller in scale compared to Company A. The decision apparatus was different (Company B organizational charts were not revealed to the author). Information was primarily obtained from two sources - The Vice-President in the Special Materials program within the company and a full-time external consultant who has been helping the company's Acquisition program. Other evidence included shareholders' reports and published literature. Company B was not forthcoming about specific acquisitions. Data on specific acquisitions was made available only in parts or through veiled references.

In each of the above two cases, all of the information has been reproduced as faithfully as possible. As per original agreement, both companies were given an opportunity to look at the author's write-up on their respective companies and provide comments. This was to ensure that the information revealed did not compromise the companies in any fashion or reveal their identity.

2. **THE ACQUISITION PROCESS AT COMPANY A**:

a. **The Evolution of Corporate Strategy**

Before looking at process issues, it is illuminating to look at how the corporate strategy at Company A has evolved over time. The strength of one individual has shaped company policy since the mid-sixties. The firm's direction has reflected his changing vision. In the sixties the push was for increased R&D and internal growth, with stringent financial and other controls. This was designed to "--- generate a steady flow of new and improved products which will continue to contribute a greater portion of the total sales in the
years to come.¹ The general idea was to make Company A a dominant Electrical firm by the late seventies. Several acquisitions were also made in the electricals field. Batteries were still a driving force for the company and it was willing to dabble in some unrelated acquisitions such as real estate. The basic aim however, was technological leadership through concentrated R&D, large Capital Expenditures in Plant and Equipment and the expectation that the Electrical segments would grow faster than the GNP.²

The mid to late seventies saw a change in Company A strategy. Even though earnings were pushing ahead at over 21% compound annual rate, the CEO made several mid-course corrections to bet on Electronics as the major growth sector. There were a number of reasons given for making this change. Inflationary trends were on the upswing along with sharp declines in the sale of heavy electrical equipment. Of the four main businesses in Electrical, Battery, Industrial and Electronics sectors, Electronics had consistently shown the highest return on investment. It was decided by the CEO, after internal analysis, that Electronics had the highest potential for growth in the eighties. The changing strategy caused the company to aggressively pursue divestiture of businesses (including many of the 50 or so companies acquired in the last decade) that did not appear to fit this new vision of the CEO.

During 1977-1979, Acquisition guidelines were revised to include external acquisitions in the Electronics Areas through joint-ventures and second-tier venture capital financings.³ Acquiring technology became a sharp motivator. A significant structural change that followed the changing strategy was the
creation of a Corporate Development staff under the aegis of a Vice-President reporting directly to the CEO. The push was on to grow through the acquisition of other companies possessing "appropriate" technologies.

The strategy for the eighties was to broaden the high-technology base. In 1980 Company A high-tech businesses accounted for 32% of the total sales and 47% of the earnings compared to 28% and 38% respectively, the previous year. The company had made a few very large acquisitions in the seventies in High-Tech areas and had also tried a few abortive hostile takeovers. It was felt that in the eighties the company should concentrate on acquiring small firms with cutting-edge technology and "people". Batteries, Industrial products, etc. were on the way out; Factory Automation, Computer Systems and Software, Defense and Medical Electronics were on the way in.

The make-up of top management and personnel being promoted to the executive level also reflected this changing strategy. Personnel from acquired firms were increasingly assuming key jobs within Company A. The Company changed its structure in 1983 in order to reflect a market-orientation as a means to facilitate its acquisition strategy and new direction. The change from a mature-industry participant to a high-tech company was also evident in the changed dividend policy that reflected lower payout ratios.

The current thinking is to consolidate the number of acquisitions made in response to the changing strategy into two focal areas - Factory Automation and Defense. Also, acquisitions in the future are expected to continue in growth areas.
b. The General Process Description

The acquisition strategy at Company A is very much driven by the CEO's aggressive style. However, the main Groups shown in the company's organizational structure (Exhibit 3-1) are very autonomous in terms of operating style and available latitude of decision-making. All the groups do not lead the search for potential acquisitions. The majority of the identified candidates were presented by the Vice-President for Advanced Planning (VP-A) in Group I. He reports to the group Vice-President, who in turn reports to the President for operating decisions, but most often directly to the CEO on strategic decisions, such as acquisitions. Each group is autonomous with its own board of internal and external directors. The VP-A routes his recommendations to the group concerned which then may become involved in the nitty-gritty details. The VP-A gets involved in practically every step of the pre-Acquisition Process.

The VP-A was responsible in the seventies for writing a definitive essay on "Venturing as a diversification/acquisition technique" for the benefit of Company A Senior Management. This enabled Company A to participate in a modest venture-capital role for the company (only second-tier financings were involved, without Company A actually participating in managing the companies they invested in or sitting on any of the Boards). More importantly the VP-A's work identified key issues needed to be addressed for participation in high-tech businesses. The suggested elements were:

- Corporate Climate
- Organization
Company A wanted to look into Industries and Markets such as:

- Industrial Electronics
- Test and Measurement
- Medical Technology
- Automatic Test Equipment
- Data Communications
- Energy Management
- Power Conversion
- Material Processing
- Computer Technology

Most of the criteria utilized in analyzing companies in the Venture Capital role were financial in character with certain "soft" organizational issues such as management strength included as well. The general idea was that a second-tier investment strategy in a growth company "may lead to a possible acquisition at a later date". However, Company A did not go very far in the venture capital route because of a very conservative and cautious investment philosophy.

The lessons learned in the venture route, led to a more aggressive stance in actual acquisitions. The strategy over time was to build a solid, integrated capability in the areas of Electronics for
Computer Systems and Factory Automation purposes. Firm A1 and A2 were large acquisitions that formed part of the overall factory automation strategy shown in Exhibit 3-2.

One of the primary moves was the development of a broad and comprehensive internal memo called "growth areas of interest". This outlined for instance, viable areas within computer products for Company A to get into such as Artificial Intelligence, peripherals, communication networks, etc. Exhibit 3-3 shows a summary outline of the kinds of information that Company A had to develop for any acquisition candidate.

The initial outline for candidate presentation is supplemented by a rigorous preacquisition checklist. Exhibit 3-4 shows the management-related issues in the check-list. In addition, each of the following "strategic" issues are covered thoroughly (the source is the same internal memo) including:

- Financial (42 different criteria)
- Marketing (15 different sales and distribution criteria, 5 for advertising and Promotion)
- Competitors (9 different criteria)
- International Aspects (4 different criteria)
- The Product (15 different criteria)
- Engineering, R&D (16 different criteria)
- Manufacturing (22 different criteria)
- Labor (22 different criteria)
- Key Management Attitudes (11 different criteria, included in Exhibit 3-5)
EXHIBIT 3-2

FACTORY AUTOMATION STRATEGY

HOST COMPUTER (FIRM A1)

MAN-MACHINE INTERFACE

ACQUISITIONS

SENSORS

PC (FIRM A2)

MOTION CONTROL

ROBOTS

NC MACHINES

TRANSFER MACHINES

ACQUISITIONS

MOTOR CONTROL
EXHIBIT 3-3
OUTLINE FOR CANDIDATE PRESENTATION

- HISTORY AND BACKGROUND

- BASIC OPERATIONS DESCRIBED
  MARKETING
  MANUFACTURING
  R&D, ENGINEERING
  MANAGEMENT AND DIRECTORS
  OUTSIDE PROFESSIONALS
  OTHER BASIC INFORMATION

- BASIC FINANCIAL DATA
  OPERATING STATEMENTS
  OPERATING STATEMENT ANALYSIS
  FUTURE PROJECTIONS, WHAT, WHEN
  OWNERSHIP STATEMENT

