INFORMATION SERVICES PRICING, VOL. I

PROCESSING SERVICES AND INTEGRATED SYSTEMS

INPUT

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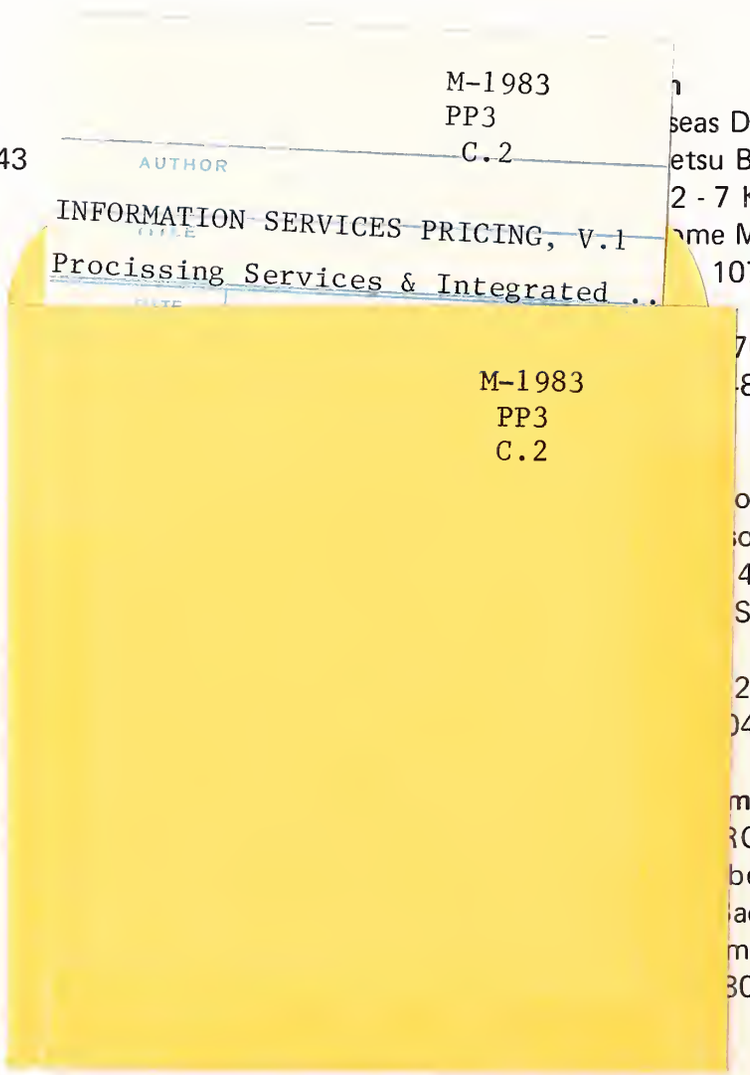

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INFORMATION SERVICES PRICING TRENDS AND TECHNIQUES

VOLUME I

PROCESSING SERVICES AND INTEGRATED SYSTEMS

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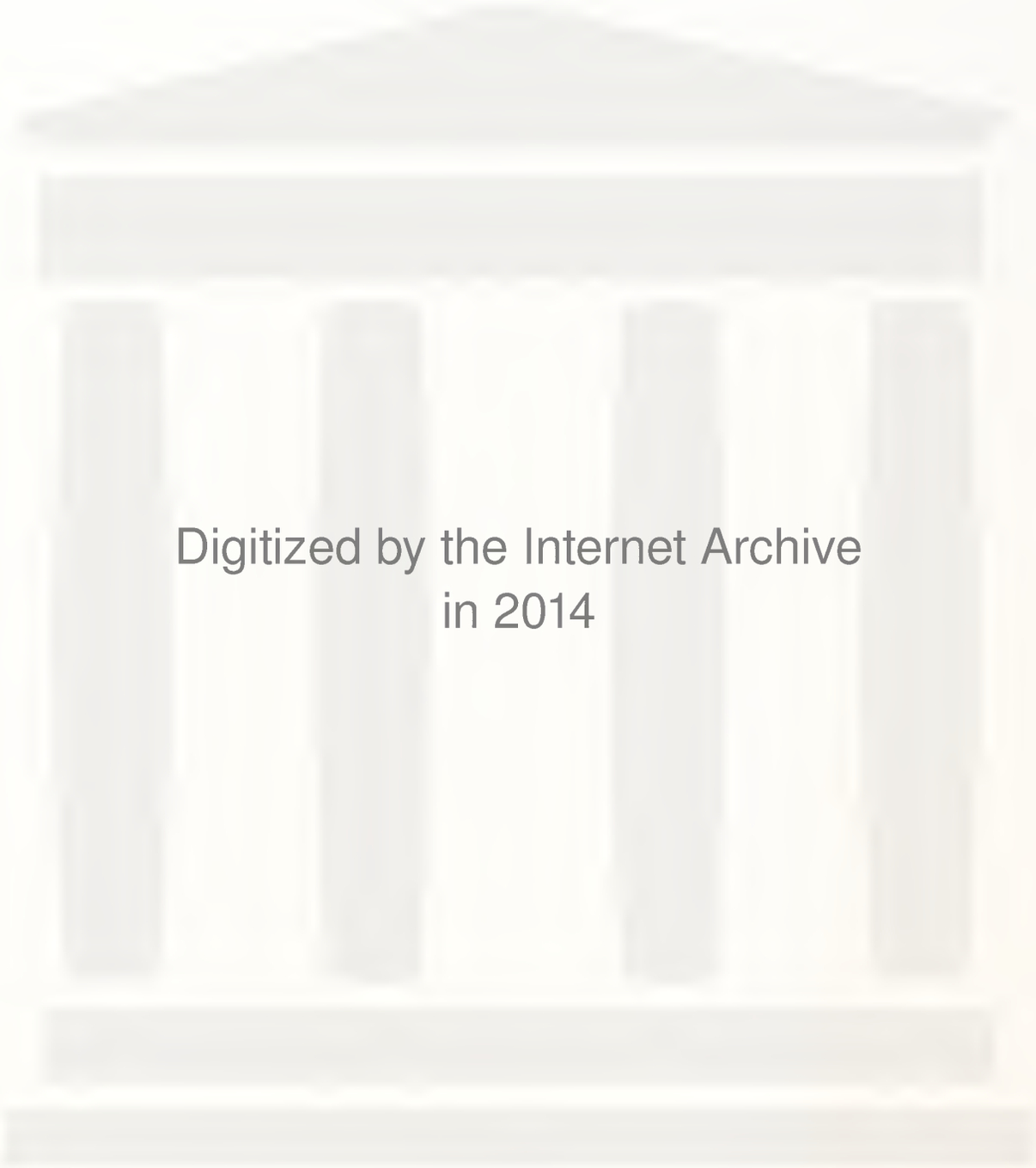

INFORMATION SERVICES PRICING TRENDS AND TECHNIQUES
VOLUME I
PROCESSING SERVICES AND INTEGRATED SYSTEMS

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1 INTRODUCTION

I INTRODUCTION

- This study was produced by INPUT as part of the Information Services Industry Program (ISIP). This is Volume I of a two-part study, Information Services Pricing Trends and Techniques.

- This first part of the study will analyze the pricing of processing services and integrated systems. Processing services will be analyzed with respect to the following modes of delivery:

  - Remote Computing Services (RCS).

  - Batch Processing Services (BPS).

  - Facilities Management Processing Services (FMPS).

- The study includes the United States only.

- The current volume is a follow-up on several previous INPUT studies conducted for the ISIP program:

  - Trends in Computer Services Pricing, 1980.

  - Trends in Services and Software Pricing, 1978.

- This area of research was selected because of high client interest (as indicated by a poll), and because INPUT believes this topic to be a particularly critical issue at a time of increasing competition.

- INPUT's objective is to help clients improve market penetration and profitability by identifying changes and innovations in pricing techniques that have strategic implications for the period 1983-1984.

- Research consisted of interviews with representative vendors and users of RCS, BPS, FMPS, and integrated systems.

- Fifty-seven interviews were conducted in spring and summer, 1983, by telephone calls and on-site visits.

  - Fifteen interviews were made with the following types and numbers of vendors:

    . Six remote computing services vendors.

    . Three batch processing services vendors.

    . Two facilities management processing services vendors.

    . Four integrated systems vendors.

  - Forty-two interviews were made with the following types and numbers of users:

    . Twenty remote computing services users.

    . Seven batch processing services users.

    . Five facilities management processing services users.

    . Ten integrated systems users.

- Descriptions of other characteristics of the interviewees appear in the text.

- The user interviews were conducted with decision makers who selected and bought the type of service being researched.

- The vendor interviews were conducted with senior executives who had some responsibility for setting both prices and pricing policy.

- Specific areas investigated in this study included the following:

  - Pricing structures and policies employed by vendors, with an examination of resource, transaction, fixed, and bundled pricing.

  - Pricing preferences of users.

  - Vendors' perceptions of user attitudes with respect to buying and pricing.

  - Users' buying criteria and pricing sensitivity.

  - Changes in pricing and reasons for the changes.

  - The extent of discounting from both the vendor and user's perspective.

  - Innovative pricing approaches being used or introduced.

  - The pricing process employed by vendors.

- Vendors were asked to provide confidential information about pricing policies and plans. Therefore, there is no identification of the specific vendors who participated in the study.

- Definitions of terms employed in this study are given either in the text or in Appendix A.

- Copies of the vendor and user questionnaires are included in Appendix G and H respectively.

- Related INPUT reports are listed in Appendix B.

II EXECUTIVE SUMMARY

II EXECUTIVE SUMMARY

- Note: this executive summary is designed in a presentation format in order to:

  - Help the busy reader quickly review key research findings.

  - Provide a ready-to-go executive presentation, complete with script, to facilitate group communications.

- The key points of the entire report are summarized in Exhibits II-1 through II-9. On the left-hand page facing each exhibit is a script explaining that exhibit's contents.

A. INFORMATION SERVICES PRICING TRENDS AND TECHNIQUES

- This research was produced as part of INPUT's Information Services Industry Program.

- Two information services are studied in this report. They are processing services (which are analyzed by the three major delivery modes: remote computing services, batch processing services, and processing services facilities management) and integrated systems.

- Important changes are taking place in the pricing of some processing services.

  - Vendors are responding to an increasingly cost-sensitive marketplace.

  - RCS vendors are rapidly switching from the traditional resource pricing to transaction and fixed pricing.

- The research scope of this report addresses current pricing problems, such as changing pricing structures and policies, and the extent and type of discounts.

- Also included are user attitudes toward services and their degree of price sensitivity.

- In addition, vendor pricing plans and innovations are discussed. Vendor plans include pricing that deals with both the personal computer threat and an increasingly competitive market.

- The remainder of this summary highlights key findings and recommendations.

EXHIBIT II-1

INFORMATION SERVICES PRICING TRENDS AND TECHNIQUES

- Includes Processing Services and Integrated Systems
- Important Pricing Changes Taking Place
- Research Scope
  - Current Pricing Problems
  - User Attitudes
  - Vendors' Plans and Innovations

B. MAJOR SHIFT IN RCS PRICING

- RCS has become a mature service where price competition is fierce; this has caused a shift in pricing approaches.

- The RCS respondents to this study have experienced declining profitability for the past three years, just as many other vendors in the industry have.

- Findings in this study support earlier INPUT research in that RCS vendors face potentially significant losses of business in the next few years.

  - Thirty percent of the RCS users interviewed plan to convert their RCS applications over to personal computers within the next year.

  - Twenty percent plan to convert to in-house mainframe or minicomputer systems.

- When users are selecting a vendor, they most highly value service quality, turnaround/response time, customer support, and the price of the service.

- INPUT's recommendations related to pricing strategies are presented next for RCS, batch, facilities management, and integrated systems vendors.

EXHIBIT II-2

MAJOR SHIFT IN RCS PRICING APPROACHES

- Mature Service
- Declining Profitability
- Significant Loss Potential
- Users Seek Quality and Price

C. RELATE PRICE TO VALUE RECEIVED

- Vendors must establish true cost for their remote computing services.

- Most vendors interviewed for this study did not have a good understanding of the true cost of their services. Vendors have to understand their true costs better if they are to effectively price their products in a mature and very competitive industry.

- Vendors have to audit all aspects of how they price their products, especially in relation to new competitors, such as personal computers. In this study INPUT recommends a method of doing this.

- INPUT found that vendors' pricing structures have become too complex and cumbersome. This increases selling cost and is a major cause of vendors not being able to establish true cost. Vendors should simplify their pricing schedules.

- Many RCS vendors are changing pricing techniques even though users feel very comfortable with the current ones. Vendors should survey customers before making major pricing changes.

- RCS users complain most about budgeting problems that are attributable to the variable cost of their service. Vendors must find ways to solve this problem for their customers, such as fixed pricing.

- Because of high perceived value by users, vendors can selectively increase prices on certain components of their services. To reduce customer resistance and sensitivity, vendors are advised to increase prices on main components by changing from resource pricing to transaction or fixed prices. In addition, pricing structures should be reevaluated.

- To prevent loss of current customers, RCS vendors should discount their service more aggressively. In general, volume qualifications for discounts should be cut in half.

EXHIBIT II-3

RCS VENDORS RELATE PRICE TO VALUE RECEIVED

- Establish True Cost
- Simplify Price Schedules
- Survey Customer Attitudes
- Selectively Increase Price While Changing Price Structure

D. BATCH PROCESSING SERVICES

- The batch processors surveyed forecast that they will be delivering nearly 60% of their service as a remote computing service by 1985, as compared to only 7% in 1982.
  - Batch services will account for only 28% of their revenues in 1985, in contrast to 86% in 1982.
  - This transformation is forestalling the industry's maturity.
- Respondents' profits have declined in the past three years, but in the past year showed signs of improvement.
- INPUT found that the batch processors harbored a number of misconceptions about user buying attitudes.
  - Vendors felt that customer support was not very important, whereas users rated it as highly important.
  - Vendors also felt that knowledge of the user's application wasn't very important, whereas users took the opposite view.
- When buying a batch processing service, users rated the following criteria as more important than price: service quality, turnaround/response time, customer support, and vendor reputation.

EXHIBIT II-4

BATCH PROCESSORS SHIFTING TO RCS

- Declining Profitability
- Vendors Misreading User Attitudes
- Price Is Not the Deciding Factor

E. INCREASE PROFITS THROUGH SERVICE IMPROVEMENTS

- Batch processors can improve profits by providing better service and charging more for it.

- Vendors should improve customer support and promote this superior support in their sales efforts and customer relations. Users will accept higher prices for better support.

- Vendors should emphasize the improvement of their knowledge of customer and prospects' applications. This approach enhances a vendor's competitive edge and thus allows more pricing flexibility.

- Vendors should improve the quality of their services by focusing on improving turnaround time and reliability. This too should be promoted in the marketing effort. Users feel prices should correlate with these factors.

- Batch processors can and should increase their prices selectively. Users attach a high perceived value to training, connect time, and storage, so vendors should be able to unbundle and/or increase the prices on these services.

EXHIBIT II-5

BATCH PROCESSORS INCREASE PROFITS THROUGH SERVICE IMPROVEMENTS

- Promote Customer Support
- Improve Application Knowledge
- Increase Quality Control
  - Turnaround Time
  - Reliability
- Selectively Increase Prices
  - Training
  - Connect Time
  - Storage

F. FM PROCESSORS SHOULD SHARPEN UNDERSTANDING OF USERS

- Vendors have some misconceptions about user purchasing attitudes.
  - FMPS vendors felt that their own knowledge of the customer application was unimportant, whereas users felt it was highly important.
  - Vendors also believe that users are very price-sensitive, whereas these findings indicate that the user has a low level of price sensitivity.
- When purchasing a facilities management processing service, users most highly valued (in order of importance) service quality, turnaround/response time, application knowledge, the vendor reputation, and customer support.
- By using customer surveys, FMPS vendors should improve their understanding of their buyers' motivation.
- Vendors should continue to raise price in order to maintain profitability in the face of cost increases.
- Discounting is not widely practiced in FMPS; INPUT could find no need for this.

