

ACQUISITION STRATEGIES FOR
COMPUTER SERVICES COMPANIES

INPUT

ABOUT INPUT

THE COMPANY

INPUT provides planning information, analysis, and recommendations to managers and executives in the information processing industries. Through market research, technology forecasting, and competitive analysis, INPUT supports client management in making informed decisions. Continuing services are provided to users and vendors of computers, communications, and office products and services.

The company carries out in-depth research. Clients receive access to data on a continuous basis.

Many of INPUT's products have nearly 20 years of specialized senior management marketing, or planning, enables INPUT to handle complex business.

Formed in 1974, INPUT is a leading international firm. Clients include the largest and most prominent companies.

UNITED STATES, West Coast
2471 East Bayshore Blvd.
Suite 600
Palo Alto, California 94303
(415) 493-1600
Telex 171407

UNITED STATES, East Coast
Park 80 Plaza West-1
Saddle Brook, New Jersey 07662
(201) 368-9471

UNITED KINGDOM

gh Road

M
ACQ

Service Company, Ltd.
No. 12-7 Kita Aoyama
Ku

7-9 Merriwa Street
rdon N.S.W. 2072

INPUT LIBRARY
CIRCULATION ONLY

00015

ACQUISITION STRATEGIES FOR
COMPUTER SERVICES COMPANIES

IMPACT REPORT #12

MARCH 1979

INPUT LIBRARY

Digitized by the Internet Archive
in 2015

https://archive.org/details/acquisitionstratunse_0

ACQUISITION STRATEGIES FOR COMPUTER SERVICES COMPANIES

TABLE OF CONTENTS

	<u>Page</u>
I INTRODUCTION	1
II EXECUTIVE SUMMARY	3
A. Acquisition Trends	3
B. Limits To Acquisitions	6
C. Impact Of Acquisitions	7
D. Acquisition Program Characteristics	9
E. Acquisition Targets And Methods	12
F. Acquired Company Considerations	14
G. Recommendations	16
III IMPACT OF ACQUISITIONS ON THE COMPUTER SERVICES INDUSTRY	19
A. Historical Assessment	19
B. Effect Of Acquisitions On Market Share	21
C. Impact Of Acquisitions On Competition	25
D. Management Strategies	27
E. Acquisition Trends	28
F. Limits To Acquisitions	30
G. Nature Of Acquisitions	32
IV ACQUISITIONS - THE ACQUIROR'S VIEWPOINT	35
A. Survey Of Acquirors	35
B. Nature Of Acquisition Process	37
C. Form Of Acquisition Consideration	42
D. Finding Acquisitions	44
E. The Acquisition Process	47
F. Methods Of Acquisition Evaluation	54
G. Respondents' Current Acquisition Interests	58
H. Respondents' Evaluation Of Competition In The Acquisition Field	61
I. Respondents' Views Of Acquisition Trends	61
J. Post-Acquisition Implementation	64
K. Respondents' Opinions On The Acquisition Process	66
V ACQUISITIONS - THE POTENTIAL ACQUIREE'S VIEWPOINT	71
A. Survey Of Potential Acquisitions	71
B. Attitudes Of Respondents Toward Acquisition	73
C. Attractiveness Of Acquirors	75
D. Acquisition Criteria	86
E. Reasons For Being Acquired	92

	<u>Page</u>
VI ACQUISITIONS - THE ACQUIRED COMPANY'S VIEWPOINT	95
A. Reasons For Being Acquired	95
B. Decision Process	96
1. Preliminary Screening	96
2. Rating Of Factors In An Acquisition	98
3. Length And Cost Of The Acquisition Process	100
4. Company Valuation Techniques	103
C. Structuring Of The Agreement	103
1. Payment Terms	103
2. The Integration Process	107
D. Acquired Company's View After The Acquisition	107
E. Respondents' Views On Acquisitions In The Computer Services Industry	109
1. Rate And Impact	109
2. Nature Of Acquisition Programs	110
APPENDIX A: DEFINITIONS	111
APPENDIX B: SURVEY QUESTIONNAIRES	115
Acquired	115
Acquiror	120
Acquiree	129

ACQUISITION STRATEGIES FOR COMPUTER SERVICES COMPANIES

LIST OF EXHIBITS

			<u>Page</u>
II	-1	Impact Of Growth And Acquisitions On The Structure Of The Computer Services Industry, 1979-1983	4
	-2	Revenues Of Acquired Companies Per Year Compared To Incremental Industry Growth	5
III	-1	Growth Of Major Public Computer Services Companies, 1970-1978	22
	-2	Impact Of Acquisitions On Tymshare's Mix Of Revenues	24
	-3	Computer Services Company Formation Trends	35
IV	-1	Respondents' Numbers Of Acquisition Staff	39
	-2	Acquisitions Investigated By Respondents	41
	-3	Respondents' Comments On Use Of Finders And Brokers	45
	-4	Respondents' Estimates Of Length Of Acquisition Process	48
	-5	Stage Of Acquisition Process Respondents' Departments Are Involved	50
	-6	Respondents' Priority Ratings Of Acquisition Evaluation Factors	55
	-7	Respondents' Preferences For Size Of Acquisition	59
	-8	Respondents' Preferences For Processing Services Companies	60
	-9	Competitors In The Acquisition Field	62
V	-1	Characteristics Of Respondents Who Are Potential Acquisitions	72
	-2	Respondents' Attitudes To Acquisition In Future	74
	-3	Respondents' Preferences For Types Of Acquiring Organization	76
	-4	Software Respondents' First Preferences For Type Of Acquiror	80
	-5	Processing Services Respondents' First Preferences For Type Of Acquiror	81
	-6	Respondents' Methods Of Valuing Their Companies	87
	-7	Respondents' Valuation Factors	88
	-8	Respondents' Ranking Of Acquirors' Characteristics	90
	-9	Respondents' Preferences For Method Of Acquisition	91
	-10	Respondents' Reasons For Being Acquired	93

	<u>Page</u>	
VI -1	Number Of Potential Acquiring Companies Considered By Respondents	97
-2	Respondents' Ratings Of Acquisition Factors	99
-3	Respondents' Reported Length Of Acquisition Process	101
-4	Respondents' Costs Of The Acquisition Process	102
-5	Respondents' Valuation Methods Used	104
-6	Relationship Of Acquisition Factors, Basis Of Acquisition, And Executive Retention	106
-7	Respondents' Degree Of Integration	108

I INTRODUCTION

I INTRODUCTION

- This report is produced by INPUT as part of the Market Analysis Service and analyzes the acquisition process in the computer services industry.
- This topic was selected because of very high client interest. The acquisition process is important to non-participants as well as participants because of its competitive impact.
- The purpose of the study was to analyze the reasons for companies making acquisitions in the computer services industry and to provide information on the perceptions relative to acquisitions to the acquirors, acquirees and acquisition prospects.
- The information presented shows differences in perception among the parties involved. The report identifies many of the characteristics necessary to execute an effective acquisition program. From the point of view of the prospective acquisition, it provides information on what acquirors are looking for.
- Research for the study consisted of over 20 telephone interviews and almost 30 responses to a mail questionnaire:
 - Ten interviews were held with executives of companies that have been acquired.

- Completed mail questionnaires were obtained from 27 companies which were acquisition prospects, although most of them were not actively seeking acquisition.
- The questionnaire forms used are in Appendix B.
- Interviews were conducted primarily in December 1978 and January 1979.
- Definitions of computer services industry categories are presented in Appendix A.
- Inquiries and comments on the information presented are invited from clients.

II EXECUTIVE SUMMARY



II EXECUTIVE SUMMARY

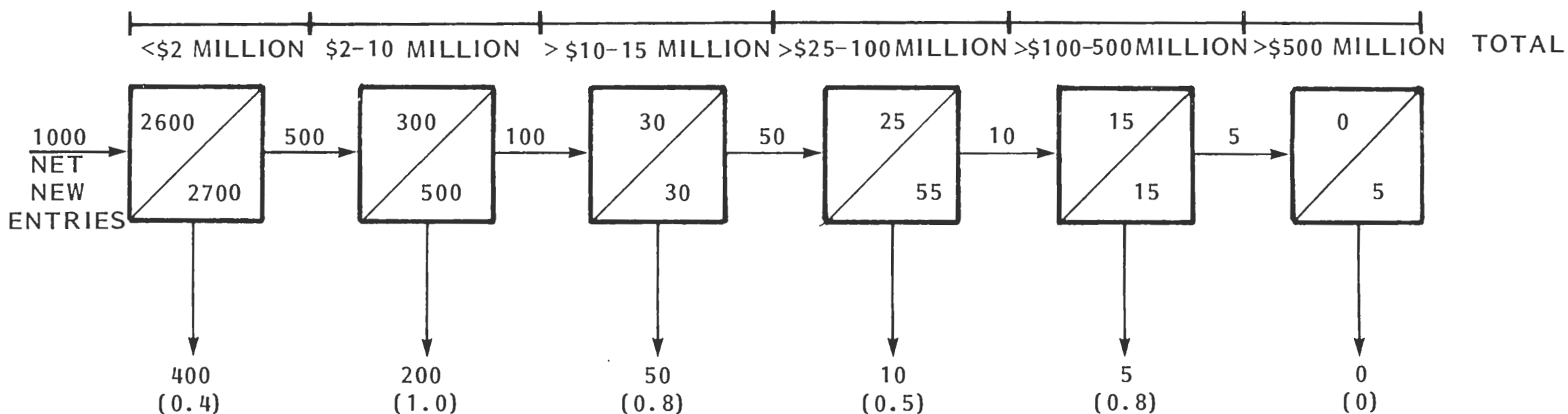
A. ACQUISITION TRENDS

- The number of acquisition activities per year in the computer services industry will increase slightly from about 100 per year in 1979 to 150 per year in 1983.
 - Total number of acquisitions in this period will be approximately 700, as shown in Exhibit II-1.
 - Cumulative revenues of these acquired companies at their points of acquisition will be \$3.5 billion.
 - These companies will cumulatively account for over \$4.5 billion or 30% of industry revenues in 1983.
 - Average size of acquisitions will increase from \$2 million or \$3 million in 1979, to over \$6 million by 1983.
 - The impact of acquisitions relative to industry growth is shown graphically on Exhibit II-2. Acquisitions are clearly expected to be increasingly significant.

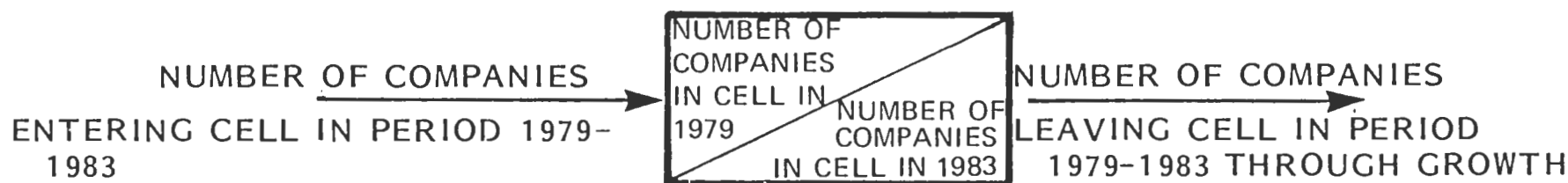
- The number of major, active acquirors will increase from about 20 now, to about 30 by 1983.

EXHIBIT II-1
 IMPACT OF GROWTH AND ACQUISITIONS ON THE STRUCTURE
 OF THE COMPUTER SERVICES INDUSTRY, 1979-1983

NUMBER COMPANIES BY ANNUAL U.S. COMPUTER SERVICES REVENUES IN \$ MILLIONS



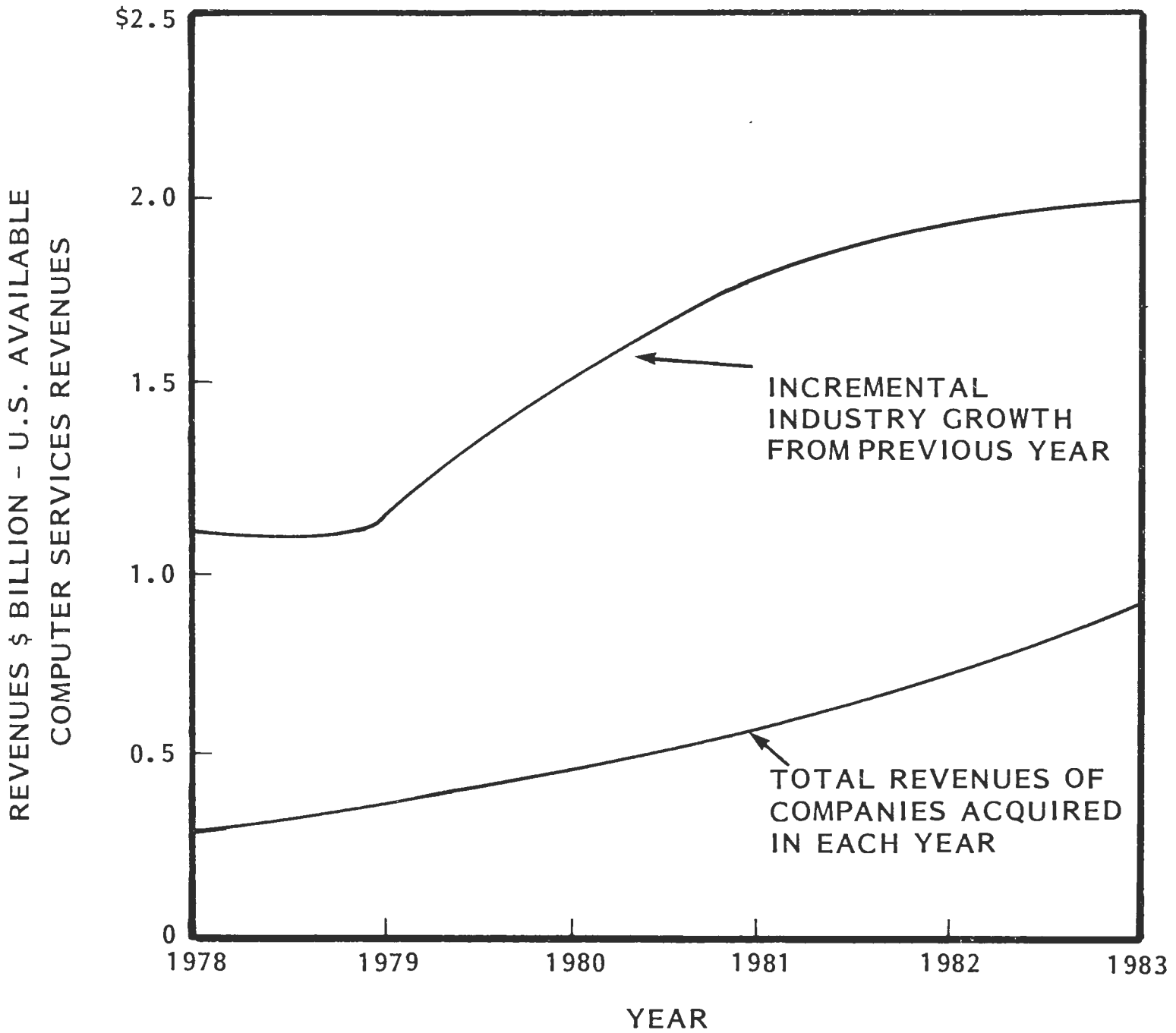
LEGEND



NUMBER OF COMPANIES LEAVING CELL IN PERIOD 1979-1983 THROUGH ACQUISITION
 (AGGREGATE ANNUAL REVENUES OF THESE COMPANIES IN THEIR YEAR OF ACQUISITION IN \$ BILLIONS)

EXHIBIT II-2

REVENUES OF ACQUIRED COMPANIES PER YEAR COMPARED TO
INCREMENTAL INDUSTRY GROWTH



- During this period another 10 to 20 active acquirors will themselves be acquired.
- Average number of acquisitions per company will remain about three per year, with a few companies achieving 10 or more acquisitions in some years.
- In order for leading companies to retain their market share ranking, they must plan to grow at 25% per year from internal growth and acquisitions.

B. LIMITS TO ACQUISITIONS

- The most immediate limiting factor is the unavailability of skilled acquisition staffs and a lack of sound planning for acquisition and integration:
 - Many companies look on acquisitions as an art rather than a discipline.
 - Failure to effectively integrate acquisitions limits the acquisition potential of a company because of the concomitant drains on management time.
- Availability of funds to make acquisitions is a limiting factor but it is not as severe as in other industries:
 - Many of the acquiring companies, such as oil and financial services companies, have plenty of cash available.
 - INPUT expects the stock prices of public computer services companies to out-perform the market, so that acquisitions for stock will still be viable, although less common than in the past.

- Computer services companies themselves are excellent cash generators and will use cash for acquisitions.
- Tighter control and higher costs of credit will limit borrowing for acquisitions.
- In the long term, government regulation and legislation is the major limiting factor on major computer services acquisitions:
 - Changes in these areas will take five to seven years to implement.
 - In the meantime, taxation and accounting rules changes will be used as inhibiting tools by government.
 - The size of the computer services industry and its participants will cause acquisition activities in it to increasingly come under scrutiny from the FTC and Justice Department.
 - A problem related to this is that individual computer services sub markets may be used in civilian governmental antitrust or restraint of trade activities. One civil action of this nature is already in process.

C. IMPACT OF ACQUISITIONS

- INPUT believes that effective acquisition programs by leading companies are necessary for the computer services industry to achieve its projected growth levels.
 - Resources of large corporations are increasingly needed for a product or service to reach its full market potential.
 - Development costs are increasing, as are time constraints.

- Acquisitions significantly change a company's competitive position.
 - The largest independent computer services company in the world, Automatic Data Processing, Inc., has used an aggressive acquisitions policy in achieving its current position.
 - "Line-of-Business" characteristics of a company are changed, in some cases dramatically. Informatics, for example, has built a major position in processing services and professional services primarily through acquisition; instead of software products representing the majority of its business, they now represent about one third of the annual revenues.
 - Geographic coverage, type of services offered, and industries serviced are all characteristics greatly impacted by acquisitions.
- One characteristic which has often been negatively impacted by acquisitions is short term profitability. Tymshare, in acquiring the processing services of the Western States Bankcard Association (WSBA), knew that the initial operational loss from that acquisition would significantly affect immediate profitability. Most computer services companies, like Tymshare, will accept this to a certain degree because of the longer term potential.
- One myth that follows the acquisition process is economies of scale. These do not automatically result from acquisitions. They follow if, and when, sales forces are integrated, production is rationalized or redistributed, and products rationalized. These tasks are not easily accomplished.
- The impact of acquisitions on competition is complex. Overall, the impact will make competition stronger.
 - Today, profiles of major vendors have few overlaps. Acquisitions will tend to increase the number of areas in which these overlaps occur.

- The consumer will then benefit because there will be several national firms competing for his business.
- Regional firms and those industry specialized companies in the \$5 million to \$25 million revenue range will feel the most pressure. Unless they grow rapidly towards the \$100 million level, they will have a difficult time withstanding the aggressive actions of the larger companies in their areas.
- Industry or functional specialization, in and of itself, will not be a sufficient defense without a stable and significant market share position in these areas of specialization.
- Large companies will "acquire around" medium-size companies which prove impervious to acquisition blandishments, or they will directly enter their business with advanced product lines.
- Small companies will have to rely on tight local commitments and/or extreme specialization. Many of them will set up affiliations with larger companies, which may include distributorships, licensing agreements, or software purchases.
- Small processing services companies will be particularly "squeezed."

D. ACQUISITION PROGRAM CHARACTERISTICS

- The acquisition process is regarded by many respondents as a game, albeit a serious one, but nevertheless game terminology constantly appeared in interviews.

- Reasons for making acquisitions are primarily related to entering new business areas. Rationalization and geographic expansion are far less important, especially for international expansion.
- It is important to diversify acquisition "bets." It is probable that more than one in three acquisitions will not be satisfactory in terms of subsequent performance.
- Considerable stress should be placed on the financial aspects in acquisitions.
 - A strong financial capability in the acquisition function is more important than market or legal knowledge.
 - Personal financial planning for the acquisition beneficiaries is extremely important.
 - Potential acquisitions must do a far better job in preparing financial statements and plans.
- A formal plan covering all aspects of acquisition from search to integration is necessary. Few companies carry this plan far enough, either in general or for specific acquisitions.
- A dedicated and trained staff is a requirement for an effective acquisition function. To be competitive, at least two people should be dedicated to the process, at least one of whom is a top level, executive salesman with heavy financial expertise.
- An effective and trained support team of accountants and lawyers, either internal or external, must be available at all times. For them, acquisitions must have the highest priority.
- This is of the essence in an acquisition process when the objective is to reduce the elapsed time to below three months, without "skimping" on the research,

the post-acquisition plan, or getting to know the key people. The number of people involved should be at a minimum - do not have an acquisition committee of any kind.

- The acquisition function in a company should be regarded as a line, and not a staff, function. It contributes directly to revenue growth and profits.
 - As such, it should be separate from the planning function.
 - The planning function supports all corporate activities on an ongoing basis, including the acquisition process. Too close an involvement of the two functions can in ineffective or non-existent planning and/or ill-advised acquisitions.
- As a line function, the acquisition process should have quantifiable parameters attached to it. It appears that one fully competent, full-time, acquisition person will generate approximately 10 serious acquisition considerations per year and two or three resulting closes.
- Therefore, a major question for acquirors should be exactly how many people should they have in the process. Corporate objectives, funds availability, and ability to assimilate companies are all factors to be considered.
- Another factor is the cost of the acquisition process itself:
 - An effective, dedicated, one person acquisition function will cost a company between \$300,000 to \$500,000 per year, including personnel time of support staff, key executives and outside expenses. This excludes brokers fees.
 - Assuming that two or three acquisitions are made as a result, the cost becomes \$100,000 to \$200,000 per acquisition in addition to the payments for the acquisitions themselves.

- The opportunity cost of this application of management time and corporate resources is an additional heavy burden.
- However, it may be the most effective use of corporate resources for a \$200 million a year company to have a team of two, three, four or more people and invest several million dollars in the activity, recognizing there will be a hefty acquisition payment bill and implementation process as a result.
- Perhaps the greatest single factor in the success or failure of an acquisition program is the psychology of the top company management.
 - The desire and ability to make acquisitions must be there.
 - Executives must be prepared to see people become richer than they are as a result of the executives' decisions.
 - Executives must be psychologically able to give up a piece of "their" company.