- BASIC PROPOSAL AND ITS EFFECT IN COMBINATION WITH COMPANY A

Source: Discussions with the VP-Advanced Planning of Company A
EXHIBIT 3-4
MANAGEMENT-RELATED ISSUES IN PRE-ACQUISITION CHECKLIST

- APPOINTMENT OF COMPANY A ACQUISITION TEAM AND TEAM-LEADER
- MAINTAIN CONSTANT CONTACT WITH KEY MANAGEMENT AND BOARD RIGHT UP TO CLOSING DATE
- HISTORY OF BUSINESS
- DESCRIPTION OF THE CORPORATE STRUCTURE
- LIST OF OFFICERS, DIRECTORS; BIOGRAPHIES OF OFFICERS, DIRECTORS, SALARIES.
- STOCK DEMOGRAPHY AND DISTRIBUTION: WHO, WHERE, HOW MUCH, ATTITUDES, ETC.
- ORGANIZATION CHART
- POLICY MANUAL, IF ANY
- PERSONNEL MANUAL
- PROSPECT'S DIVIDENDS AND OTHER FINANCIAL POLICIES
- EXTENT OF INTEGRATION OF COMPANY - POTENTIAL FOR VERTICAL EXPANSION OR INTEGRATION
- PHILOSOPHY OF MANAGEMENT ON MATTERS SUCH AS GROWTH, INDUSTRIAL RELATIONS, ORGANIZATIONAL PLANNING, INDUSTRIAL ENGINEERING, MERCHANDISING, EDUCATIONAL SELLING, ADVERTISING, ACCOUNTING AND BUDGETING, R&D, ENGINEERING, PRODUCT DESIGN, ETC.
- CAN WE EVALUATE THE COMPANY OURSELVES OR MUST WE HIRE OUTSIDE CONSULTANTS FOR PERSONNEL ANALYSIS, MARKET RESEARCH OR OTHER FACTORS? WHO?
- ARE THERE ANY LEGAL PROBLEMS PECULIAR TO THE COMPANY, ITS PRODUCTS, OR THE INDUSTRY?
- WHAT CONSULTING FIRMS HAVE BEEN OR ARE BEING RETAINED BY THE FIRM?
- HOW ARE RELATIONS WITH THE COMMUNITY?
- WHAT IS THE POLICY CONCERNING PATENT PROTECTION?
- ARE COMPANY'S NAME AND TRADEMARK WELL-KNOWN? ARE THEY CONFUSINGLY SIMILAR TO ANY OTHER FIRM'S NAME AND TRADEMARK?
- STOCKHOLDER RELATIONS
- AUDITOR RELATIONS

- DOES THE PROSPECT'S MANAGEMENT SHARE WITH THE ACQUIRER'S MANAGEMENT A SIMILAR CONCEPT OF BUSINESS AND MORALITY?

- IS THE PROSPECT'S MANAGEMENT CAPABLE?

- WILL MANAGEMENT CONTINUITY BE AFFECTED BY THE ACQUISITION?

- HAS THE PROSPECT'S MANAGEMENT PERMITTED ITS COMPANY TO ACHIEVE MAXIMUM PROFITS?

- DO THE PROSPECT'S EXECUTIVES UNDERSTAND WHAT THEIR RESPONSIBILITIES ARE?

- ARE THEY CAPABLE OF DELEGATING AUTHORITY? HAVE THEY CONDONED OVERLAPPING LINES OF AUTHORITY?

- HAS THE PROSPECT'S MANAGEMENT USED CAPITAL EFFECTIVELY TO PRODUCE EARNINGS?

- HAS THE PROSPECT BEEN OPERATED FOR THE BENEFIT OF STOCKHOLDERS OR MANAGEMENT?

- ARE THE DIRECTORS KNOWLEDGEABLE ABOUT THE PROSPECT'S BUSINESS? DO THE DIRECTORS GET ENOUGH INFORMATION ABOUT THE COMPANY'S ACTIVITIES?

- DO THE VARIOUS DEPARTMENTS HAVE SHORT-TERM AND LONG-TERM BUDGETS?

- DO THE FINANCIAL STATEMENTS PREPARED FOR INTERNAL USE SUPPLY MEANINGFUL DATA?

Source: Company A Internal Memo
According to the VP-A, the advantage of having this comprehensive list lies in knowing beforehand all the bases that need to be covered. This is expected to leave very little to chance.

Which companies to acquire is basically arrived at through an "internal" selection process. The VP-A does a majority of the candidate identification and assessment duties himself, with the help of other divisional staff. Over 50% of the leads are obtained through venture capital sources (journals, contacts etc.). Sometimes, Investment Banking Firms approach the VP-A or the V.P. of Corporate Development with a business plan in hand.

Company A wants to acquire companies with proven results and a growth-track that shows their capability of being run effectively in a stand-alone mode. Typically, Company A does not want to put management into the companies it acquires. Knowing that (in the high-tech area) it is buying both a product and people, Company A considers the "love-making" crucial. The people interface is kept as smooth as possible, the basic assumption being that the "selling company" personnel perceive the acquirer as difficult to work for unless the acquirer's good intentions are well-known and publicized.

The need for the selling company's employees to be retained with the right attitude marks a radical departure from the CEO's style in the late sixties and seventies. His acquisition style was aggressive and heavy-handed. The prevailing notion then was that "corporate control specialists" were always needed to "rein-in" the newly acquired companies. A large management turnover in the late seventies coming in the face of the strategic redirection for the company convinced the CEO that running interference in day-to-day
operations of the divisions and misapplying corporate policies on newly-acquired firms was inimical to long-term company interests. The changing strategy helped change the CEO's perspectives and style on how to acquire and run growth companies, the upshot being an "arms-length" philosophy for any acquisition, to be followed by phased integration into overall Company A activity.

According to the VP-A, Company A does not consider "speeding up the process" crucial to the acquisitions that are initiated. "Timing" of the various moves is however, considered important (the lack of a timing perspective cost the company a few strategic candidates in the seventies).

Once the prospective candidates are identified, the VP-A "shops around" for the ideal match. The VP-A has the experience of having acquired over 40 companies, with a dozen or so as a member of Company A. According to him, once Company A makes up its mind about a particular candidate, the process escalates rapidly to the point where the deal is "consummated" as efficiently as possible (through a "sensitive" approach to the marriage partner, that ensures that the selling company does not feel "emasculated").

After the candidate has been identified, the VP-A acts as an initiator of dialogue and data-gatherer. At any one time, the VP-A keeps track of about 200 potential candidates.

The ultimate decision-making authority rests with the particular group's Board of Directors in consonance with the CEO of the corporation. The important idea is to do the "homework" professionally before the decision-making process. This starts out with identifying the company through D&B and other financial reports.
It is considered very important to see who is investing in the company (the venture capital community is considered the easiest to deal with, because of the VP-A's contacts). Otherwise, the bankers or accountants are scanned to see who can make the "proper introductions". Sometimes, a direct call is made to the CEO of the selling firm to see if he is interested in "meeting and talking".

The preacquisition checklist and the guidelines for candidate presentation are used (to the extent possible) to get a "feel" for the other company. Company A generally uses "financial considerations" to screen out unfit candidates. After the initial screen, it is imperative from Company A's point-of-view not to let the other company know that "you are in a hurry to get married".

The first meeting usually involves the VP-A and perhaps one or more division staff members from Company A and the selling company's President at the selling company's headquarters. There are two main reasons for the preliminary contact:

- to gauge the President's interest in selling to Company A
- to introduce Company A to the President via a presentation, etc.