EXHIBIT II-6

FM PROCESSORS SHOULD SHARPEN UNDERSTANDING OF USERS

- Overcome Vendor Misconceptions
  - Application Importance
  - Price Sensitivity
- Users Most Highly Value:
  - Service Quality
  - Turnaround/Response Time
  - Application Knowledge
  - Vendor Reputation
  - Customer Support
- Continue to Raise Prices
- Discounting Unnecessary

G. HIGH GROWTH BUT LITTLE PROFIT FOR SYSTEMS INTEGRATORS

- Systems integrators have a profit problem that is due in part to a misconception of user needs.
  - Vendors perceive their prospects to be very price sensitive, while INPUT found them to be relatively insensitive.
  - This misunderstanding has caused vendors to be overly cautious in establishing and raising prices, this in turn has resulted in marginal profits.
- Half the users interviewed had very critical applications and showed a willingness to pay much higher prices for higher levels of service.
- When purchasing integrated systems, users place a high value on service quality, turnaround/response time, and customer support.
- In many cases, when a user buys a system the software available is the most important factor. Because of this, many users do not even consider alternatives and are fairly insensitive to price.

EXHIBIT II-7

HIGH GROWTH BUT LITTLE PROFIT FOR SYSTEMS INTEGRATORS

- Vendors Misperceive Price Sensitivity
- Value/Price the Critical Applications
- Service and Software More Important Than Price

H. SYSTEMS INTEGRATORS CAN PROFIT BY CHANGING PRICES

- INPUT recommends that systems integrators diversify their delivery modes by offering their products through RCS and by providing rental integrated systems. This reduces buyer resistance by eliminating a large capital investment and opens new markets to small users who cannot at first justify buying a system.

- Discounting is widely practiced in the industry, even though few vendors have published discount schedules. Vendors should establish more formal discount schedules and agressively promote them with both their customers and their prospects.

- In addition to discounting, vendors should price their products more aggressively to improve profits.

  - Users are less price sensitive than vendors think.

  - The proprietary nature of many products will also permit higher prices.

- Systems integrators should develop more and higher revenue streams from their customer base by developing more add-on sales of software and other services.

- Vendors with applications that are critical to users' operations should charge higher prices for them.

- Users are receptive to paying more for excellent service and customer support. Vendors should recognize this in their pricing.

- Many integrated systems users never considered another alternative to their processing needs. INPUT's findings indicate that increases in sales call activities will generate many more sales in which pricing should not be a significant factor.

EXHIBIT II-8

SYSTEMS INTEGRATORS CAN PROFIT BY CHANGING PRICES

- Offer Variations of Service
  - RCS Version
  - Rental Systems
- Promote Discount Schedules
- Increase Prices
- Develop Add-ons
- Sell Critical Applications
- Increase Sales Call Activity

I. SOME THEMES COMMON TO ALL SERVICES

- Users recognize and appreciate high-quality service, and for the most part are willing to pay for it.

- Most vendors can and should increase prices. Not necessarily across the board, but in areas where users show a high level of appreciation.

- Users want pricing they can understand. They also want to be able to accurately forecast and budget their costs.

- Vendors must make more effort to know their customers and prospective customers. Customer surveys should be routine. Executives who price products should spend more time in the field with their customers and prospects.

- Vendors should create an environment in which their sales people can show more flexibility in addressing customers' price and cost problems.

EXHIBIT II-9

SOME THEMES COMMON TO ALL SERVICES

- Users will Pay for Quality
- Increase Prices
- Keep Pricing Simple
- Know Your Customer
- Be Flexible

III PROCESSING SERVICES VENDORS' PRICING PRACTICES AND ATTITUDES

III PROCESSING SERVICES VENDORS' PRICING PRACTICES AND ATTITUDES

A. CHANGES AND INNOVATIONS

- INPUT categorizes processing services resources into three pricing groups:

  - The component price category included any resource that is sold in discrete units. For example, RCS vendors traditionally have sold connect hours or central processing units (CPUs) in this manner.

  - The bundled price category includes any resource that is not priced separately but instead is bundled with another resource. Hotline support is typically bundled by an RCS vendor into charges for other resources.

  - The fixed-price category includes any resource that is sold for a fixed price. Hardware is typically sold for a fixed price by all three modes of service.

1. RESOURCE PRICING

- The three processing service modes charge for their services in very different ways.

- In 1982 RCS vendor respondents derived 70% of their revenues from resource pricing.

- Batch vendor respondents received 84% of their revenues through transaction pricing.

- FM processing vendors obtained 95% of their revenues from fixed prices.

- The pricing techniques employed by the respondents for the various resources are shown in more detail in Exhibit III-1.

- The RCS vendors derive 70% of their revenues from resource pricing by charging on a component basis for 60% of the different types of resources offered.

  - Five of the RCS vendors employed component pricing for CPUs, connect time, and daily access storage. One had transaction prices.

  - All of the items that were not priced as components were bundled with other components.

- Half of the resources sold by RCS vendors were also available on a bundled basis.

- Twenty-two percent of the resources were also available on a fixed-price basis.

- The broad use of bundling and fixed price is a result of both competitive pressures and user demands.

  - Competition from minicomputers, integrated systems, and in-hours information systems departments has forced RCS vendors to respond

EXHIBIT III-1

PRICING TECHNIQUES OF RCS VENDORS

SERVICE COMPONENT	REMOTE COMPUTING SERVICES (6) NUMBER OF RESPONDENTS		
	COMPONENT	BUNDLED	FIXED
Central Processing Unit			
Immediate	5	4	2
Deferred	5	3	1
Connect Time			
Prime	5	4	4
Nonprime	5	3	3
Storage			
Daily Access	5	4	3
Limited Access	4	2	1
Communications	4	3	4
Response Time	2	3	0
Daily Backup (Storage)	0	6	0
Software Premium	3	5	3

Continued

EXHIBIT III-1 (Cont.)

PRICING TECHNIQUES OF RCS VENDORS

SERVICE COMPONENT	REMOTE COMPUTING SERVICES (6) NUMBER OF RESPONDENTS		
	COMPONENT	BUNDLED	FIXED
User Site Hardware Service	3	3	2
Hardware Maintenance	0	4	0
Software Maintenance	0	4	0
Backup System	3	3	0
Application			
Consultant/Support	5	3	2
On-site Training	5	2	1
Vendor Site Training	3	4	0
Manuals/Documentation	3	1	0
Hotline Support	0	6	0
Custom Programming	5	2	2
Other Services (Special Handling Charge)	-	-	-
Percent of Total for All Mentioned Components (Parts 1 and 2)	60%	50%	22%

with a broader array of pricing options that enable the vendor to tailor the pricing scheme to customer needs.

- Unbundling helps RCS vendors be more competitive by not having to charge for a service or resource that the client does not need but that comes bundled with something the client does need.

- Fixed pricing not only helps the RCS user predict and control cost, but it also enables him to more favorably compare the RCS solution to other fixed-cost solutions, such as integrated systems.

- Generally, the RCS vendors felt that unbundling and fixed pricing have worked well for them and that they would be doing more of it in the future.

  - Unbundling and fixed pricing have helped keep established customers and win new ones.

  - Because these price policies have often resulted in lower costs, they have not necessarily resulted in lower profit margins.

- INPUT recommends that RCS vendors who are not employing these techniques should consider doing so.

2. TRANSACTION PRICING

- More than 80% of the processing services vendors offer some services on a transaction pricing basis. Details are shown in Exhibit III-2.

- All but one of the RCS vendors offer transaction pricing.

  - The RCS vendors said they had been increasing their use of transaction pricing over the past few years.

EXHIBIT III-2

TYPES OF TRANSACTION PRICING
BY PROCESSING SERVICES VENDORS

REMOTE COMPUTING SERVICE VENDOR	TYPE OR METHOD OF TRANSACTION PRICING
A	Number of accounts. Number of transactions by type of transaction.
B	Per access charge on certain data bases.
C	On certain proprietary applications.
D	Via insurance application charge per report. On graphics systems, charge by graph and page.
E	In order entry system, charge per order entered.
F	None
BATCH PROCESSING VENDOR	
A	Charge per account, per transaction, and per record stored. Provide discount for customer data entry. Monthly minimums for storage and transactions.
B	Charge for all services by transaction (mailing list labels).
C	Transaction charge for each line of input and each line of output.
FM PROCESSING VENDOR	
A	None.
B	None.

- In addition to new applications, old ones were being reviewed for their suitability for transaction pricing.

- The batch processing respondents derived most of their revenues through transaction pricing.

  - None of them offer any resources on a fixed price basis.

  - Most of the items that are priced on a component basis are ancillary or supplemental services.

- All of these vendors felt that transaction pricing worked very well for them.

- None of the FM processors employed transaction pricing.

3. FIXED PRICING

- More than 60% of the processing service vendors offered some form of fixed pricing. Details are shown in Exhibit III-3.

- Two-thirds of the RCS vendors offered fixed pricing.

  - All of these charged a fixed price for a set amount of systems resources.

    . Usually these were for large amounts of resource.

    . This pricing is designed to emulate the cost of alternatives, such as in-house processing.

    . Fixed pricing is also a form of discounting that usually requires the buyer to make a long-term commitment for the resource.

EXHIBIT III-3

TYPES OF FIXED PRICING OFFERED
BY PROCESSING SERVICES VENDORS

REMOTE COMPUTING SERVICE VENDOR	TYPE OR METHOD OF FIXED PRICING
A	Dedicated resources or a portion of a machine.
B	Primarily communications (connect charges).
C	Block of central processing units.
D	Connect charges. Dedicated System. Dedicated portion of a system.
BATCH PROCESSING VENDOR	
A	Varies by product, but generally allows unlimited access to data for a fixed price.
FM PROCESSING VENDOR	
A & B	Virtually everything is on a fixed price.

- Some of RCS vendors' fixed pricing, not shown in the exhibit, is for such items as hardware, custom programming, application consultant time, training, and software.

- The one batch processor that offered fixed pricing did so only on certain products and that was for interactive access to data that was generated in the batch process mode.

- Ninety-five percent of the revenues of FM processing services vendors came from fixed pricing, and the remainder came from component pricing of services that were incidental to the vendors' principal service.

4. CHANGES IN PRICING METHOD

- The distribution of pricing methods of the processing vendor respondents in 1982 and their projected changes by 1985 are shown in Exhibit III-4.

a. RCS

- The most dramatic change is planned by the RCS vendors.

  - By 1985 they expect to nearly double the amount of transaction pricing and nearly triple the amount of fixed pricing.

  - Their primary pricing method in 1982, resource pricing, will account, by 1985, for less than half of their revenue pricing.

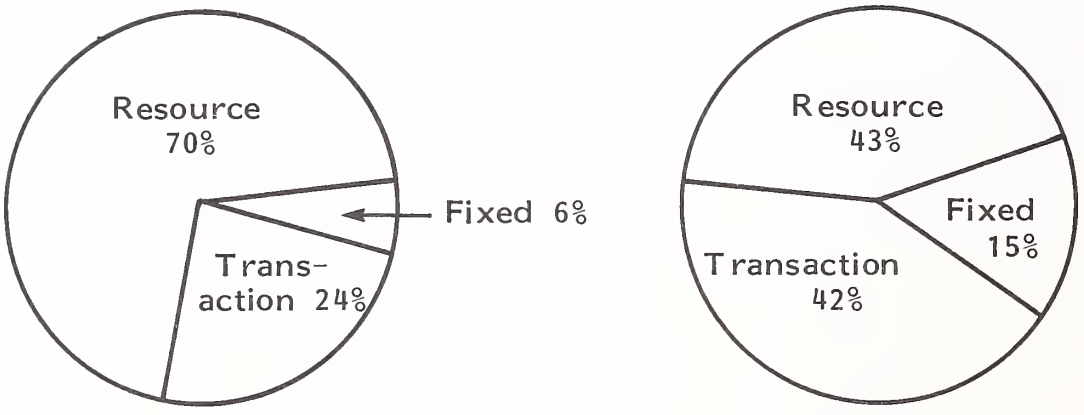
- Competition from integrated systems, minicomputers, personal computers, in-house systems, and other processing services companies has made resource pricing virtually untenable for many applications.

  - All of the alternatives to resource pricing allow the user to associate a fixed cost with a fixed amount of work. Control and budgeting are

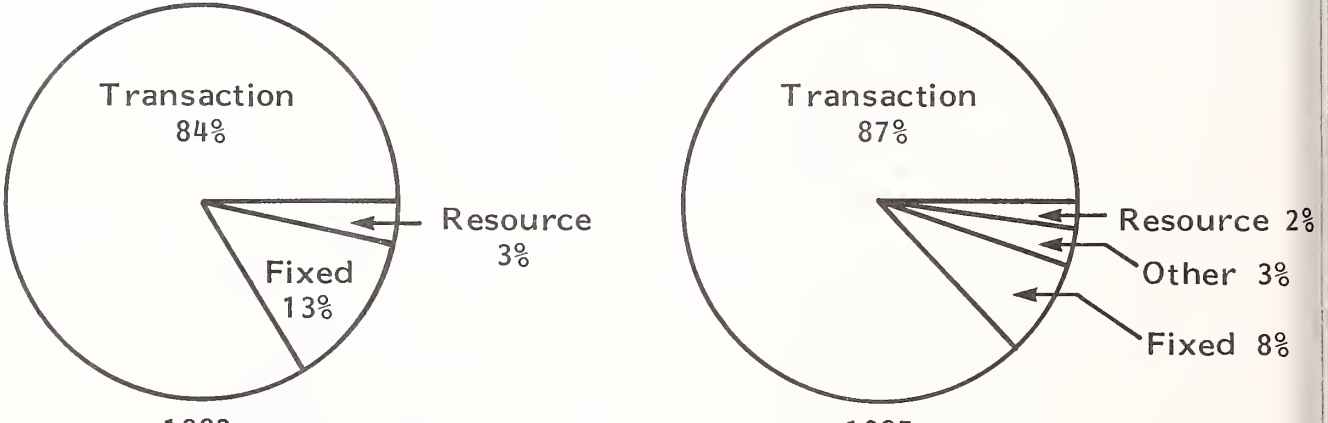
EXHIBIT III-4

DISTRIBUTION AND PROJECTED CHANGE IN
PRICING METHODS, 1982 - 1985

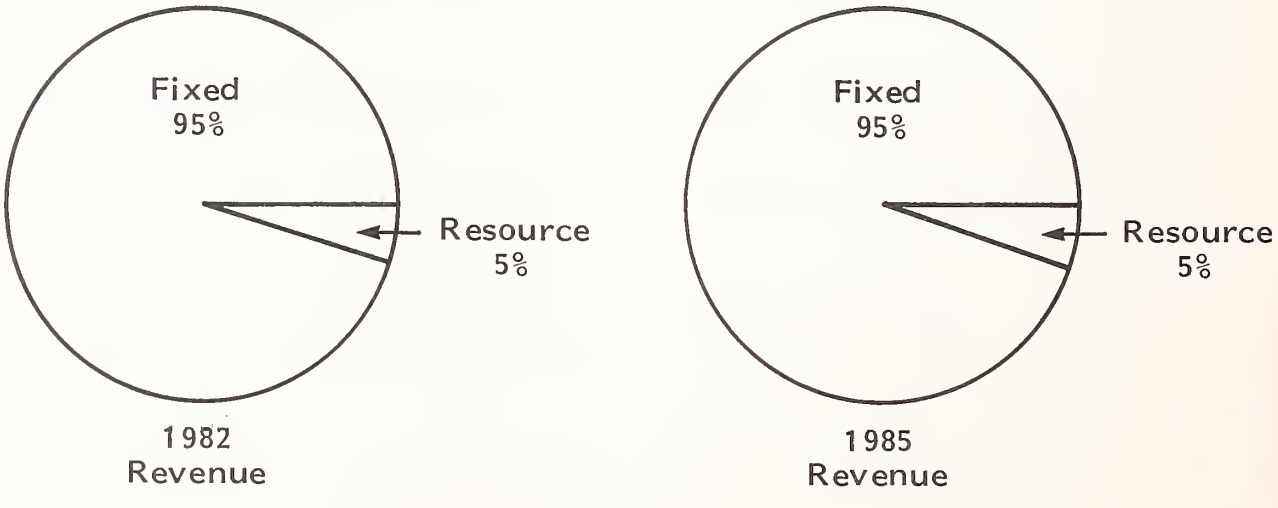
RCS Respondents



Batch Respondents



FMPS Respondents



easier. The alternatives also often appear to be far less expensive than the RCS service.