E. ACQUISITION TARGETS AND METHODS

- There is an inconsistent set of parameters which companies apply to prioritize their targets:
 - As a result, there is not much overlap among the acquiring companies in terms of targets.
 - The average potential acquisition has serious discussions with only four companies.
- Acquirors are looking for companies that are profitable, with significant growth potential, and in an area of high interest to them. Typically, \$5 million

to \$20 million per year, RCS-based, industry specialized companies operating in the U.S., are the prime choice; with similar companies in the \$2 million to \$5 million category as second choice.

- There is a low but increasing interest in information processing equipment companies, particularly from those vendors which are looking for communications/equipment/service integration in the future.
- There is no standard valuation criterion, except perhaps, for "pay-back." Even here the pay-back period varies from two to seven years.
 - As one respondent stated, it is the market value, using an appraisal method, that is the only real determinant.
 - Rough rules of thumb suggest a valuation of less than a dollar-for-dollar in revenues, seven to ten times earnings, with pay-back in four years using discounted cash flow analysis.
- Cash is the prime form of consideration paid for acquisitions. There is a trend to reduce the use of earn-outs.
- In the post-acquisition phase, the handling of management is the biggest problem.
 - Experience indicates that an adjustment period is necessary before making major changes.
 - Good communications at all levels and an involvement of key people are necessary to overcome the problems.
 - Acquirors must realize that key people will leave no matter what they do.

- A firm, planned personnel program stated up-front, will avoid misunderstandings.
- Acquirors should remove inconsistencies in personnel programs expeditiously.

F. ACQUIRED COMPANY CONSIDERATIONS

- With several thousand computer services companies and less than 20 active acquirors, the number of contacts with an individual company is usually very low, with a few exceptions.
 - Potential acquisitions have not been "over-sold" on the prospect.
 - There is a lot of scope for "conditioning" of prospective acquisitions.
- As expected, the first choice of potential acquisitions are usually independent processing services companies, with subsidiaries of large organizations as a close second.
 - Software products companies would generally not want to be acquired by a similar company; computer equipment or communications companies would be more attractive to many of them.
 - Communications companies are also attractive to RCS companies.
- There is a definite dichotomy in the attitude of potential acquisitions to acquiring companies.
 - Some companies are looking for strong compatibility in their acquirors.
 - Others are looking for companies in totally different areas.

- Potential acquisitions are interested in combinations of cash and stock, in sharp disagreement with what is happening in the industry at present.
- Overall, the most important reason for being acquired was to obtain resources to expand markets, although almost half the potential acquisitions interviewed admitted that enabling investors to liquidate capital was the most important reason.
- Values attached to their company by respondents were generally higher than acquirors would pay in terms of current profitability measures but "in the ballpark" in terms of revenue measures.
- Generally acquired companies will seriously consider three proposals after about ten preliminary discussions. Respondents to the survey indicated that price was not the determining factor in their choice since acquiring companies' offers are usually very similar.
- The length of time of the process varies from 3 to 18 months. It is a very significant drain on a small company.
 - The shorter the lead-time, in this context, the better.
 - Acquired companies tend to count the length of time from initial consideration and thus there is a "conditioning" period allowance.
 - Acquiring companies pay the cost on both sides of the acquisition process when the acquisition is completed. This is another reason to minimize the time involved and to plan the activity as far as possible.
- Acquired companies' major problems with acquisitions again lie in the post-acquisition process. The lack of planning on the acquirors' part significantly contributes to the problems.

- It is noteworthy that for those acquired companies interviewed, where the consideration was stock, most of the chief executives have left and a relatively low importance was given to market expansion.
- For those acquired companies, where the consideration was cash, the executives have stayed and have far more interest in growth.
- It appears that with stock, executives can leave the company and still participate in growth; while with cash, they have to stay involved to get future benefit.

G. RECOMMENDATIONS

- Many of the recommendations are stated or implied in the above text. The following is then a summary.
- An acquiror should:
 - Establish a dedicated acquisition function, separate from the planning function, and headed by a senior, financially oriented executive salesman who handles the process from beginning to end.
 - Recognize that making acquisitions is primarily a sales process.
 - Recognize that the acquisition function is a line, not a staff, function and as such should have quantifiable parameters attached to it. It should have an expected contribution to revenues and profits.
 - Establish a definite, detailed acquisition plan related to the company's ability to make acquisitions and its corporate objectives.

- Staff the function according to the plan in terms of numbers of people, recognizing that there are definite, quantifiable parameters attached to the level of staffing in the function.
 - Carry the acquisition plan through post-acquisition activities.
 - Provide a post-acquisition plan as part of the offer. The acquiring company may have a more detailed internal plan which is not part of the offer, but the acquired company must have enough knowledge of the plan to facilitate the post-acquisition process.
 - Minimize the length of time of the acquisition process and the number of people involved.
 - Be sure to research the customer base of the company under consideration, directly or through a third party - the most unpleasant surprises will usually be in this area.
 - Recognize that key customers and staff will leave, regardless.
 - Recognize that, despite any plans advanced to the contrary, there is always a post-acquisition "down" period.
 - Recognize that the acquisition process will be made more difficult as time progresses, with severe limitations beginning to appear within five years due to activities by the FTC and the Justice Department.
- A potential acquisition should:
 - Prepare accurate and detailed financial statements.
 - Produce a believable plan based on prior experience and well-researched market factors.

- Demand a post-acquisition plan as part of the offer.
 - Value the company in realistic terms but recognize that acquirors will attach subjective premiums based on factors such as new industry capability (for them), advanced technological knowledge, geographic location, etc. Therefore, initial valuation should be high.
 - Minimize the length of time, people involvement, and number of companies considered. It is a draining and potentially destructive process.
 - Obtain personal financial plans for key executives and investors as part of the process.
 - Recognize that the acquisition process is essentially a selling process on both sides.
- All major computer services companies, or those aspiring to be considered as such, should have an active, structured acquisition program.

III IMPACT OF ACQUISITIONS ON THE
COMPUTER SERVICES INDUSTRY

III IMPACT OF ACQUISITIONS ON THE COMPUTER SERVICES INDUSTRY

A. HISTORICAL ASSESSMENT

- The character of the computer services industry has changed dramatically since its inception more than 20 years ago. During its formative stages and continuing through the late 1960s, the industry was generally comprised of small companies with relatively easy-to-classify, homogeneous business activities. Included in this group of service firms were:
 - Batch service bureaus.
 - Software development companies.
- As computer technology evolved, computer services companies changed by responding to the challenge - utilizing new technology, pioneering new applications, and developing a broad list of computer related services.
 - Software products businesses emerged.
 - The "timesharing boom" began, spinning off some 200 participants before 1970.

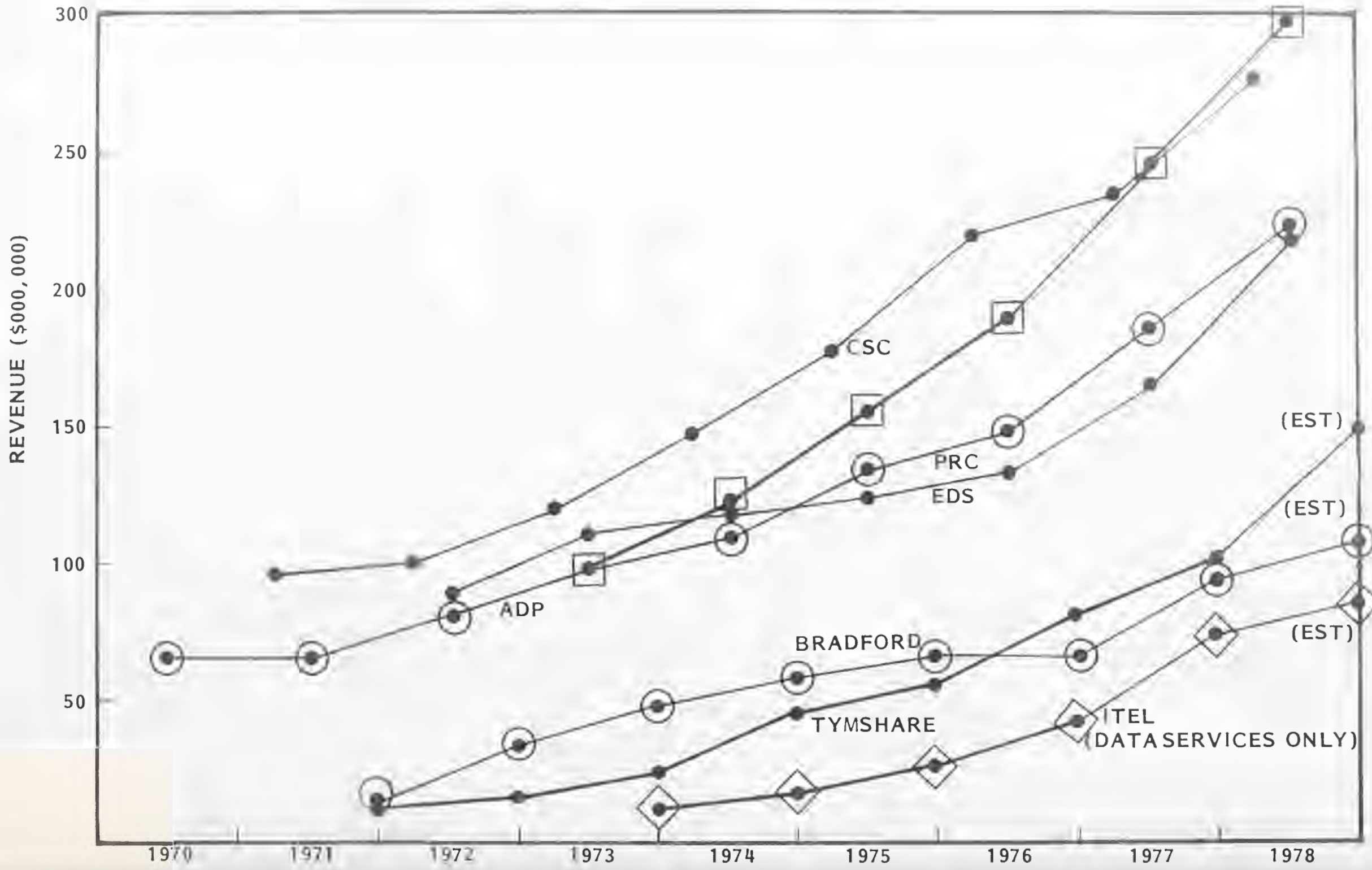
- Facilities management companies entered the marketplace and experienced dramatic growth.
- Perhaps the least understood industry force began to appear a few years prior to 1970, as the move toward nationwide companies with arrays of diversified services gathered momentum. This force was that of growth through the acquisition process.
 - Automatic Data Processing, with fiscal 1967 revenues of less than \$10 million, expanded its payroll business into new geographic areas with the acquisition of Research Calculations, Inc. of Boston (January 1967) and Computer Services of Florida, Inc. (September 1967). Just prior to these acquisitions, ADP's first major attempt to diversify resulted in acquisitions of companies in the brokerage processing and printing/publishing business.
 - In 1967, CDC acquired CEIR, an early leader in the computer services industry. The processing workload was gradually moved from CEIR's IBM batch and GE timesharing hardware to the CDC network which was already being upgraded to include CDC 6000 series equipment. At the same time, CDC started developing its education, professional, and maintenance services through acquisitions of companies such as Howard Research, Comma, and Syntonic Technology, Inc.
- Since the few early mergers of the 1966-1967 period, acquisitions numbering in the hundreds have been completed, with ADP alone responsible for about sixty. Generally, strong companies have acquired weak ones, and the survivors have learned how to run new businesses, select new markets, and profitably distribute new products.
- Successful computer services companies have recognized the need for strong marketing, finances, returns on capital, and able management. While there is some element of searching for these characteristics in most acquisitions, companies primarily justify their acquisition programs in one of three ways:

- Expectation that the merger will lead to some form of improved efficiency.
 - Acquired stock is undervalued relative to their own.
 - Acquisition reduces business risk by diversification.
- The most difficult lesson learned by companies which have participated in the industry's consolidation is that mergers do not necessarily bring economies of scale. These economies follow when, and only when, sales forces are integrated, production is redistributed, and the products are rationalized - tasks which are not easily accomplished.

B. EFFECT OF ACQUISITIONS ON MARKET SHARE

- Acquisitions in the computer services industry have had an impact on the market share structure.
 - Generally, those firms with successful acquisition programs, such as ADP, Tymshare and Itel Data Services, have grown more rapidly than the industry as a whole, and hence have continuously increased market share during the past ten years.
 - Some companies, such as EDS and PRC, have been able to gain market share without major acquisition activity.
 - These companies are compared with others in the industry in Exhibit III-I.

EXHIBIT III-1
 GROWTH OF MAJOR PUBLIC COMPUTER SERVICES COMPANIES,
 1970-1978

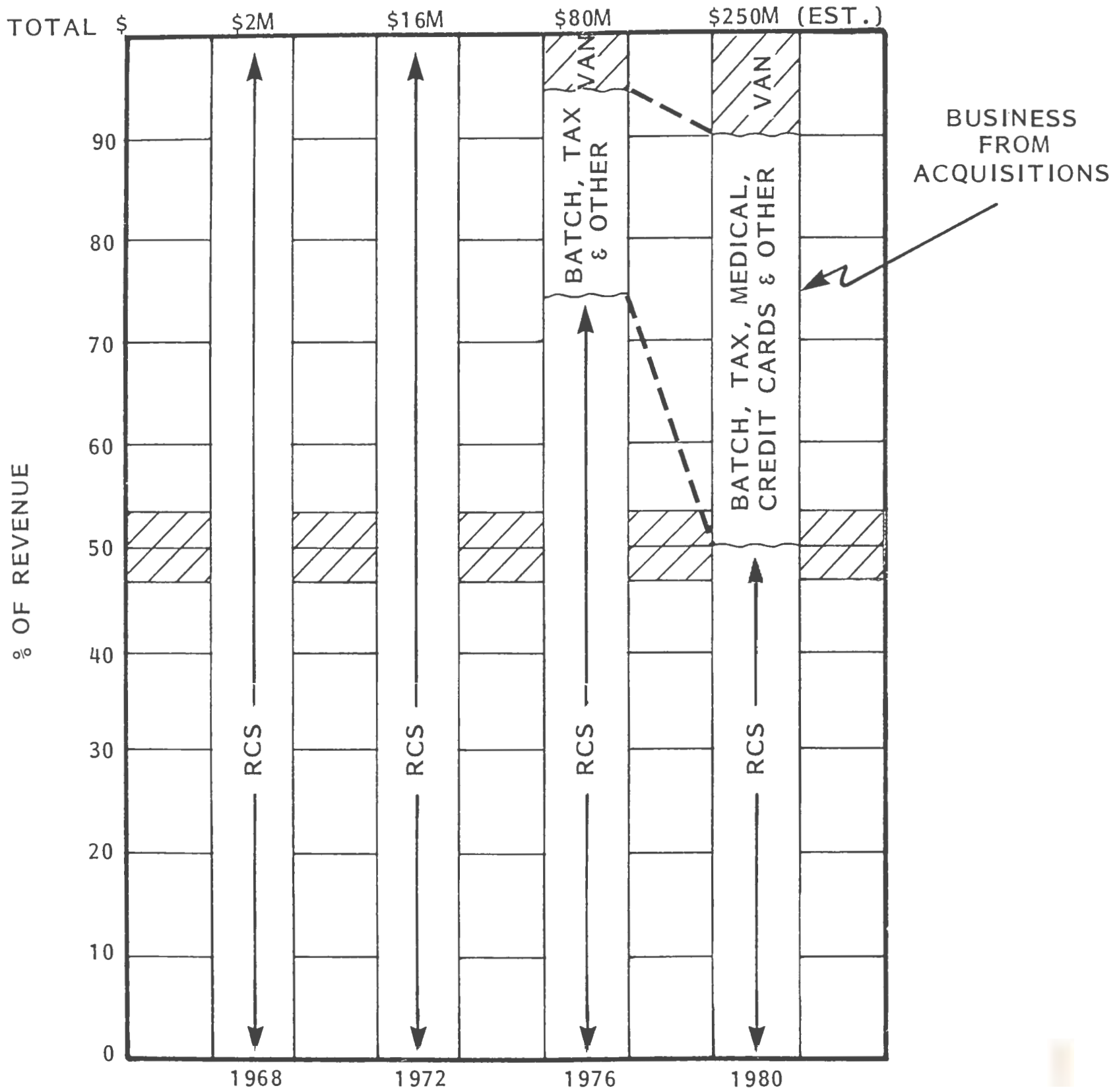


© 1979 by INPUT, Palo Alto, CA 94303. Reproduction Prohibited.

- The product mix of firms with active acquisition programs has also changed, as shown for Tymshare in Exhibit III-2. The proportion of Tymshare's business from acquisitions outside its traditional RCS is expected to grow from 20% in 1976 to 40% by 1980.
- Larger computer services firms with successful acquisition programs have not only increased their market share by growing at rates faster than their prime competitors and the industry at large, but have also strengthened their positions vis-a-vis future market share capture.
 - Acquisitions of smaller firms very often provide additional sales locations for the new parent. These locations with revised staffing and training eventually become multi-product sales locations operating at "full speed" more quickly than de novo start-ups.
 - Multiple acquisitions of smaller companies which provide services to the same industry, or which support the same cross-industry application, permit the establishment of a rapid nationwide presence.
 - Acquisitions of local or regional firms have not only provided an in-place base for the newly acquired products/services, but also for other products already successfully marketed by the parent in other geographic locations. The converse is also true whereby newly acquired regional or local products are eventually made available to the larger company's nationwide base.
- The investment required to fully develop new business opportunities in computer services will be more substantial than it is today. This fact impacts the industry trend toward consolidation through acquisition and merger in a number of ways.
 - Smaller firms will be less able to compete in an industry reaching out to solve more complex problems. Those firms which fall behind will gradually disappear.

EXHIBIT III-2

IMPACT OF ACQUISITIONS
ON TYMSHARE'S MIX OF REVENUES



- Small and medium sized companies with reasonable current capability, but which recognize the need for higher levels of investment and longer product development cycles, will begin seeking a larger partner to provide many forms of assistance, including the necessary funding.

C. IMPACT OF ACQUISITIONS ON COMPETITION

- One of the primary effects of acquisitions in the computer services industry during the last decade is the reduction in the number of strong, applications-oriented, regional competitors and the corresponding rise of a few nationwide delivery vehicles.
- One example of this can be seen by examining the market for automobile dealership services. At the the present time, outside of Computerized Automotive Reporting Services, Inc. (CARS) and The Reynolds and Reynolds Company, the largest nationwide services companies in this market are ADP and ITEL, both of whose dealer services operations stem from acquisitions of regional companies during the early and mid 1970s.
- The disappearance of the regional firms has resulted in the smaller local firms having to rethink their offerings and, in many cases, to become even more specialized. Whereas the small local company might consider "taking on" a regional competitor, they are less likely to enter into full fledged competition with a large national firm.
- Acquisition programs have impacted competition by providing a vehicle for larger firms to upgrade or expand their technology, thereby placing them in an improved overall competitive position.
- This technology upgrade has come in the form of hardware, software, and communications "know-how."

- New technology applied to tried and proven applications systems has resulted in millions of dollars of increased profits for those firms able to capitalize on this situation.
- From the purchaser's viewpoint, acquisitions have resulted in keener competitive offerings from relatively equally balanced, national companies. Yet the smaller, local company can still often compete with very specialized and personalized service.
- In the longer term, the effect of acquisitions on the computer services industry will be one of stabilization. As small companies are integrated into their new parents, the larger companies' standards and business procedures will be imposed on the acquired companies. This, in turn, will "ripple" through other small competitors resulting in the eventual lessening of the "cottage industry" image, and a more professional and stable industry posture.
- Aggressive acquisition programs by larger companies will result in the industry leadership residing in a few large firms. By 1983, no less than five companies will exceed \$500 million in annual sales, and many more will reach the range of \$200-\$500 million.
- However, the total number of companies included in the industry will increase and not diminish during the next five years, as those which disappear through acquisition and abandonment will be replaced by a higher number of "new starts" in a variety of new service areas.
- The overall affect, however, will be a continuing concentration of size in a few companies. Those companies which will be acquired will have achieved multi-million dollar size (perhaps even tens of millions), while the new starts will require a few years of operations before reaching that size.
- As many as 10 to 20 new "one year olds" will be required to achieve the revenues of a single recently acquired "eight year old."

D. MANAGEMENT STRATEGIES

- The performance of the most successful computer services companies, measured in revenue and profit growth during the past five years, provides a good indication of how successful acquisition programs strengthen the companies that implement them.

- While the obvious benefits of successful acquisition programs are well known and continue to be sought as key ingredients in most acquisitions, certain other benefits often accrue which are less recognized. These include:
 - Lengthening of the product life cycle. Often this effect is generated by moving into secondary and tertiary geographic markets. ✓

 - Reduced account "cannibalism." Generally, the impact of this reduction is very beneficial because of the decrease in the involvement of already scarce marketing resources.

 - Availability of alternate delivery mechanisms. An increasing sensitivity and awareness to business needs on the part of end users is requiring a range of services solutions. ✓

- An alternative approach to formal acquisitions is the purchase of a business base using any one of a variety of payment methods. Properly executed, this method of business expansion is effective, profitable, and considerably easier to manage. For example, ADP has "purchased" the payroll business of several hundred banks over the years, adding many thousands of profitable accounts to the ranks of its clients. This was accomplished without the need for complicated SEC filings, accounting restatements, or fanfare. ✓

- More and more, the management teams of large (or expecting to be large) services firms view acquisition as the lowest risk method of moving into new markets. ✓

- As the industry has grown, so too has the sophistication of the user. No longer is he willing to "sponsor" a new application system at his expense, providing a learning situation for the service vendor.
- Therefore, it becomes the responsibility of the vendor to know the business before entering the market.
- Obviously, buying a firm which has already paid the price of admission permits a high level of confidence in succeeding and provides a running start into the marketplace.
- One respondent to the survey mentioned that an overriding cause of acquisitions is that "90% of internally developed products are failures."