Typically, the President responds back tentatively. At the same time, the VP-A arranges another on-site follow-up visit (by the time the third meeting takes place says the VP-A "-- I know if the deal will come through --"). Two or three trips are considered sufficient to provide enough information needed in the check-list. Actual negotiations are not considered a problem once the "homework" has been done well. The implication here is that "strategic"
variables if defined and understood properly, enable Company A to give and take the right amounts during the negotiation phase, resulting in a "successful" buy. Au contraire, if the homework is not done properly, the negotiations usually fail.

For Company A, it is crucial that someone be the team-leader. Typically, 3-5 individuals are brought in for analysis and on-site visits from operations, marketing, finance, technical staff, etc. (the Firm Al acquisition involved a HR specialist). These individuals come from either company headquarters or any of the Groups to assist in the effort.

The attitudes of Company A personnel (for or against the acquisition) on average is not considered critical to the Acquisition Process. Their opinions are not considered critical because by and large, pre-acquisition plans are kept secret. However, the backing of senior divisional management is considered crucial. According to the VP-A, he has very good relations with the division managers because if they are not receptive then the deal is "---as good as dead". Over the last five years or so, the CEO has made a concerted effort to let the selection authority reside autonomously within the Groups.

Timely and periodic communication to both external and internal sources is considered very important. Internally, this means periodic memos from the VP-A to other senior management and concerned personnel. Review meetings are also held periodically in order to get everyones input and commitment to the project and also to acquaint senior management of the acquisition's progress. Externally, the communication between Company A and the interested
party is usually verbal. There is some letter follow-up, if initial indicators appear to be promising, in order to continue the love-making. According to the VP-A's philosophy, "-- The less written the better --". The fundamental strength, according to him, that is tantamount to a critical success factor is "the personal understanding of the other guy's business". In other words, Company A tries to go into the preacquisition phase with a fairly broad knowledge of the business that they want to get into. According to the VP-A "---our depth of understanding surprises those guys, since we talk his language---". This is expected to facilitate communication and put it on a very professional level.

The depth of management is gauged through the contacts that the VP-A and his team have with the other team's management. Hearsay or other documented evidence (obtained via consultants, investment bankers, etc.) are given minor importance compared to face-to-face dialogue with the selling company's President and other team members at the second or third level. An exhaustive management report is normally put together for the benefit of Company A senior management, by the VP-A.

The chain of command for reporting purposes, is shown in Exhibit 3-5. This shows the VP-A as the main initiator of acquisitions.

The lines indicate that VP-A reports to the Group VP of Group 1 on a day-to-day basis. Depending on a specific Group's potential acquisition that he may be working on, he also reports to the VP of that Group. Group 4 (Defense-related activity) is usually not a part of this chain. Support personnel from other Groups are matrixed
EXHIBIT 3-5
PRE-ACQUISITION REPORTING CHAIN

1. VP-A reports on day-to-day basis to Group VP of Group 1.
2. VP-A reports to Groups VP's of Groups 2, 3, 4 as needed on specific acquisitions.
3. VP-A appraises VP-Corporate Development on all acquisition activity at all times.
4. VP-A appraises the COO or CEO directly on certain facets of acquisition activity.
5. VP-A is assisted (as needed) by support personnel from Groups 1, 2, 3, 4 or staff personal from Corporate Development, Legal, Financial, etc.
6. All Groups and the VP-Corporate Development report directly to CEO or COO.

Source: Discussions with the Vice-President - Advanced Planning for Company A.
in, as and when necessary, to help the VP-A. The role of Corporate Development is fairly unique. It takes over once the negotiation phase is ready and is aided by the Corporate Staff members such as Legal/Financial/Audit/Human Resources, etc., and helps to physically consummate the deal. At that stage, the VP-A's role is no longer proactive but more that of an adviser to the proceedings (because of the rapport & trust that he has created with the selling party).

The CEO is involved in the negotiation phase when the selling company President makes his first visit to Company A headquarters. The CEO is actively involved in understanding each acquisition through his attendance of Group Board meetings, Corporate Development Review meetings (attended by the VP-A) and meetings of the Management Committee. The President/COO is usually involved also, though his responsibilities are brought into focus more during the post-acquisition integration and operational phases.

One way for the VP-A to know what each Group wants (each Group has several divisions) is to attend every division's strategy review meeting that takes place once-a-year. This gives him an inkling as to what to aim for during the following year in the short-term/long-term (the strategy review meetings usually look at 3-5 years down the road). This enables the VP-A to:

- Go after specific acquisition candidates in known areas for each Group.
- Seek future compatibilities for the corporation as a whole.

The divisions consider the VP-A's role as a that of an "external consulting and implementation resource".
After the due-diligence criteria in the acquisition check list have been understood by both managements, a "letter of intent" is signed and a definitive purchase/sale agreement goes to the Corporate Boards of both parties. This is a definitive offer. Three months to one year would have normally passed between the time an acquisition candidate is selected and an offer is made to the Board of Directors of this candidate.

A point is noteworthy here on the use of "outside consultants". The VP-A suggested that technical, marketing and audit expertise are the only two areas that external consultants may be brought into during the preacquisition phase. As he put it "Things we can't do, we use external consultants". There is also an in-built distrust against investment bankers because of the feeling that they tend to "hurry-up" the deal (Investment bankers are usually paid a fixed fee regardless of the length of time involved in the acquisition) and that they are good only at structuring deals but not understanding the business involved. Company A being "technology hungry" is less-driven by financial considerations as the end-all, even though financial cut-offs may be used actively as a preliminary screen.

The approval of the offer by both Boards, following negotiations formally and informally, is key to the actual integration process yet to come. By this time the deal has been structured and the GO/NOGO decision has been reached.

A GO decision by both parties involved, puts the coupling mechanism to work. Post-acquisition integration questions are dealt
with according to pre-conceived methodologies. These include:

- Financial integration of the company books. This takes place first within 30 days. Financial staff are integrated at the Corporate level.
- A "hands-off" attitude is used in running the business, in the short-term which may extend a few years into the future. Management incentive, control, reporting mechanism changes are minimal. The President of the "subsidiary" is given tremendous latitude and reports directly to the Group Vice-President (his company now belongs to that Group). Care is taken to minimize management turnover, unless called for by "strategic reasons" to reduce management.
- Since the CEO of Company A ultimately "does the deal" his continuing involvement and rapport with the acquired Company's President in the near term is "kept up" to maintain continuity and goodwill.
- Other operational integration is basically left to the operating Group and it usually runs its own course. This is turning out to be a problem for Company A of late, since it has to mesh many "loosely driven" companies, without formal "integration" mechanisms to harmoniously coalesce all these entities together.

c. The Acquisition of Firm Al

i. Introduction to Firm Al

Firm Al is a manufacturing company specializing in the manufacture of 32-bit computer systems primarily to the OEM market.
The applications for the market include simulation, energy management and scientific computation. Their computers are "experts" in storing and processing real-time data. Firm Al's markets are international in character with principal locations in the United States, Canada, Israel, Australia, and Western Europe. Revenues for Firm Al were around $80 million at the time of the acquisition.

ii. A Longitudinal Construct of the Acquisition

The potential availability of Firm Al as a candidate for acquisition became known to Company A through researching the technical and financial reports and other publicly available data on minicomputer companies. Company A was ready to acquire a minicomputer company in order to propel its factory automation strategy forward. There was sufficient publicly available information on Firm Al to spark Company A's interest. The VP-A called up Firm Al's President, introduced himself and requested a meeting at the President's location. The President's acceptance indicated to the VP-A that he was interested in "talking". The preliminary contact was made by the VP-A on April 7, 19XX. The venue was Firm Al's headquarters. Representing Company A were the VP-A and the VP of Group 1. Firm Al was represented by the President of the company and his Vice-President of Finance. The reason given for the meeting was "to explore fit in the factory automation field between Firm Al and Company A."