- RCS vendors are combating the competition via fixed or transaction pricing.

- Many of the large RCS customers no longer need many of the support services that have traditionally been bundled into resource pricing.

  - Customers perceive those charges as being excessive - they don't need them but must pay nevertheless.

  - Customers who are forced to pay for unneeded services will feel free to look for alternative processing solutions.

  - The RCS vendors, wanting to keep clients, are responding by unbundling prices, as well as by offering more services on a fixed and transaction-priced basis.

- The proliferation of small, lower cost systems and the inexpensive but sophisticated user friendly software available for them (either as separate packages or on an integrated basis) provide prospective users of RCS with many new alternative options.

  - RCS was the original personal computer.

  - Some of the most widely sold applications in the early days of interactive remote computing were spread sheets, cross tabulations, simple data base management systems, and statistical analysis services. All of these are available on personal computers at a low fixed cost when amortized over a few years.

- Prospective RCS users are more "computer intelligent" today. They recognize the advantages of alternatives.

- RCS vendors are already losing customers and prospects to these competitors; RCS vendors are usually responding via major changes in service charges.

- RCS vendors are also reassessing how the user perceives the value and cost of RCS services as compared to the alternatives. In many cases, RCS vendors are finding that the comparison is not favorable to them.

  - Many of these unfavorable comparisons are the result of higher communication cost and much lower hardware cost.

  - One of the justifications for using RCS services has been the resulting ability to share the high cost of hardware and software that could be accessed through low-cost communications.

  - Because of mass production, mass distribution, and technological advances, hardware and software have declined so much in cost that this justification is no longer valid for some applications.

- Many of the pricing changes being implemented by RCS vendors are defensive and are resulting in lower profit margins for the vendors.

  - RCS has experienced explosive growth and high profit margins for the last twenty years.

  - RCS is now a mature industry and is facing some of the problems of this maturity.

- The more enlightened RCS vendors will recognize that they are in the computing solution business and not just in the RCS business: therefore they will find better computing solutions for their customers.

- Pricing changes are only a part of the solution.

- New delivery mechanisms, products, and services are also called for.

b. Batch Vendors

- Like the RCS vendors, the batch processing vendors intend, by 1985, to increase their transaction pricing as a percent of their revenues.

  - Resource and fixed pricing will be correspondingly reduced.

  - Other pricing to be implemented includes a mixture of fixed and transaction pricing.

c. RCS Vendor Pricing Changes

- In the past year the RCS vendors have made a number of changes in pricing their services, as shown in Exhibit III-5. Several innovative changes are cited.

  - One vendor reduced storage charges to encourage CPU and connect use.

    . Presumably, customers will bring up much larger data bases because of the lower storage cost. Customers will probably also use more CPU and connect time in accessing the data bases.

    . This seems like a good strategy in that it encourages applications that aren't easily addressed by personal computers.

    . Low storage prices, combined with very powerful data base management systems (DBMS) and information analysis tools, should also be effective ways of combating minicomputers and in-house systems.

EXHIBIT III-5

CHANGES RCS VENDORS HAVE MADE IN PRICING DURING PAST YEAR

PRICING CHANGE
• Dedicated resource pricing.
• Reduced storage price to encourage CPU and connect use.
• Simplified pricing to reduce cost of sales and help customer predict cost.
• Selling large blocks of resources (50K CPUs) to simulate in-house.
• More bundling.
• More transaction pricing.
• More fixed pricing.
• More flexibility.

. The thing that will give RCS vendors the edge is their experienced and talented applications consultants and sales people.

- Another vendor simplified its pricing structure. This vendor believes the simplification reduces its sales cost and helps customers predict charges.

  . Simplification appears to be a good strategy. Most vendors have not simply changed pricing structures but have added on to the old pricing structures, resulting in very lengthly, complex, and confusing price lists.

  . Many vendors could benefit by reviewing and simplifying their price schedules.

  . One way would be to replace rather than change methods; this is encouraged wherever possible.

  . Sales training and sales time should be reduced if changes are made judiciously.

  . It is easier and less costly to sell something that is simple.

  . Dedicated resource pricing is another way of simplifying prices. The user pays one fixed price for an agreed amount of resources. The resources may be independent ones, such as storage, or they may be combinations, such as CPU and connect time.

- Another problem with complex price structures is that they make it very difficult to establish true costs. If the true cost is not established several problems may arise.

- An item may be priced too high and the user will seek alternatives.

- An item may be priced too low and this will result in losses.

- In either case, the vendor loses.

- INPUT believes that many vendors' pricing structures are far more complex than they need be and recommends that vendors formally review their pricing to see that it isn't causing as many problems as it solves.

  - Many pricing changes have come about as an ad hoc solution to an immediate problem, without looking at the long range cumulative impact of the changes.

  - That impact must be studied as it affects the selling effort and the customer.

- The broad array of pricing options that RCS vendors have implemented may have an effect that is deleterious overall. RCS managers involved in the pricing process should consider this possibility.

d. Batch Processing Vendors Price Changes

- Although pricing changes are not so evident with batch processors as they are with RCS vendors, nonetheless batch processing vendors have been making a number of changes, as shown in Exhibit III-6.

  - Many of the changes cited are not simply changes in pricing technique but also encompass price reductions.

  - Some vendors reduced prices by tightening their refund policy or by lowering discounts.

EXHIBIT III-6

CHANGES BATCH PROCESSORS HAVE MADE
IN PRICING DURING THE PAST YEAR

Established a maximum fee for certain transactions.
Reduced price on some transactions to increase market share.
Reduced discounts.
Tightened refund practices.
Offered volume discounts on transactions.
Changed transaction to fixed price on certain functions.

- These changes reveal strong competitive pressures in the batch processing marketplace that pricing techniques cannot address. Transaction pricing appears to suit these vendors' customers very well.

5. DISCOUNTING

- More than 80% of the processing services vendors provided discounts to their customers.
  - All of the RCS vendors provided discounts.
  - One of the batch processors and one of the FM processors did not provide any discounts to their customers.
- The types of discounts offered by RCS vendors are quite diverse, as shown in Exhibit III-7.
- All of the RCS vendors offered volume discounts.
  - Many of them have volume discounts as a standard part of their price schedules.
  - In order to qualify for a non-standard volume discount, customers needed a minimum monthly expenditure of $8,000 to $15,000. The average minimum was $10,000.
  - The average maximum discount allowed was 28%.
- Two-thirds of the RCS vendors offered discounts for long-term agreements.
  - These discounts were generally higher than simple volume discounts, but in addition to the term agreement usually substantial minimum volumes were required.

EXHIBIT III-7

DISCOUNTING PRACTICES REPORTED
BY PROCESSING SERVICES VENDORS

DISCOUNT PRACTICE	NUMBER OF RESPONDENTS		DISCOUNT AMOUNT (percent)			
			MINIMUM		MAXIMUM	
	Discount	No Discount	Average	Range	Average	Range
RCS Vendors						
Volume	5	0	3.3%	2-5%	27.8%	13-37.5%
Term Contract	4	2	4	3-5	32.5	30-37.5
Usage Pattern	3	0	-	-	-	-
Government Sector	4	2	25	2-40	28	13-40
Education Sector	0	6	-	-	-	-
Other	2	0	20	-	70	-

- The minimum term required varied from six months to five years.

- The typical minimum term was one year.

- Half of the RCS vendors offered usage pattern discounts.

  - These discounts were generally for CPU time, connect time, storage, and turnaround time on the CPU.

  - None of the vendors reported the range of discounts that was offered for usage patterns, but it is not uncommon to see as much as 50% off on these types of discounts.

- Four of the RCS vendors offered discounts to the government while two did not.

  - The range of discounts provided to the government was similar to commercial discounts, with one vendor offering a slightly higher maximum discount to the government.

  - Government sector discounting is controlled by the General Services Administration Teleprocessing Services Program (TSP). Vendors negotiate their rates with the GSA; these rates are in effect for "qualified" government business. The government insists that it get at least the same discount as the best commercial discount.

- None of the RCS vendors offers a special discount to the educational sector.

- Two of the vendors also offered some other type of discount.

  - One of the vendors offered a discount that got progressively higher for each month (beyond a minimum time period) that the customer remained.

    - The discount was implemented to encourage long-term customers to remain customers without requiring a long-term contract.

    - This vendor said it was too soon to determine if the discounting method was successful.

- The other vendor offered a discount for large, dedicated blocks of resource that were contracted for at least one year.

    - For example, a user could buy a block of 50,000 CPUs per month for a year.

    - The discount ranged from 20% to 70%.

    - This arrangement is very similar to a volume discount.

- RCS vendors sold from 30% to 82% of their business at a discount, with the average for all vendors being 57%.

- Two of the three batch vendors offered discounts.

    - Both offered volume discounts, but the amount of discount was relatively low: 1% to 7%.

    - One vendor offered a discount for a term agreement.

    - None of the vendors offered a discount to the education or government sectors.

- Two of the batch processors mentioned other types of discounts.

- One offered a discount to charities.

- The other offered a discount by waiving minimum monthly fees to very seasonal businesses.

- None of the batch processors offered a term discount. This was probably due to the fact that their type of application implied a long-term commitment on the part of their customers; therefore batch processors didn't feel there was much to be gained.

- Only seven percent of the batch processors' revenues were sold at a discount.

- None of the FM processors gave discounts on volume, term contracts, use patterns, or to the government or education sectors.

  - One of the vendors would give discounts of 1% to 10% to close a sale.

  - Less than 10% of those revenues was sold at a discount.

6. PRICE PROTECTION

- Most of the RCS vendors offered some form of price protection to at least some of their customers.

  - Eighty-three percent offered price protection.

    . Fifty percent offered unqualified guarantees for term contracts that had a maximum term of one to two years.

    . One offered a guarantee for one year with cost passthroughs.

    . Another writes term agreements for three to five years, with increases tied to an inflation indicator.

- One vendor only offered price protection to the government under a GSA contract.

- All of the batch processors offered some price protection.

  - This included price protection under long-term contracts of one to two years and price protection to new clients for the first year of service.

- Both FM processors offered price protection.

  - One offered price protection for one to five years with some limited passthrough of cost increases.

  - The other FM processor guaranteed limits to price increases for the term of its agreement with the customer.

- All of the vendors indicated that they provide price protection only because their customers demand it.

  - None were enthusiastic about providing price protection.

  - Some of the RCS vendors were hurt when telecommunications costs went up and they were unable to pass through the increased cost of doing business to protected customers.

7. TERMS AND CONDITIONS

- The processing service vendors were asked if their customers requested any terms or conditions that vendors would not provide. Nearly all vendors had had such requests.

- RCS vendors cited the following requests:

- "A fixed price for unlimited resources."

- "A fixed price with a month-to-month commitment. A long-term commitment with a low inflation rate."

- "A warranty on the software. A guaranteed cost for the application. Protection against price increases. A most favored clause."

- "Administrative support of our customers' (who resell) customers. Program customization that would impact other customers."

- "Some customers would like to own the system and have us operate it for them."

- Some of these requests are clearly unreasonable, and it is understandable why the vendors do not wish to comply.

- Other requests are reasonable and indicate why some customers cancel and find another solution to their problem.

  - It is not unreasonable for customers to want their costs defined before they make an expenditure. Most of the things they buy are so defined.

  - In order to address this problem, RCS vendors are offering more services on a transaction basis or at a fixed price.

- The batch processors classified the following as requests they could not comply with:

  - "As a bank, we cannot offer services which are not financially related and acceptable to federal regulators. Customers also request program customization for which they do not wish to pay."

- "Customers want us to lower our prices and to offer discounts."

- An FM processor responded with "Yes, customers would like us to accept liability for consequential damages."

- The batch and FM processors did not get as many cost-related requests as did the RCS vendors. Cost is less of an issue for them because they predominantly price by transaction or fixed price.

B. VENDOR PERCEPTIONS OF USER ATTITUDES

- On average, the batch processing vendors rated their customers as being more sensitive to price increases than the other service modes. Details are shown in Exhibit III-8.

- Several respondents said that customers had become and were continuing to become more price sensitive because of the recession and their own declining sales and profits.

- INPUT requested that the respondents rate how important certain factors were to their customers in the vendor selection process. A "1" means low importance and a "5" means high importance. The results are shown in Exhibit III-9.

- All three types of processing vendors rate service quality as the most important selection factor.

- The vendor's reputation, closely related to service quality, also received high ratings by all three service modes.