E. ACQUISITION TRENDS

- The number of acquisitions of companies per year in the computer services industry was about 60 in 1978, many of them relatively small.
 - This number will stay the same or slightly increase to within a maximum of 100 per year over the next several years.
 - On the other hand, the average size of the acquisitions will increase significantly. Whereas \$200 million per year are approximately the aggregate revenues of acquisitions in 1978, INPUT expects this to more than triple by 1983, assuming no external impediment.
- As well as acquisitions of companies, there are other forms of obtaining computer services business, such as the acquisition from a company, without acquiring the company, of a business base of revenues in a certain market segment; e.g., Automatic Data Processing acquiring the payroll services activities of a bank as mentioned earlier.

- This activity, which is also an acquisition activity, does, and will, total an additional 50% of the complete company acquisitions in number and size.
- Therefore, the total number of acquisition activities per year will grow from about 100 in 1979 to 150 in 1983.
- In contrast, the average annual rate of growth of the industry over the next five years of 16% implies an increase in the market of one billion dollars in 1979, and of over two billion dollars by 1983.
- Thus, the revenue attaching to computer services companies from acquisitions of all kinds is equivalent to about 30% of the growth of the industry in 1979 and 40% by the 1983 to 1985 time period.
- Further, INPUT expects to see a consistent and increasing set of acquirors in the computer services industry. In other words, companies will not enter the acquisition "game" for a few years, make some acquisitions, then stop doing so. Once they are in, they will generally stay in, unless external forces prevent them. Therefore, the acquisition activity growth will tend to go to the same set of companies.
- This implies that leading companies must grow at well over 20% per year during the next five years in order to be sure of retaining their competitive position. Probably a target growth rate should be 25% per year.
- In terms of the major active acquirors, INPUT projects that this number will increase slightly over the next five years, from approximately 20 companies now to about 30 by 1983. Some of the acquirors will themselves be acquired during this time so that the sum of the players in the "game" will be between 40 and 50 over this time period.
- This indicates that the average number of acquisitions per acquiring company will remain about three per year. The more aggressive, experienced

companies will double this number, with one or two approaching the ten per cent level. The average will be reduced by the new entries, less experienced companies, and temporary impediments for some companies.

- As a result of the acquisition activity over the 1979-1983 period, companies with approximately \$3.5 billion in annual revenues in their years of acquisition will be acquired. They will cumulatively account for over \$4.5 billion in revenues in 1983; about 30% of the total industry revenues.

F. LIMITS TO ACQUISITIONS

- In the long term, the major potential limiting factor relative to acquisition is federal government regulation and legislation.
 - Senator Edward Kennedy has already called for the use of tax policy to control corporate growth through acquisition.
 - Kennedy has also called for legislation requiring federal regulatory agencies, such as SEC and FTC, to provide competitive impact statements assessing the impact of an agency's rules and decisions on competition.
 - The Justice Department's Antitrust Division can be expected to be even more active in the future, particularly if the current Administration remains in power after the next election.
- Future attacks on acquisitions will largely be through accounting rules. Pooling of interest acquisitions will be a prime target; the "goodwill" consideration may be further complicated. There may be a push for purchase accounting, with allocation of fair market value to identifiable assets only.

- Another major limiter to acquisitions in the availability of funds. The acquisitions over the next five years will "cost" about three billion dollars.
 - Tighter credit and lower stock prices are the major factors here.
 - The Federal Reserve Board may prohibit loans for acquisitions or put pressure on banks to restrict loans for acquisitions.
 - There will be an increasing trend in the short term to use debentures in acquisitions as a result.

- There are several factors which ameliorate the impact of tighter credit and low stock prices on acquisitions in the computer services industry:
 - Computer services companies are excellent cash generating machines; many of the larger ones have an increasing amount of available cash. Acquisitions are, for the most part, a more attractive way of using this cash than paying dividends, since stockholders in computer services companies typically want growth rather than immediate income.
 - Computer services companies' stock prices have consistently outperformed the market over the last year. This performance can be expected to be retained.
 - Several groups of companies interested in computer services acquisitions have more than enough cash available to spend on acquisition. These include oil, financial services, and foreign companies, including some that are quasi-governmental, such as the British company INSAC.

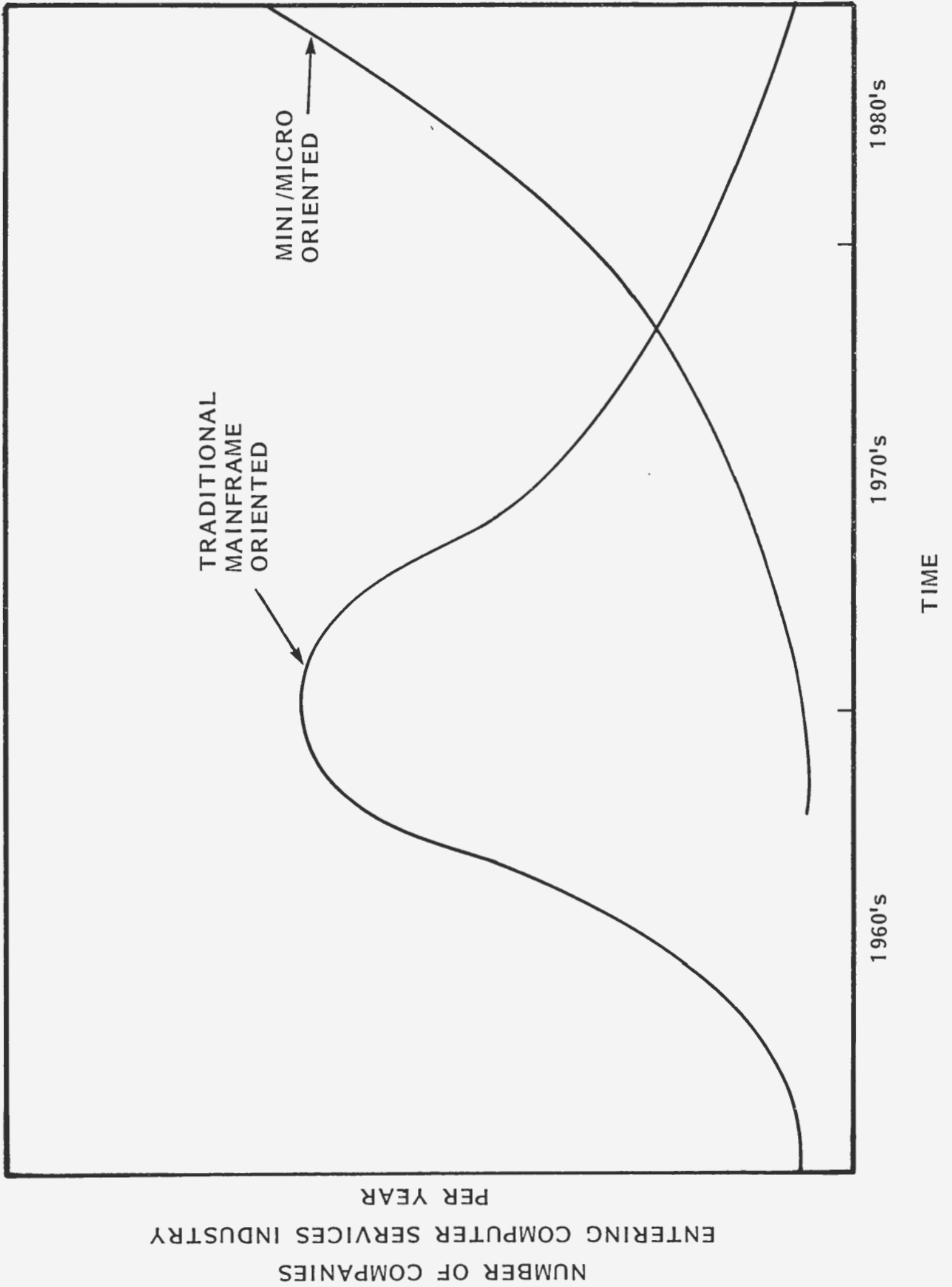
- The third and immediately most important limiter is the absence of skilled acquisition staffs.

- There are very few professional, well staffed acquisition functions in the industry.
- There are even fewer companies that are well organized for acquisition integration.
- As a consequence, many companies are inefficient and ineffective in acquisitions. They operate in spasms and waste considerable time and effort on individual acquisitions, particularly smaller ones.

G. NATURE OF ACQUISITIONS

- INPUT projects that the net number of new companies entering the computer services industry between now and 1983 will be at least 1000. This will be the difference between new companies entering the industry and those leaving the industry other than through the acquisition process.
- However, as depicted in Exhibit III-3, the nature of many of these companies will be significantly different from the traditional computer services companies:
 - The number of companies formed, which are oriented towards large and medium sized computer systems, will continue to decline primarily because of barriers to entry.
 - On the other hand, there will be a dramatic growth in the number of companies formed which are oriented towards the small computer system.
 - When communication networks become easily and widely available, many of these organizations will be able to offer remote processing services nationwide. At that time the difference between them and the

EXHIBIT III-3
COMPUTER SERVICES COMPANY FORMATION TRENDS



traditional large suppliers will be in delivery method rather than nature of solution.

- The acquisition "wave" passing through the \$5 million to \$25 million per year companies in the next several years will primarily reflect the acquisition of large systems oriented companies.
- Some of the small acquisitions (less than \$2 million category) will be of small-systems oriented companies by the large companies. However, the next wave of acquisitions in this area will not come until the mid-1980s when the large computer services companies start to "snap-up" the emerging, successful small systems oriented companies.
- Another change will come in the nature of the products and services offered by the "new wave" of start-ups. They will tend to be integrated companies, offering combinations of products, services, and hardware, as opposed to the more segmented offerings of the traditional companies. They will be in areas such as office services and services to the home. The large companies will tend to enter these new areas through acquisition.
- Some factors affecting the formation of these new "computer services" or "automated information services" companies are:
 - While the trend is to a decreasing number of entrepreneurs in the U.S. society, there will be an increasing interest by these entrepreneurs in the information processing industry.
 - The industry is not a "derived demand" industry such as the paper industry; it is a "created demand" industry. New companies in new areas create new demand.
 - The new companies will tend to concentrate in non-traditional data processing areas.

IV ACQUISITION-THE ACQUIROR'S VIEWPOINT

IV ACQUISITIONS - THE ACQUIROR'S VIEWPOINT

A. SURVEY OF ACQUIRORS

- Nine acquiring companies were interviewed for this report. In addition, one interview was held with an executive familiar with the acquisition process of a significant company through a prior association. Some additional information was obtained from a partially completed interview with one company.
- The companies interviewed were active acquirors; with the exception of one company with interests outside the computer services field which purports not to be an active acquiror, but still makes relatively frequent acquisitions.
- The respondents were, with one exception, the executives in charge of the acquisition process.
- Three of them were chief executive officers, while only one of the others did not report to the chief executive officer.
- Combined computer services revenues of the respondents were of the order of a billion dollars in 1978.
- The respondents interviewed have made close to 200 acquisitions in the computer services industry, with 40 in the last two years.

- The acquisition pace is increasing from new companies getting into the "game" rather than from more acquisitions by the existing players.
- Average number of acquisitions per year by the respondents was three for the years in which they made acquisitions. Several respondents only reported acquisitions in the last three years.
- For only two of the respondents was the amount of current business due to acquisitions less than 10%. Several respondents reported that virtually all their business was dependent on past acquisitions which have subsequently grown.
- In terms of satisfaction with acquisitions, the respondents were obviously prone to some bias as, in most cases, they had been responsible for them. However, they could generally be characterized as very satisfied with the acquisitions their companies had made.
- In over 87% of the 69 acquisitions rated, the respondents considered that representation by the acquired company was good. In only 5 cases was representation considered bad.
- Management of the acquired companies was marked considerably less satisfactory, with management considered bad or indifferent in almost 40% of the cases.
- Subsequent performance was rated good in over 75% of the cases, and bad in only 7%.
- As mentioned by one respondent, it is important to diversify bets. Allowing for the respondents' biases, there is probably a greater than one-in-three chance that any one acquisition will not be satisfactory.
- One respondent with a great deal of experience considered there often was misrepresentation by acquired companies. He suggested that potential

acquisitions need far better financial records and more rational future forecasts, with expectations tied clearly to past reality.

- It is likely that the expertise and experience of the respondents compensates for much of the initial misrepresentation by the potential acquisitions which might be due merely to ignorance or wishful thinking.

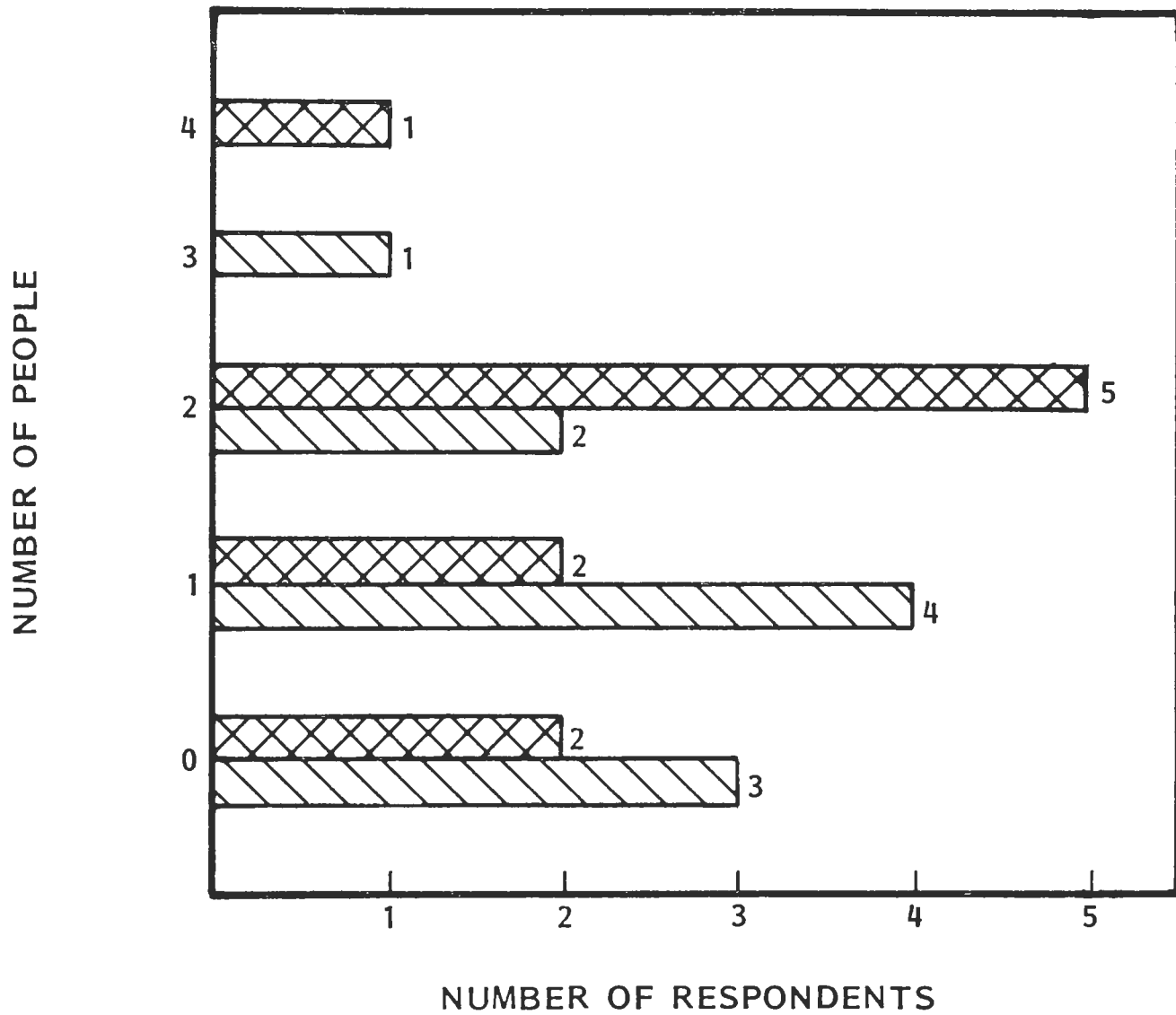
B. NATURE OF ACQUISITION PROCESS



- Of the 10 companies analyzed, only one had no acquisition plan at all and one company had basically a passive, informal plan to respond to certain opportunities. Of the remainder, seven companies had a very formal plan and one company had a formal plan as far as industry orientation was concerned and was otherwise informal.
- Only one of the nine respondents had a formal "kitty" established to make acquisitions. This company, a subsidiary of a large company, replenished its kitty annually.
- Most respondents felt that establishment of a "kitty" was too restrictive. However, there are obviously fairly well understood parameters governing what the respondents can do. Some comments were:
 - "Unlimited resources."
 - "(Kitty) very restrictive - must have chips to enter the game."
 - "Stock allocated by Board for various purposes including growth. Nothing is set up for acquisition in general - set up for specific situations." (Company which is relatively new to acquisitions).

- "No (to kitty) - set up parameters only. If kitty is pre-established it is not good."
 - "No (to kitty). Set objective size to take on in acquisition area -range of values. Establish program as opportunities develop. Go to parent as source of cash or credit." (Subsidiary of large company).
- Thus, the acquisition process appears to be governed by a loose set of objectives only and has a lot of freedom and fluidity in most respondents.
 - Very importantly, every company that has a continuous record of acquisition, except one, has at least one person dedicated to the acquisition process.
 - As shown in Exhibit IV-1, one company has five people who are mainly committed to acquisitions. It is a company which has only been in the business for a few years and is already building a significant track record.
 - To be competitive, in a general sense, a company should have at least two people committed to the process.
 - In addition, there needs to be a trained group of support people, primarily attorneys and accountants.
- One of the major reasons for success of several of the leading companies is the availability of such people.
 - One company, which averages twice as many acquisitions per year as most other companies, has a senior counsel, a financial officer, two accountants, and two attorneys, who are available on call for acquisitions although they are not specifically assigned to the process.

EXHIBIT IV-1

RESPONDENTS' NUMBERS OF
ACQUISITION STAFF



-  PEOPLE WHOSE SOLE JOB IS ACQUISITION
-  PEOPLE WHOSE SOLE JOB IS ACQUISITION PLUS PEOPLE WHOSE MAIN TASK IS ACQUISITION

NOTE: EACH RESPONDENT GAVE ONE RESPONSE IN EACH OF THE ABOVE CATEGORIES

- On the other hand, another very successful company swears by using a high outside legal firm which has all the skills and experiences they need to meet varying conditions. They feel it is a major factor in their speed of response and success.
- Just the physical numbers of contacts made by the respondents require a dedicated staff.
 - As shown in Exhibit IV-2, at least half the respondents (including almost all the leading acquirers) contacted hundreds of companies per year.
 - Several of the companies operating fewer contacts had a limited acquisition program in terms of scope.
- The number of companies seriously considered drops typically by an order of magnitude from the number contacted.
 - A rough rule of thumb seems to be that a company can consider 10 acquisitions each year for each person dedicated to the process.
 - On average, about three proposals are produced as a result of these considerations. Several respondents pointed out that letters of intent were used as their criterion for a proposal.
 - The close rate after proposals are produced is reportedly very high; over 60% of the time, according to respondents.
- As one respondent pointed out, the situation is somewhat complicated by the fact that some companies are going after larger acquisitions than hitherto. The work load in an acquisition can be greater for a larger acquisition particularly if a public company is being acquired. However, it is not a linear relationship between size and effort required, so that it is generally much easier to do one five million dollar acquisition than five one million dollar acquisitions.

EXHIBIT IV-2

ACQUISITIONS INVESTIGATED BY RESPONDENTS

RESPONDENT	NUMBER IN ONE YEAR OF			
	CONTACTS	COMPANIES SERIOUSLY CONSIDERED	FORMAL PROPOSALS	CLOSES
1	200	20	4	3
2	500	22	6 LETTER OF INTENT	4
3	300-500	-	15	7
4	12	5	3	2
5	12	6	3	2
6	100	20	5	2
7	24	6	2	1
8	30-40	3-4	2	1
9	133 REVIEWED	8	3	2
10	HUNDREDS	16	8 LETTER OF INTENT	6

C. FORM OF ACQUISITION CONSIDERATION

- Six of nine respondents primarily make acquisitions for cash, while two others reported an even distribution between cash and stock.
- Only one respondent, a relative newcomer to acquisitions, primarily makes acquisition for a combination of stock and cash. Two other companies with experienced acquisition personnel regard combination deals as of importance; however, another equivalently experienced organization will "never" make such arrangements because of the handling of goodwill.
- The question of goodwill and its handling is a major factor in acquisitions. It was specifically mentioned by several of the most successful respondents. Detailed treatment is beyond the scope of this report.
- Most companies use escrow funds for a short period, typically up to 6 months, for warranties and representations of the seller.
- There was an even distribution between respondents using earn-outs and those that did not. The trend appears to be a reduction in the use of earn-outs.
 - Those companies with 100% of their acquisitions for cash favored earn-outs.
 - The earn-out period mentioned by respondents was typically three years.
 - In future the earn-out period will tend to reduce to two years.
- Some comments about earn-outs from some of the more successful acquirors:
 - "Difficult - less important than it used to be. There is no general trend but it is a very good way (of making acquisitions)."

- "We do not use earn-outs. Develop a consideration in management contract - method of lowering goodwill."
 - "Not used, except in exceptional circumstances."
 - "(Use it) whenever possible."
- As expected, respondents generally consider that the acquisition pace will increase:
 - "Deals will become bigger and bigger."
 - "Will stay the same."
 - "Rate of technological change is the driver."
- In terms of the forms of consideration used, there are many complicating factors and the input from the respondents was not clear.
 - Accounting rule changes in 1974 significantly changed the form of consideration because of the handling of goodwill. Prior to that, acquisitions by public companies were primarily for stock; since then, cash acquisitions have been more common.
 - As one respondent stated, "Used to be stock. Now it is cash and debentures. Sometimes use stock for tax reasons."
 - Respondents generally considered cash and notes would be even more important in the future, although larger acquisitions would involve stock.
 - Factors affecting the form of consideration are stock price, inflation, taxation, and accounting rules. As one respondent stated, "There is more concern with real wealth (cash and notes) now."

- It becomes obvious from the responses that a thorough understanding of the financial rules related to acquisition and a strong financial/accounting support capability are of critical importance in an acquisition function.