This contact enabled the VP-A to understand the history of Firm Al and to get marketing information (including customers, suppliers, future growth opportunities, previous tie-ins with Company A since
Firm Al had supplied computers to one of their divisions in the past, business tie-ins with other companies, domestic and foreign sales, competition, etc.), financial information (sales, NI, estimated backlog, estimated future orders, financial structure, etc.), and business strengths and weaknesses (in R&D, organization, manufacturing, management, compensation structure). These were summarized for the benefit of the COO of Company A and the VP of Corporate Development in an April 9, 19XX memo. This memo included a short sketch of the VP-A's personal "gut-feel" of the situation. This included information on:

- what Firm Al's owner actually said he wanted and what he "seemed to be" wanting.
- what Firm Al's criteria were for selling.
- information on compatibility (market, technology, etc.) with Company A's divisions.
- the need for a tax-free stock deal (apparently an "intentional" slip on the part of Firm Al's President) with an additional "premium" over market price.
- whether or not Firm Al would open up secondary markets.

The initial contact and follow-up information to Company A senior management was accomplished in less than a week.

The day after the trip to Firm Al's premises (on April 8, 19XX), the VP-A wrote back to the President of Firm Al thanking him for his hospitality and the information on the application of Firm Al computers to the overall factory automation field. An invitation was extended to the President of Firm Al to visit Company A's application marketing groups (within specific divisions). The letter
also indicated that the CEO of Company A had a winter house in the vicinity of Firm Al, and would be pleased to meet with the President and his associates of Firm Al at a mutually convenient time. A copy of Company A's Corporate Fact Book and a list of questions that Company A wished to explore in-depth with Firm Al were mailed along-with this letter. The letter also indicated as a post-script that both he (the VP-A) and his boss would be on the road until April 28, 19XX and that they could be contacted at any time after that. This was purportedly to give the President of Firm Al at least three weeks to mull over Company A's initial overtures before contemplating a reply.

The structure of Firm Al (Exhibit 3-6) was quite simple enough for decisions to be taken fairly quickly. The main players involved from their point-of view was the President and his VP of Finance. The President was also a large shareholder in the company.

Subsequent to April 8, the President of Firm Al suggested (by telephone) to the VP-A that he wanted to visit the PC division in order to explore in further detail, Company A's long-term objective to enter the full-field of Factory Automation and Data Communication. A trip was arranged for June 19, 19XX. The Group VP of Group 1, alongwith senior-executives from the PC division and the VP-A coordinated the visit. During this visit, the President of Firm Al also brought with him more detailed information about current financials, five-year projections, markets and new products. The President also outlined his needs in terms of Price Range, Incentives
EXHIBIT 3-6
STRUCTURE OF FIRM A1

Source: Internal File on Firm A1 at Company A.
for his managers, etc. He also volunteered that in the event of a sale he would be stepping down and recommended the VP of Finance or the VP of Products and Services as potential replacements for his position. This visit coupled with the additional information made available, allowed t.e VP-A to consolidate his "homework" done over the past two months. The time was considered appropriate to make concrete recommendations to the COO and VP of Corporate Development.

On June 20, 19XX, the VP-A wrote a memo to these two senior managers outlining:

- The P/E used in valuing Firm Al.
- The market value of Firm Al based on stock price.
- The number of Company A shares to be paid alongwith the effects of dilution.
- The Actual Income Statement for Firm Al, with projections for the next five years.
- The actual 19XX Balance Sheet for Firm Al alongwith projections for the next five years.
- The Orders/Backlog/Revenue and Profit Statistics by quarter since Firm Al's inception (including the tax effect), alongwith future trends.

Most of the strategic analysis was done by the VP-A with the help of assistants drawn from the PC division and the finance staff at corporate headquarters. After the June 19 meeting, the President of Firm Al was supposed to get back to Company A within 30 days, after discussing the price and the implications of being taken over with his board of directors. He did not get back to the VP-A until
July 25 (a telephone call). He hinted that Firm Al stock had appreciated in the interim and that this called for a revaluation of the financials. He also however, showed his continuing interest by asking to meet with the CEO of Company A at his winter house. He suggested that the preliminary feedback from an informal "chat" with his board members was positive but that the matter had to be brought up during Firm Al's next board meeting on September 5, 19XX. The VP-A promised to get back to him. The gist of this telephone call was recorded in a memo to the COO from the VP-A. This memo also analyzed the list of Directors at Firm Al. A "gut-feel" analysis of the Board suggested that one of the Investment Banker/Director's at Firm Al may oppose the acquisition more. This memo did not concentrate on strategic issues but dwelt largely on appraising each individual Firm Al manager at the level directly below the President. Personality traits were described in detail. The VP-A recommended that the CEO of Company A should meet with the President of Firm Al, as the "signs" looked good both from a strategic and organizational perspective.

The VP-A arranged for a follow-up meeting with Firm Al executives on August 22, 19XX to agree on the financial revaluation and to have a joint dialogue prior to the Firm Al September Board meeting. This meeting was a top-level meeting on both sides suggesting the rapid convergence of ideas and interests. It also showed the preliminary stage at which the CEO of Company A normally got involved in the pre-acquisition phase. The venue was the CEO's winter house located near Firm Al's corporate offices. The participants included the President and VP-Finance from Firm Al.
The CEO, COO, Group VP of group 1 and the VP-A represented Company A. As always, the VP-A acted as the chairperson and coordinator of the meeting. As always, financials were discussed at the top of the agenda. The price changes were discussed along with other financial considerations such as forecast of sales, NI, EPS, etc. These numbers were the ones to be presented to Firm Al's Board (however, managements' internal goals that were higher were also presented). The ultimate price, according to the President of Firm Al, was up to his Board of Directors. This was considered as a "hedge" (against making any concrete decisions) on the part of Firm Al's President.

In an evaluative memo to the COO on August 26, 19XX the VP-A suggested that attractive employment contracts would have to be devised (as a sweetener) to Firm Al's upper management. He suggested that the VP of Finance as President would help keep Firm Al strong and independent (the suggestion being that Firm Al needed to be independent to be a viable part of Company A in the future). He also suggested the need to convince Firm Al directors that Company A stock would appreciate in the future. This memo also revealed that the second Investment Banker (advising Firm Al) was pushing for Firm Al to get acquired as soon as possible by Company A. Hence, the VP-A underscored the need to accelerate the acquisition momentum in order to preempt other parties that might potentially get interested in Firm Al.

The VP-A then arranged for the CEO and COO to meet with Firm Al management in situ on September 3 and 4, 19XX. This meeting was to be followed by the presentation by Firm Al management to their Board on September 5, 19XX, in order to present Company A's interest.
The Board would then mull over the offer, debate it and finally, come up with a reply to Company A.

The VP-A's active involvement did not end at this stage. Looking ahead, with the assumption that the Board would give the green signal, in-depth studies of Firm Al had to be done with a view towards understanding how best to merge its resources with that of Company A (and also to assess how much Firm Al was actually worth). A green signal implied that Firm Al would be more forthcoming in terms of information for assessment purposes. On August 28, 19XX the VP-A wrote to the COO outlining a table that showed how the indepth study of Firm Al would be carried out. Exhibit 3-7 shows a listing of the staff involved.