EXHIBIT III-8

PROCESSING SERVICE VENDORS' RATINGS OF THE CUSTOMERS' SENSITIVITY TO PRICE INCREASES

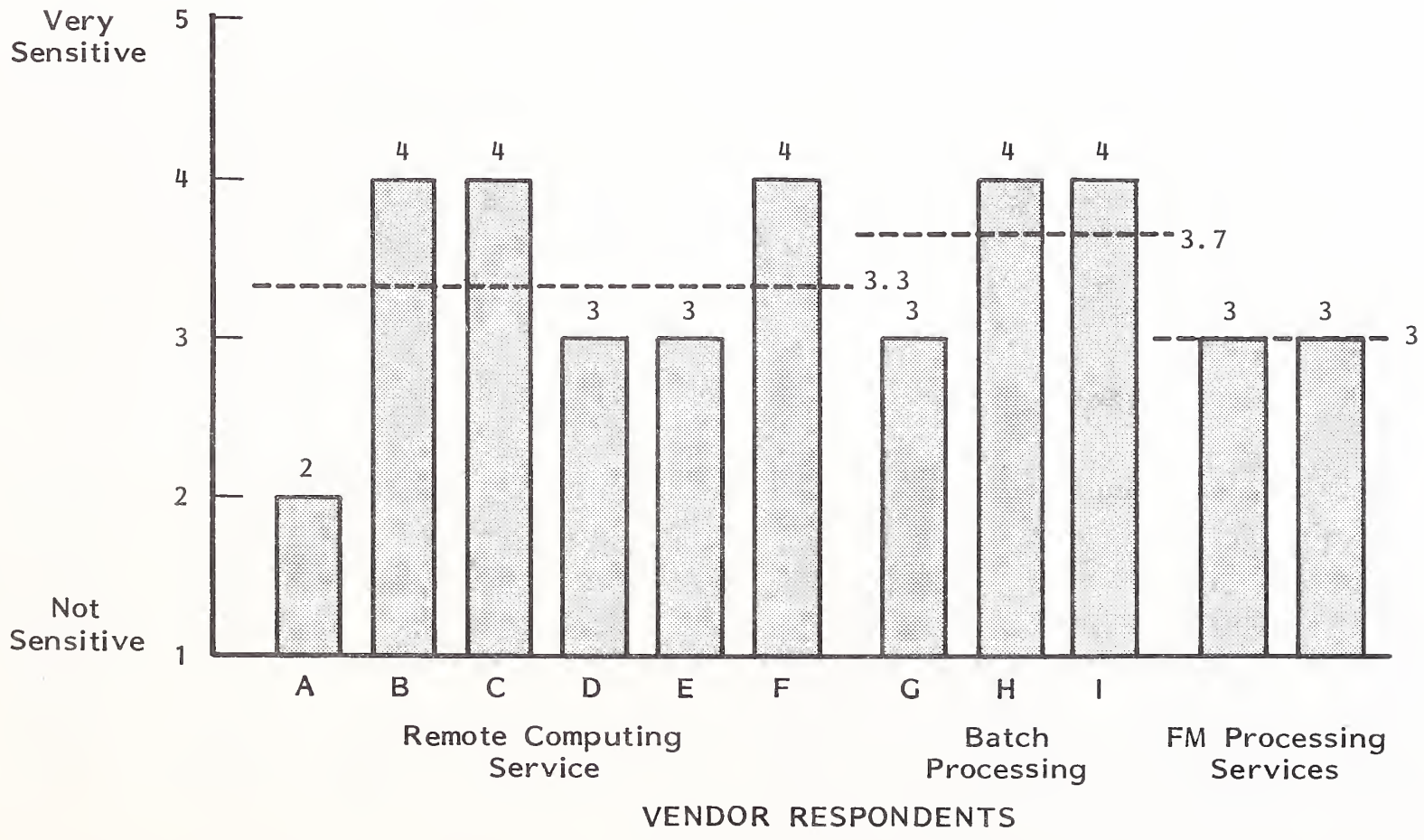
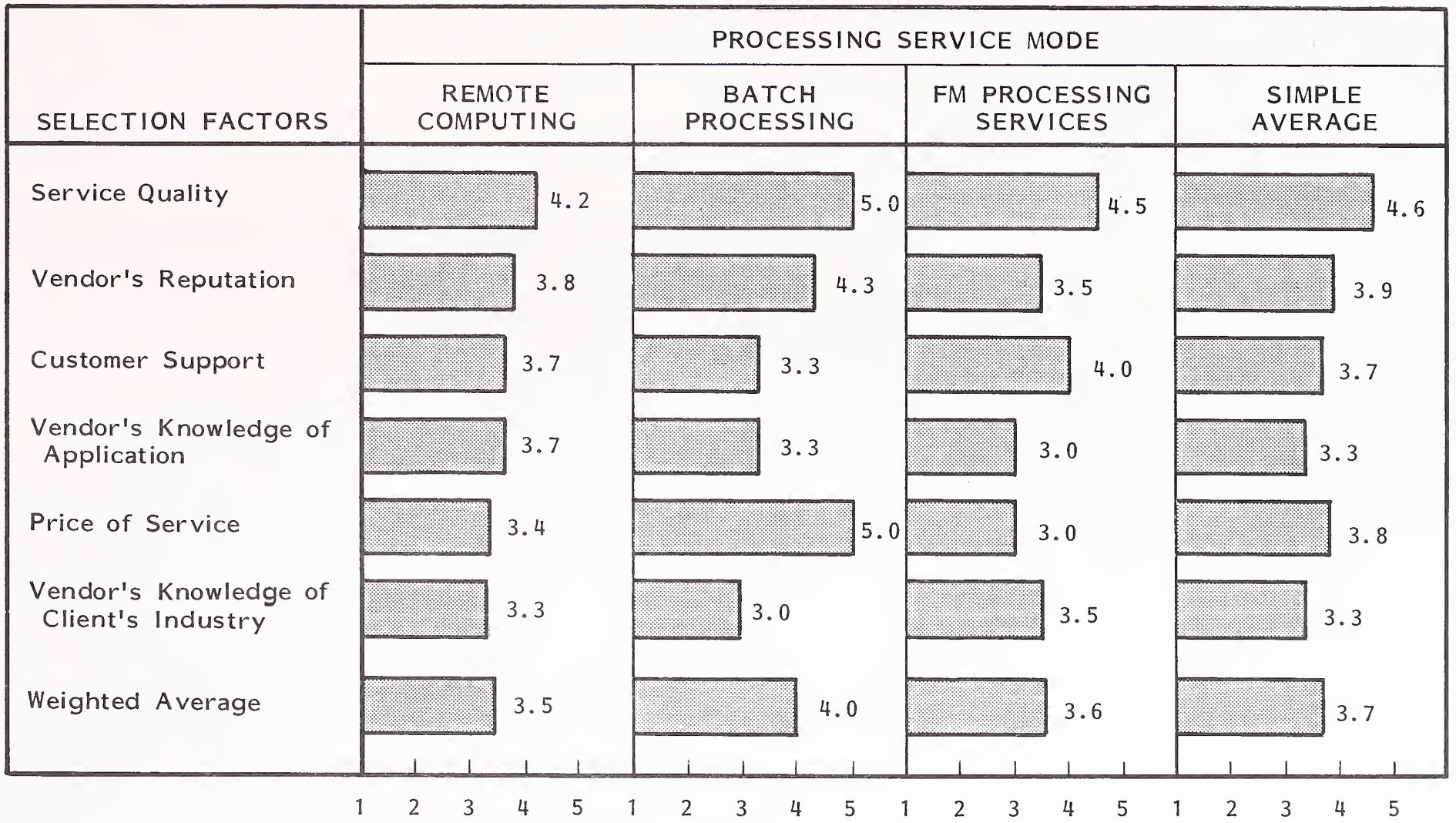


EXHIBIT III-9

PROCESSING SERVICES VENDORS' RATINGS OF THE
IMPORTANCE TO THEIR CUSTOMERS OF VENDOR SELECTION FACTORS



Ratings of Importance 1 = Low, 5 = High

- After the aforementioned factors, RCS vendors felt that the vendor's knowledge of the application was a critical selection criterium.

- Along with service quality, price was also a critical factor cited by the batch processors.

- After service quality, customer support was ranked second by FM processor clients.

- It is interesting to note that price was not rated very high as a selection factor by the RCS vendors, especially when one observes that vendors have been making a lot of changes in their pricing methods in response to customer demands.

- It is now time to turn to the users and examine their attitude towards service pricing and see how it contrasts with the vendors' perceptions.

IV PROCESSING SERVICES USER ATTITUDES

IV PROCESSING SERVICES USER ATTITUDES

A. USER APPLICATIONS AND EXPENDITURES

- The users were questioned about their primary processing service.

- On average the users were large consumers of primary service, with expenditures of over $150,000 a year. Details are shown in Exhibit IV-1.

- The RCS users were asked to describe their two most important applications and their annual expenditures on those applications.

- The responses shown in Exhibit IV-2 reveal that financial applications were not only the most common, but were also among the largest in terms of annual expenditures.

- When compared to their total expenditures on RCS, respondents spend most of their budgets on their two most important applications.

- The batch and FM processing users' most important applications and expenditures are shown in Exhibit IV-3.

  - The batch processing users' expenditures extend over a broad range, with an average of $356,000 per year.

EXHIBIT IV-1

USER RESPONDENTS' ANNUAL EXPENDITURES
ON PROCESSING SERVICES

TYPE OF SERVICE	AVERAGE ANNUAL EXPENDITURE ($ thousands)		
	REMOTE COMPUTING USER	BATCH PROCESSING USER	FM PROCESSING USER
Remote Computing Service	156	127	0
Batch Processing Service	39	523	0
FM Processing Service	7	0	157

EXHIBIT IV-2

REMOTE COMPUTING USERS' MOST IMPORTANT APPLICATIONS

MOST IMPORTANT APPLICATION†	ANNUAL EXPENDITURE	SECOND MOST IMPORTANT APPLICATION†	ANNUAL EXPENDITURE
Order Processing	$480,000	Invoicing & Inventory Control	$ 60,000
Modeling/Consolidations	250,000*	Data Base Management Systems	250,000*
Sales Analysis	105,000	-	-
Financial Modeling	60,000	Marketing Support	72,000
Sales Forecast	60,000	Financial Modeling	20,000
Merger and Acquisition	57,000	Literature Research	3,000
Financial Modeling	50,000	Scientific Calculations	40,000
Inventory Statistical Analysis	50,000	Market Forecasting	37,000
Energy Recording	45,000	-	-
Balance Sheet Forecasting	18,000	Project Accounting	18,000
Market Research	10,000	Sales Forecasting	90,000
Literature Search	6,000	-	-
Data Consolidation for Model	5,000*	Financial Modeling	5,000*
Lease Versus Buy	5,000	Bank Balance Reporting	12,000
Production/Inventory Modeling	5,000*	Facility Location Modeling	5,000*
Cash Management	4,000	Financial Modeling	5,000
Engineering/Seismic Processing	NA	Financial Modeling	NA
Financial Analysis	NA	Financial Forecasting	NA
Market Research Statistical Analysis	NA	Cross-tabulations	NA
Production Modeling	NA	Inventory Control	NA
Average	$76,000	Average	$ 47,000

*Total reported by respondent. INPUT divided the amount between the applications cited.

†Each line represents one respondent.

EXHIBIT IV-3

BATCH AND FM USERS' MOST IMPORTANT APPLICATIONS

BATCH USERS

MOST IMPORTANT APPLICATION†	ANNUAL EXPENDITURE	SECOND MOST IMPORTANT APPLICATION†	ANNUAL EXPENDITURE
Custom Ordering	$900,000	Material Usage	$560,000
Accounting	250,000	Insurance Underwriting	50,000
Data Entry Consumer Service	250,000	-	-
Accounting	25,000*	Budget Control	25,000*
Employee Stock Ownership	NA	Stock Valuation	NA
Financial Modeling	NA	Operation Productivity Research	NA
Material Control	NA	-	-
Average	$356,000	Average	$212,000

FM PROCESSING USERS

MOST IMPORTANT APPLICATION†	ANNUAL EXPENDITURE	SECOND MOST IMPORTANT APPLICATION†	ANNUAL EXPENDITURE
Sales Analysis Data Base	$150,000	Sales Analysis	$ 50,000
Financial Reporting	120,000*	Policy Data Processing	120,000*
Payroll Application	10,000	Check Reconciliation	20,000
Accounting	NA	Billing	NA
Claims Checks Production	NA	Claims Data Base Management	NA
Average	$93,000	Average	$63,000

*Total reported by respondent. INPUT divided the amount between the applications cited.

†Each line represents one respondent.

- The FM processing users' expenditures were less diverse and averaged $93,000 per year.

- For both service modes, financial applications are strongly represented.

- INPUT asked the users how critical their applicatons were, because this can be a major factor in how users feel about their application and its service.

- The users were asked to give the cost to their company in profits and/or revenues if either of the two most important applications goes down (can't be operated).

  - Nineteen of the RCS users responded with "no cost."

  - One RCS user said it would cost the company $1,600 per month.

  - Six of the batch processing users said "no cost."

  - One batch processing user said it would cost the company $17,000 per day.

  - None of the FM processing users reported any cost when the application goes down.

- The users were also asked if there were any other problems when the application went down. Five of the twenty RCS users cited other problems, as follows:

  - "Planning is more difficult."

  - "The information flow is interrupted."

  - "It's harder to stay on schedule."

- "Our planning is more difficult."

- "We have to pay people overtime to keep on schedule."

- Overall, none of the applications were very critical to the users except for the batch application, which cost $17,000 per day when it was down.

- These users should not be very sensitive to problems such as downtime or poor system response.

B. USER PURCHASING ATTITUDES

1. PRICING METHODS

- Users' pricing sensitivity is influenced by the way they pay for their processing service. INPUT asked the users how they paid for their service; results are shown in Exhibit IV-4.

- RCS users, like the vendors, had a broad variety of pricing methods.

  - Fifty-five percent paid by resource pricing.

  - Twenty percent paid transaction pricing.

  - Twenty percent paid fixed prices.

  - Five percent paid by a mixture of resource and transaction pricing.

- The batch processing users were very unlike the batch processing vendors in pricing methods.

EXHIBIT IV-4

PROCESSING SERVICES USERS' PRICING METHODS

TYPE OF SERVICE USER	TYPE OF PRICING METHOD (Number of Respondents)				
	RESOURCE	TRANSACTION	FIXED	OTHER*	TOTAL
Remote Computing Users	11	4	4	1	20
Batch Users	3	1	2	1	7
FM Processing Users	0	0	4	1	5
Total	14	5	10	3	32

*RCS and batch "other" categories were a mix of resource and transaction.
FM "other" category was a mix of transaction and fixed price.

- The vendor respondents predominately employed transaction pricing.

- The user respondents included only one who paid by transaction and another who paid a mixture of transaction and resource.

- Slightly more than 40% of the users paid for resources and 30% paid fixed price.

- Eighty percent of the FM processing users paid a fixed price for their services, which closely parallels the vendor respondent profile of pricing methods.

2. REMOTE COMPUTING SERVICES

- The extent of RCS users' pricing sensitivity is shown in Exhibit IV-5.

- The average of all ratings is 3.7, which indicates that the users consider most of the factors to be important when selecting a vendor.

  - Of the nonvolunteered factors, service quality received the highest rating (4.7).

  - A close second was turnaround/response time, which is closely related to service quality in the minds of many users.

  - Customer support, another service quality factor, received the third highest rating (4.3).

  - Tied for fourth place were price of service and vendor's reputation.

- It is apparent that service quality, as measured in a variety of ways, is far more important to RCS users than the price of the service.

EXHIBIT IV-5

RCS USERS' RATINGS OF VENDOR SELECTION FACTORS

SELECTION FACTOR	RCS RATING
Service Quality	4.7
Turnaround/Response Time	4.4
Customer Support	4.3
Price of Service	4.0
Vendor's Reputation	4.0
Resource Price Structure	3.8
Discount Available	3.7
Vendor's Knowledge of Application	3.5
Transaction Price Structure	3.1
Component Pricing	3.0
Fixed Price Structure	2.4
Vendor's Knowledge of User Industry	2.4
Other Volunteered Factors (described)	
Reliability	5.0
Software Availability	4.4
Storage Cost	5.0
Average	3.7

Rating: 1 = Low, 5 = High Importance

- On this point, the RCS vendors correctly assessed user attitudes in that they too rated service quality as the most important factor. (See Exhibit III-9).

- The vendors also rated vendor reputation second highest, which agrees with the users' ranking. (See Exhibit III-9).

- With regard to pricing methods, users indicated a clear preference for resource pricing, followed in preference by transaction pricing.

  - Fixed pricing clearly was not desirable to users.

  - Discount availability was very important to users.

- The RCS vendors' plans call for them to replace resource pricing with transaction and fixed pricing.

  - The foregoing results seem to indicate that RCS vendors are heading in a direction opposite to the one that users prefer.

  - This interpretation is not necessarily correct. Users tend to show a preference for something with which they are familiar, and most of these users are currently charged on a resource basis. This highlights the importance of providing good explanations for proposed pricing changes.

  - Users may also have felt that transaction pricing would not work well with their applications.

- In any event, INPUT recommends that RCS vendors survey their customers on major pricing structure changes before they are implemented. The change may not be as welcomed as the vendor thinks.

- Fixed pricing was not attractive to users because a number of them had applications in which use varied considerably. Users felt that a fixed-price agreement would be more costly.

- Users indicated that the vendor's knowledge of the industry was the least important factor. Vendors gave an identical response. (See Exhibit III-9).

- A vendor's knowledge of the application was rated high by users as well as by vendors. (See Exhibit III-9).

3. BATCH PROCESSING SERVICES

- The batch processing users' ratings of selection factors had an overall average of 3.8, as shown in Exhibit IV-6. This rating shows that users generally considered these factors to be important.

- Service quality is rated the most important factor by the users (Exhibit III-9); it was rated similarly by the vendors of batch services.

- Users rated customer support as second most important.

  - The user rating differs sharply from the vendors' rating. (The vendors' rating places customer support next to the bottom.)

  - Vendors may be taking customer support too much for granted.

- In selling their services, vendors should emphasize customer support and if possible show how it is superior to the competition's.

- Batch processing users gave a high rating to the price of service. Vendors ranked price highest, tied with service quality.

EXHIBIT IV-6

BATCH PROCESSING USERS' RATINGS OF VENDOR SELECTION FACTORS

SELECTION FACTOR	BATCH PROCESSING RATING
Service Quality	4.7
Customer Support	4.6
Turnaround/Response Time	4.6
Vendor's Reputation	4.1
Vendor's Knowledge of Application	3.7
Price of Service	3.6
Component Pricing	2.9
Fixed Price Structure	2.9
Resource Price Structure	2.9
Transaction Price Structure	2.9
Discount Available	2.8
Vendor's Knowledge of User Industry	2.1
Other Factors (described)	
Reliability	5.0
Software Availability	4.0
Storage Cost	5.0
Average	3.8

Rating: 1 = Low, 5 = High Importance

- Although service quality is most important, batch users are very price-sensitive.

- Batch users did not express a clear preference for any pricing method, rating all types the same at 2.9, which is only slightly important.