D. FINDING ACQUISITIONS

- Respondents considered that, on average, 80% of their successful acquisitions were made from contacts they initiated, with about 10% each from acquirees and brokers.
 - One major acquiror with a recent change in personnel reported only 50% of successful acquisitions from its own contacts.
 - Only two of the eight reported no use of brokers. One of the fastest growing companies reported 25% of its successful acquisitions from broker contacts.
- As shown in Exhibit IV-3, respondents were generally not satisfied with services offered by finders or brokers. However, almost all respondents have used, and will use, them primarily because they don't want to miss anything.
- Most respondents wanted more depth and management expertise from the broker.
- Two of the respondents indicated they had a contract or agreement with a broker (the same one, in fact). The problem of a broker working with more than one acquiror was identified several times.

EXHIBIT IV-3

RESPONDENTS' COMMENTS ON USE OF FINDERS AND BROKERS

RESPONDENT	COMMENT	FEE SCALE
1	"WILL DEAL WHEN KNOW BROKER. GENERALLY NOT SATISFIED (ESPECIALLY) WHERE THEY DON'T KNOW WHAT THEY ARE DOING. INSIGHT-PERSONAL KNOWLEDGE VALUABLE"	NORMALLY DON'T PAY 5/4/3/2/1. IS HIGH LIMIT
2	"NOT BIASED. COMPETITIVE ATTITUDE SOMETIMES DIFFICULT. RATHER WORK BY OURSELVES"	TAILORED
3	—	MAXIMUM \$25-\$30K PER DEAL
4	"MIXED ATTITUDE. WE HAVE USED THEM FOR INTRODUCTION ONLY. THEY ARE LIKE REAL ESTATE BROKERS:"	3/2/1 – THEY ALL START 5/4/3/2/1. WISH IT WAS VALUE RECEIVED
5	"DON'T FAVOR THEM. INTERNAL PEOPLE GET BETTER RESULTS. SOME ARE PROFESSIONAL"	1½ – 2% OF CONSIDERATION. BUYER PAYS IN CASH.
6	"NEGATIVE. NOT SATISFIED. THEY CAN'T FULFILL NEEDS"	FLAT FEE \$25-\$50K
7	"OVERWHELMING 'NO!' JUST NEED FRIENDLY INTRODUCTION. ONLY REASON CONSIDER THEM IS WE DON'T WANT TO LEAVE UNTAPPED SOURCE."	\$25K FOR \$1MILLION \$60K FOR \$3MILLION
8	"ENCOURAGE IT-BUT ONLY USED ONCE. NOT SATISFIED-PEOPLE TEND TO BE FINDERS AFTER COMPLETING VOCATIONAL CAREER. THEY FEEL INTRODUCTION ENOUGH-WE HIRED GUY WHO WAS GOOD"	\$10K FOR COMPANY OVER \$5 MILLION. 1% FOR ANALYSIS IF INVESTMENT BANKER
9	"INFORMAL PROGRAM CAN AND SHOULD BE USED. CAN BE HELPFUL EVEN WITH TARGET FROM SALES VIEWPOINT. USE INVESTMENT BANKERS TO CLOSE. NEED THEM TO PROVIDE MANAGEMENT EXPERTISE"	NEGOTIATED
10	"HAPPY TO WORK WITH SOMEONE WHO KNOWS THE BUSINESS. MOST ARE JUST CONTACTS. USEFUL WHEN INVOLVED IN CONSIDERATION PROCESS"	NEGOTIATED

- None of the respondents indicated they would use the 5/4/3/2/1 scale (5% of first million dollars, 4% of second million dollars, etc.). This was termed a "figment of the imagination" by one respondent. Typically, respondents were willing to pay a flat fee of \$10,000 to \$25,000 for an introduction. Size of acquisition and/or assistance in the process would increase the total fee.
- Several respondents mentioned the use of investment bankers in the analysis and close, rather than during the search process.
- Four of the respondents specifically mentioned working with one broker, Gil Mintz of Broadview Associates, generally in a very positive manner.
- Sources of information besides brokers used to identify prospects included outside services and directories. Five of the respondents considered their field people to be very important. One very successful acquiror has a "hot line" established from the field to the acquisition function.
- ADAPSO was regarded as a source of contacts; generally the meetings.
 - However, one respondent described ADAPSO as "has been a collection of less than first class companies."
 - There also is a feeling that it used to be more important as a source of companies to be acquired.
 - Recent growth in ADAPSO membership runs counter to the above two opinions.
- The trade press was of some use for ideas.
- Eight of the respondents mentioned INPUT's services as a source of information. In particular, the CAMP service was specifically identified by several of the most successful acquirers.


- Datapro was mentioned by two companies and Dun and Bradstreet by another.

E. THE ACQUISITION PROCESS

- In the series of actions of search, evaluation, negotiation, and close, most of the respondents had a continuous search process, as shown in Exhibit IV-4. Several companies pointed out that initial contacts several years ago which are continually 'revisited' often eventually result in further activity.
- The evaluation stage averages two months although several companies indicated an ability to considerably shorten this process. Also one respondent pointed out the necessity of "selling" at this stage.
- Negotiation is a much shorter stage; two to six weeks, with an average of about one month.
- The close stage varies from a minimum of one day to a maximum of three to four months. There is an indication that a several week close cycle should be the target.
- In terms of the total length of the process, there appears to be two groups of companies.
 - The first contains at least three of the most successful acquirors and expects the total time to close to be two to four months.
 - The second group expects the total time to be six months or longer.
- Speed is regarded by several companies as being vital. One public company did its due diligence work in parallel with other activities and reckoned to complete an acquisition within 60 to 90 days of contact.

EXH BIT IV-4

RESPONDENTS' ESTIMATES OF LENGTH OF ACQUISITION PROCESS

RESPONDENT	LENGTH OF PROCESS (MONTHS)				
	SEARCH	EVALUATION	NEGOTIATION	CLOSE	TOTAL
1	ON-GOING	2	1	3-4	6
2	INDEFINITE	<1	1½	½	2-3
3	ONE DAY TO MANY MONTHS			½	3
4	CONTINUOUS		2	3	6
5	6	1	½	2	1-12
6	CONSTANT	2	1	1	
7	CONTINUOUS	1-3			≥6
8				≥1 DAY	2-3

- Few respondents had any idea of how the costs of the acquisition process were distributed among the various stages. Several companies indicated the evaluation stage was the most expensive, up to 50% of the cost.
- One respondent commented their acquisition process cost half a million dollars a year - excluding cost of acquisitions themselves. Another mentioned a one million dollar a year cost.
- As shown in Exhibit IV-5, top management of an acquiring company is invariably involved in the close. However, most companies use their top management at some time before the close as part of the selling function.
- On the other hand, the role of the Board of Directors is primarily one of program ratification and prior approval unless it is a "big deal."
- Although the acquisition function is usually responsible for taking an acquisition right through to the end, two companies switched responsibilities for negotiation and close.
- Those companies with a central planning function, only involved it in the search and evaluation stages, at most, to obtain identification and support data.
 - Only one of the four companies which did not have central planning function is a leading computer services company and recognizes the need for such a function.
 - It is notable that most companies separate their planning and acquisition functions. It is almost as though planning is "staff" while acquisitions is a 'line' function.
- The company attorney must be involved in the negotiation and close stage. However, few companies waste time with them before hand.

EXHIBIT IV-5

STAGE OF ACQUISITION PROCESS RESPONDENTS'

DEPARTMENTS ARE INVOLVED

DEPARTMENT	STAGE AT WHICH DEPARTMENTS ARE INVOLVED NUMBER OF RESPONDENTS				
	SEARCH	EVALU- ATION	NEGOTI- ATION	CLOSE	NOT IN- VOLVED/ NOT AP- PLICABLE
TOP MANAGEMENT	2	5	7	9	0
BOARD OF DIRECTORS	0	0	1	4	3
ACQUISITION FUNCTION	10	9	8	8	0
PLANNING FUNCTION	3	3	0	0	4
COMPANY ATTORNEY	0	2	9	9	0
TECHNICAL STAFF	1	9	1	0	0
FINANCIAL STAFF	2	8	7	5	0
OUTSIDE ATTORNEY	0	1	1	4	4
EXTERNAL AUDITOR	0	1	1	3	2
FINANCIAL ADVISORS	0	1	1	0	6
BROKERS / CONSULTANTS	6	1	0	0	1

"TOTAL OF NINE RESPONDENTS"

- On the other hand, it is extremely important to get the financial people involved relatively early in evaluation. Although only half the respondents keep them involved through the close, several of the more successful companies stressed the importance of doing this.
- As shown, few of the respondents set much store by outside services.
 - Several respondents involved an outside attorney in the close.
 - One very successful respondent emphasized the use of a large external law firm with all the skills they needed. This respondent considered this a significant advantage over competitors.
- Two other companies used investment advisors in the evaluation and negotiation stages and were well satisfied.
- Of the companies that used brokers in the search stage, several expected to use more consulting services in the evaluation stages in future.
- Respondents generally considered that personnel costs were about 50% of the cost of an acquisition process, if brokers' fees are excluded.
 - Legal expenses averaged about 20%, more in the case of the company extensively using an outside law firm. Several comments were made that legal fees were "outrageous."
 - Accounting, travel, and other costs averaged about 10% each. Accounting expenses in particular, would be a greater share for a large public acquisition.
- For smaller companies, external expenses are minimized.
- Costs of an individual acquisition, excluding broker fees, can range to \$100,000. If annual costs of a significant acquisition program are pro-rated

across acquisitions made, the cost probably more closely approximates to \$200,000.

- Confidentiality is regarded as very important by respondents from the viewpoints of protecting their interest and of protecting the prospect's interest, particularly if a small company. As one respondent stated, you "want to keep the prospect away from competition" and recognize that the prospect "could be injured."
- However there is a divergence of opinion as to whether or not it is a problem. Generally, those companies with a shorter time to close perceive it less of a problem than the others. Comments about methods of reducing the problem, apart from letters of intent, were:
 - "Don't tell anybody, except one or two people. For big transactions meet on neutral ground."
 - "Use very short time period."
 - "Move quickly once everybody interested."
 - "Limit number of bodies involved. Code information. Use research firm for research."
 - "Use 'need-to-know' policy internally."
 - "Sometimes use a mutual non-disclosure policy."
- Letters of intent are controversial. Of those respondents addressing their use, two said they used them, two avoided their use altogether, and two used them under certain conditions.
 - "Letter of intent during negotiation."

- "No letter of intent as standard practice."
 - "Give letter if they ask for it."
 - "Never give letter of intent. It is not worth the paper it is written on."
 - "May use in a complex situation only. Put conditions on potential acquiree such as an agreement not to talk to another company for six months."
 - "Use letter of intent signed by both parties."
 - "Make letter of intent as specific as possible - face reality immediately."
- Very few respondents considered sheer size as a determinant of acquisition potential. One respondent considered the maximum size of a potential acquisition as 50% of their size. A much larger company pointed out that if they acquired a company 50% of their size it would take years to digest, unless it operated independently.
 - Several respondents mentioned the rate of assimilation of companies and people as the limiter.
 - However, the degree of autonomy allowed acquisitions affects this rate very significantly.
 - If acquisitions are allowed a lot of freedom and autonomy, as often happens with companies under \$50 million which are at an early stage in their acquisition process, assimilation is not a problem.
 - Several respondents stated there was no real limit to their acquisition potential. As one respondent stated, limit is "Desire, psychology, and the ability to do it."

- Other comments relating to determinants of acquisition potential:
 - "Not sure what is limiting constraint - we can buy bigger companies. Limits relate to amount of stock willing to give up, available capital in tight money situations."
 - "Look at what company would look like when put together."
 - "Ability to find good candidates."
 - "Limit is internal rate of return on investment. Cash flow, capital budget, and availability of funds are also considerations."

F. METHODS OF ACQUISITION EVALUATION

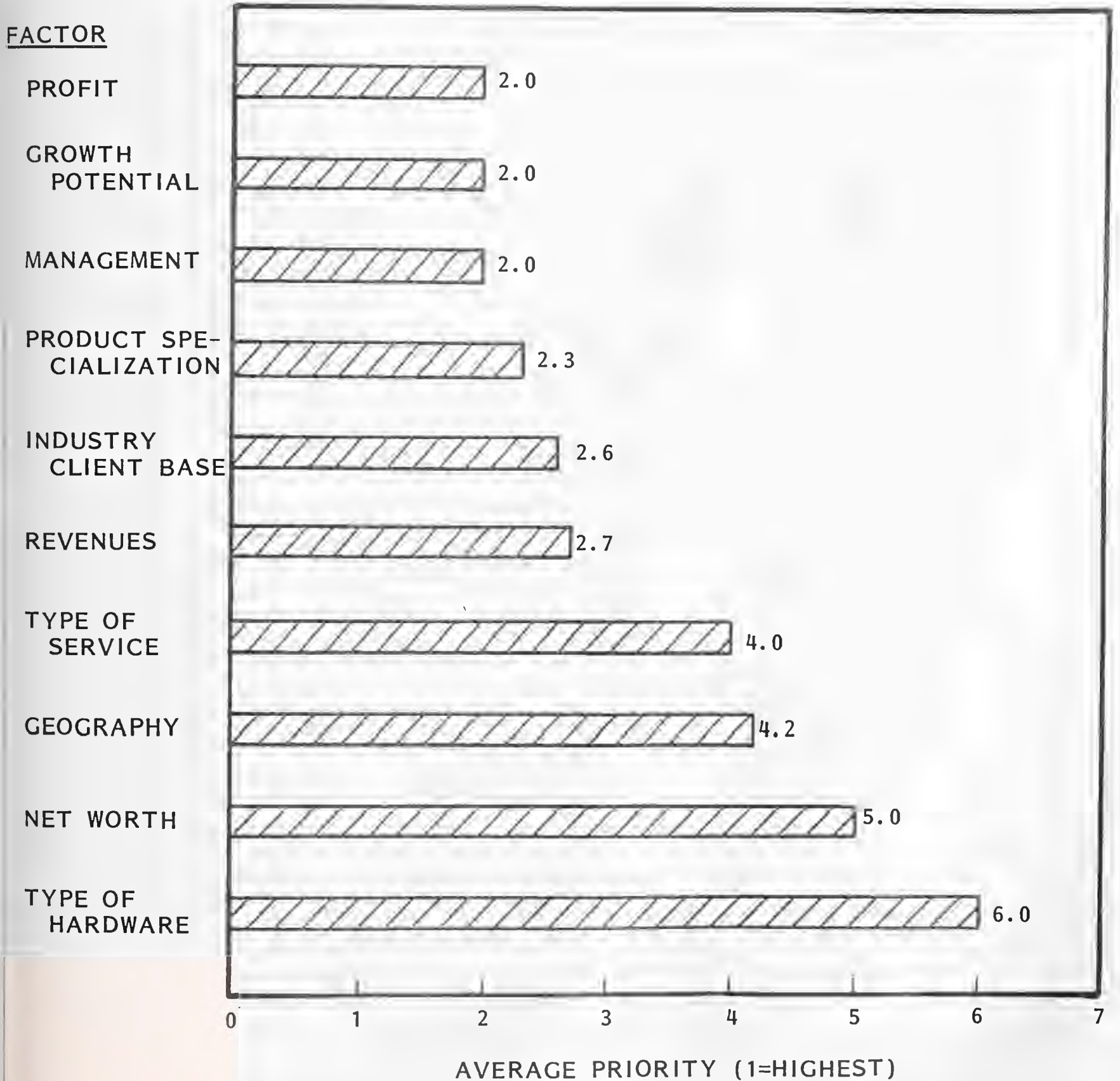
- Respondents were generally reserved in giving quantitative measures of how they evaluate and value companies.
- As shown in Exhibit IV-6, respondents value profit and growth potential at the top of their list, on average. Several respondents volunteered "management" as being equally important.
 - One respondent commented that "Management was important (in early days) but not now."
 - Another respondent commented that "Numbers came after people."
- Revenues, profit, growth potential, and product specialization all received number one priority ratings from two respondents, demonstrating the diversity of approach of the respondents.

EXHIBIT IV-6

RESPONDENTS' PRIORITY RATINGS OF ACQUISITION
EVALUATION FACTORS

MOST IMPORTANT

LEAST IMPORTANT



- Several commented that they made acquisitions for a variety of purposes, to "fill gaps," "merge with existing operations," "enter new industry areas," etc.
- Hence, acquisitions may be valued differently by the same company depending on the reason for them.
- Comments relating to evaluation factors are:
 - "Management is a very significant reason and track record."
 - "People and market share are important." Respondent who has different evaluation factors depending on stage of acquisition process; i.e., industry is a critical "gating" factor in search, but then becomes unimportant once the company enters negotiation.
 - "Pay higher for strategic acquisitions; e.g., software in a changing technology area."
 - "Quality of management important."
 - "Want to accelerate growth and achieve critical position in the market. Do not want to be in the commodity market."
 - "Management is a 'must' criterion."
- Actual valuation data was sparse:
 - "Principals generally want two to three time its worth."
 - "Use combination of pay back and discounted cash flow" to achieve value. Rule of thumb in that "value is a proportion of existing price/earnings ratio plus so many years positive cash flow" (very successful acquiror).

- "Use pay back of five years or more on pro forma. 'Paper' is more flexible. Price is always the last consideration."
 - "(Value) three to five times pre-tax earnings, depending on growth. Use discounted cash flow analysis over seven years."
 - "(Value) 50-100% of one year's revenues or 7 to 10 times earnings." (Respondent looking for good profit return).
 - "Market value. Use appraisal technique, no formula." (Another very successful acquiror).
 - "Use discontinued cash flow with pay back in three to four years. Look at profitability it will generate, excluding principals' perks."
 - "Expect to pay less than a dollar-for-dollar on annual revenues and 12% to 15% return on acquisition money. Look at what would happen at the end of five years. Use accrual accounting and return on capital employed." (Subsidiary of large company).
- Thus valuation procedures vary, but discounted cash flow and pay back periods appear to be consistently involved, although the length of the period varies from as low as two to as high as seven years. Cash flow is also considered very important by several respondents.
 - Obviously, then, the prospect must have a credible pro forma statement for the next three to five years.

G. RESPONDENTS' CURRENT ACQUISITION INTERESTS

- All the respondents were primarily concerned with U.S. acquisitions. Only two respondents reported an equivalently high interest in European acquisitions and interest in acquisitions in other areas was practically non-existent.
- As shown in Exhibit IV-7, the five to twenty million dollar a year companies are ranked highest in terms of desirability, with the two to five million dollar category close behind:
 - Only one respondent, a relatively passive acquiror, had more interest in the under two million dollar category than any other.
 - Three respondents ranked the two to five million dollar category highest, including two of the smaller companies.
 - Three of the four companies ranking the five to twenty million dollar category highest are the most aggressive acquirors.
 - Only one company reported a really serious interest in companies over twenty million dollars per year.
- Software companies with industry specialized software or professional services were of high interest to respondents (rating 7.8 on the scale), higher than expected. INPUT therefore expects to see more acquisitions of such companies by the major acquirors in the future.
- Other software products and professional services companies were generally of negligible interest to respondents. Although one aggressive acquiror rated system products companies (with compatible products) quite highly.
- Industry specialized, RCS-based services are rated the highest by respondents as shown in Exhibit IV-8. Respondents also had a high interest in multi-service