The venue for each team and contacts at Firm Al were also laid out in detail. The preliminary "green signal" was obtained from Firm Al and on September 9, 19XX, the VP-A sent a memo to his boss suggesting that additional group members be sent to Firm Al to add to the body of knowledge. The accent here was to send in "operating managers" as opposed to staff because of the need to identify operating strengths and weaknesses that may aid in the post-acquisition phase. The operating managers and their staff had not been involved in any active sense (except for the Group Vice-Presidents and the PC division managers). The potential acquisition of Firm Al was starting to become an operational reality.

The group members for this stage of pre-acquisition analysis and the individuals in Exhibit 3-7 would be submitting "independent" reports that would cover assembled facts with conclusions and recommendations. They will submit these reports in confidence to
EXHIBIT 3-7

PLAYERS INVOLVED IN THE IN-DEPTH PRE-ACQUISITION STUDY OF FIRM A1

INDIVIDUALS

<table>
<thead>
<tr>
<th>INDIVIDUALS</th>
<th>STUDY VISIT DATE, SEPTEMBER, 19</th>
</tr>
</thead>
</table>

a) ACCOUNTS
- 1 MANAGEMENT CONSULTANT
- 2 AUDIT PARTNERS

b) BUSINESS ASSESSMENT
- VP-A

10, 11

16, 17, 18

10, 11

10, 11

10, 11

15, 16, 17, 18

15, 16, 17, 18

15, 16, 17, 18

10, 11

10

10

10

10

15

Source: Internal Company A File on Firm A1's Acquisition.
four individuals - the COO, the Group VP of Group 1, the VP of Corporate Development and VP-A.

At this stage, the VP of Corporate Development had become the more proactive element at Company A. The aim was to structure "the right deal" for presentation to the Company A Board of Directors, based on all of the available information and attendant analysis.

A special confidential report of the major items in the Acquisition Process was prepared for the benefit of Company A Board of Directors. The legal issues were thrashed out and finally a special meeting of shareholders was announced on November 25, 19XX. A joint proxy statement was furnished both to stockholders of Company A and Firm Al in order to solicit proxies to be used at their respective shareholder's meetings. Both meetings (at their own respective venues) were to take place on December 17, 19XX.

The terms of the merger were agreed to unequivocally by both Boards and Firm Al became part of Company A in early January thereafter. The overall duration was less than nine months, which was faster than the normal pace for an acquisition of this size (much smaller acquisitions were done by Company A in 3-6 months and the trend seems to be headed in this direction) for Company A.

The speed of the acquisition may have created problems that could have been ruled out otherwise. There were two problems that were primary to the acquisition of Firm Al. One was strategic in nature. The compatibility of Firm Al's Computer Operating Systems Application Software and the level of standardization with Company A Factory Automation Systems were hugely overstated prior to the acquisition. One reason may have been the lack of involvement
of operating managers earlier in the acquisition itself. Their involvement late in the game seemed to reflect a situation where they may have been merely endorsing decisions already taken by more senior management. This author was not able to see the content of the pre-acquisition analyses done in September, 19XX by the various operating managers.

The other problem was Firm Al management turnover during the year following the acquisition. This may have been caused partly by the fact that the speed of the acquisition left many Firm Al managers suddenly confronted with the reality of being part of a billion dollar company after having been a part of an 80 million company. Also, the prospect of facing heavy-handed corporate interference in day-to-day business affairs (though indications suggest that by this time the company was enthusiastic about the prospect of having "Autonomous subsidiaries" in the short run) may have induced several top managers to quit the company.

Both of these reasons reduced the utility of Firm Al to Company A, though it was successfully integrated into Group 1 of Company A within a couple of years after the acquisition. Exhibit 3-8 is a tabular summary of the main steps involved in the acquisition of Firm Al.

3. **THE ACQUISITION PROCESS AT COMPANY B**

a. **The Evolving Corporate Strategy**

For over 50 years Company B was basically a "Carbon Black" manufacturer with very limited growth prospects and in a cyclical industry with an overreliance on the automobile and tire industries
**EXHIBIT 3-8**

**KEY EVENTS IN THE ACQUISITION OF FIRM A1 BY COMPANY A**

<table>
<thead>
<tr>
<th>Prelim. Phone Contact</th>
<th>Initial Contact @ Firm A1 by VP-A</th>
<th>Return Visit by Firm Al President to PC Division</th>
<th>First Meeting Between CEO &amp; President of Firm Al</th>
<th>Visit by CEO to Firm Al</th>
<th>Firm Al Board Give &quot;Green Signal&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>May 7, 19XX</td>
<td>April 7, 19XX</td>
<td>June 19, 19XX</td>
<td>Aug. 22, 19XX</td>
<td>Sept. 3, 4, 19XX</td>
<td>Sept. 5, 19XX</td>
</tr>
</tbody>
</table>

**In-Depth, On-Site Analysis of Firm A1 by Company A**

<table>
<thead>
<tr>
<th>Staff &amp; Line Experts</th>
<th>Shareholders of Both Companies Approve Acquisition</th>
<th>Firm Al Becomes &quot;Stand-Alone&quot; Subsidiary of Company A</th>
<th>Firm Al Becomes &quot;Integrated&quot; Into Group 1 of Company A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sept. 9, 15, 19XX</td>
<td>Nov. 25, 19XX</td>
<td>Jan., (19XX+1)</td>
<td>Jan. (19XX+3)</td>
</tr>
</tbody>
</table>
as buyers. Its main strength was that it was one of the lowest cost producers in the industry. Since 1969 the company has diversified through acquisitions into speciality metals and energy (mainly gas) businesses which in 1980 accounted for over 60% of total revenues. Carbon Black and Chemicals accounted for about a third of total revenues and 25% of the overall profits. However, it was recognized around the beginning of 1983 that there were no "cutting edge" growth technologies within the Company, even in the speciality metals group. The CEO was determined to change the stance of the company away from mature industries. A "special materials program", almost like a fourth group, was started separate from mainstream operations. Headed by a Vice-President for Acquisitions it initially had a was fairly fluid charter. He gathered a research team under a Ph.D in Materials Science and asked them to look into "growing industrial markets". The final technologies and materials program to be pursued had to:

- be part of a growing demand.
- springboard of in-house expertise in materials science.
- exploit synergies with in-house product/process knowledge that was part of on-going operations and fields of interest.

The support and emotional style of the CEO was fully behind this venture. The "traditions" of the company excluded it from going after biotechnology or computer-related companies.

According to the Senior-VP of Company B, also a member of this new group, "....you want to know what you are doing. If you don't know how to manage the (acquired) company then don't buy it. If good
management comes with it, then good. The point is that senior management at Company B should be able to pick a good Division President. Sometimes (the acquired Company's Senior Management) aren't excluded when they should have been excluded."

The strategy at Company B has been heavily "top-driven". External consultants from a reputed East Cost firm helped identify the external growth areas in Technical Ceramics, after internal groups within Company B had exhaustively explored R&D and other internal developmental methodologies and rejected them as viable growth prospects.

Under Technical Ceramics there was the option of going either into Structural Ceramics or Electronic materials. The former had fairly poor markets, heavy competition from entrenched players and long lead times before any operation could prove profitable. Hence, Company B fell back into diversifying through acquisitions in the area of Electronic Ceramics.