- The vendor's knowledge of the user's application was rated very important by the users.

  - The vendors, on the other hand, attached only average importance to this factor.

  - INPUT recommends that vendors place more emphasis on knowing their users' applications.

  - In their sales efforts vendors should place more emphasis on this knowledge.

- The vendor's knowledge of the user's industry was clearly of little importance to the users. The vendors agreed on this point.

- The availability of discounts was of average importance to users. Batch vendors appear to recognize this in that they offered very low discounts, and very little of their business was discounted.

- Tied for second most important factor was turnaround/response time.

- INPUT recommends that batch processing vendors maintain a quality control process to measure these factors.

  - Vendors could then assure customer satisfaction on a factor that is very important to their customers.

- Vendors could also use in their sales presentations the statistics showing excellent turnaround/response time.

- One user volunteered that reliability was worth a five rating. Two other users volunteered that software availability was also worth a five.

- Reliability and software availability were also volunteered as being important to the RCS users, so vendors in general would be well advised to assess the reliability and the breadth of their software availability.

4. FACILITIES MANAGEMENT PROCESSING SERVICES

- The facilities management processing service users also gave a high overall rating (3.9) to the selection factors, as shown in Exhibit IV-7.

- Service quality was selected as the most important factor, with a rating of five by the FMPS users.

  - The FMPS vendors also rated this factor the highest. (See Exhibit III-9).

  - All users and vendors of the three service modes agree that service quality is the most important factor in selecting a new vendor.

- The vendor's reputation was rated as tied for third most important by FMPS users.

- A vendor's reputation and the quality of its service is one of the vendor's most valuable assets and should be jealously guarded and preserved.

- The vendor's knowledge of the user's application, and customer support are also rated very highly by the users.

EXHIBIT IV-7

FM PROCESSING SERVICES USERS' RATINGS
OF VENDOR SELECTION FACTORS

SELECTION FACTOR	FMPS RATING
Service Quality	5.0
Turnaround/Response Time	4.4
Vendor's Knowledge of Application	4.2
Vendor's Reputation	4.2
Customer Support	4.0
Fixed Price Structure	4.0
Price of Service	3.4
Vendor's Knowledge of Your Industry	3.2
Resource Price Structure	2.6
Transaction Price Structure	2.6
Discount Available	2.3
Component Pricing	1.0
Other Factors (described) Reliability Software Availability Storage Cost	5.0
Average	3.9

Rating: 1 = Low, 5 = High Importance

- The vendors did not rate knowledge of the application very high. (See Exhibit III-9).

- Vendors should place more emphasis on this factor.

- Price of service was rated slightly below average in importance.

  - The vendors may be overly concerned about the price of their service.

  - This may be particularly true in that users also placed little value on discounting.

- The users expressed a strong preference for a fixed price structure, which was what 80% of them had.

- Turnaround/response time was the second most important factor for the users.

  - Vendors should monitor this factor closely to insure good performance.

  - Vendors should also stress this in their promotional sales efforts.

- The FMPS users volunteered a number of other factors that were all rated at five.

  - Software availability.

  - Reliability.

  - Accuracy of processing.

  - Availability of personnel.

  - Vendor flexibility in meeting users' needs.

- Software availability and reliability were also volunteered as being important to RCS and batch processing users.

- Vendors must assess their strengths in these areas and make improvements wherever possible.

- Mentions of personnel availability and vendor flexibility imply a weakness in these areas.

  - Vendors should consider offering personnel time on a resource basis.

  - Vendors should also periodically survey their customers with respect to how responsive vendor personnel have been to customer requests and needs.

C. USER RESOURCE PRICING PREFERENCES

1. REMOTE COMPUTING SERVICES

- In general, the RCS users preferred to pay for their resources on a component rather than a bundled basis, as shown in Exhibit IV-8.

  - This also corresponded closely to the way RCS users are currently charged.

  - There was no significant difference between how RCS users were charged and how they preferred to be charged.

- In the following cases a change in pricing was indicated:

EXHIBIT IV-8

RCS USERS' PRICING METHODS - THEIR PREFERENCES AND VALUATIONS

Resource	Number of Respondents				Rating	
	Currently Priced as		User Preference is		Importance to User (1 to 10)	Cost Effectiveness (1 to 10)
	Component	Bundled	Component	Bundled		
Central Processing Unit						
Immediate	8	3	9	2	4.8	7.4
Deferred	2	2	2	2	6.5	8.0
Connect Time						
Prime	8	2	8	2	4.1	6.5
Nonprime	7	1	7	1	4.7	6.2
Storage						
Daily Access	8	2	8	2	4.6	6.5
Limited Access	4	1	5	0	6.8	6.0
*Communications	2	1	2	1	8.0	8.0
Hardware (USHS)	7	3	8	2	6.0	7.8
Software Premium	3	3	3	3	7.5	8.2

*Integrated Systems Only.
(USHS is User Site Hardware Service)

EXHIBIT IV-8 (Cont.)

RCS USERS' PRICING METHODS - THEIR PREFERENCES AND VALUATIONS

Resource	Number of Respondents				Rating	
	Currently Priced as		User Preference is		Importance to User (1 to 10)	Cost Effectiveness (1 to 10)
	Component	Bundled	Component	Bundled		
*Hardware Maintenance	2	6	2	6	7.6	6.6
*Software Maintenance	1	3	1	3	9.3	9.0
Response Time	3	4	3	4	5.0	8.4
Daily Backup (Storage)	3	6	3	6	5.7	7.8
*Backup System	0	3	0	3	9.3	9.0
*Application Consultant/ Support	1	4	1	4	6.7	6.1
*On-site Training	2	4	1	5	6.2	7.7
*Vendor Site Training	1	2	1	2	7.3	7.3
*Manuals/Documentation	5	3	4	4	6.3	7.5
*Hotline	1	4	1	4	5.8	7.2
*Custom Programming	0	0	-	-	-	-
*Other Services	-	-	-	-	-	-
Total/Weighted Average	68	57	69	56	6.4	7.4

*Integrated Systems Only.

- One user would like to have the limited access storage pricing changed from bundled to component.

- Another user would like to see user site hardware service (USHS) pricing changed from bundled to component.

- The above users commented that component pricing would give them more control over their cost.

- Another user would like on-site training to be changed from component to bundled pricing.

- Still another user would like manuals and documentation to be changed from component to bundled pricing.

- The users were also asked to rate, on a scale of 1 to 10, where 1 is low and 10 high, how important the resources were to their main applications.

- The most important factors cited were software maintenance (9.3) and backup systems (9.3).

  - This response is consistent with the frequent earlier mentions of service quality and reliability.

  - Vendors should determine if they have any weaknesses in these areas and if they do should take steps to improve.

- Communications was also very important to several of the users' applications. A large and reliable network has always been recognized as an advantage in RCS.

- Software premiums received very high ratings (7.5).

- Obviously, users are willing to pay a premium for good software. They recognize that the software might not be available without the extra charge.

- Vendors should not hesitate to implement this type of pricing.

- Hardware maintenance (7.6) also received a very high importance rating.

  - Users want to pay for hardware maintenance on a bundled basis.

  - Users are likely to be willing to pay a higher price for good hardware maintenance.

- Limited access storage (6.8) and deferred CPU (6.5) also received high ratings.

  - Both of these offerings enable users to realize substantial savings in certain applications.

  - Vendors who do not offer these options should give them serious consideration.

- The users were also asked to rate how cost effective their services were and to rate them.

- On a scale of 1 to 10, the users' overall rating of cost effectiveness is 7.4.

  - This high rating indicates a high degree of value received by the users.

  - None of the ratings for any of the services was below 5.0. In fact, the lowest rating was 6.0.

- Users rated the following services as the most cost effective:

- Software maintenance (9.0).
- Software premiums (8.2).
- Communications (8.0).
- Deferred CPU (8.0).
- Response time (8.4).
- Backup systems (9.0).

- Since users consider these six services to be very cost effective, users are not likely to be very sensitive to cost changes.
  - These six are services on which users are most likely to accept price increases without substantial protest.
  - Vendors may feel safest in raising the prices of these services.
  - Vendors who do not offer the above should consider doing so.
- The least cost effective services include the following:
  - Limited access storage (6.0).
  - Application consultant/support (6.1).
  - Nonprime connect time (6.2).
  - Prime connect time (6.5).
  - Daily access storage (6.5).

- Hardware maintenance (6.6).

- Raising prices on any of the above is likely to result in strong user resistance.

- Unfortunately, user price increase resistance is strongest toward the services that represent a majority of vendor revenues; resistance is weakest toward the more incidental services.

- RCS vendor pricing on these items is largely by resource.

  - Users will more readily accept price increases on these services if the pricing structure is changed simultaneously.

  - Changing to transaction or fixed pricing on these services will be one of the most acceptable ways of increasing prices.

- The overall rating of 7.4 for cost effectiveness does indicate that there is room for price increases, especially since users do not consider price the major factor in selecting RCS vendors.

- INPUT recommends that, when they must increase prices, RCS vendors implement price increases through changes in pricing techniques.

2. BATCH PROCESSING SERVICES

- Batch processing users showed little enthusiasm for changes in the pricing techniques for their services. Details are shown in Exhibit IV-9.

- Three batch processing users preferred pricing technique changes. All three users would like pricing changed from bundled to component for the following services:

EXHIBIT IV-9

BATCH PROCESSING USERS' PRICING METHODS -
THEIR PREFERENCES AND VALUATIONS

Resource	Number of Respondents				Rating	
	Currently Priced as		User Preference is		Importance to User (1 to 10)	Cost Effectiveness (1 to 10)
	Component	Bundled	Component	Bundled		
Central Processing Unit						
Immediate	2	0	2	0	7.0	7.0
Deferred	1	1	1	1	5.5	7.0
Connect Time						
Prime	2	1	2	1	6.3	8.0
Nonprime	2	1	2	1	6.3	8.0
Storage						
Daily Access	1	1	1	1	6.5	8.0
Limited Access	2	1	2	1	6.3	7.3
*Communications	1	0	1	0	8.0	6.0
Hardware (USHS)	0	1	1	0	8.0	6.0
Software Premium	2	1	2	1	6.7	6.3

*Integrated Systems Only.

Continued

EXHIBIT IV-9 (Cont.)

BATCH PROCESSING USERS' PRICING METHODS -
THEIR PREFERENCES AND VALUATIONS

Resource	Number of Respondents				Rating	
	Currently Priced as		User Preference is		Importance to User (1 to 10)	Cost Effectiveness (1 to 10)
	Component	Bundled	Component	Bundled		
*Hardware Maintenance	1	1	1	1	5.5	6.5
*Software Maintenance	2	0	2	0	7.5	5.5
Response Time	1	2	1	2	7.7	7.3
Daily Backup (Storage)	1	1	2	0	6.5	6.5
*Backup System	0	1	1	0	5.0	4.0
*Application Consultant/ Support	0	0	0	0	-	-
*On-site Training	2	0	2	0	8.0	9.0
*Vendor Site Training	1	0	1	0	8.0	8.0
*Manuals/Documentation	1	1	1	1	6.5	8.0
*Hotline	0	1	0	1	5.0	8.0
*Custom Programming	0	0	-	-	-	-
*Other Services	-	-	-	-	-	-
Total/Weighted Average	21	15	25	11	6.7	7.0

*Integrated Systems Only.

- User site hardware service.
- Daily backup of storage.
- Backup system.

- The most important services were the following:
  - Communications (8.0).
  - User site hardware service (8.0).
  - On-site training (8.0).
  - Vendor site training (8.0).
  - Response time (7.7).
  - Software maintenance (7.5).

- Some of these services, such as training, are offered on a bundled basis. Vendors should consider pricing them on a component basis since users consider them so important.

- The least important services were the following:
  - Backup system (5.0).
  - Hotline (5.0).
  - Deferred CPU (5.5).
  - Hardware maintenance (5.5).

- Users were also asked to rate how cost effective the services were. They rated the following most cost effective:

  - On-site training (9.0).
  - Prime connect time (8.0).
  - Nonprime connect time (8.0).
  - Daily access storage (8.0).
  - Vendor site training (8.0).
  - Manuals/documentation (8.0).
  - Hotline (8.0).

- Those services rated highly cost effective are those that batch processing service vendors should consider for pricing changes.

  - If the vendor offers the service on a bundled basis, the vendor should consider selling it on a component basis as a means to raise prices and revenues.
  - If the service is already offered on a component basis, the vendor should consider these services as candidates for increased prices.
  - If a vendor does not offer these services, the vendor should consider doing so.

- The users' overall rating of cost effectiveness was 7.0. This indicates that the users felt they were receiving good value for their expenditures.

D. USER ATTITUDES TOWARD PRICING METHODS

- The users were asked to state whether or not they liked the pricing method employed by their processing service vendor and why they felt that way. A tabulation of the responses is shown in Exhibit IV-10. The explanations given by users are shown in Exhibit IV-11.

- The usual negative comment on resource pricing was that it makes it too difficult to control cost and budget expenses.

- The positive aspect of resource pricing is that it can enable the user to reduce expenditures when the user either doesn't need it or is over budget.

- Fixed price offers the advantages of being easy to budget; users also felt there was some room to negotiate.

- The combination of fixed price and transaction pricing offered the advantages of being both relatively easy to budget and flexible with respect to level of use and expense.

- Processing service users who were subject only to transaction pricing were asked a series of questions.

  - When asked if they would prefer to pay for their service through resource or fixed pricing, they replied that they liked transaction pricing and would not like to change.

  - Respondents were asked what was included in a transaction. Those who responded stated that it included either a report or printing.

EXHIBIT IV-10

USERS' ATTITUDES TOWARD PRICING METHODS EMPLOYED BY THEIR VENDOR

• TYPE OF SERVICE - TYPE OF PRICING	USER ATTITUDE (Percent of Users)	
	LIKES	DISLIKES
• RCS		
- Resource	40%	60%
- Fixed Price	100	0
• Batch Processing		
- Resource	50	50
• FM Processing		
- Fixed Price	100	0
- Fixed/Transaction	100	0

EXHIBIT IV-11

CURRENT USERS' REASONS FOR LIKING OR NOT LIKING CURRENT PRICING METHODS

• TYPE OF SERVICE - TYPE OF PRICING IN USE	LIKES*	USERS' COMMENTS
• Remote Computing		
- Resource	No	Too expensive.
- Resource	No	Difficult to budget expenditures.
- Resource	No	Too expensive.
- Resource	Yes	Easy to reduce expense.
- Resource	Yes	Fits need: has unpredictable use.
- Fixed Price	Yes	Easy to budget.
• Batch Processing		
- Resource	No	Lack cost control.
- Resource	Yes	Allows us to use according to need.
• FM Processing		
- Fixed Price	Yes	Able to negotiate a fair price and then establish budgets.
- Fixed Price	Yes	Able to netotiate price increases.
- Fixed Price	Yes	Can budget expense with no problems.
- Fixed Price and Transaction	Yes	We have some flexibility and we can anticipate budget requirements

* All other users stated they liked their pricing method and made no other comment.

- Respondents were asked if they had to pay a minimum in addition to the transaction charge.

  . Twenty-five percent of the RCS respondents said yes. The minimum was $4,000 per month.

  . None of the batch respondents had to pay a minimum.

  . One of the FM processing users had to pay a minimum.

- Respondents were asked if there were any hidden charges associated with their transaction pricing. All who answered said "no," except for one FM processing user who said he had to pay for program changes.

- When asked if there were any changes that they would like to see made in their transaction pricing, 50% wanted lower prices.

- All users who were buying their services on a fixed price basis were satisfied with this type of pricing. None preferred transaction or resource pricing.

- The same response was received when users were asked if there were any changes they would like to see made to their fixed-price arrangement. All service modes respondents felt no need to change their fixed-price arrangement.

E. CHANGING VENDORS OR APPLICATIONS

- The users subject to resource pricing were asked if they were considering changing processing vendors.

  - Four of the twelve RCS respondents said yes.

- Two of the four batch processing respondents said yes.

- The users were also asked if they planned to change the processing method for their most important applications.

- Twelve of the twenty RCS users said yes. These twelve also stated what the change was and their reason for it.