EXHIBIT IV-7

RESPONDENTS' PREFERENCES FOR SIZE OF ACQUISITION

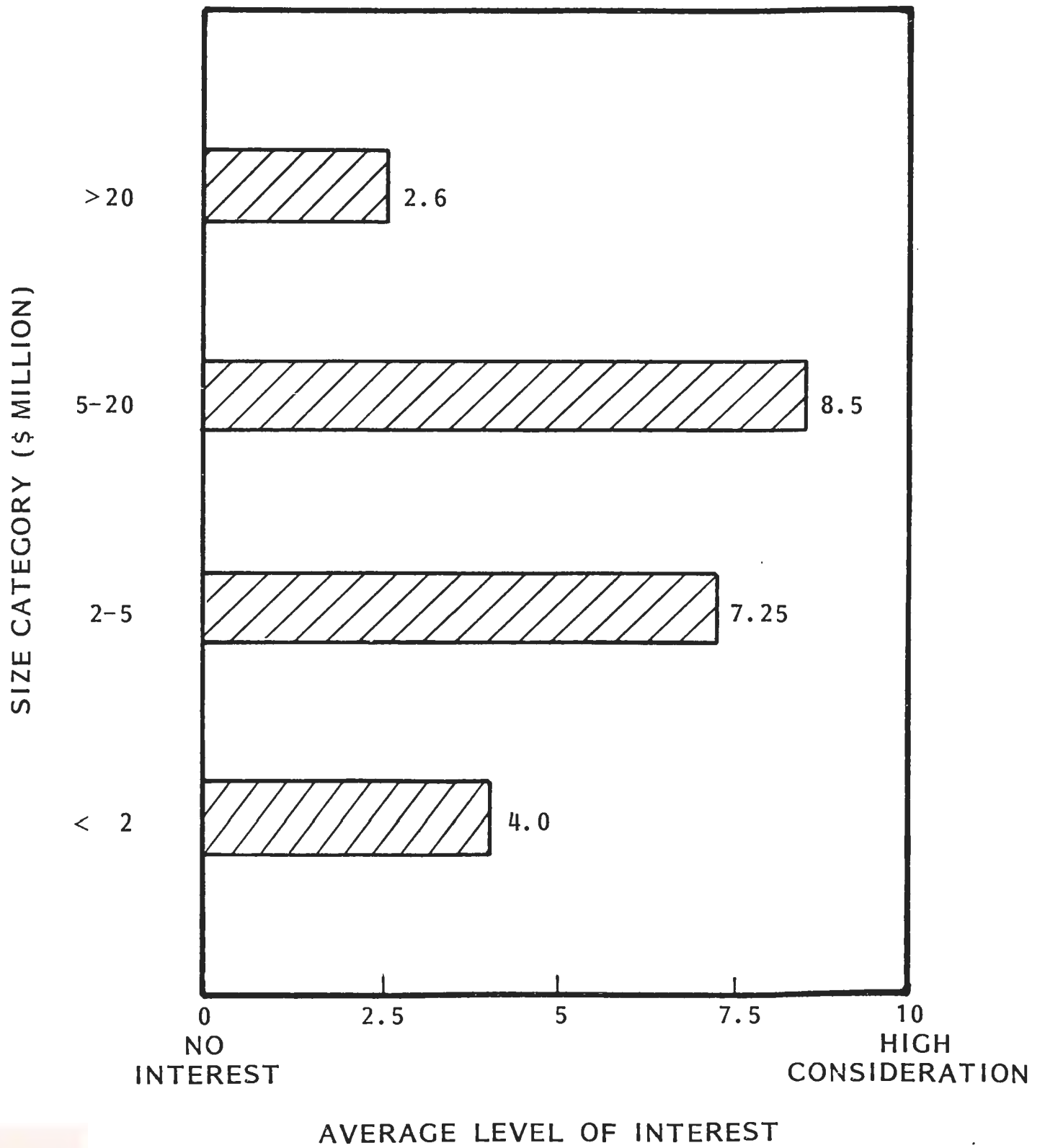
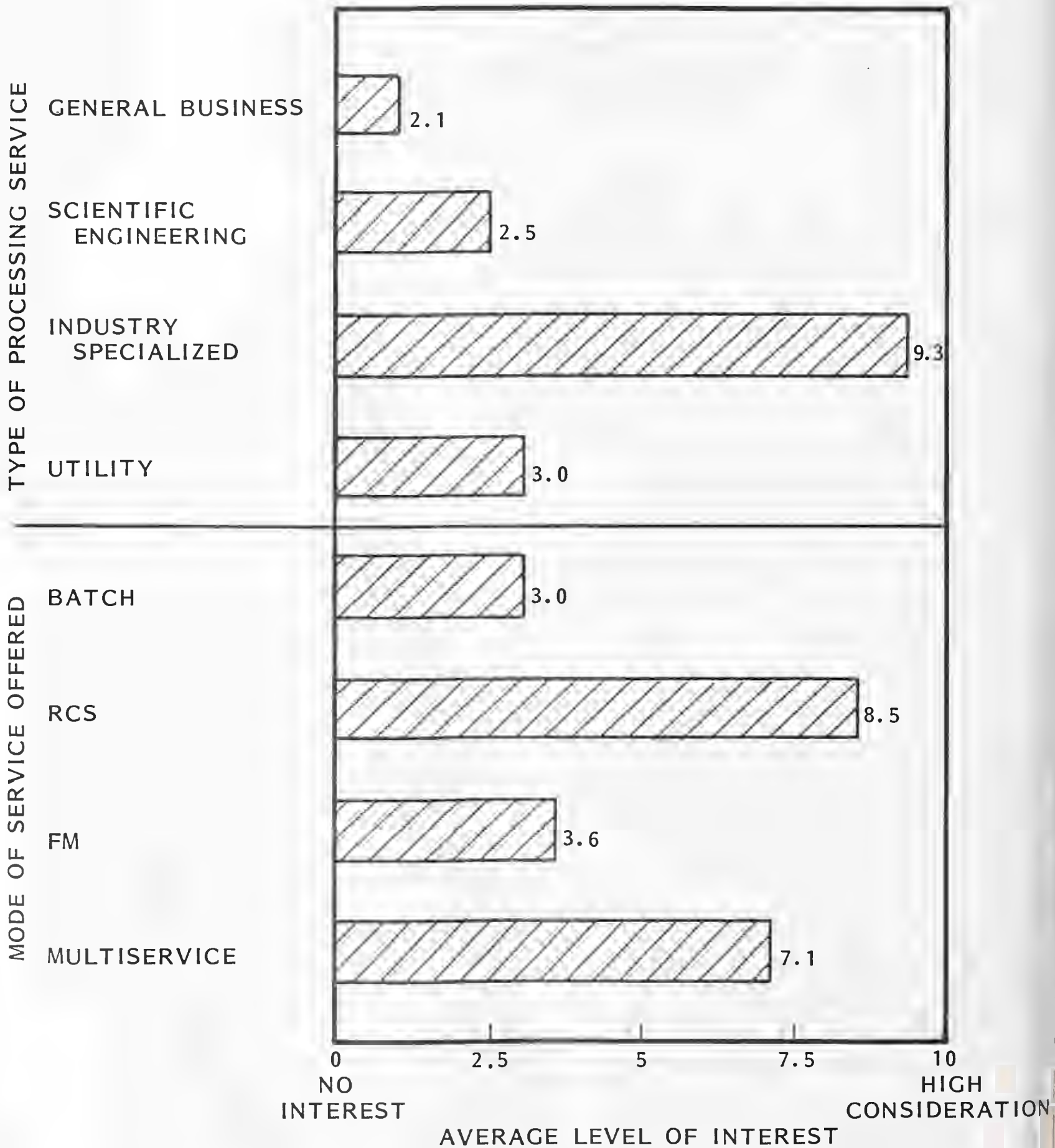


EXHIBIT IV-8

RESPONDENTS' PREFERENCES FOR PROCESSING SERVICES COMPANIES



companies, particularly if they were in DDP, or if, as one respondent said, "there really were any multi-service companies."

- Relatively few of the respondents had an interest in equipment companies. However, those that did had a relatively high interest in communications and office equipment. One respondent stated that "this is where the bucks will be made in future. It is opening up now but no one has put it together yet."

H. RESPONDENTS' EVALUATION OF COMPETITION IN THE ACQUISITION FIELD

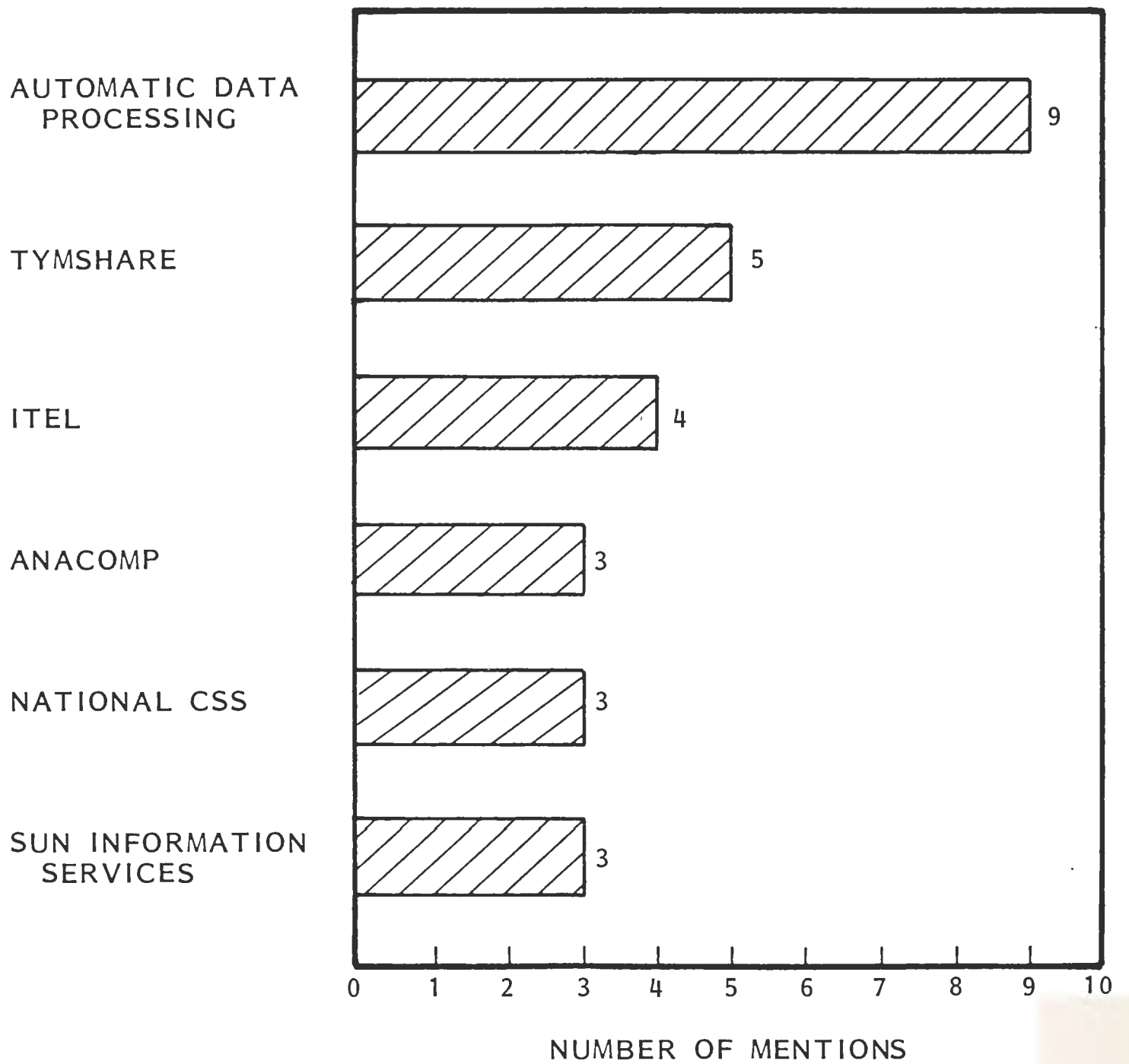
- Automatic Data Processing is on everyone's list as a competitor, as shown in Exhibit IV-9. Apart from the companies listed, single mentions were made of Shared Medical Systems, Reynolds & Reynolds, OSI, Informatics, SBC/CDC (two mentions), and NLT. EDS and CSC were also mentioned as potential competitors.
- Competition is regarded as limited, with most companies mentioning two to four competitors. Several companies commented that the extent of competition from a particular company depended on the presence or absence of a specific individual.

I. RESPONDENTS' VIEWS OF ACQUISITION TRENDS

- Seven of the eleven respondents considered that the acquisition trend will accelerate, while two feel it will stay the same.
- Of the two who consider that it will decelerate, one considers there are fewer good candidates left (a position with which INPUT and other respondents disagree). It considers that new companies will be developed, but not as fast.

EXHIBIT IV-9

COMPETITORS IN THE ACQUISITION FIELD



The other feels there will be a short term deceleration because of economics and a long term acceleration.

- Respondents generally considered that "deals" will be larger in the future; \$10 million to \$50 million level was mentioned by one respondent. This contrasts with the interests of the respondents as to size of acquisition reported above. However, this may reflect a movement towards "consolidation" rather than "acquisition" mentioned by several respondents.
- Reasons for the acceleration process were as follows:
 - "Source of managers is 'gravy.' (Main reason) is that challenges will require increasing economies of scale."
 - "Economies of scale."
 - "More and more companies see industry/discipline specializations as the route. Major companies are generally not there yet. Some other companies are getting into it. Lot of room for growth; still a lot of very fine companies to be acquired."
 - "Reason (for acceleration) is there is a vast sea of plankton and large fish cruising around. Amalgamation will have more effect on smaller companies in future. Larger acquisitions will cause digestion problems."
 - "There are tremendous state-of-the-art entrepreneurs that need support of larger companies to reach potential."
 - "Rate of technology change and aging of entrepreneurs."
 - "Need to get large critical mass."

- As indicated by one respondent, more companies are going to make the "make versus buy" decision when they try to get into new areas.
- Another respondent considered that the public firms will not be able to do what they want since their stocks won't do as well in the near future.

J. POST - ACQUISITION IMPLEMENTATION

- In the post-acquisition areas, management was regarded as the most difficult area. Problems identified were:
 - "Changing from entrepreneurial to managed business."
 - "Used to being own boss."
 - "Reluctant to give up name."
 - "Imagined loss of control."
 - "Finding your bubble burst."
- Solutions suggested to these problems included:
 - "Have a period of transition management."
 - "Get to know (them) beforehand."
 - "Postpone integration for some period."
 - "Allow them to make suggestions to make changes."
 - "Counseling and good communications."

- Communication is frequently mentioned as being important throughout an organization.
- Respondents emphasized the necessity of expecting some key people to leave, no matter what is done.
- Product development and marketing areas are regarded as somewhat less difficult to handle. Product understanding and company image problems in marketing can be handled through good interaction, communications and training.
- Operations problems are generally not significant, and can be easily handled.
- Only three of the respondents have a formal post-acquisition plan, although several indicated they should have.
 - Several others respondents mentioned they establish such plans for each specific acquisition.
 - One respondent emphasized not showing the plan to the prospect before the acquisition is completed. He also emphasized, though, that there should be no surprises to the acquired company.
- There is a considerable variation in how quickly respondents change benefit plans of acquired companies with about half the respondents trying to change programs immediately, generally including the more aggressive companies, while the other half do it slowly:
 - "Let them continue until there is no negative impact."
 - "Change as quickly as possible."
 - "Immediately."

- "Try to make our standards generally applicable."
- "Coordinate (benefits)."
- "Don't change to ours - they are too high."
- However, respondents agreed it is important to establish this "up-front."
- There is less emphasis on changing compensation plans quickly. Most companies, particularly the more successful acquirors, like to use an evolutionary approach.
- Management "perks" are integrated pretty quickly by most successful acquirors. If necessary, allowance is made in the consideration for such "perks." It is necessary to be consistent and firm in this area.

K. RESPONDENTS' OPINIONS ON THE ACQUISITION PROCESS

- Respondents were generally very positive on acquisitions. It obviously is a very emotional business with a lot of psychological aspects. Many respondents use the term "game" or game analogues in their conversation.
- For several of these companies, the acquisition function and process is a "line" as opposed to "staff" activity. They have a charter to "make things happen." This is a major reason for the differentiation between acquisition and planning functions.
- Individual comments are shown below.
 - One respondent commented, "It (acquisition process) is fun!"
 - "Honest communications are needed on both sides."

- "One of the most difficult things to do is the search function."
- "It is difficult to find out what the financial information really means, although we use our auditors."
- "We need a well managed process. We make it a keystone of our business" (company with a detailed acquisition plan with general and industry segments).
- One very knowledgeable respondent advanced the following considerations:
 - Reasons for acquisition from the acquiree's viewpoint: "estate of an outside owner, 'over-their-heads' management, inability to handle growth, capital needs, and prestige credibility."
 - He commented that "sales force expansion does not work," and that "Estate planning is vital for smaller organizations."
- For acquirors he stated the questions should be: "Why acquire anybody? Do we have the personality to handle acquisitions? Do we have the organization to handle it?"
 - Too often the reason for a company being in the acquisition business is that "it is the thing to do."
 - Companies should be doing it: "where the needs are identified, management is sympathetic to the process, psychologically able to 'give away part of the store,' and able to accept the wealth of individuals bought. Also need cash, stock, and/or borrowing power, of course."
- Another very successful respondent stated:

- "No other business is as volatile. There are peaks and valleys emotionally. Frustrations are large."
 - "A lot of people make it mechanical; it is a very people business!"
 - "Our acquisition activity is part of corporate strategy, not part of marketing or financial functions."
 - "Accounting rules are very important."
- A respondent who represents a subsidiary of a larger company stated he was very positive about it:
 - "It is a unique area!"
 - "Need to get to know key management people and what they are thinking, particularly in wealth terms."
 - "Insist on talking to key clients, possibly using consultants."
 - "Evaluate real growth potential, not just past projections."
 - "Certain employees will quit, from fear or removal of loyalty. Certain customers will also be lost. This will surprise management."
- A very successful acquiring company uses a team approach, a combination of sales and financial talent. They are able to move rapidly as a result.
 - "It's risky!"
 - "Good way to grow - exciting way to do it! Really makes things happen."

- Another respondent sounded a note of caution, however, perhaps because it is now an established leading computer services company:
 - "Acquisitions, or take overs, now use brute economic power. Creative people leave. Also, activity will bring in legislation."
 - "Initially, when we were growing rapidly, we needed acquisitions for critical mass, for sales and management. Today, our size and stature raise legal questions."
 - "Now, we have a low appetite for acquisitions. Most of ours are small and selective, for missing software applications."
 - "Acquisitions are bad except in special cases - people must want to be acquired and people must not be uprooted as a result."
 - "Other approaches can be used; joint ventures, licensing arrangements, distribution agreements, etc."

- Another successful respondent commented:
 - "Major questions are: Do you do mergers or acquisitions? Purchases or pooling?"
 - "More emphasis is needed in legal and tax questions. Tax planning for the seller is very important. There is no such thing as 'conservation of tax.'"
 - "Look at getting around goodwill, personal assumption of liabilities/assets to the seller. Enable tax planning to be done."

- A relative newcomer to the acquisition process had a very perceptive comment:

- "Few companies recognize how beneficial it (an acquisition program) can be. It is like a football game; internal growth is like the running game, acquisitions are like the passing game."
- "It is very important to have planning for integration."
- Key question "The integration process - how is this done? How do you integrate technology? We need to change our technology to support them (acquisitions). However, if we converted now, costs would be too expensive. Also, where should the geographic location be for executives?"
- The acquisition process then is viewed as being critical to most of the respondents, psychologically and practically. They expect activity to accelerate and have a major impact on the competitive structure of the industry.

V ACQUISITIONS - THE POTENTIAL
ACQUIREE'S VIEWPOINT

V ACQUISITIONS - THE POTENTIAL ACQUIREE'S VIEWPOINT

A. SURVEY OF POTENTIAL ACQUISITIONS

- In the survey, 27 respondents with combined 1978 revenues approaching \$200 million summarized their views of the acquisition process. This represented about 15% of the companies to whom the questionnaire was sent.
- Companies surveyed generally excluded the following categories:
 - Companies with less than \$2 million in annual revenues.
 - Companies with over \$20 million in annual revenues.
 - Subsidiaries of banks, manufacturers, or other organizations not in the computer services industry.
 - Companies recognized as "acquirors" rather than "acquirees."
- As shown in Exhibit V-1, however, the respondents tended to be larger than the distribution of companies in the sample.
- There were two main reasons for the response from some of the larger companies.

EXHIBIT V-1

CHARACTERISTICS OF RESPONDENTS WHO ARE POTENTIAL ACQUISITIONS

SIZE OF COMPANY IN 1977 ANNUAL REVENUES	NUMBER OF RESPONDENTS (PER CENT) BY TYPE OF COMPANY		
	PROCESSING SERVICES	SOFTWARE PRODUCTS & SERVICES	TOTAL
<\$5 MILLION	8 (30%)	8 (30%)	16 (59%)
\$5-20 MILLION	6 (22%)	4 (14%)	10 (37%)
>\$20 MILLION	1 (4%)	0 (0%)	1 (4%)
TOTAL	15 (56%)	12 (44%)	27 (100%)

- Several of them are much more interested in making acquisitions than being acquired.
- At least eight of them are actively considering being acquired.
- All but five of the respondents were presidents or chairmen of their companies.

B. ATTITUDES OF RESPONDENTS TOWARD ACQUISITION

- As well as the eight respondents considering acquisition, 16 respondents would possibly consider having their identity released to acquiring companies.
- In terms of the number of approaches received by the respondents, one remote computing services company reported 18-20 while three companies were not approached at all.
 - The median number of approaches was three.
 - All the companies presently considering acquisition had been approached from one to four times.
- This number of contacts should not be projected over all computer services companies. In INPUT's opinion, the respondents are a relatively attractive group of companies with higher than average contact rates.
- It is noteworthy, therefore, that the contact rate is relatively low in all but a few highly visible instances. This is compatible with the fact that there are only about 20 companies with significant acquisition activity in the industry.
- As shown in Exhibit V-2, almost half those companies not presently considering being acquired will consider doing so at a certain time and/or size:

EXHIBIT V-2

RESPONDENTS' ATTITUDES TO ACQUISITION IN FUTURE

RESPONDENT	"WHEN WOULD YOU CONSIDER BEING ACQUIRED?"			
	YEAR	SIZE (\$ MILLION)	VALUE (\$ MILLION)	COMMENT
1		40	40	
2		2	2	
3				"WHEN NEEDED FOR OPERATIONS OR AN UNUSUAL OPPORTUNITY"
4		2.5-3.0	2.5-3.0	"RIGHT PARTNER"
5		100	100	"WHEN CAPITAL REQUIREMENTS FOR GROWTH EXCEED OUR ABILITY TO RAISE IT"
6				WHEN CHEMISTRY IS RIGHT AND AND ITS A GOOD DEAL FOR STOCKHOLDERS AND EMPLOYEES
7		15	25	
8		18-20		ANYTIME
9	1982	4		
10				RIGHT PARTY AT RIGHT TIME
11				"SOMEWHERE BETWEEN AGE 40-50 YEARS"
12				". . . . COMBINATION WOULD HAVE TO BE BENEFICIAL TO BOTH FIRMS"
13				"WHEN IT MADE SENSE"
14	1980		5	"WHEN MARKET VALUE AND MATCH SEEM FAVORABLE"
15	1979			"WOULD CONSIDER IT IF CONDITION WERE FAVORABLE TO ALL
16	1979			
17				"THE SIMULTANEOUS DEATH OF THE MANAGEMENT TEAM"

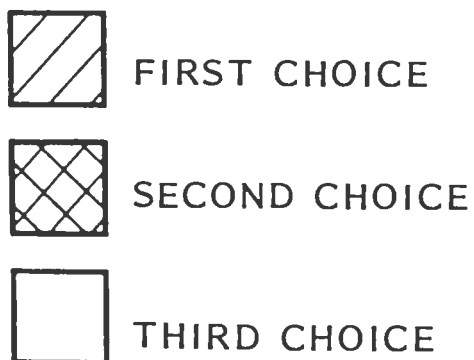
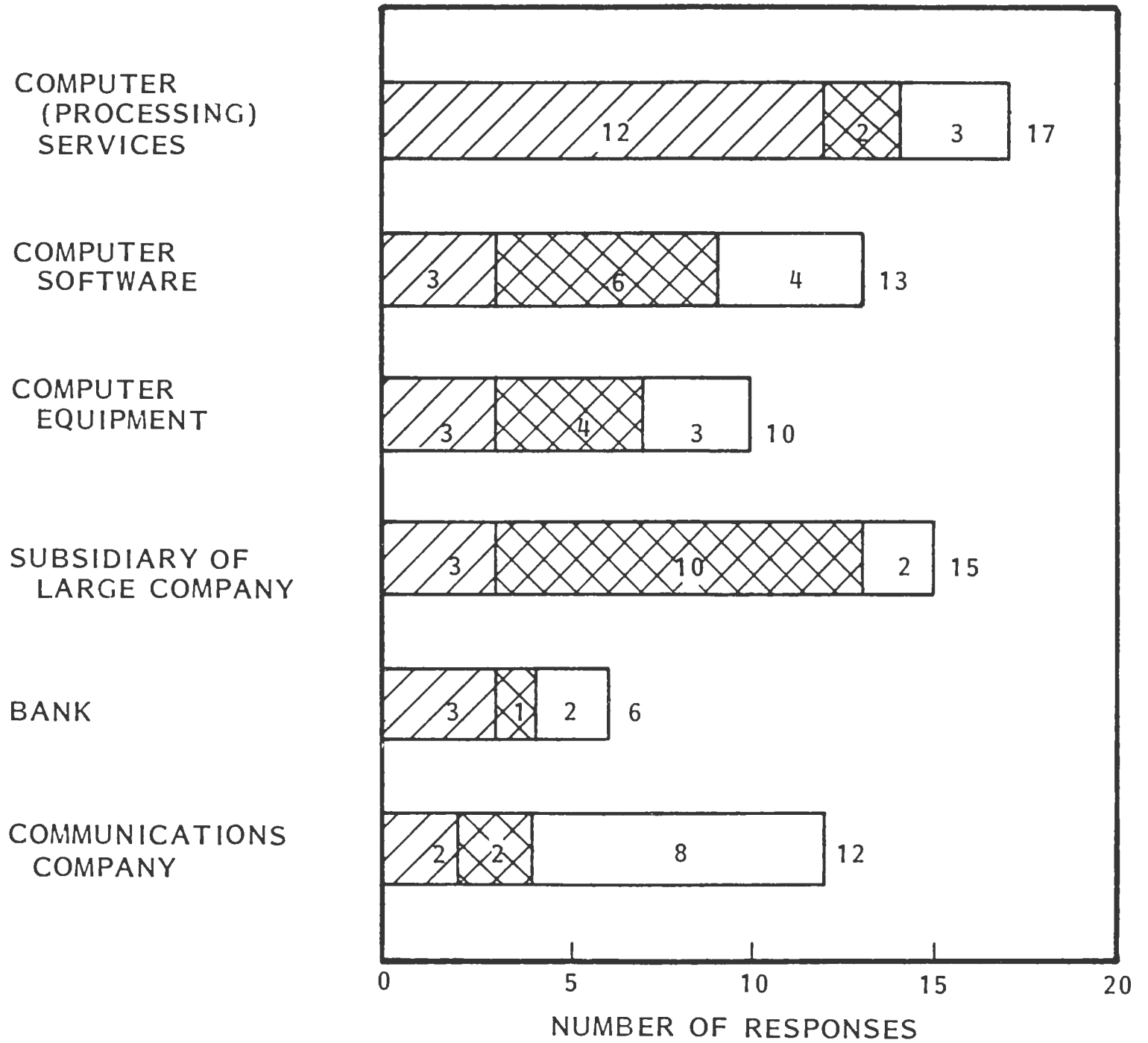
- In addition, most of the remaining companies would consider an approach "if it made sense."
 - Those few companies that would not consider acquisition had had very few approaches in the past year.
- Thus, it appears that as the number of companies making acquisitions increases, their steady calling on prospective acquisitions will gradually condition all but the most resistive to the concept. After that it is a matter of time and the right approach before the company succumbs.
 - The most resistive comment (respondent number 17 in Exhibit V-2) came from one of the more attractive, industry specialized, acquisition prospects. There are several of these obvious targets which have been well "prospected" and still resist. However, even they may well seek shelter if, to meet competition, their basic business requires resource expenditures that they don't possess.