In sum, Electronic Ceramics would form the basis of Company B's future growth through acquisitions.

b. The General Process

One of the disadvantages of the study of the Acquisition Process at Company B was that the individuals concerned would speak only in generalities and were unwilling to speak about any acquisition in depth. The area of Electronic Ceramics was an entirely new area with few established players but many, relatively unknown, companies were beginning to emerge. The Acquisition Process at Company B from beginning to the end can be classified as "random"
as opposed to a structured, formally developed methodology as in the case of Company A. This not to say that Company B did not or does not know what it is doing. It means that "...there are no standards to the game." 15

The process is initiated at the top (CEO level), with the work being privy to a handful of participants at a very senior level at Company B.

The search is started with the list of companies in the American Society of Ceramics, coupled with D&B reports 16 in order to generate companies of interest. No specific cut-off screens are preestablished and each company is appraised on a one-on-one basis. Strategic issues for screening include - technological fit, management potential (minor), age of the company, etc.

A smaller list is generated as a number of events precipitate a further narrowing down of the choices:

- External consultants are brought in to identify specific companies.
- Staff work is carried on simultaneously to assess and either accept or reject companies in the list.

Inputs of the CEO himself, along with those from members of the R&D staff and others in the acquisition staff are pooled together.

Though the CEO has a great influence on ultimate candidate selection, the process of narrowing the number down to 2 or 3 candidates is very much left to the members of the Special Materials Program. The stage at which marketing, finance and other disciplines are brought in for their specific expertise is usually when the list
is down to five or ten companies. In-depth analysis is being done earlier and earlier in the process as the Special Materials Program expands in scope. This is because the initial universe of probable companies has been identified and the incremental list of companies is much smaller. The reliability of available information is thoroughly questioned and the recommendations are researched fully before being presented to the CEO.

The initial contact varies from cold calls for a meeting to recommendations from mutually acceptable sources. The key from the Senior V.P.'s point-of-view is that "...you home in on who is going to do the negotiations for you and their guy...".

One of the problems encountered by Company B is the paucity of information available from smaller companies that they traditionally go after. Most times the initial contact helps Company B obtain the selling company's Market and Business Plan, for a more exhaustive (in-house) analysis of the selling company.

Company B uses financials as the base for its negotiation strategy but believes that if an acquisition candidate has passed the various hurdles to the point where the parties are "talking", then it is not so much the price but the "package" offered that becomes important. For instance, apart from paying fair market value for the physical assets being considered, many entrepreneurs selling their companies want a medium-term "consulting" contract. This is usually written into the package. The key according to the Senior V.P. is "....to find out what he (the seller) really wants".

Company B's acquisition strategy is still in the learning process and consequently there is the in-built realization in all
the acquisition team-members that their strategy must be fluid and not be "too idealistic". The staff is kept lean and expertise (both internal and external) are brought in as needed.

The attitudes of the rest of the Company B does not affect the acquisition decision-making. Since Company B approaches the candidate with the expectation that personnel changes will be made during the consolidation, almost all aspects of the process are kept secret. Company B believes for the most part that talent has to be infused into the companies that it acquires. Company B also believes that its decisions are not affected by its shareholders at this stage.

After the indepth analysis of the selling Company and alongwith the negotiations between the two parties, Company B also sends operating and other staff to research in situ the various aspects of the selling Company's business such as facilities, manufacturing, sales, etc. The typical duration is a 1-2 day visit by each functional individual or team. Qualitative, independent reports are submitted by each team member, and these are factored into the recommendations to the CEO for every company that the CEO has approved as a potential acquisition candidate. "Gut-feel" forms a large part of the recommendations and assessments at this stage.

Company B's perspective on smaller acquisitions has been to utilize (Company B) operating managers in various disciplines for the overall acquisition. The larger acquisitions tend to be driven largely by financial considerations and deal structuring (Investment Bankers being key).
On a few occasions, if the scope of the acquisition is very large (financially) then "joint-venture" agreements are entered into with the selling party.

Typically, the use of a third-party is dependent on the situation concerned. An external consultant was used in the acquisition of two small electronics materials firms. The consultant served "to introduce" the two parties and bring them together. Such an approach is rare for Company B. On another occasion, a common Director on the Board of Company B and another company suggested the latter's acquisition by Company B. The preliminaries in terms of understanding the other management were dispensed with and this company was acquired within a week of the initiation, with only one plant visit and a breakfast meeting. These and other instances indicate that Company B may be in a hurry to acquire and get its Special Materials Program running viably as quickly as possible.

The "lack of proper homework" (unlike Company A) is manifest in the acquisition of certain companies and the failure to acquire others in the areas of Magnetic oxides, Gallium-Arsenide and Semi-conductors. Exhaustive homework prevailed in successful acquisitions in epitaxial devices and other joint-ventures.

Typical motivations of the seller that were exploited by Company B in the negotiations included:

- a desire to cash in
- the lack of resources to meet the capital requirements of an expanding business.
- a "distress" sale
- the desire to participate in the industry (backward or forward integration).

A key differentiating factor in Company B's strategy is the use of outside technical consultants from academia, as opposed to strictly industrial consultants. The technological drive and the need to be at the forefront of all activity is the key behind utilizing academics to help focus the search for suitable acquisition candidates. The use of investment bankers is very limited.

Time is not a critical variable though there is the undercurrent that the Special Materials Program has to be of a certain size by a certain time frame. However, the indications are that Company B's acquisition thrust accelerates very rapidly after the initial contact is made and expectations of consummating the acquisition are positively reinforcing.

4. **LIMITATIONS OF THE DATA**

The main thrust in this chapter was a descriptive report of the Acquisition Process at Company A and Company B. The primary shortcoming of the process description of Company B was the reluctance of senior management to "open-up fully" on specific acquisitions. Bits and pieces of information were provided during the course of the interviews themselves. The other major shortcoming was the inability to get operating line executives (both at Company A and Company B) to voice their perspectives on the Acquisition Process thereby diluting somewhat the strength of the findings.

The major strength was that key individuals associated with almost every recent acquisition of both companies were interviewed.
The reports are, therefore, essentially correct in generalities and most of the specifics; however, they do not have the input of key line executives most intimately impacted by the acquisition decision.

The final chapter has several purposes in mind, central to which is the analysis of information laid out in this chapter using the framework proposed in Chapter 2 and the available evidence in Chapter 1. Further research directions are also hinted that are vitally needed to better understand the process perspective in acquisitions.
CHAPTER 3

FOOTNOTES

2. Ibid.
3. Adapted from a 1979 profile of Company A's venture capital involvement in *Venture Magazine*.
5. Ibid
7. Footnote (3), Ibid.
8. From a 1980 *Business Week* article.
9. *Business Week* and *Electronic News* articles in 1984 on the selection of a new President at Company A.
10. Joint Proxy Statement and Prospectus on the impending acquisition of Firm Al by Company A on November 25, 19XX.
11. Discussion with the Vice-President of Advanced Planning at Company A.
13. Interview with the Senior Vice-President of Company B.
14. Interviews with the Senior Vice-President and the in-house consultant at Company B.
15. Interview with in-house consultant at Company B.
16. Dun and Bradstreet - Company reports.
17. Interview with in-house consultant at Company B.
18. Ibid.
CHAPTER 4
ANALYSIS AND GENERALIZATIONS

1. INTRODUCTION

This chapter analyzes the Acquisition Process at Companies A and B. Similarities and differences are explored. The general questions raised in Chapter 2 along with the available research evidence in Chapter 1 are used to study the impediments in the process at both Companies.

While there is no specific model to work with, the aim of this chapter is to look for patterns of generality given the field data. Commonalities between the field data and available information on the Acquisition Process are construed as the more generalizable aspects. Some of the differences between Companies A and B are minor, others are quite obvious. It is understood however, that a sample of only two companies is an obvious limitation to the conclusions that can be drawn.