  - Six said that within a year they would replace their RCS application with personal computers to reduce cost.

  - Four said that within a year they were going in-house to reduce the cost of their application.

  - One user company said it was making some program changes because of increased workloads.

  - Another user said it was trying to improve efficiency in order to reduce costs.

- When one remembers that the average user's annual expenditures for RCS are $156,000 per year, it becomes obvious that even large applications are vulnerable to personal computer competition.

  - A serious problem is pointed out by the statistic that 30% of the respondents are converting from RCS to personal computers.

  - RCS vendors must assess their vulnerability to this threat and take appropriate actions to reduce it. Clients should review this threat; it was presented in detail in another 1983 ISIP report, Personal Computer Opportunities For Remote Computing Services Vendors.

- The fact that 20% of the RCS users are going to in-house systems is also ominous.

- All together, half of the respondents plan to cancel their RCS service. However, innovative pricing changes can help.

F. DISCOUNTS

- Processing services users were asked if they received discounts, and if so how much and how one qualified.

- Six of the 20 RCS users stated that they received a discount.

  - Only two of the users could state the size of their discount; it was 10% in both these cases.

  - Five of the six stated that their discount was based on volume.

- Four of the six respondents had expenditures higher than $10,000 per month, which placed them above the level where the typical vendor respondent starts to offer discounts. The other two respondents did not give expenditure data, but INPUT believes they qualified for their discounts on the same basis.

- None of the users who did not receive discounts had expenditures of more than $10,000 per month.

- It is interesting to note that of the users who were planning to cancel their use of RCS, only 8% were receiving a discount. Of the users who had no plans to cancel their RCS service, 63% were receiving discounts.

- Vendors should consider offering discounts that begin at lower volume levels.

- Discount qualifications on volume should start with monthly expenditures of $4,000 to $5,000.

- Vendors who already discount at this level through their standard schedule should consider making the discount a nonstandard offering and giving it to the user on an exception basis. There can be a psychological benefit to users about special treatment in receiving discounts, and this makes them more loyal to the supplier.

- Two of the seven batch processing users received discounts.

  - Only one stated the amount of the discount, 30%. This user's expenditures were less than $5,000 per month.

  - The other user's expenditures were over $120,000 per month.

- Two users who did not receive discounts had monthly expenditures of over $20,000. One of these was planning to cancel the service and go in-house.

- One of the users who received a discount of 30% was planning to cancel the service but this user did not indicate what was going to replace it.

- Three of the five FM processing users received discounts, but none of them stated the amount.

  - One discount was based on volume.

  - Another was negotiated.

  - The third was given a discount because it was a desirable customer in terms of the vendor's public relations. This user's expenditures were also greater than $20,000 per month.

- None of the FMPS users who received a discount was planning to cancel the service.

  - One of the users who did not receive a discount was planning on cancelling FM processing service.

  - This user's volume of expenditures was not disclosed, but INPUT believes it to be substantial.

G. COST CONTROL

- Eighteen of the twenty RCS users said they felt they could control and predict the cost of their service.

  - One of the two who could not said there was nothing the vendor could do to help him.

  - The other user said that the vendor should give him some means of finding out how much was spent at the end of the day.

- Five of the seven batch processing users said they could control and predict their cost. The two who could not stated there was nothing their vendors could do to help them do this.

- All of the FM processing users felt they could control and predict their cost.

- Users were asked if they would prefer a new pricing arrangement that is not currently being offered by their vendors.

- Two of the RCS users said yes. Both indicated that they would like fixed prices.

- One of the batch processing users said yes. This user would like a cancellation clause that would apply to companies that do not perform as advertised.

- None of the FM processing users wanted a new pricing arrangement.

V INTEGRATED SYSTEMS PRICING

V INTEGRATED SYSTEMS PRICING

A. VENDOR PRACTICES AND ATTITUDES

1. CHANGES AND INNOVATIONS

a. Pricing Structure

- The vendors sell their system for a fixed price and were expecting no changes by 1985.

- Vendors typically charged a one-time fee for the hardware, software, and training. At least one vendor included support for one year in his price.

- Two of the vendors had made pricing changes in the past year.

  - One vendor increased prices and put a limit on the amount of forms customization that they would do. They also introduced more user options.

  - The other vendor started to provide larger-volume discounts to large customers.

- Several of the vendors plan to change the way they priced their service in 1983.

- In order to improve profit margins, one vendor is increasing annual support fees and add-on software charges. This vendor is also going to a larger, higher cost system to increase the functionality of their system so they can target new market niches.

- Another vendor (who also sells an RCS version of its product) is going to start renting integrated systems on a six-month basis.

  . The RCS product is less profitable than the integrated system, so this vendor is trying to move its customers in that direction.

  . The rental integrated system will reduce the communications cost of the user, but will require no capital investment.

b. Discounting

- All of the respondents said they offered discounts.

- Three of the vendors offered volume discounts.

  - One gave discounts only on additional software sales.

  - Another would give discounts if a customer spent more than $500,000 in a two-year period. The discount would be between 10% and 13%.

  - The third vendor gave discounts based on the number of systems purchased.

- None of the Systems Integration (SI) vendors gave discounts to term contracts or the government.

- One vendor gave discounts in the education sector.

- Two vendors gave other types of discounts.

  - On a negotiated basis for multiple-location users, one vendor will provide central support at a 50% discount and will install the software on additional sites with a 20% discount.

  - The other vendor permitted its sales people to give discounts on a discretionary basis in order to close sales.

- The proportion of business sold at a discount by the systems integrators covered a broad range, as is shown in Exhibit V-1.

c. Price Protection

- Two of the systems integrators offered some form of price protection to their customers.

  - On a negotiated basis, one vendor would limit increases in software prices for a period of one year.

  - The other vendor will for a limited time guarantee a price for additional systems. But this offer is rarely used.

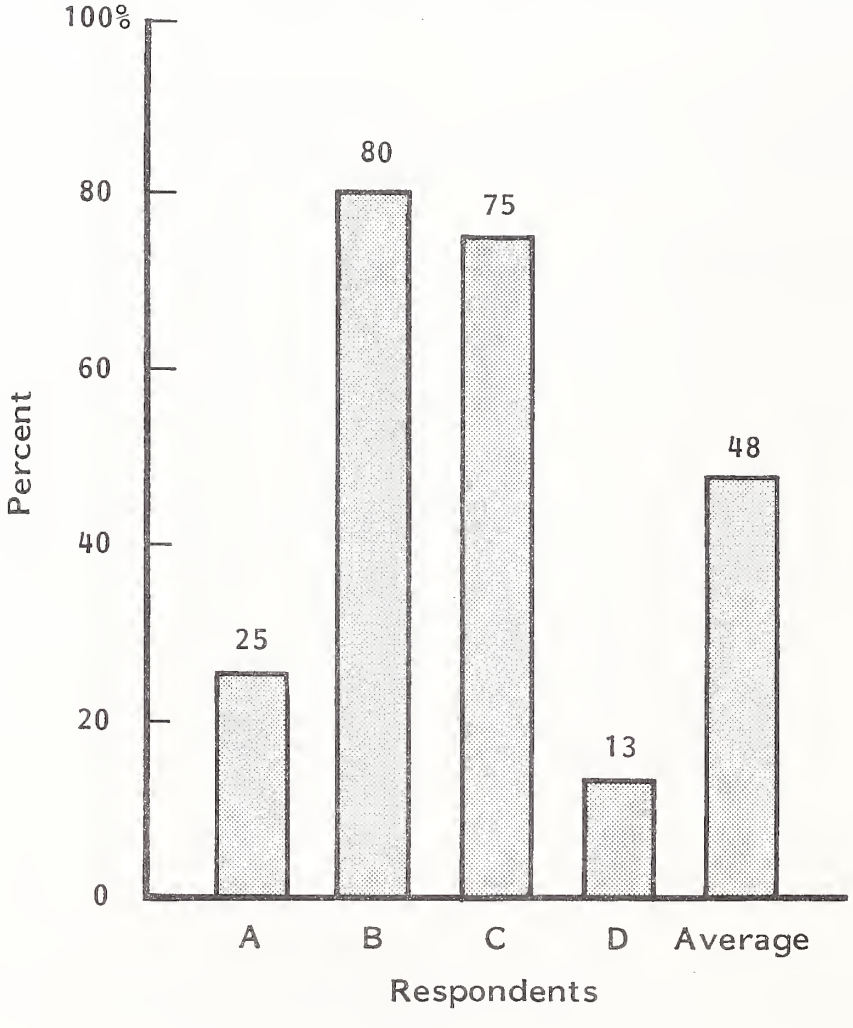
d. Other

- Vendors were asked if there were any terms or conditions that their customers requested but that they would not provide. Two of the vendors said yes. The following are descriptions of requests.

  - "We have been asked to provide performance guarantees for both the system and support."

EXHIBIT V-1

PROPORTION OF BUSINESS DISCOUNTED BY SYSTEMS INTEGRATORS



- "We have been asked to provide perpetual licenses to customers who want to resell the system to third parties."

2. VENDOR PERCEPTIONS OF USER ATTITUDES

- The vendors were asked to rate how sensitive their customers were to price increases.

  - Two responded that sensitivity was average and two stated that it was above-average. Details are shown in Exhibit V-2.

  - The average for all four vendors was 3.5, which was slightly above the scale's midpoint.

- The systems integrators were asked to rate a number of selection factors in terms of their importance to their customers. The results are shown in Exhibit V-3.

  - Service quality, the vendor's knowledge of the application, and the vendor's reputation were all rated very important (4.5).

  - The vendor's knowledge of the client's industry is also rated very high, which is not surprising in that all of the vendors offer industry-specialized products.

  - The price of the service received the lowest rating in importance, but at 3.8 it was still well above the midpoint.

- Basically, the systems integrators felt that all of the factors were important and success was dependent on doing well in all six factors.

EXHIBIT V-2

SYSTEMS INTEGRATORS' RATINGS OF
CUSTOMERS' SENSITIVITY TO PRICE INCREASE

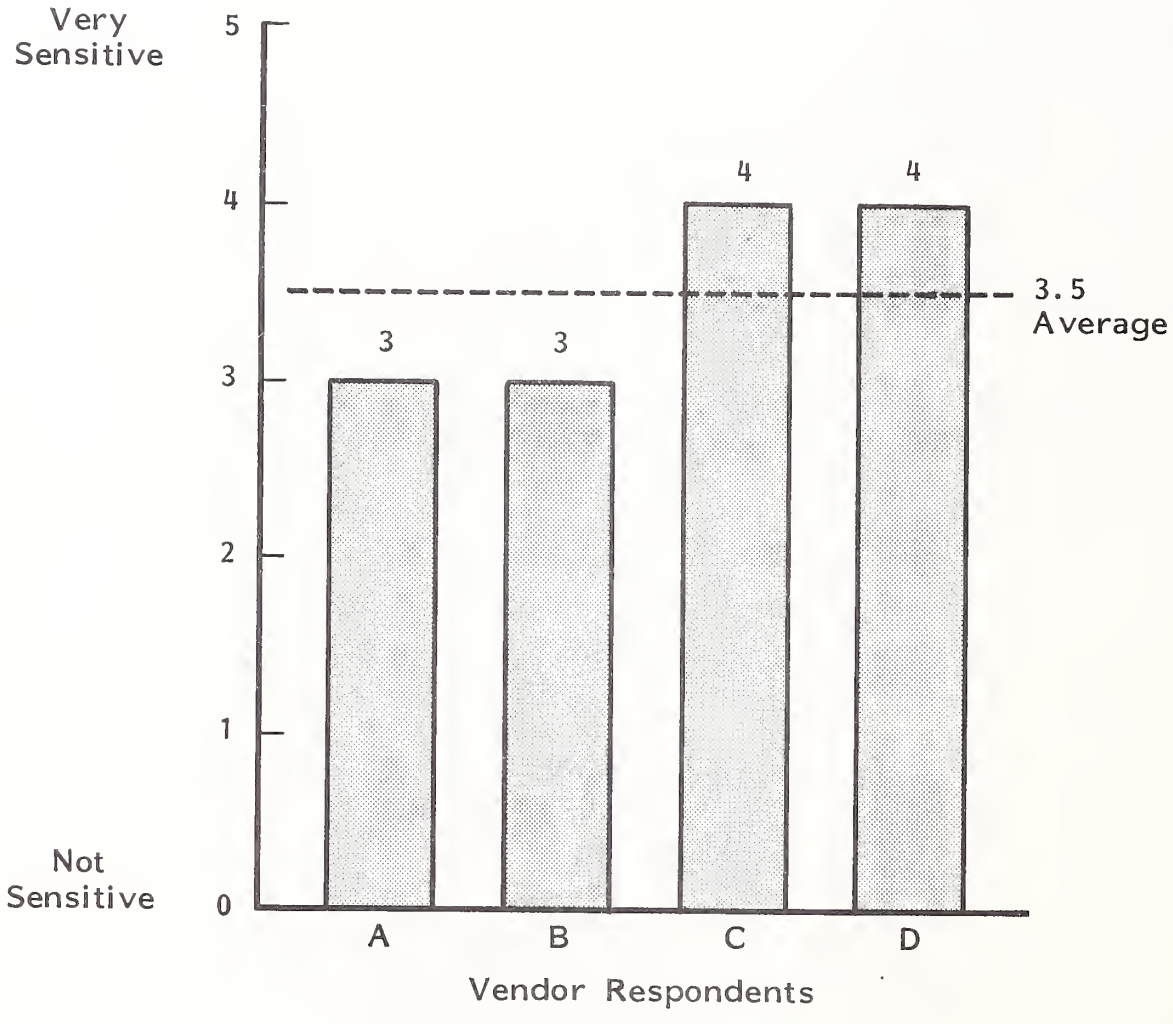
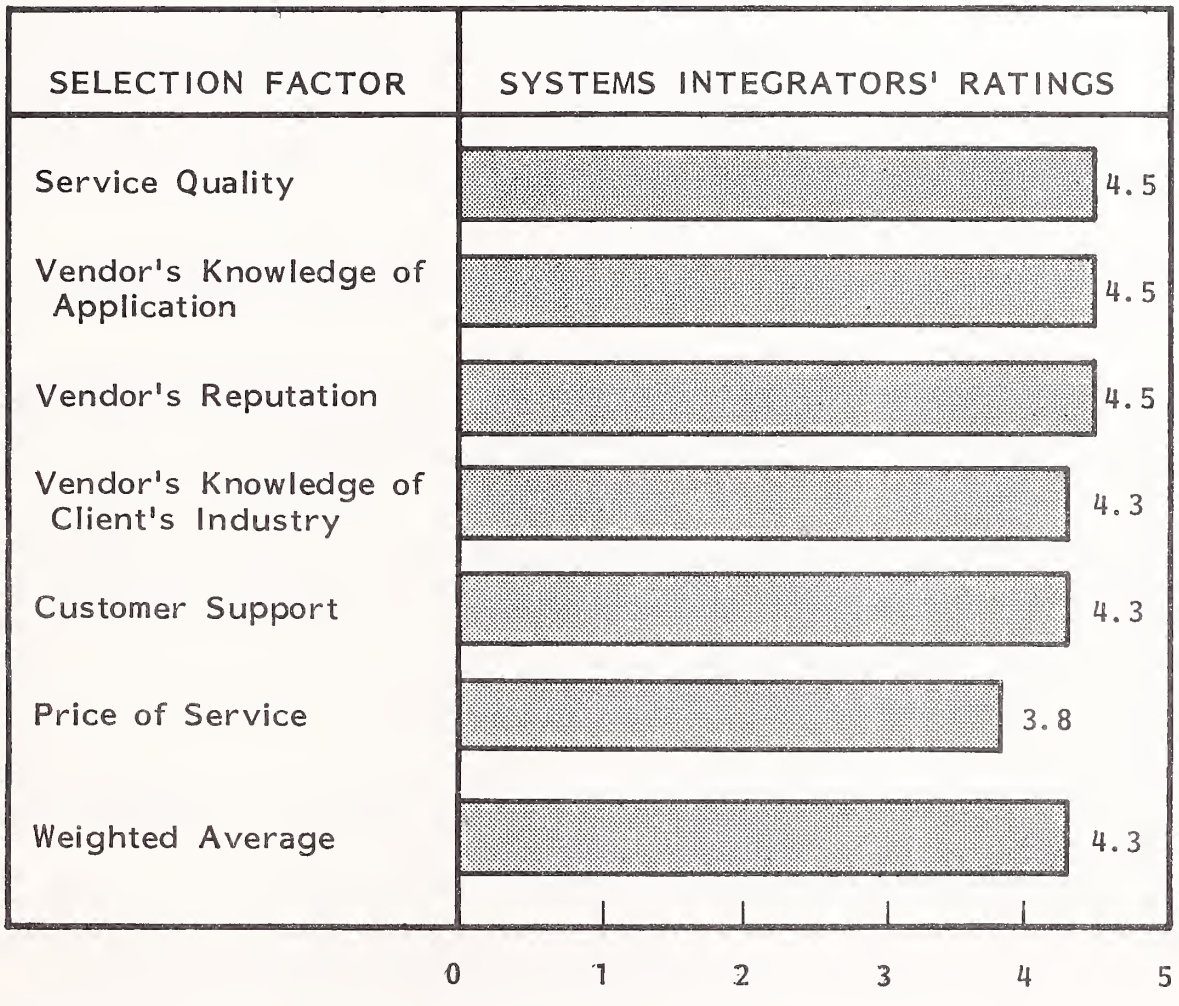


EXHIBIT V-3

SYSTEMS INTEGRATORS' RATINGS OF IMPORTANCE OF SELECTION FACTORS TO THEIR CUSTOMERS



* Rating of Importance 1 = Low, 5 = High

3. USERS' APPLICATIONS AND EXPENDITURES

- The users were asked to tell what their annual expenditures were for integrated systems and processing services.