C. ATTRACTIVENESS OF ACQUIRORS

- Computer (processing) services companies are the first choice of almost half the respondents in terms of by whom they would like to be acquired, as shown in Exhibit V-3. Reasons are as follows:
 - "Know-how."
 - "Same business."
 - "Most like our business."
 - "Our business is service and software."
 - "The business is the same, thus continuity is preserved."

EXHIBIT V-3

RESPONDENTS' PREFERENCES FOR TYPES OF ACQUIRING ORGANIZATION



- "Better understanding of the business; most likely have common objectives."
- "Complementary strengths and goals."
- "Best trade-off between goodness of fit and size of acquiror's resource base; likely to be part of a significant corporate commitment."
- Reasons why processing companies are not the first choice:
 - "Least opportunity for talented people." (president of one of the larger RCS respondents ranking them seventh choice)
 - "We are already in computer services." (ranking them second choice)
 - "A large middleman is attractive since we know how to operate in this mode - our products need national distribution." (ranking them second choice behind subsidiary)
- The second choice of many companies are the subsidiaries of large companies:
 - "Resources."
 - "Better chance of being an important part of this phase of their business."
 - "Force-fed revenue and value added of software products."
 - "Division may be in our business." (ranking them second choice after processing services)
 - "Could equal #1 if the firm was already engaged in the marketplace."

- "Depends on corporate commitment to our business - staying power - NY listed stock - available capital to fund rapid growth."
- Negative comments on subsidiaries are:
 - "Compatible business. Prior experience with X company indicates they do not pay enough."
 - "Limited imagination."
 - "Lack of common interests."
- Two of the more attractive RCS companies would be most interested in a large company diversifying into the computer services industry, implying that they would become the computer services subsidiary of that company.
- Comments related to communications companies are:
 - "Potential expansion." (software company ranking them first choice)
 - "Potential good fit." (RCS company ranking them third choice)
 - "Utility business too different." (medical industry specialist company)
 - "We will be heavily in communications processing." (RCS company)
 - "May have a marginal benefit." (large processing company)
 - "Increasing importance of communicaitons in DP."
 - "If IBM, Xerox, and AT&T move to dominate, we would like to be with them; but can they?"

- "Relatively poor fit; probably a stultifying environment unless they saw software as a major growth area." (same comment applies to banks)
- Generally, RCS companies are most receptive to being acquired by communications companies: they perceive a "fit" because of the importance of telecommunications to them as a delivery mechanism and the natural expansion potential of telecommunications companies into computer processing services.
- It was notable that only two of the software companies responding would prefer to be acquired by another software company, as shown in Exhibit V-4; while five of the 12 looked for a computer equipment or telecommunications company.
 - One software company ranked a company like Magnuson as first choice because they could "put our software on a chip."
 - This is a marked difference from the processing services companies, as shown in Exhibit V-5.
- Five of the six companies ranking software companies their second choice chose computer (processing) services companies first. These companies also tended to be among the smaller ones.
- Comments relating to software companies as acquirors were:
 - "Cyclical." (lowest ranking)
 - "Compatible business."
 - "Good fit." (large processing company ranking this first choice)
 - "Usually smaller companies, easier to work with." (ranking them third choice)

EXHIBIT V-4

SOFTWARE RESPONDENTS' FIRST PREFERENCES
FOR TYPE OF ACQUIROR

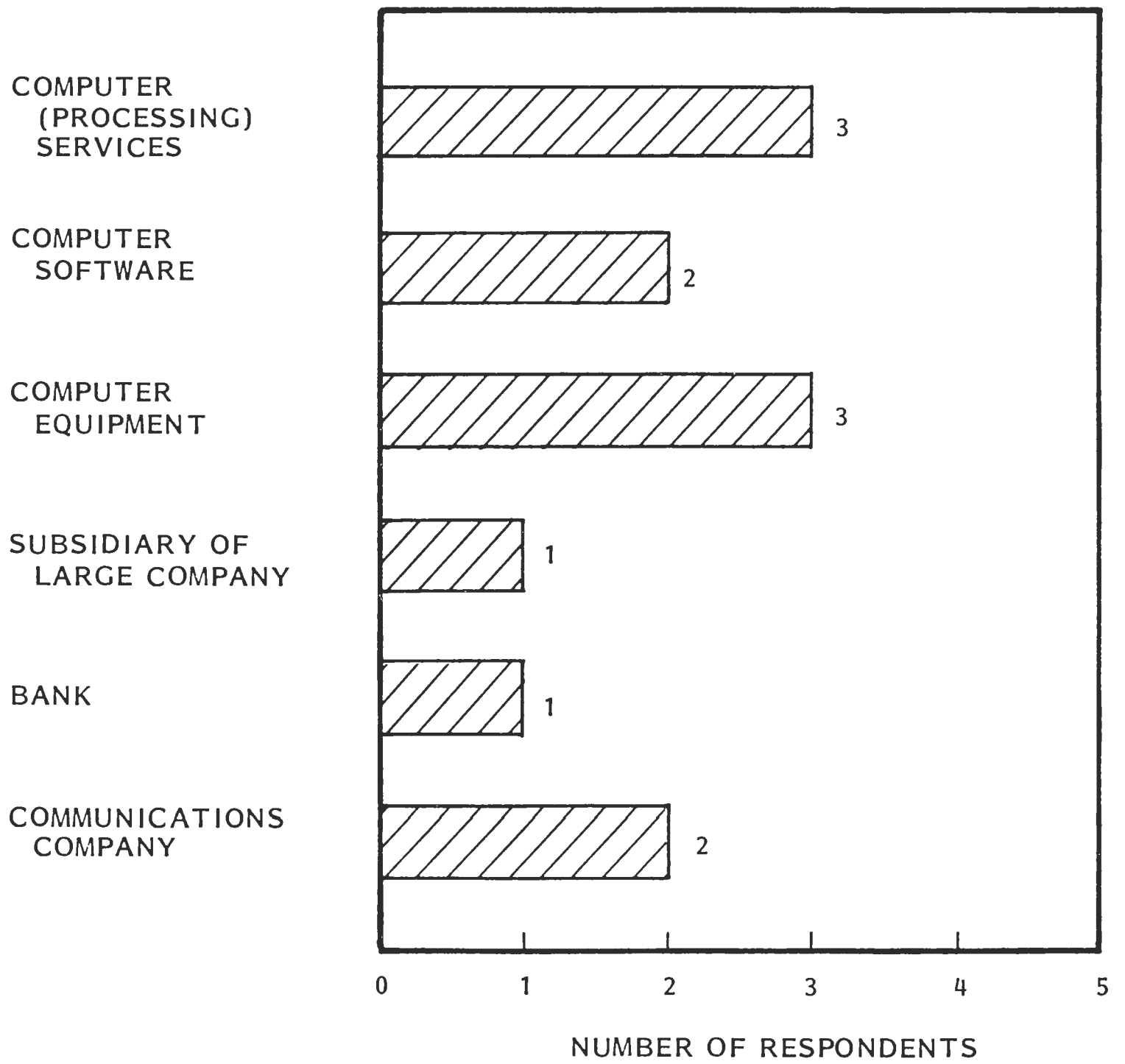
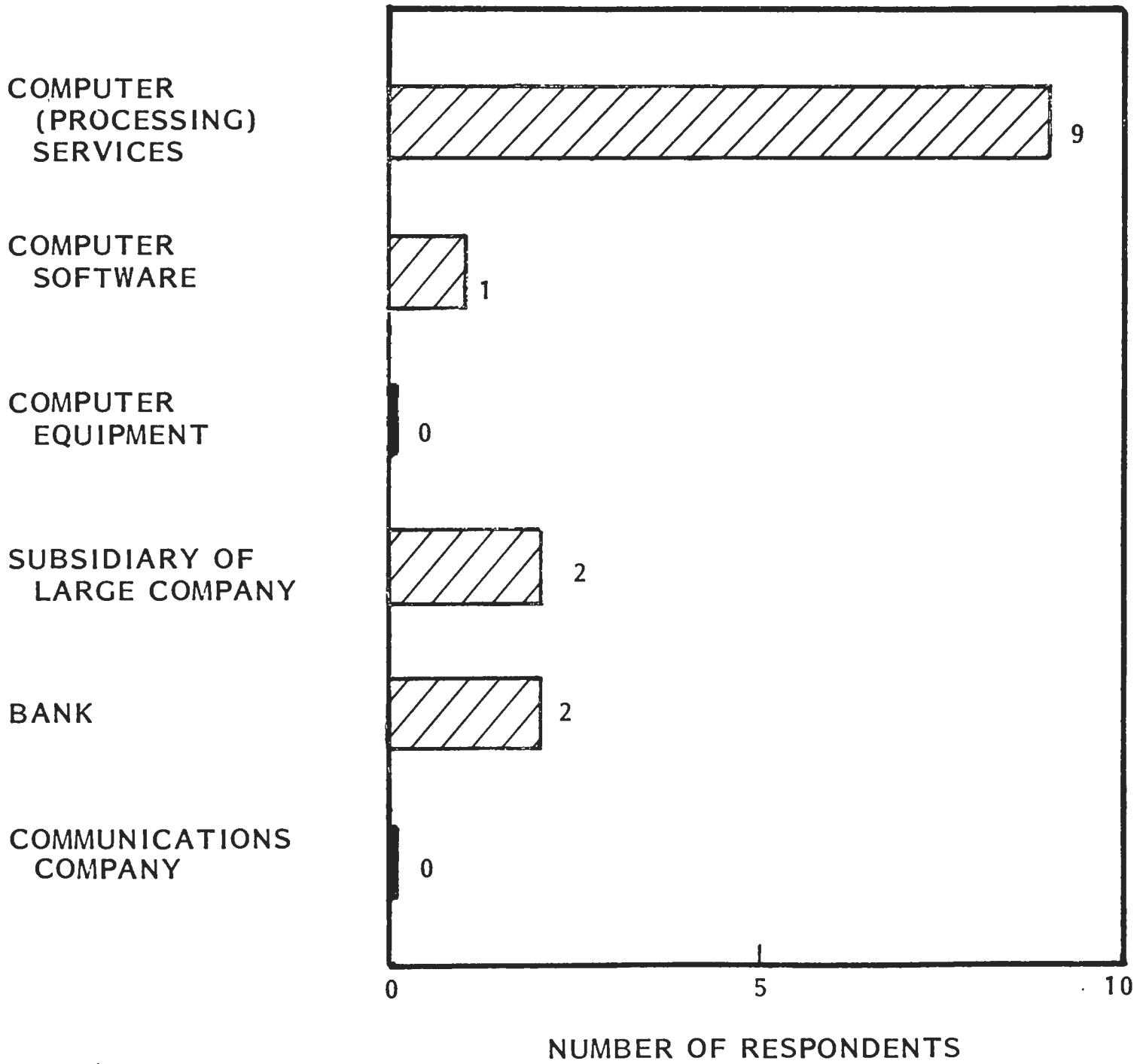


EXHIBIT V-5

PROCESSING SERVICES RESPONDENTS' FIRST PREFERENCES
FOR TYPE OF ACQUIROR



- "Our business is services and software." (ranking them second choice)
 - "The result would be constrictive." (lowest ranking)
 - "Riskier but still good." (ranking them second choice behind computer services)
 - "We could use software expertise." (first choice)
 - "Too unstable a business - low stock values and multiples." (next to lowest ranking)
 - "Best fit but resources for further growth most likely to be a restraining factor." (software company ranking them second choice)
- In general, therefore, software companies do not prefer processing or other software companies as acquirors. Also, only small processing companies will actively consider software companies as acquirors and then more for expertise than business capability. It appears software companies have a long way to go to become viable acquirors.
 - As mentioned previously, computer equipment companies were high ranking choices of software companies as acquirors. Processing services companies generally were negative about them:
 - "Equipment bound."
 - "Compatible business - may have more money (than higher choices)."
 - "Equipment manufacturing mentality has difficulty understanding service business." (large RCS company)
 - "May have service bureau division." (ranking them fourth choice)

- "The hardware may be beneficial." (large processing company ranking them second behind computer services)
- "Too specialized in software scope." (software company ranking them fourth choice)
- "We have hardware capabilities."
- "Don't want to be tied to one manufacturer - cost of iron dropping."
- "Possibility of a good fit, but out of the mainstream in a large organization." (software company)
- Thus, processing and some software companies regard computer equipment companies as being too limiting in general.
- Banks have the lowest appeal of all the groupings. Only four of the respondents ranked them first or second choice:
 - "Business." (ranking them second choice)
 - "Possible fit." (ranking them fourth choice)
 - "Better deal for employees." (ranking them first choice)
 - "Less dependent upon sole source of (our) business - RCS." (ranking them first choice)
 - "Financial business too different." (medical industry specialist)
 - "Financing ability." (large company ranking them fourth choice.
 - "Boring!"

- "Would become too subservient to bank objectives."
- "Relatively poor fit; probably a stultifying environment unless they saw software as a major growth area."
- Banks, therefore, that have an interest in acquiring computer services companies have to overcome perceived lack of interest, knowledge, and excitement (translated into opportunity). However, their business capabilities and basic financial resources put them in a position of easily becoming attractive, if they so desire.
- Other comments of note:
 - "Rank is related to incremental value we would add."
 - "Large company in process of diversifying (would be #1 choice) - (our) corporation could make the most contribution to acquiring organization."
 - "Big board service, computer-oriented company expanding computer services on a national basis." (ranking first choice)
 - "Large publicly held corporation not in industry."
- Many organizations really don't care too much about the type of acquiring company as long as their requirements are met.
- There is a very definite dichotomy in the attitude of potential acquisitions:
 - Some companies are looking for strong compatibility in their partner.
 - Others are looking for companies in a totally different area, perhaps not even in the computer industry.

- This possibly is an indication of managements' intent to "stick with it" -those companies looking for dissimilarities are looking for opportunities for themselves with acquiring companies; the others probably want to feel they can withdraw without leaving significant problems.
- However, it is apparent that compatibility of objectives is a strong consideration in these attitudes. Fast growth is probably one of the key objectives computer services companies are perceived to have which other organizations lack.
- Another reason for the strong desire for compatibility of partners may stem from the belief (erroneous, in INPUT's opinion) that the computer services business is difficult to understand or can't be run like any other business.
- About one-third of the respondents would not consider acquisition by a foreign company.
 - Three quarters of the software companies would consider a foreign company, as opposed to less than half the processing services companies. This reflects again the international orientation of software companies, particularly those selling systems software.
 - Several of the small industry specialized processing companies opposed acquisition by a foreign company, reflecting their relatively narrow, and often geographically limited focus.
- Only 10 of the respondents identified specific companies by whom they would most like to be acquired: 17 different companies were so identified:
 - Intel was mentioned by four of the respondents. Its particular attraction stems primarily from its unique combination of equipment and service activities.
 - Tymshare was mentioned three times.

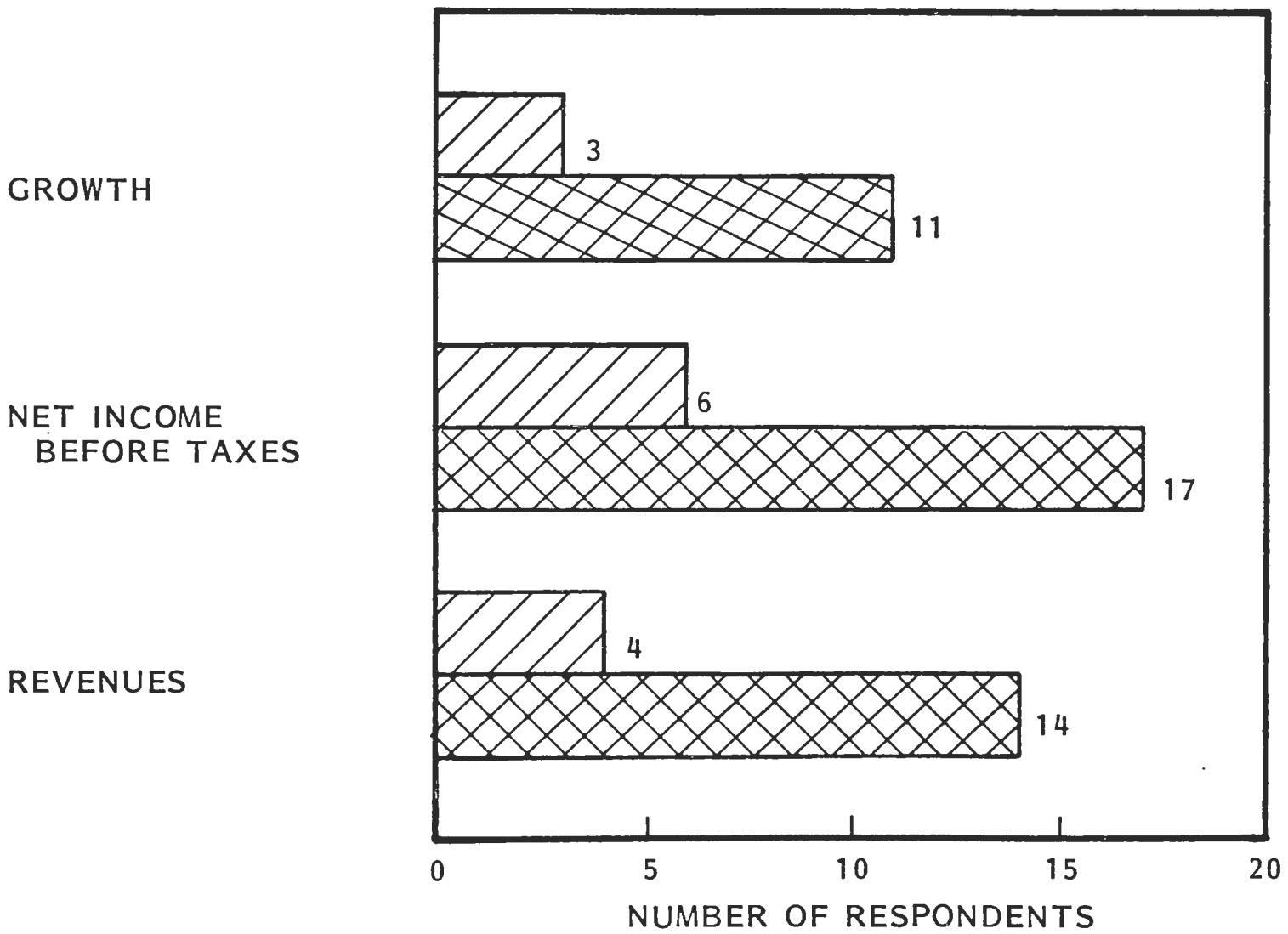
- Amdahl, Automatic Data Processing, and National CSS were each identified twice.
- IBM was identified by one company with the comment "Who wouldn't (want to be acquired by IBM)?"
- Several companies considered themselves more as acquirors than potential acquisitions.
- Most of the remaining respondents identified a generic category of potential acquirors rather than specific companies, or expressed no particular choice.