Finally, to have a firm handle on the Acquisition Process across corporations, the chapter suggests the need for in-depth study of many more acquisitive companies. The overall message is that apart from a strategic and organizational bias, acquisitive companies differ in their "process bias" and that they understand in varying degrees what the Process entails in an a-priori sense.
2. **ANALYSIS OF THE PROCESS IN COMPANIES A AND B**

a. **A Note on Corporate Goals**

Well-articulated objectives or goals exist to varying extents in any acquisition decision process and this is manifest in both Companies A and B. According to Drucker,\(^1\) "...objectives are needed in every area where performance and results directly and vitally affect the survival and prosperity of the business". Both Company A and B have had an evolving corporate strategy - in the case of A a strategic redirection over a 5-10 year period; in the case of B a relatively recent 2 year transition period. However, while corporate goals are firm in the Company A psyche, they have yet to permeate into Company B's organization. The conclusion is that an acquisitive company may help itself by defining its goals clearly in an a-priori sense.

b. **The Role of the CEO**

There are very strong and aggressive CEOs in both organizations. In terms of Table 1-2 on page 13, the operating mode for the CEOs can be construed as "active". However, there is a difference in the "delegation" of responsibility. There is no formal Corporate Development Department in Company B. The Special Materials program has several senior executives, each of whom works on acquisitions alongside his other responsibilities. A full time in-house consultant assists in seeking acquisition candidates. The CEO has his own acquisition candidate database and list of preferred criteria. The end result appears to be a "political consensus" about which acquisition candidate to actively pursue. Only such "suitable"
candidates come up to the CEO for approval and he himself cross-references them with his own notions and ideas.

In contrast, the role of the VP-A is unique at Company A. The acquisition decisions are taken in a delegated mode and the CEO "steps in" at about the time the acquisition candidate is "serious" about selling the company.

In both cases, the CEOs have made a strong commitment to the program and closely track the program to ensure that it is in tune with their overall strategy. This is espoused by Mace and Montgomery who suggest that, "...(even though staff and line groups have significant contributions to make) the leadership and drive must come from the chief operating man or his representative with his support".

The role of the Corporate Board (and Group Boards) in Company A appear to be stronger than that of Company B. The independent commitment of the Board is crucial to the success of any acquisition mode.

By Power's definition of decision-process categories (pages 16-17 of this thesis) it can be said that both CEOs and their staffs follow a rational, analytic decision process. Impulsive, presold or indecisive decision-making seems unlikely to aid success given the direction of the two companies.

c. A Graphical Construct of the Players Involved

Exhibit 4-1 compares and contrasts the main players involved in the Acquisition Process. Contrary to popular opinion (as Chapter 1 suggests), the role of investment bankers and external consultants
## EXHIBIT 4-1

IN VolVEMENT OF KEY ACTORS AT DIFFERENT STAGES OF THE ACQUISITION PROCESS

<table>
<thead>
<tr>
<th>PROCESS PARTICIPANTS</th>
<th>IDEA DEVELOPMENT</th>
<th>STRATEGIC ANALYSIS</th>
<th>NEGOTIATIONS AND AGREEMENT</th>
<th>ORGANIZATIONAL ANALYSIS</th>
<th>INTEGRATION</th>
<th>OPERATIONS AS ONE FIRM</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>COMPANY A</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CEO</td>
<td>x</td>
<td></td>
<td>x</td>
<td>x(3)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>VP-ADVANCED PLANNING</td>
<td>x</td>
<td>x</td>
<td>x(1)</td>
<td>x(1)</td>
<td>x(1)</td>
<td></td>
</tr>
<tr>
<td>GROUP-VP</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x(3)</td>
<td>x(2)</td>
<td></td>
</tr>
<tr>
<td>GROUP LINE MANAGEMENT</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GROUP &amp; CORP. STAFF</td>
<td>x</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EXTERNAL CONSULTANTS</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>INVESTMENT BANKERS</td>
<td>x(3)</td>
<td></td>
<td>x(3)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>VENTURE CAPITAL FIRMS</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

ACQUISITION PROCESS STARTS ➔ ACQUISITION PROCESS ENDS

| **COMPANY B**        |                  |                     |                             |                         |              |                        |
| CEO                  | x                | x                   | x                           |                         |              |                        |
| IN-HOUSE CONSULTANT  | x                | x                   | x(3)                        |                         |              |                        |
| SENIOR MANAGEMENT IN SPECIAL MATERIALS PROGRAM | x | x | x | x | x | |
| LINE MANAGEMENT      |                  |                     | x                           | x                       | x            |                        |
| CORPORATE STAFF      | x                | x                   |                             |                         |              |                        |
| EXTERNAL CONSULTANTS |                  |                     |                             |                         |              |                        |
| INVESTMENT BANKS     |                  |                     | x(3)                        |                         |              |                        |
| VENTURE CAPITAL FIRMS (NA) |           |                     |                             |                         |              |                        |

(NA) - Not Applicable; x - Shows Involvement of Player

(1) Advisory Role; (2) Acquired Company Normally Stands Alone; (3) Very Seldom at least in the short-term.
are minimal or even eschewed by both companies, suggesting that Mergers and Acquisitions may well proceed without their aid (at all times and in all instances). This exhibit uses the framework suggested by Jemison and Sitkin.\(^5\)

One of the gaps in both companies is the lack of participation of operating line management earlier in the Acquisition Process, though Company B seemed to show a better "track-record" in this respect. Their involvement seems to be solely to help analyze the acquired company after successful negotiations have been conducted. In the case of Firm A1, a number of compatibility problems were discovered after it became a part of Company A due, perhaps, to the fact that operating managers were not involved earlier in the process. The general lesson here appears to be that even though acquisitions are very secretive processes privy to only the very top management and their staff, the inclusion of key operating managers at the time strategic analysis is taking place or key acquisition ideas are being developed may prevent operational and integration problems later.

d. Process-Based Impediments

The four process-based impediments suggested by Jemison and Sitkin\(^6\) were defined in Chapter 1. Their sphere of influence during the Acquisition Process is shown in Exhibit 4-2. The specific impediments in the process at Companies A and B are shown in this exhibit.

Generally, the amount of activity segmentation in Company A is not much of a problem because of the unique role of the VP-A as an
### EXHIBIT 4-2

**OCCURRENCE OF IMPEDIMENTS TO ACQUISITION SUCCESS**

<table>
<thead>
<tr>
<th></th>
<th>IDEA DEVELOPMENT</th>
<th>ANALYSIS</th>
<th>NEGOTIATIONS</th>
<th>AGREEMENT</th>
<th>INTEGRATION</th>
<th>OPERATION AS &quot;ONE&quot; FIRM</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Activity Segmentation</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Escalating Momentum</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Expectational Ambiguity</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Management System's Misapplication</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- Represents the general sphere of influence of each process impediment during the Acquisition Process.

A - Represents Company A Process Impediment.

B - Represents Company B Process Impediment.

"initiator, expediter and integrator". The absence of any one such specific individual in Company B may be a cause for concern (even here some senior person in the Special Materials program takes responsibility for the acquisition at least through the strategic analysis phase). The problem with Company B is that various senior personnel in the Special Materials Program are working on different acquisition modes thereby implicitly thrusting the integrator's role on the CEO, for which he may not have the time since he too is thinking acquisition strategy for Company B as a whole. It is true that both companies value "strategic fit" stronger than "organizational fit", though Company A in its quest for "technology and people" may be giving (relative to Company B) a lot of weight to organizational issues also. Company B looks towards putting its own people into managing acquired companies and hence "strategic fit" issues reign paramount. The absence of an individual such as the VP-A (having a multi-disciplinary, global perspective) may cause the wrong organization to be acquired by Company B for the right reasons. One advantage of the limited use of external consultants and investment bankers is that organizational issues may be given more prominence than otherwise possible. This is because these external players tend to concentrate mostly on "strategic fit" issues.