- Users spent from $18,000 to $450,000 per year on integrated systems, with the average annual expenditure being $167,000. They also spent an average of $22,000 per year on RCS.

- Users were also asked to name their two most important integrated systems applications and their annual expenditures for those systems. Their responses are shown in Exhibit V-4.

  - CAD/CAM and sales applications were both mentioned twice.

  - The annual expenditures reported were fairly diverse, with an average of $73,000 for the most important application.

- It is useful to know how critical an application is when assessing user attitudes, so the users were asked what the costs were if their system went down.

  - One user said it cost about $75 per hour.

  - Another said the cost would be very large and that the IS manager would probably be looking for a new job.

  - Two said there was no cost because they had backup systems.

  - One respondent said the vendor absorbed the cost of downtime.

  - Five stated there was no financial cost if the system went down.

- Half of the respondents have critical applications, while the others do not.

EXHIBIT V-4

INTEGRATED SYSTEMS USERS' MOST IMPORTANT APPLICATIONS

MOST IMPORTANT	ANNUAL EXPENDITURES	SECOND MOST IMPORTANT	ANNUAL EXPENDITURES
Mechanical Drafting	N/A	Designing	N/A
CAD/CAM	75,000*	Automated Drafting	75,000*
Auto Product Sales	N/A	None	-
Automatic Cash Application	5,400	Financial Forecasting	N/A
Point-of-Sale Ordering	9,000*	Ledger Accounting	9,000*
Inventory Control	N/A	Accounts Receivable	N/A
Material Requirements Planning	N/A	None	-
Program Management	250,000	None	-
Graphics	250,000	VisiCalc	100
Personnel Status and Salaries	N/A	Executive Personnel Status	N/A
Average	73,000		42,000

N/A = No Answer

* Total reported was divided between the applications

4. USER PURCHASING ATTITUDES

- Nine of the users paid a fixed price for their integrated system, whereas one paid on a transaction basis.

- Users were asked to rate the importance of a number of selection factors (on a scale of 1 to 5; 5 = most important).

- The most important selection factor to users is service quality (5.0), followed closely by turnaround/response time (4.8), and customer support (4.7). Details are shown in Exhibit V-5. These ratings are understandable when one recognizes that half of these users have very critical applications.

- INPUT recommends that systems integrators consider how critical the product is to their users when pricing their products.

  - Users should be willing to pay a higher price for these applications.

  - Vendors should be prepared to provide a higher level of service and support to these customers. These customers will demand and expect it.

- Vendors also rated service quality and customer support very high; therefore they understand this aspect of their buyers' motivations.

- The vendor's reputation (3.9) and knowledge of the application (3.6) also received high ratings.

- Once again vendors gave these same factors high ratings. (See Exhibit V-5).

EXHIBIT V-5

INTEGRATED SYSTEMS USERS' RATINGS OF VENDOR SELECTION CRITERIA

SELECTION FACTOR	I.S. USER RATING
Service Quality	5.0
Turnaround/Response Time	4.8
Customer Support	4.7
Fixed Price Structure	4.1
Vendor's Reputation	3.9
Vendor's Knowledge of Application	3.6
Price of Service	3.2
Discount Available	3.1
Vendor's Knowledge of User Industry	3.0
Component Pricing	2.9
Transaction Price Structure	2.9
Resource Price Structure	2.7
Other Factors (described) Reliability Software Availability Storage Cost	0
Average	4.1

Rating: 1 = Low, 5 = High Importance

- The users gave the price of the service a relatively low rating (3.2), just as the vendors did, as shown in Exhibit V-5.

- INPUT recommends that vendors consider raising their prices if they feel their own organization is strong in the areas that users rated highest.

  - Users considered discounts to be of some (3.1) but not a great deal of importance.

  - Fixed pricing (4.1) was strongly favored over other types of pricing.

- The vendor's knowledge of the user's industry received much lower ratings from the users (3.0) than from the vendors (4.3).

  - The vendors were all industry specialized.

  - Users have more cross-industry than industry-specialized applications.

5. PRICING PREFERENCES

- Users were asked if they liked the pricing technique employed by their vendors.

- Seven of the nine users who paid a fixed price said they like it because it is easy to budget.

- One of the users said "no" because the system was up 99% of the time and maintenance fees were expensive insurance.

- None of the fixed-price users would prefer another pricing technique.

- The one integrated system user who paid for each transaction said that transaction pricing was difficult to budget and therefore undesirable.

- The user reported these other aspects of his vendor's pricing.
  - This user expressed a preference for fixed pricing because it made budgeting easier.
  - The transactions being paid for were for reports.
  - The user has to pay a monthly minimum of $4,000.
  - He stated there were no hidden charges.
  - The user also did not want any changes made to its current transaction pricing arrangement, other than going to fixed-price.
- The integrated systems users were asked why they bought an integrated system instead of a processing service.
  - Five of the ten users said that integrated systems are less expensive than processing services.
  - Other reasons given:
    - "The systems integrator offered the type of software we needed."
    - "The systems integrator came in and simply did a good job of selling."
    - "The system met our needs."
    - "The systems integrator had the capability needed for the best price."

- "We prefer an integrated system to a processing service because the information is confidential and we didn't want it getting out of house."

- Systems integrators should be able to price their products higher in cases where their primary competition is a processing service.

- The integrated systems users were also asked why they bought an integrated system rather than just buying software and using it on an in-house system.

- Proprietary software was the deciding factor in most situations. The following are users' comments:

  - "Upper management felt this systems integrator's software was the best."

  - "The applicaton software only came on an integrated system."

  - "The software desired was only available on an integrated system."

  - "The software would not run on our system."

  - "The software would have to be customized to run on our system which is too costly."

  - "Our in-house system could not handle the application."

  - "We did not consider that alternative."

  - "The integrated system was compatible with our needs."

  - "That alternative was not considered."

- One user gave no response.

- It appears that sales activity is also an important factor in selling integrated systems.

  - Several of the buyers did not consider other alternatives.

  - The systems integrators simply found prospects with unfulfilled needs and proceeded to fill them.

- A high level of sales call activity should boost systems integrator sales.

- The failure to look at alternatives also implies that for some prospects there is very little price sensitivity.

  - Some vendors may be unneccessarily concerned about users' price sensitivity.

  - INPUT recommends that vendors review the alternatives that their buyers and prospects are looking at. If there are few or no alternatives being sought, then the vendor should consider raising prices.

- The pricing of integrated systems should be a function of the exclusiveness of the software and of the selling abilities of the sales organization.

6. OTHER

- All 10 of the users said they were not considering changing vendors or applications.

- None of the users wanted any changes in the terms and conditions under which they bought the integrated system, except for one who wanted lower maintenance fees.

- Users were asked if they could control and predict the cost of their service.
  - Nine said they could.
  - One said he would like his vendor to allow him to decide the lease rate.
- Seven of the 10 users said they received discounts on their systems.
  - Three received volume discounts for purchases of additional systems.
    - One got 20% off per system.
    - Another got 40% off for additional software.
  - One user received a 2% discount for paying on time.
  - Another user got a discount for paying in one lump sum.
  - Two of the users with discounts did not specify how much it was or why they got it.
- Discounting is widely practiced by systems integrators; therefore INPUT recommends that in order to be competitive, vendors should implement much more elaborate discounting options in their pricing schedules.
- When asked if there were certain types of pricing arrangements that they would like to see but that are not currently being offered by vendors, all of the respondent users replied in the negative.

VI TECHNIQUES FOR EFFECTIVE PRICING

VI TECHNIQUES FOR EFFECTIVE PRICING

A. PRICING ENVIRONMENT IN THE 1980s

- As discussed in the previous chapters, processing services and integrated systems vendors are facing many new challenges in the 1980s. These new developments make pricing and pricing techniques much more critical than ever before to the success of organizations.

- The greatest new challenge is personal computers, a product that virtually did not exist in the 1970s.

  - In addition to the research in this study, other INPUT studies have shown that processing service vendors are losing significant numbers of customers and prospects to personal computers.

  - The effect on processing services vendors' revenue growth is evident.

- RCS vendors are the first to be affected by personal computers, but INPUT believes that batch processing and FM processing vendors will also feel the impact soon.

- Personal computers are not the only challenging threat.

- Integrated systems are winning more processing services customers and even more of their prospects.

- Low-priced minicomputers are continuing to become faster and cheaper and are gaining both systems and applications software so that they will present an even greater threat in the 1980s than they did in the 1970s.

- Improved in-house timesharing operating systems on both mainframes and minicomputers, combined with very advanced DBMS, are making the in-house option more attractive than ever for both small and large users.

- Vendor data bases and application software will be distributed on floppy and (later on) video disk.

- Value-added networks (VAN) will provide still more options to RCS users, who had only one option in the 1970s.

- Systems integrators continue an uphill battle - competing with each other while struggling to convince end users of the value of their services.

- In the 1980s systems integrators will face perplexing and threatening changes as integrated software is integrated with personal computers and sold through mass distribution channels at incredibly low prices.

- Systems integrators will not only have to compete more heavily with processing services, but will face many of the same challenges that those vendors face.

- The extraordinary technological, marketing channel, and cost changes coming in this decade make service pricing a critical factor that must be handled more effectively than ever before.

- A review of current pricing techniques is presented in the following sections.

B. PRICING PROCESS

1. MANAGEMENT INVOLVEMENT

- Processing vendors were asked who is responsible for pricing vendor services and what this person's functional responsibilities are. Vendor responses are shown in Exhibit VI-1.

- In virtually all cases at least three executives or departments were involved.

  - The chief executive or general manager of the division responsible for profits and long term goals of the organization.

  - The top sales or marketing manager, whose concern is with market tolerance or customer sensitivity to pricing changes.

  - The chief financial officer, who provides information on cost and cost changes, as well as an analysis of the impact of pricing changes on the profitability of the organization.

- In one company, the director of operations was also involved; he was concerned about the company's ability to deliver services after pricing changes are implemented.

- INPUT recommends that operations managers be more involved in the pricing process. Many of the changes vendors were implementing will definitely have a strong impact on operations, so that review is important.

EXHIBIT VI-1

MANAGERS INVOLVED IN THE PRICING PROCESS
AT PROCESSING SERVICES VENDORS

TITLE/FUNCTION CHIEF EXECUTIVE	FUNCTIONAL RESPONSIBILITY
President Division V.P. General Manager Group President Chief Operating Officer Sr. V.P.	Profits Long-term Goals and Objectives
MARKETING	
Marketing V.P. Business Planning Manager Sales Director Product Manager Manager of Marketing Programs Marketing Manager	Market Tolerance and Customer Services Recommendations
FINANCE	
Chief Financial Officer Controller Pricing and Financial Analysis Pricing Manager	Cost Analysis
OPERATIONS	
Director of Operations	Plant capacity to Dallas

- The systems integrators were also asked who was responsible for pricing in their companies and their responses are shown in Exhibit VI-2.

  - Their responses were very similar to those of the processing services vendors.

  - One difference is that the sales division is more concerned about pricing's impact on new sales than it is about its impact on existing customers.

2. STRATEGIC OBJECTIVES

- The vendors were asked to rate the importance of various strategic objectives to their pricing procedures.

  - Three of the service modes rated maximizing profits as their most important strategy. Details are shown in Exhibit VI-3.

  - The other mode, FM processing, rates increasing market share most important.

- RCS vendors did not have increasing market share as an important goal. Other than profits and volunteered objectives (shown as "other"), their main concern is with maintaining market share.

- As a strategy, covering cost was somewhat important to the FM processors and not at all important to the other vendors.

- The other objectives cited by the RCS vendors included increasing earnings (four respondents), and looking for new markets (one respondent).

EXHIBIT VI-2

MANAGERS INVOLVED IN THE PRICING PROCESS
AT SYSTEMS INTEGRATORS

TITLE/FUNCTION CHIEF EXECUTIVE	FUNCTIONAL RESPONSIBILITY
President Executive Vice President	Long-term Company Objectives Profitability
MARKETING	
V.P. Sales	Impacts on Sales
FINANCE	
V.P. Product Development V.P. Finance Accounting Department Directors, Product Marketing	Cost Factors

EXHIBIT VI-3

RATING OF STRATEGIC OBJECTIVES IN VENDORS' PRICING PROCEDURES

	TYPE OF COMPANY				
	RCS	BATCH	FM	SI	Processing Simple Average
Increase Market Share	2.2	4.0	4.5	4.0	3.6
Maximize Profits	4.5	4.5	3.5	4.5	4.2
Cover Cost	2.0	2.5	3.5	2.5	2.7
Other	4.5	N/A	N/A	N/A	4.5
Average	3.3	3.7	3.8	3.7	3.8

3. KEY PRICING FACTORS

a. Processing Services

- The processing services vendors were asked to rate the importance of a variety of factors affecting pricing decisions. Their responses are shown in Exhibit VI-4.

- For RCS vendors the most important factors affecting their pricing decisions were the following:

  - Customer demand (4.3).

  - Competitive factors (4.0).

  - Other (4.0).

  - Company pricing objectives (3.5).

- The "other" category included the following objectives:

  - "Portfolio pricing, working with different profit margins for different products."

  - "Strategically pricing components of our service to achieve higher margins on our service."