D. ACQUISITION CRITERIA

- In terms of the way companies value themselves, there appears to be no consistent pattern. Net income before taxes is regarded as marginally more important than revenues or growth, as shown in Exhibit V-6. It is slightly more important for those actively considering acquisition.
- As shown in Exhibit V-7, there is a fairly significant difference between software and processing services companies in the quantitative manner in which they value themselves.
 - Software companies, particularly those with a high professional services component, tend to value their company at less than annual revenues. Of the seven respondents, only two indicated a current or future value greater than their annual revenues.
 - Processing companies' lowest self evaluation is equivalent to their annual revenues. Two of the respondents with high multiples of revenues as value (three and five times, respectively) have an extremely low interest in being acquired.

EXHIBIT V-6

RESPONDENTS' METHODS OF VALUING
THEIR COMPANIES



EXCLUSIVE METHOD



EXCLUSIVE AND COMBINED WITH ONE
OR BOTH OF THE OTHER METHODS

EXHIBIT V-7

RESPONDENTS' VALUATION FACTORS

TYPE OF COMPANY AND RESPONDENT	METHOD OF VALUATION				
	REVENUE (MULTIPLE)	NIBT (MULTIPLE)	GROWTH		
			YEAR	(\$ MILLION) SIZE	(\$ MILLION) VALUE
SOFTWARE					
1	-	15			
2	1-1.25	-			
3	2	-			
4	-	-	1981	20	5-10
5	0.25	6	1979	10	2.5
6	-	10-15	1980	7	5
7	0.7	10	1980	12	8-10
8	0.6-0.75	15-19			
MEAN	0.05	12.5			
STD. DEV.	0.25	2.5			
PROCESSING SERVICES					
9	-	6			
10	-	10-15			
11	5	-			
12	1	5			
13	-	30			
14	-	3	1981	15	25
15	-	-	1981	15	25
16	1	-			
17	-	5			
18	1	10			
19	-	-	1985	7	
20	1+				
21	3				
22	1.5+	16			
23	2±	10			
MEAN	1.6	9.2			
STD. DEV.	0.8	4.2			
OVERALL MEAN	1.4	10.3			
STD. DEV.	0.7	4.2			

ALL CALCULATIONS EXCLUDE EXTREME VALUES.

- There is a wider variation in valuation on the basis of net income before taxes than on revenues. A multiple of ten is the mean value over all the respondents, excluding extremes, with software companies expecting a slightly higher multiple (12) than processing companies (9).
- It can be concluded from the results that software companies are slightly more "future oriented" in their self-evaluation than processing services companies.
- By far the most important factor, other than price, to respondents in an acquiring company was its growth and profitability, as shown in Exhibit V-8.
- Only software companies with revenues less than \$5 million had a factor of greater importance and that was "match of business."
- Geographic location of the acquiring company and the pre-establishment of a personal relationship were the least important factors. Software companies gave a particularly low rating to geographic location, but several regional processing services companies rated it highly.
- Processing companies were slightly more concerned than software companies with degree of autonomy and stability of previous acquisitions.
- Security of employees was very important to about half the respondents, particularly the larger processing companies.
- Other factors of importance that were mentioned were technology (for a software company), commitment to the business, and capital availability.
- As shown in Exhibit V-9, respondents would prefer a combination of cash and stock as payment for the acquisition. There was no discernible variation by size or type of company as to the preferred method.
 - The most frequently mentioned combination was 50% stock and 50% cash; variations from this always had a larger stock component.

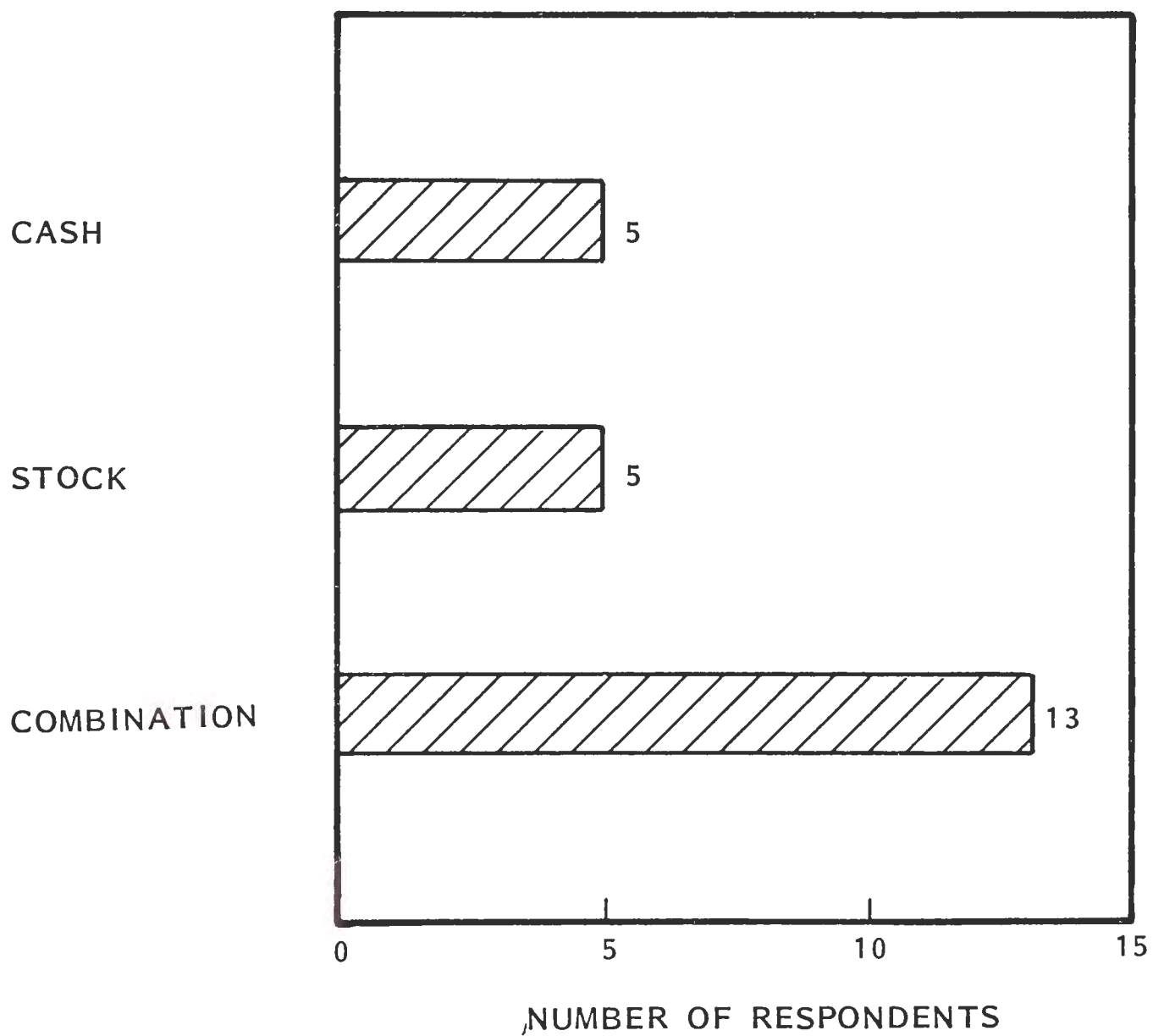
EXHIBIT V-8

RESPONDENTS' RANKING OF ACQUIRORS' CHARACTERISTICS

FACTOR	NUMBER OF MENTIONS 10 = MOST IMPORTANT, 0 = UNIMPORTANT											WEIGHT
	10	9	8	7	6	5	4	3	2	1	0	
GROWTH & PROFITABILITY	10	10	1	1	1	-	-	-	-	-	-	9.2
SECURITY OF EMPLOYEES	6	2	5	3	2	-	2	-	-	-	-	8.0
MATCH OF BUSINESS	9	2	3	1	1	1	1	-	1	2	-	7.5
STABILITY OF PREVIOUS ACQUISITIONS	3	1	9	4	-	1	1	-	-	-	1	7.4
DEGREE OF AUTONOMY	5	1	4	4	2	3	1	-	-	-	1	7.1
PERSONAL RELATIONSHIP	2	1	3	2	3	1	-	-	4	-	4	4.9
GEOGRAPHIC LOCATION	2	-	3	-	-	6	3	1	1	-	5	4.3

EXHIBIT V-9

RESPONDENTS' PREFERENCES FOR METHOD
OF ACQUISITION



- The expected provisos about stability and marketability of the stock were frequently advanced.

E. REASONS FOR BEING ACQUIRED

- As shown in Exhibit V-10, almost half the respondents admitted that enabling the investors to liquidate capital was the most important reason to consider acquisition. This was particularly true for larger processing services companies.
- Overall, however, the most important reason was to obtain resources to expand their market.
 - Small software companies particularly emphasized this with six out of eight respondents ranking it their first or second choice.
 - Software companies were also generally more concerned than processing companies with being able to obtain investment for new products and services.
- Several comments related to reasons for acquisition were:
 - "We see a four or five billion dollar software market in 1984 - technically we're out in front, but IBM will probably take the biggest share. I'm interested in exploring how to increase our share." (one of the larger software products respondents)
 - "Someone is going to evolve as a national RCS vendor. I would desire to be a part of it." (\$2 million processing company).
- Several companies reiterated they were more interested in making acquisitions than in being acquired.

EXHIBIT V-10

RESPONDENTS' REASONS FOR BEING ACQUIRED

REASON	NUMBER OF MENTIONS BY RANK				WEIGHT*
	#1 = MOST IMPORTANT	#2	#3	#4 = LEAST IMPORTANT	
ENABLE INVESTORS TO LIQUIDATE CAPITAL	7	1	5	2	2.1
MEET COMPETITION	1	1	6	6	3.2
OBTAIN RESOURCES TO EXPAND MARKET	5	8	1	2	2.0
OBTAIN INVESTMENTS FOR NEW PRODUCTS / SERVICES	5	4	3	4	2.4

*WEIGHT CALCULATED BY MULTIPLYING NUMBER OF RESPONSES TO #1 BY 1, TO #2 BY 2, TO #3 BY 3, AND #4 BY 4 THEN DIVIDING BY THE NUMBER OF RESPONDENTS TO THAT QUESTION.

- Several other companies pointed out they were doing well by themselves, but might consider an acquisition in the future; for example:
 - "We are a very profitable, aggressive leader, growing (56% in last three years) firm with good technical staff designed to accomplish (sic) our marketing area...we have adequate funds, personnel, new business, to accomplish our goals...if the right company at the right time were interested, we would listen with the welfare of our customers, employees, and stockholders best interests being the determining factor." (a \$3.5 million processing services company)
- In summary, both software and processing companies will consider acquisitions positively.
 - Apart from a few well identified companies, they have not been oversold on the prospect.
 - There are no definite parameters for "selling" a prospective acquisition although there are some relatively common characteristics in certain types and sizes of companies.
 - There are no fixed parameters for valuation of their companies in the minds of potential acquisitions.

VI ACQUISITIONS - THE ACQUIRED
COMPANY'S VIEWPOINT

VI ACQUISITIONS - THE ACQUIRED COMPANY'S VIEWPOINT

A. REASONS FOR BEING ACQUIRED

- Ten acquired companies were interviewed in this phase of the study.
 - The chief executive was interviewed in almost all cases.
 - One company was a spin-off of a larger company.
 - In the other nine companies, the person interviewed was either the founder or a member of the founding group.

- Companies interviewed became acquired for a variety of reasons.
 - They desired growth and did not have the internal resources to accomplish their objectives.
 - Their investor group wanted to realize an immediate return.
 - They were in trouble and needed help.
 - In two cases, the trigger was simply that they were asked and this initiated the acquisition process.

- Of the ten acquisitions, four were initiated by the acquiring company, three by the acquired company, two by consultants, and one by a broker.
- Companies mentioned as being active and considered as acquiring companies included ADP, Itel, Tymshare, BCS, Xerox, D&B, MCAUTO, Sun Information Services, and CSC.

B. DECISION PROCESS

I. PRELIMINARY SCREENING

- Once the acquisition process had started, respondents typically developed a range of potential acquirors.
 - As shown in Exhibit VI-1, seven of ten companies interviewed went through eight to thirteen steps in finalizing an acquisition, indicating a general agreement that this amount of activity is adequate.
 - Regardless of the number of preliminary discussions held, no more than three firm proposals were received by each respondent.
- Reasons for eliminating contenders varied, with the following being dominant:
 - They "were not our kind of people."
 - Businesses were not compatible.
 - Acquiring company moved too slowly.
 - Acquiring company did not offer an attractive stock.

EXHIBIT VI-1

NUMBER OF POTENTIAL ACQUIRING COMPANIES
CONSIDERED BY RESPONDENTS

INDIVIDUAL RESPONDENT COMPANIES	NUMBER OF POTENTIAL ACQUIRING COMPANIES		
	STEP 1: PRELIMINARY DISCUSSIONS	STEP 2: SERIOUS DISCUSSIONS	STEP 3: FIRM PROPOSALS
1	4	4	3
2	8	4	1
3	4	2	2
4	4	4	2
5	5	2	1
6	2	2	2
7	20	10	3
8	3	4	2
9	3	3	2
10	0	2	1
TOTAL	53	37	19

*IN MOST CASES A PROSPECTIVE ACQUIRING COMPANY PARTICIPATED IN UP TO THREE STEPS WITH SOME DROPPING OUT AFTER THE FIRST OR SECOND STEP.

- In no case was price stated as a dominant reason, with the prevalent opinion being that prices were about equal among alternative acquiring companies.

2. RATING OF FACTORS IN AN ACQUISITION

- The two dominant factors in the acquisition process are to convert a non-liquid investment into a more liquid form (usually cash or tradeable stock) and/or to place the company in a better position to grow.
- As shown in Exhibit VI-2, market expansion was given some importance by all respondents and was dominant in two cases.
 - Cash or tradeable stock, when it was the most important factor, tended to dominate, reflecting a desire to "cash in."
 - The overall posture of the acquired companies is aggressive with "protection from competition" rating low as a factor, as is "guaranteed employment."
 - Non-business factors such as family or health were not considered by the respondents, while future rewards such as deferred compensation or retirement received minimum mention.
- Employment contracts were usually involved (eight of the ten respondents).
 - The term was from six months to five years.
 - The contracts were viewed primarily as protecting the acquiring company, often as a means of keeping key people from starting competing companies.
 - Key executives in acquired companies typically felt that contracts were unnecessary because they didn't want to stay if, in fact, they were not wanted by the acquiring company.

EXHIBIT VI-2

RESPONDENTS' RATINGS OF ACQUISITION FACTORS

FACTORS	INDIVIDUAL RESPONDENT COMPANY										TOTAL
	1	2	3	4	5	6	7	8	9	10	
<u>INDIVIDUAL</u>											
CASH TRADEABLE STOCK	0	10	0	2	10	8	10	9	5	9	63
GUARANTEED EMPLOYMENT	0	1	3	0	0	5	0	4	1	6	20
DEFERRED COMPENSATION/RETIREMENT	0	1	0	1	0	0	0	0	0	0	2
<u>CORPORATE</u>											
CASH SHORTAGE	0	0	10	8	7	0	8	1	5	9	48
MARKET EXPANSION	5	9	9	10	9	8	5	10	6	4	75
PROTECTION FROM COMPETITION	0	9	7	2	4	0	3	0	7	4	36
NATIONAL SALES FORCE	5	2	5	5	9	0	0	0	6	5	37
INVESTMENT FOR NEW PRODUCTS	7	9	6	4	7	0	3	9	7	6	58
INVESTMENT FOR EQUIPMENT/OTHER	7	0	0	0	7	0	2	0	5	3	24
<u>OTHER</u>											
FAMILY/HEALTH	0	0	0	0	0	0	0	0	0	0	0
INVESTORS WANTED "CASH OUT"	8	10	0	0	0	0	0	0	0	0	18

KEY: 10 = MOST IMPORTANT
0 = NOT CONSIDERED

- The decision point among ten responding companies was split five to five between an individual (usually the president) or the board of directors.

3. LENGTH AND COST OF THE ACQUISITION PROCESS

- The time taken to finalize an acquisition from the point the acquired company began considering the possibility of being acquired varied widely, as shown in Exhibit VI-3.
 - In the two cases where the process took only three to four months, both sides were anxious to reach agreement from the outset.
 - The other extreme, those cases which took 18 months, were with larger, more structured acquiring companies which had a defined set of criteria and procedures.
- The length of time involved did not determine the outcome since all ten respondents felt they achieved their objectives.
 - Nine of ten stated they would definitely make the same decision again.
 - One respondent qualified his answer with: "As a stockholder, 'yes'; as a manager 'no'."
- The cost of the acquisition process, in terms of key personnel time and fees, is substantial, as shown in Exhibit VI-4.
 - For a small company the drain can significantly impact performance, an observation made by several respondents.
 - The costs for the acquiring company are in addition to those shown, so the total cost can be several times the amounts on the exhibit.

EXHIBIT VI-3

RESPONDENTS' REPORTED LENGTH OF ACQUISITION PROCESS

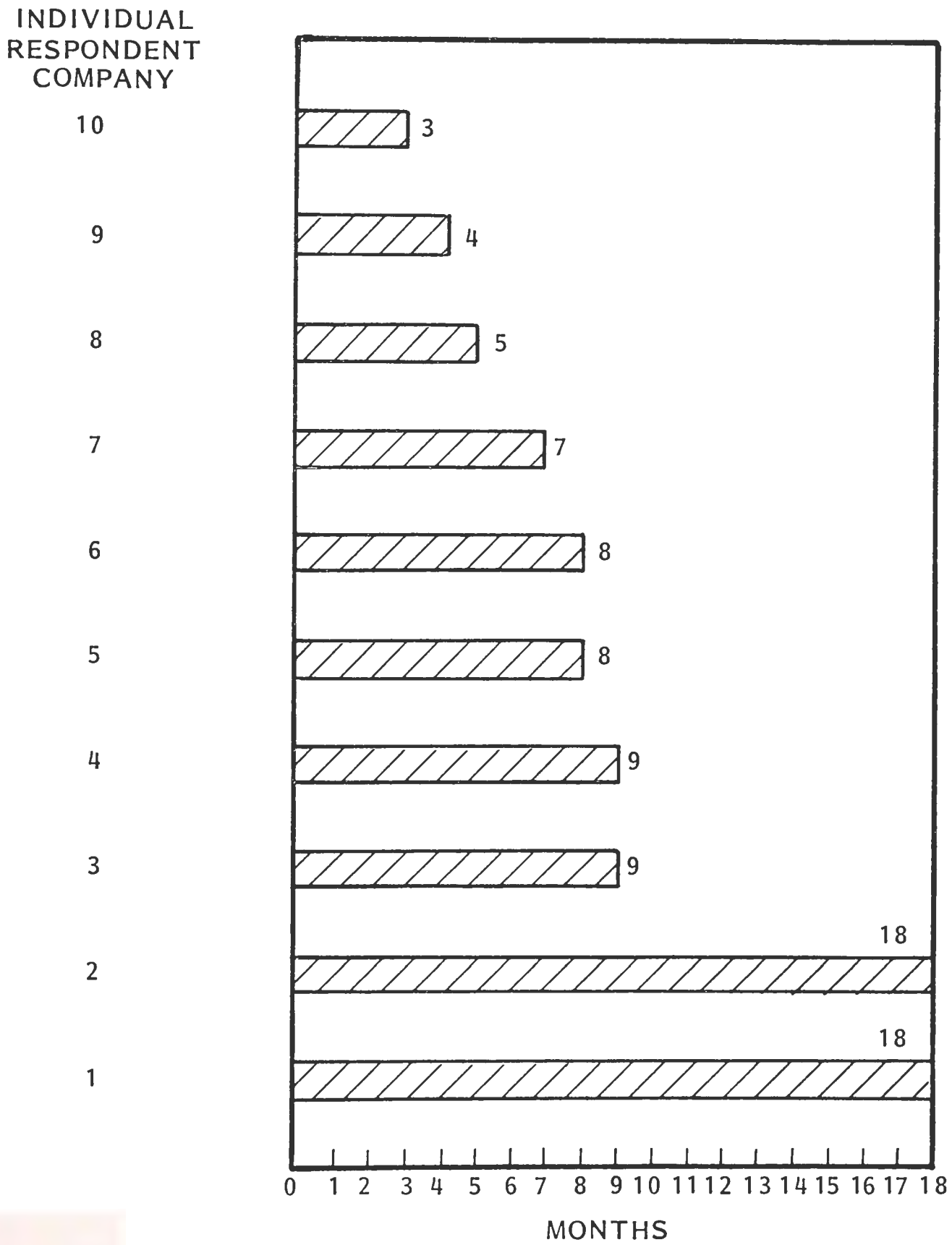


EXHIBIT VI-4

RESPONDENTS' COSTS OF THE ACQUISITION PROCESS

INDIVIDUAL RESPONDENT COMPANIES	COST			
	KEY PERSONNEL TIME (MAN MONTHS)	LEGAL (THOUSANDS)	ACCOUNTING (THOUSANDS)	TOTAL LEGAL PLUS ACCOUNTING (THOUSANDS)
1	2	\$10	\$30	\$ 40
2	3	75	25	100
3	8	20	10	30
4	9	-	-	-
5	12	75	26	101
6	20	35	UNKNOWN	35
7	24	40	30	70
8	36	"MINOR"	"MINOR"	-
9	60	15	40	55
10	84	-	-	100

*LEGAL AND ACCOUNTING COSTS NOT DEFINED INDIVIDUALLY. THE TOTAL SHOWN INCLUDES BOTH COST CATEGORIES.

- These costs must be compared with the alternative to acquisition, that of starting an operation from scratch.

4. COMPANY VALUATION TECHNIQUES

- The prevalent mode of valuing the acquired company was earnings, with multipliers of 10-16 times being mentioned by respondents. Typical comments are documented in Exhibit VI-5.
 - Future earnings were not a major factor in most cases since the acquiring company also claimed future earnings growth and the discussion then centered on the relative price/earnings ratios of the acquired and the acquiring companies.
 - Where the acquired company had no significant earnings, the price was set on other factors such as book value or assets.
- Respondents felt that price was not the determining factor in that the alternative acquiring companies use similar formulas and prices tend to be similar.
- In the words of one respondent, "You always think something is worth more than it really is and then comes a time when you have to be realistic."

C. STRUCTURING OF THE AGREEMENT

I. PAYMENT TERMS

- Of the ten respondents, only one had an agreement which included an earn-out provision.