Escalating Momentum of the Acquisition Process is not affected by any of the conventional reasons such as the presence of fee-based investment bankers, commitment of the CEO to complete every deal that is started, etc. Rather the problem here lies in the response to the Corporate Strategy in both cases. Company A's strategic redirection has made it "acquire for the sake of acquiring" to a certain extent,
as fast as possible (alongwith divestitures of mature businesses). This has resulted in a set of non-integrated "stand-alone" businesses more in keeping with a conglomerate's identity. Company B's strategy of pulling in businesses into its Special Materials Program has been more cautious; however, the lack of suitable direction (in terms of what it wants specifically) may be making this company acquire faster than it can assimilate - certain deals for instance, were consummated in a matter of days without an adequate "Process" being put through the paces. Also, Company B has been burnt in the past because it did not move fast enough in one of its acquisitions and a selling company used its bid "as a prod" to get a third party to move in and acquire it. Hence, escalating momentum may be an impediment to the process in both Companies.

Not much was revealed about the negotiation strategy during the meetings between the acquiring company (A or B) and the selling company. It can be conjectured that Expectational Ambiguity should be less of a problem for Company A because it expects to run the newly acquired Company more as a "stand-alone" during the short-term after the acquisition. Company B wishing to integrate at once after the acquisition (and possibly displace acquired top management) may have "more to hide" during the negotiations, thereby setting up a potential problem for the future.

One of the negatives with Company A during the first few years of its strategic redirection was the heavy-handed application of its systems on the Companies it acquired. As mentioned before this form of Management Systems Misapplication resulted in poor integration and loss of key managers thereby diluting the efficiency of the acquisi-
tions. Over time, once this registered in the CEO's psyche and the collective Company A mentality, the accent changed to keeping acquisitions at arm's length during the short-term and allowing them to function on their own. In point-of-fact, the various Groups themselves are different from each other in terms of Management Systems.

There is every indication that Company B may not understand this well enough and that managerial arrogance may be a chronic problem. The presumptions of "subsidiary ineffectiveness" may well be prevalent here, even if the unique capabilities of the acquired company is apparent. The absence of key line operating managers in the pre-acquisition phase compounds the problem because the "perceived" strengths and/or shortcomings of the acquired company cannot be better evaluated and understood earlier in the process.

In general, it appears as though both Company A and B may not be "aware" of process-based impediments in general. Consequently, there are no mechanisms for either company to ask mid-way through the process:

Are we going too fast? or have we thought out the effect the imposition of our systems will have on the firm that we are contemplating acquiring? or is our negotiating position unambiguous to the extent that it will not create major "headaches" later? or are too many people involved in the Acquisition Process? Is it being coordinated well?

A final point concerns the "you're damned if you do and you're damned if you don't" scenario surrounding Company A's acquisition
strategy. The stand-alone philosophy is good but eventually the company wishes to have integrated businesses either into the Factory Automation area or Defense. However, they do not have a plan for integration in place for fear of alienating subsidiary divisions and losing key personnel in the short-term.

e. Other "Framework" Comparisons

It is clear that the psychological underpinnings of the acquisition drive in Company A and B lay in the "fear of being in stagnant, mature businesses". Both strategic redirections came from a need to change fundamentally or to become caught in rapid obsolescence and declining margins.

Another similarity in the two processes lies in the choice of the physical location as a factor in the process dynamics between the acquiring firm and the selling company (for both Companies A and B). This is summarized in Exhibit 4-3. The sequence is crucial to the actual "love-making" and the development of rapport between the interested parties.

Timely signals according to both Companies A & B, are very crucial to prevent misunderstandings. For example, if the CEO of the selling company suggests that he will call on a certain day and does not (without explanation), then there is a good chance that he is reconsidering or there is another interested party waiting in the wings. Timely Communication via memos, telephone calls and letters are considered strong motivations and "enhancers" of positive understanding between the parties involved. Both Companies appear to understand this fact. The VP-A of Company A appeared to be
EXHIBIT 4-3

TYPICAL DECISION-MAKING "LOCATIONS"

VISIT TO SELLING COMPANY BY ACQUIRING COMPANY STAFF EXPERTS

RETURN VISIT BY THE PRESIDENT/STAFF TO ACQUIRING COMPANY'S PREMISES; USUALLY TO SEE "THE ETHIC & ATTITUDES IN THE ACQUIRING COMPANY."

INITIAL CONTACT AT SELLING PREMISES USUALLY INITIATED BY ACQUIRING COMPANY STAFF

ACQUISITION IDEA DEVELOPMENT

VISIT BACK BY SELLING COMPANY CEO TO MEET ACQUIRING COMPANY CEO

CONSUMMATION OF DEAL IN ACQUIRING COMPANY OR NEUTRAL VENUE

FURTHER VISITS TO ACQUIRED COMPANY BY LINE/STAFF EXPERTS TO STUDY ORGANIZATIONAL PRODUCT COMPATIBILITY IN THE ACQUIRING FIRM
especially sensitive to intra-company and inter-company correspondence; His preferred approach was "verbal" communication with the selling company.

It was difficult to judge the personal motivations underlying the actions of the acquisition staff. No clear-cut need for personal advancement within the company was seen. The ages of the senior acquisition staff varied between 55-65. Personal risk issues seemed minimal.

Neither company seemed to have a preconceived process plan-of-action, though the process itself was formal in Company A and not-so-formal in Company B.

Both companies endorsed the idea that the process should be kept secret for fear of publicity (which would affect the stock price of a public company) or sending the wrong signals to personnel in the other company. Intra-company attitudes outside of upper management, were considered nebulous and not important enough to affect the acquisition process. In the words of the Senior VP of Company B, "If they don't like it, they can leave....".

3. CONCLUSIONS AND FUTURE DIRECTIONS

Admittedly the sample size of two companies does not lend itself very well for generalizations on the Acquisition Process. There are however, several process-based issues in the theory that are reinforced by the findings in Companies A and B. That the process may be fraught with impediments cannot be questioned. The only question open to doubt is whether we can automatically predict acquisition success or failure from the understanding of the process
variables. This is difficult because of the lack of methods that break up the relative impacts of strategic, organizational and process variables on an acquisition's outcome. Also, not all of the "process" questions and issues raised in Chapter two were necessarily explored or answered in this study, though most of them came up in the description and subsequent analysis.

One of the future requirements is that more research needs to be done on several companies to build up the "descriptive" literature. This will help to make the prescriptive literature more useful, as "generalizations" multiply due to the larger body of in-depth evidence.

This study can be strongly enhanced, therefore, by a concerted effort to study the Acquisition Process in more companies. The end-result may be a better understanding of whether or not strategic fit and organizational fit issues have to be complemented by a "process bias", for the acquisition to qualify as a success. A firm handle on process variables and their relative (perhaps quantifiable) impacts would go a long-way in reducing the "residual" uncertainty that prevails in acquisition decision-making.
CHAPTER 4

FOOTNOTES


7. Jemison and Sitkin, Footnote No. (5), Ibid.
<table>
<thead>
<tr>
<th>#</th>
<th>Author(s)</th>
<th>Title</th>
<th>Publisher/Source</th>
</tr>
</thead>
</table>