EXHIBIT VI-5

RESPONDENTS' VALUATION METHODS USED

- "THIRTEEN TIMES AFTER TAX EARNINGS"
- "TWO TIMES BOOK VALUE"
- "SIXTEEN TIMES AFTER TAX PROFITS"
- "BASED ON ASSETS, BECAUSE WE DIDN'T HAVE EARNINGS"
- "WE JUST DEMANDED A PRICE, AND THEY WANTED TO BE IN THE BUSINESS"
- "TEN TO FIFTEEN TIMES EARNINGS, DEPENDING ON THE MULTIPLE OF THE ACQUIRING COMPANY"
- "ON THE EXCHANGE OF STOCK, WE WANTED A 40% PREMIUM VERSUS THEIR STOCK PRICE"
- "TEN TO TWELVE TIMES EARNINGS"
- "PROJECTED 36 MONTHS PROFITS AND USED A NEGOTIATED MULTIPLIER FOR AFTER TAX EARNINGS"
- "BASED PRIMARILY ON REVENUE AND THE EXPECTATION THAT THE ACQUIRING COMPANY COULD REDUCE COSTS AND THEREBY GENERATE MORE PROFIT"

- The earn-out was 70% of the purchase price with the remainder being front-end cash.
 - In retrospect, the acquired company would prefer to have had a higher front-end payment to eliminate conflicts during the earn-out period on the subject of near-term versus longer term earnings.
 - Clearly, the industry is tending toward 100% front end payments, either cash or stock.
- In Exhibit VI-6, the basis of payment (cash or stock) is compared to two acquisition factors discussed earlier (market expansion and investment for new products). These in turn are compared to the fact of whether or not the chief executive of the acquired company at the time of acquisition is still with the company.
 - In the case of the acquisitions made for cash, a relatively higher importance was given to market expansion and investment for new products and the five chief executives are still with the acquired company.
 - In the case of acquisition made for stock, a relatively low importance was given to market expansion and investment for new products, and four of the five chief executives are no longer with the acquired company.
 - This indicates that where cash is the incentive, it is needed to grow the company and management stays to implement the growth. When stock is the incentive, often the acquired company has already achieved success (and profit) and there is a lesser commitment to stay and grow the acquired company.

EXHIBIT VI-6

RELATIONSHIP OF ACQUISITION FACTORS, BASIS OF ACQUISITION,
AND EXECUTIVE RETENTION

INDIVIDUAL RESPON- DENT COST	BASIS OF ACQUISITION		RATING OF ACQUISITION FACTOR*		Ⓐ
	% CASH	% STOCK	MARKET EXPANSION	INVEST- MENT FOR NEW PRODUCTS	
1	100%		5	7	YES
2	100		9	6	YES
3	100		10	4	YES
4	100		10	9	YES
5	100		6	7	YES
SUBTOTAL	-	-	40	33	-
6		100%	9	9	NO
7		100	9	7	NO
8		100	8	0	NO
9		100	5	3	YES
10		100	4	6	NO
SUBTOTAL	-	-	35	25	-

10= MOST IMPORTANT
0 = LEAST IMPORTANT

Ⓐ CHIEF EXECUTIVE AT TIME OF ACQUISITION STILL WITH
COMPANY AS OF DECEMBER 1978.

2. THE INTEGRATION PROCESS

- The usual pattern among respondents was for little integration to take place at first, and for integration to evolve over time. Exhibit VI-7 summarizes the experience of those interviewed.
 - Two of the ten respondents reported high degrees of difficulty (both chief executives of the acquired companies had resigned), coming largely from the acquiring company attempting to implement procedures on the acquired company.
 - Most respondents expected to become more integrated with the parent in a two-year time frame.

D. ACQUIRED COMPANY'S VIEW AFTER THE ACQUISITION

- Six of the ten respondents were satisfied with the acquisition as structured. Comments from those who would change the process include:
 - "Would have taken more time thinking about the personnel area. For example, we had been paying people semi-monthly and went to monthly. The little things are important."
 - "I would have had them give me a plan. One of the first things they did was force a sales manager on me."
 - "I would want a better understanding about the amount of freedom I would have. Instead of being a president I ended up being a sales manager."
 - "Maybe ask for more money."

EXHIBIT VI-7

RESPONDENTS' DEGREE OF INTEGRATION

RESPONDENT COMPANY	YEAR OF ACQUISITION	DEGREE OF INTEGRATION
1	1976	LITTLE. PROVIDE A MONTHLY REPORT ON ACQUIRING COMPANY FORMAT
2	1975	VERY LITTLE. SALES FORCES ARE SEPARATE "IT WILL TAKE A LONG TIME TO INTEGRATE"
3	1976	MORE AND MORE WITH TIME.
4	1978	HIGH. VERY COMPATIBLE PRODUCTS
5	1978	CONFUSED. TO DATE GOALS AND OBJECTIVES, REPORTING SYSTEMS ARE UNCLEAR.
6	1976	PAINFUL. ACQUIRED COMPANY'S PEOPLE REPLACED BY ACQUIRING COMPANY.
7	1978	MUCH. GOING WELL TO DATE, BUT STRAINS ARE APPEARING.
8	1977	LITTLE. POOR COMMUNICATIONS AT FIRST, BUT BETTER NOW.
9	1979	LITTLE. EXPECT A CONSOLIDATION AFTER 1-2 YEARS.
10	1975	HIGH. NOW HAVE MERGED THE TWO OPERATIONS.

- The regrets, to the extent they were found, centered more on loss of authority - the ability to run the company without review from above.
- With regard to brokers, two respondents had used them and one said he would use a broker again.

E. RESPONDENTS' VIEWS ON ACQUISITIONS IN THE COMPUTER SERVICES INDUSTRY

I. RATE AND IMPACT

- Seven of ten respondents felt the rate of acquisitions was accelerating.
- The impact on the industry was viewed as positive with these outcomes:
 - More stable prices.
 - More realistic profits.
 - Spreading of software development costs.
 - Bigger, stronger companies with one respondent foreseeing four to six dominant companies over the next 10-20 years.
 - After acquisition, the true entrepreneur leaves and starts yet more companies.
- Acquisitions are viewed as an alternative to going public; a route which is considered increasingly difficult.

2. NATURE OF ACQUISITION PROGRAMS

- Respondents felt an acquisition program is essential for all growing companies. Targets of such programs were:
 - Diversification, either into new products or new market areas.
 - Further penetration into existing areas of industry specialization such as insurance agents, bank processing, manufacturing specialties.
 - A means of participating in the trend to distributed data processing by acquiring capability in relevant hardware, communications, or software.
 - Leverage current marketing capability by pushing more products through the same channel of distribution.
- One respondent summed up his feelings by pointing out that 90% of internally developed products fail. In this context, acquisitions become an alternative to internal R&D at a time when only the largest companies can afford significant R&D.

APPENDIX A: DEFINITIONS

APPENDIX A: DEFINITIONS

- **COMPUTER SERVICES**

These are services provided by vendors which perform data processing functions using vendor computers, or assist users to perform such functions on their own computers.

- **REMOTE COMPUTING SERVICES (RCS)**

Provision of data processing to a user by means of terminals at the user's site/s connected by a data communications network to the vendor's central computer. The three sub-modes of RCS are:

1. INTERACTIVE (timesharing) is characterized by interaction of the user with the system, primarily for problem solving timesharing, but also for data entry and transaction processing; the user is "on-line" to the program/files.
2. REMOTE BATCH is where the user hands over control of a job to the vendor's computer which schedules job execution according to priorities and resource requirements.
3. DATA BASE is characterized by the retrieval of information from a vendor-maintained data base. This may be owned by the vendor or a third party.

- **BATCH SERVICES**

This includes data processing performed at vendors' sites of user programs and/or data which are physically transported (as opposed to electronically by telecommunications media) to and/or from those sites. Data entry and data output services, such as keypunching and COM processing, are also included. Batch services include those expenditures by users which take their data to a vendor site which has a terminal connected to a remote computer used for the actual processing.

- **SOFTWARE PRODUCTS**

This category is for users' purchases of systems and applications packages for use on in-house computer systems. The figures quoted include lease and purchase expenditures, as well as fees for work performed by the vendor to implement and maintain the package at the users' sites. Fees for work performed by organizations other than the package vendor are counted in professional services. The two sub-categories are:

1. SYSTEMS PACKAGES are operating systems, utilities, and language routines that enable the computer/communications system to perform basic functions. The software is provided by the mainframe manufacturers with their hardware; other vendors provide improved versions of this and special-purpose routines. This classification includes compilers, data base management software, communications packages, simulators, performance measurement software, diagnostic software, and sorts.
2. APPLICATIONS PACKAGES are software which perform processing to serve user functions. They consist of general purpose packages, such as for accounting and inventory control, and special purpose packages, such as personal trust, airline scheduling, and demand deposit accounting.

- **PROCESSING SERVICES**

Processing services encompass FM, RCS, and batch services: they are categorized by type of service, as distinguished from mode of service, bought by users as follows:

- GENERAL BUSINESS services are processing services for applications which are common to users across industry categories. Software is provided by the vendor; this can be a complete package, such as a payroll package, or an application "tool," such as a budgeting model, where a user provides much of the customizing of the finished product it uses. General business processing is often repetitive and transaction oriented.
- SCIENTIFIC AND ENGINEERING services are the processing of scientific and engineering problems for users across industries. The problems usually involve the solution of mathematical equations. Processing is generally problem solving and is non-repetitive, except in the sense that the same packages or "tools" are used to address different, but similar, problems.
- INDUSTRY SPECIALTY services provide processing for particular functions or problems unique to an industry or industry group. The software is provided by the vendor either as a complete package or as an application "tool" which the user employs to produce its unique solution. Specialty applications can be either business or scientific in orientation; data base services where the vendor supplies the data base and controls access to it (although it may be owned by a third party) are also included under this category. Examples of industry specialty applications are: seismic data processing, numerically-controlled machine tool software development, and demand deposit accounting.

- UTILITY services are those where the vendor provides access to a computer and/or communications network with basic software that enables any user to develop its own problem solution or processing system. These basic tools include terminal handling software, sorts, language compilers, data base management systems, information retrieval software, scientific library routines, and other systems software.

APPENDIX B: QUESTIONNAIRES

ACQUIRED COMPANY QUESTIONNAIRE

1. When was your company acquired? _____

2. By whom was it acquired? _____

3. How many companies were considered?
 - Contacts (preliminary discussion) _____
 - Serious Discussions _____
 - Firm Proposals _____

4. For the company selected, who initiated the contact?

5. Why did you select the one you did?

6. Today, which companies would you consider and/or select? Why?

7. Who made the selection?

Individual Board Others

Please Specify _____ Please Specify _____

8. Please rank the importance of the following in your choice on a scale of 10 = most important, 0 = not considered.

FACTOR	RANK	COMMENT
<u>INDIVIDUAL BENEFITS</u>		
Cash Tradeable Stock		
Guaranteed Employment		
Deferred Compensation/ Retirement		
<u>CORPORATE BENEFITS</u>		
Cash Shortage		
Market Expansion		
Protection from Competition		
National Sales Force		
Investment for New Products		
Investment for Equipment/Other		
<u>OTHER REASONS</u>		
Family/Health		
Other (specify) _____		

9. How long did the acquisition process take?

10a. How did the integration process work out?

b. What unforeseen problems arose? How were they handled?

11. Did you use a broker? YES NO

Why? _____

Would you do so again? YES NO

Which broker did you use? _____

Were you satisfied with them? YES NO

Please comment on broker: _____

12. What was the cost of the acquisition process?

Personnel Time (Man Months) _____

Other Costs _____

13. How did you value your company? Please give factor (revenues, NIBT, etc.) and multiplier.

14. What was the basis for acquisition?

_____ % CASH	_____ % STOCK
--------------	---------------

15. How much was up-front? Earn-out?

_____ % FRONT-END	_____ % EARN-OUT
-------------------	------------------

16. Did you achieve your objectives?

17. Would you make the same decision now?

18. What would you change?

19. How did you protect your people?

20. Please comment on the acquisition process in the computer services industry.

- a. Do you see the acquisition rate accelerating
 decelerating
 staying the same

b. What impact will it have on the industry?

c. Must a major company have an acquisition program?

d. What should its nature be?

e. Other comments: _____

ACQUIRORS' QUESTIONNAIRE

1. What is the nature of your acquisition program?

- Formal - Definite plan with targetted size/types of companies
- Informal - Intention to acquire but no formal plan - examine opportunities as they arise.
- Both No Plan

2. If formal, do you have a "kitty" of cash and/or stock allocated? How often is it replenished?

3. How many people do you have whose sole job is acquisition? _____

Whose main task is acquisition? _____

How many specialists (attorneys/accountants) are assigned to acquisition support? _____

4. Please identify number of acquisitions made over the last seven years:

YEARS	NUMBER OF COMPANIES ACQUIRED	AGGREGATE SIZE	% OF CURRENT BUSINESS
1970			
1971			
1972			
1973			
1974			
1975			
1976			
1977			
1978			

5. Please provide your estimates of following parameters for the last year you made acquisitions.

_____ number of contacts

_____ number seriously considered (formal evaluation)

_____ number of proposals

_____ number of closes

6.a. How have your acquisitions been made?

_____ number (%) for cash

_____ number (%) for stock

_____ number (%) for combination

_____ other

b. Do you use escrow funds? _____

c. Do you use "earn-outs"? _____

What period is covered? _____

7. How has the method of acquisition changed with time and how will it change in future? Please comment on industry reasons and company reasons.

8. How is initial contact generally made for your successful acquisitions?

a. Acquiror %

b. Acquiree %

c. Broker %

d. Other %

9. Please discuss your attitude to the use of finders and brokers. Are you satisfied with the services they offer? What additional services would you like?

10. What fee scale do you normally expect to pay a broker, either directly or indirectly?

a. What general sources of information are useful in terms of prospect identification?

b. How important as sources are:

ADAPSO _____	Consultants _____
Trade Press _____	Research reports _____

11. For recent acquisitions please describe the average cost and length of the process.

	Elapsed Time (Months)	Cost (\$000) or %
Search	_____	_____
Evaluation	_____	_____
Negotiation	_____	_____
Close	_____	_____
TOTAL	_____	_____

12. Please check the stages at which each of the following become involved:

	<u>SEARCH</u>	<u>EVALUATION</u>	<u>NEGOTIATION</u>	<u>CLOSE</u>
<u>INTERNAL</u>				
Top Management	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Board of Directors	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Acquisition Function	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Planning Function	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Company Attorney	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Technical Staff	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Financial Staff	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<u>EXTERNAL</u>				
Outside Attorney	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
External Auditor	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Financial Advisors	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Brokers/Consultants	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

13. For a recent acquisition please analyze costs as follows:

- _____ % Personnel
- _____ % Legal external (including necessary filings)
- _____ % Accounting
- _____ % Travel
- _____ % Other, including brokers fee

14. Please give your evaluation of your satisfaction (i.e. degree to which your expectations were met) with acquisitions your company has made. (Please give numbers where more than one acquisition has been made).

	<u>Good</u>	<u>Bad</u>	<u>Indifferent</u>
Representation by acquired company	_____	_____	_____
Management of acquired company	_____	_____	_____
Subsequent performance of acquired company	_____	_____	_____

15. To what extent is confidentiality a problem? How do you handle it?

16. On what basis do you evaluate a potential acquisition? Please indicate priority by putting 1,2,3, etc. in boxes and give multiplier where possible.

Revenues	<input type="checkbox"/>	Multiplier _____
Profit	<input type="checkbox"/>	Multiplier _____
Net Worth	<input type="checkbox"/>	Multiplier _____
Growth Potential	<input type="checkbox"/>	Multiplier _____
Product Specialization	<input type="checkbox"/>	Multiplier _____
Industry Client Base	<input type="checkbox"/>	Multiplier _____
Geographic Location	<input type="checkbox"/>	Multiplier _____
Type of Service Offered	<input type="checkbox"/>	Multiplier _____
Type of Hardware	<input type="checkbox"/>	Multiplier _____
Other: Please describe	<input type="checkbox"/>	Multitplier _____

17. What determines your acquisition potential?

18. What have you learned about the acquisition process that you can share?

19. Please rank the areas in which you would consider acquisitions on a scale

10 = high consideration 0 = no interest

Geography

U.S. Canada Europe
 Other _____ Please identify

Size in Annual Revenues

< \$2 million \$5-20 million
 \$2-5 million > \$20 million

Type of Company

Software Products

General Applications Products
 Industry Specialized Application Products
 Systems Software Products

Professional Services

Processing Services by Type of Service

General Business
 Scientific and Engineering
 Industry Specialized
 Utility

Processing Services by Mode of Service

Batch RCS FM Multi Service

Other

- Communication Services
- Office Automation Services
- Equipment Manufacturers

Computer
 Communications
 Office
 Other (please specify)

20. Who do you rank as your prime competitor in the acquisition field? What are their strengths? What are their weaknesses?

<u>COMPANY</u>	<u>STRENGTHS</u>	<u>WEAKNESSES</u>

21. Will the acquisition trend in the computer services industry accelerate or decelerate? Why will this happen?

22. What are the most significant difficulties in post acquisition implementation? How can these be addressed?

	<u>Difficulty</u>	<u>Solutions</u>
a.) In Marketing	_____	_____
b.) In Management	_____	_____
c.) In Product Development	_____	_____
d.) In Operation	_____	_____

23. Do you have a formal post-acquisition plan? _____

MAIL QUESTIONNAIRE SENT TO POTENTIALLY ACQUIRABLE COMPANIES

PERSONAL AND CONFIDENTIAL

RESPONDENT NAME _____

TITLE _____

COMPANY NAME _____

ADDRESS _____

TELEPHONE NUMBER _____

Please contact me further about this research.

Would you want to be identified to any acquiring companies?

- Yes Possibly No

This cover sheet will be separated from the tabulation sheets and will be kept in a confidential file. It is used to communicate with you, to send your report on the results, and to categorize your response by size and type of company.

CONFIDENTIAL

1. How many approaches have you received to be acquired in the past year? _____
2. Are you considering being acquired? Yes No
3. If the answer to question 2 is no, when would you consider being acquired?
 In a certain year (please give year). _____
 When you have reached a certain size (please give size). _____
 When the company has a certain market value (please give value). _____
 Please give any other indication of when you would consider being acquired.

4. What kind of company would you prefer to be acquired by and why (please rank "1" most preferred to "7" least preferred).

Type of Company	Rank	Reason
Computer Services Company; e.g., ADP, Tymshare		
Computer Software Company; e.g., MSA, ADR		
Computer Equipment Com- pany; e.g. CDC, NCR		
Subsidiary of Large Com- pany; e.g., SUN, MCAUTO		
Bank; e.g., Citibank		
Communications Company; e.g., IT&T, GTE		
Other (please identify)		

5. Which three companies would you most like to be acquired by if you were to be acquired? Why?

(Please turn over)

6. Would you consider being acquired by a foreign company? YES NO

7. Please check method you would use to value your company.

_____ Revenues (please give multiple) _____

_____ Net income before taxes (please give multiple) _____

_____ Growth potential (please give): Year _____ Size _____ Value _____

8. Please rate the factors, other than price, important to you in a company which would acquire you (please use scale of 10 = most important, 0 = unimportant)

_____ Growth and Profitability	_____ Personal Relationship Already Established
_____ Geographic Location	_____ Security of Employees
_____ Degree of Allowed Autonomy	_____ Stability of Previous Acquisitions
_____ Match of Business	_____ Other (specify) _____

9. On what basis would you prefer to be acquired?

_____ Cash _____ Stock _____ Combination _____% _____% (please give % breakdown)

10. Please rank the reasons you would want to be acquired.

_____ Enable Investors to Liquidate Capital	_____ Obtain Resources to Expand Market
_____ Meet Competition	_____ Obtain Investment for New/Product Services
_____ Other (please specify) _____	

11. Please provide any additional comments on the subject.

Thank you for your courtesy and time in completing this questionnaire. Please return to Peter A. Cunningham, President.

ACQUISITIONS IN THE INFORMATION SERVICES INDUSTRY

Peter A. Cunningham, President, INPUT

INTRODUCTION

EXECUTIVE SUMMARY

IMPACT OF ACQUISITIONS ON THE INFORMATION SERVICES INDUSTRY

- Historical Assessment
- Analysis of Recent Acquisitions
- Affect of Acquisitions on Market Structure Through 1994
- Impact of Acquisitions on Competition
- Acquisition Trends 1989 - 1994
- Limits to Acquisitions - Legal and Financial
- Impact of New Industry Entrants
- Leverage Buy Outs and Other Considerations

ACQUISITIONS - THE ACQUIRER'S VIEWPOINT

- Nature of Acquisition Programs
- Form of Acquisition Consideration
- Finding Acquisitions
- The Acquisition Process
- Methods of Acquisition and Valuation
- Current Acquisition Targets
- Competition for Acquisitions
- Acquirers' Views of Acquisition Trends
- Post Acquisition Implementation
- Specific Company Programs and Performance

ACQUISITIONS - THE POTENTIAL ACQUIREE'S VIEWPOINT

- Attitudes Toward Acquisition
- Attractiveness of Types of Acquirers
- Acquisition Criteria and Valuation Factors
- Reasons for Being Acquired
- Views on Acquisition Trends

ACQUISITIONS - THE ACQUIRED COMPANY'S VIEWPOINT

- Reasons for Being Acquired
- Decision Process
- Structure of Agreement and Valuation
- View After the Acquisition
- Views on Acquisition Trends

NAC Run

STRATEGIC PARTNERING - AN ALTERNATIVE?

- Need for Strategic Partnering
- Advantages and Disadvantages of Strategic Partnering
- Strategic Partnering: Options At All Levels
- Sharing: An Integral Part of the Information Services Strategy for the 1990's

IMPLEMENTATING AN ACQUISITION STRATEGY

- Self Analysis and "Window" Determination
- Prospect Profile Definition
- Searching and Screening
- Valuation and Negotiation
- Post Acquisition Strategy - Making It Work
- Venture Capital Funding
- Are Acquisitions for Large Companies Only?

CONCLUSIONS

- Summary
- Recommendations

All cases as a prelude to requests.

*1979
1984
rep
Called
Growth
to individual
could
advisory
H. J. ...
L. ...
Fund ...
part ...*

OT.

0951-0954-3

Com Thompson

Novell
808-747
406 M

CX 1 Sir Thompson

CX I Site dm
Site dm
Site dm
CX I

~~Signature~~