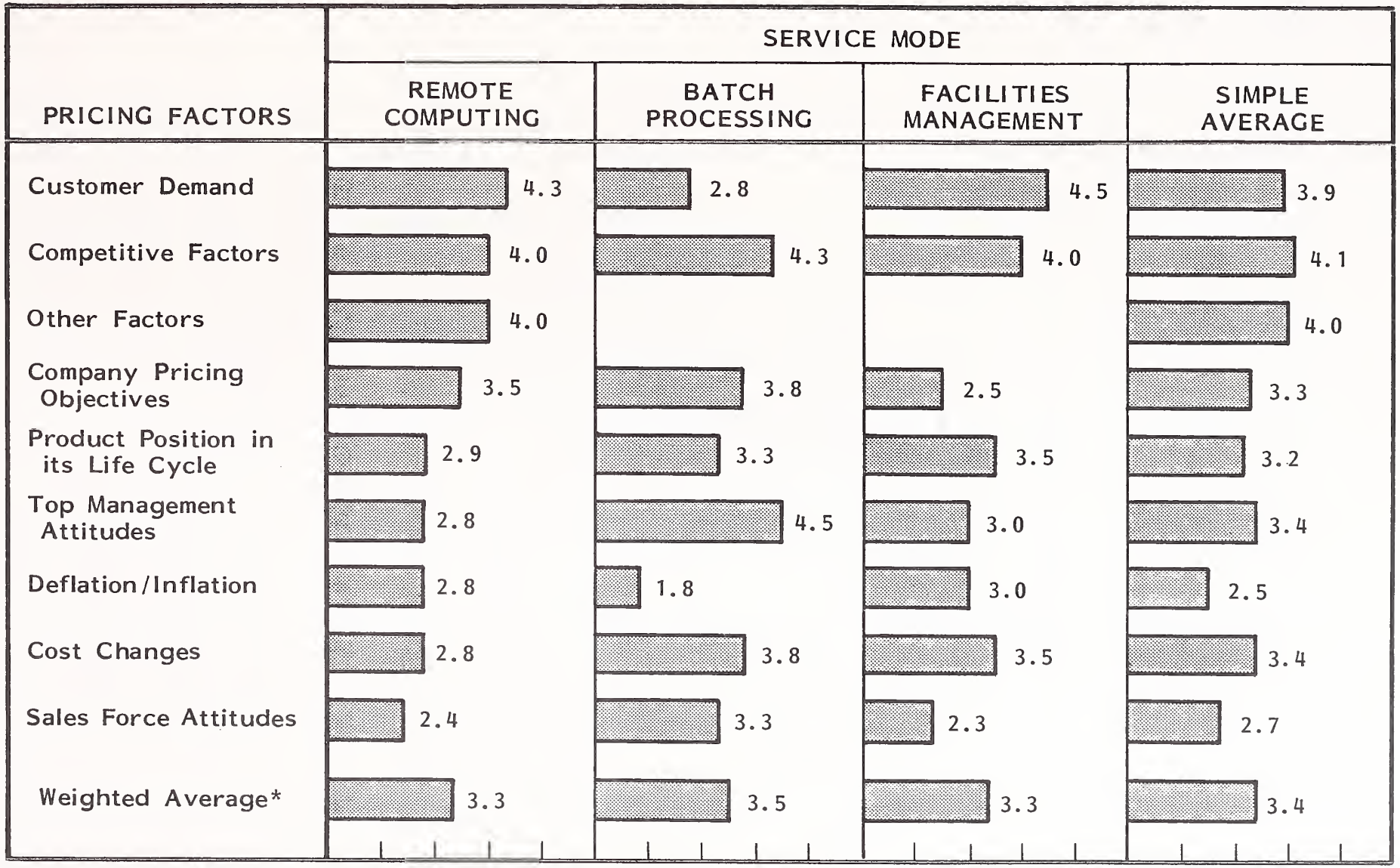
  - "Pricing our products according to the perceived value by our customers."

- Some of the reasons vendors rated factors high were the following:

  - "We are a profit-driven company."

EXHIBIT VI-4

IMPORTANCE OF FACTORS AFFECTING PRICING DECISIONS OF PROCESSING SERVICES COMPANIES



Rating: 1 = Low, 5 = High

*Weighted by number of respondents

- "The customer wants to be able to control and predict cost."

- "Ours is a very mature market, very competitive. Price is the only difference."

- "Timesharing is not technologically advanced. It's an old product in its life cycle."

- "We must be responsive to customer requests for types of pricing and discounts."

- The two highest rated factors, customer demand and competitive factors, often indicate a mature product.

  - In this kind of market, price competition is very severe.

  - Maintaining profit margins becomes increasingly difficult.

  - Replacement sales and maintaining market share become primary pricing objectives.

- The least important factors affecting RCS vendors' pricing decisions were:

  - Sales force attitudes (2.4).

  - Top management attitudes (2.8).

  - Deflation/inflation (2.8).

  - Cost changes (2.8).

- Batch processing services vendors cited as the most important factors in their pricing decisions the following:
  - Top management attitudes (4.5).
  - Competitive factors (4.3).
  - Cost changes (3.8).
  - Company pricing objectives (3.8).
- The following reasons were given for the high ratings.
  - "We are in a very competitive environment. We are competing for market share."
  - "The final decision on pricing is made by top management."
  - "We have to be aware of competitors and how they are pricing their product."
- The least important factors were:
  - Deflation/inflation (1.8).
  - Customer demand (2.8).
- The most important factors to the FM processors included the following:
  - Customer demand (4.5).
  - Competitive factors (4.0).

- Cost changes (3.5).

- Product position in product life cycle (3.5).

- Least important to the FM processors were the following:

  - Sales force attitudes (2.3).

  - Company pricing objectives (2.5).

- These responses are very similar to the RCS vendors and also indicate a mature product.

b. Systems Integrators

- Systems integrators rated the factors that are important to their pricing decisions. Results are shown in Exhibit VI-5.

- Most important were the following:

  - Top management attitudes (4.5).

  - Competitive factors (4.3).

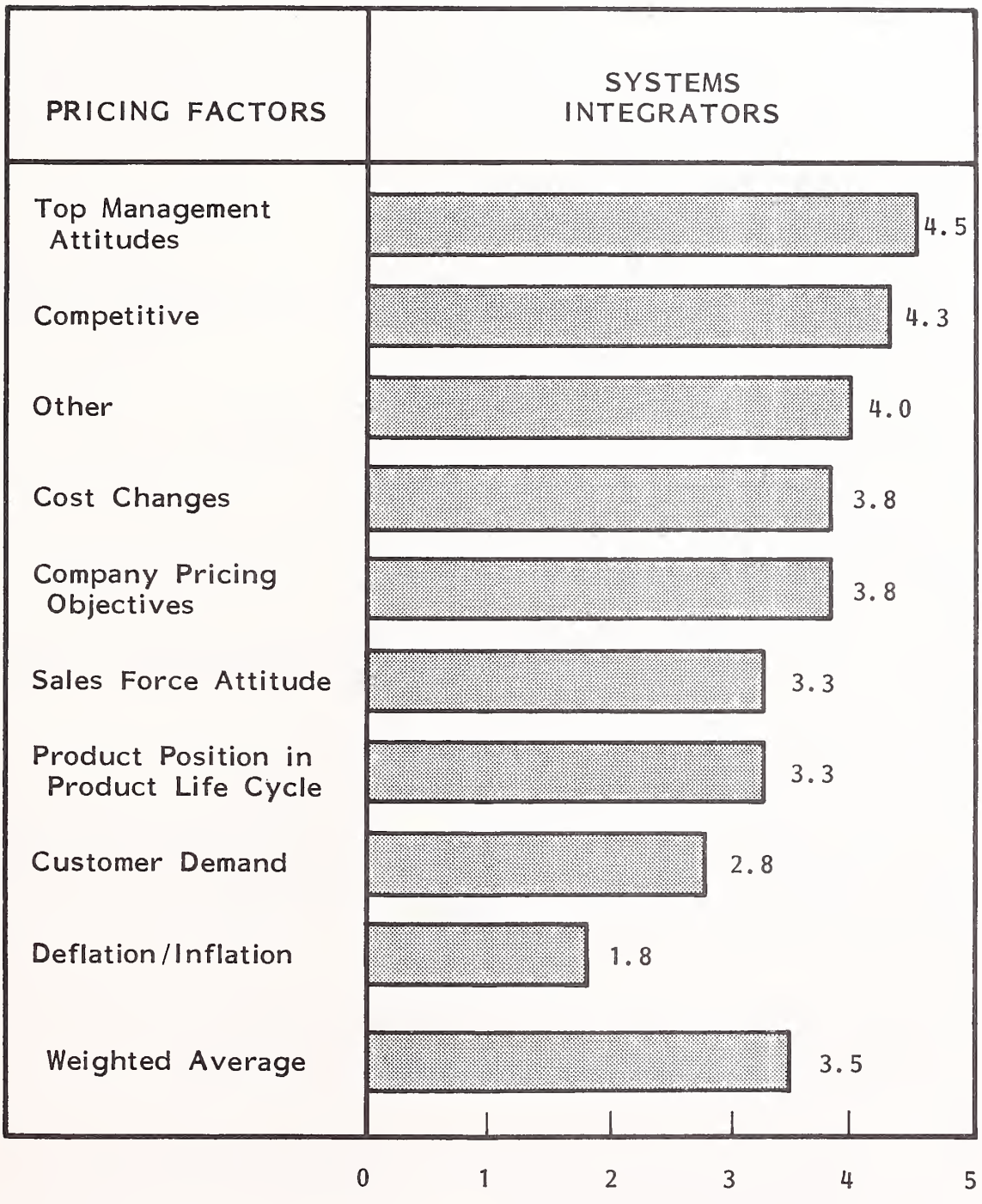
  - Other (4.0). In this case, "other" was "market objectives: If we want to enter a new market we will price for maximum penetration."

- The comments on the systems integrators' higher ratings:

  - "Competitive factors (are important) because our product is reaching maturity and we are up to the price umbrella of larger competitors."

EXHIBIT VI-5

IMPORTANCE OF FACTORS AFFECTING PRICING DECISIONS OF SYSTEMS INTEGRATORS



Rating of Importance 1 = Low, 5 = High

- "Top management wants the highest price because we are the leaders in our market and they want us to continue having the highest profit margins."

- "Prospects are very price-sensitive because we sell to narrow market segments where there are major competitors."

- "Cost changes (are important) because they greatly affect profit margins. Top management makes the final decisions in pricing issues."

4. QUALITY OF PRICING DATA

- The vendors were asked to rate the quality of the data which is available to help them make pricing decisions.

- The processing services ratings are shown in Exhibit VI-6.

- The RCS vendors rated only one set of data as being above average in quality. This was cost change (4.2).

  - Customer pricing sensitivity is rated as average quality.

  - All other items are rates below average.

- The RCS vendors did not feel they had very good product profitability data, even though they had very good cost change data. They are apparently having troubles allocating costs across product lines.

- Batch processing vendors feel they have better data than the RCS vendors. They rated three of the five items as better than average.

  - Batch processing vendors feel they have very good cost change and product profitability data.

EXHIBIT VI-6

PROCESSING SERVICES VENDORS' RATINGS OF QUALITY OF DATA AVAILABLE FOR PRICING DECISIONS

DATA	TYPE OF COMPANY			
	RCS	BATCH	FM	SIMPLE AVERAGE
Cost Change Data	4.2	3.7	4.5	4.1
Customer Pricing Sensitivity	3.0	2.3	3.0	2.8
Product Profitability	2.8	4.3	3.5	3.5
Market Size/Share	2.8	2.7	2.0	2.5
Competitive Actions	2.6	3.3	3.0	3.0
Other	2.5	NA	NA	2.5
Weighted Average	3.0	3.3	3.2	3.2

Rating: 1 = Low, 5 = High

- These vendors specialized in one or two major products, so their response is understandable.

- The worst data the batch processors have to cope with is customer pricing sensitivity. All of them priced their service on a transaction basis, so price changes are highly visible to their customers.

- The FM processors also feel they have very good cost change and profitability data.

  - The lowest quality data they have to work with is market size and share data.

  - They rated the other data as of average quality.

- The systems integrators' ratings of the quality of their pricing data is shown in Exhibit VI-7.

- They feel they have good data except for customer price sensitivity data.

  - These vendors also rated customer demand as not very important in their pricing decisions.

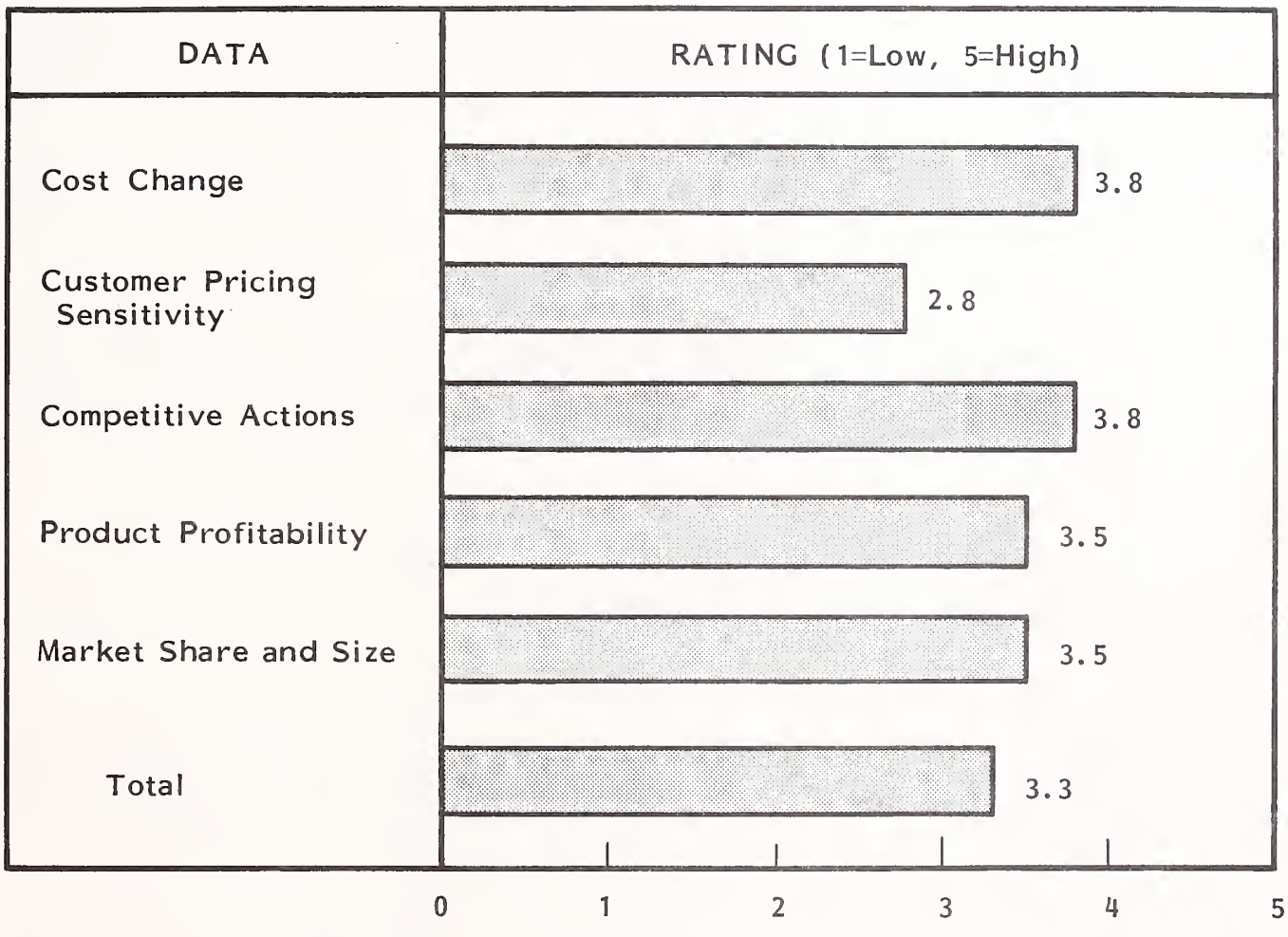
  - Apparently they feel that the price sensitivity data is not very important, so they don't do much about improving it.

5. KEY COST FACTORS

- The vendors were asked to state the key cost factors that were considered in pricing their services and what percent of their total cost those factors represented.

EXHIBIT VI-7

SYSTEMS INTEGRATORS' RATINGS OF QUALITY OF DATA AVAILABLE FOR PRICING DECISIONS



- The consensus among RCS vendors is that sales and marketing costs are the biggest factor and account for about 35% of vendor costs. Details are shown in Exhibit VI-8. Other major factors cited:

  - Data processing and communications (33%).

  - Labor (26%).

- Labor was also a major factor for the batch processors. But batch processor responses were very diverse with respect to other factors.

- The cost of labor was also by far the most important cost factor to the facilities management processors.

- As shown in Exhibit VI-9, systems integrators cited hardware as the most important cost factor affecting their pricing decisions. Marketing cost was the next most important factor.

C. PRICE INCREASES AND PROFITABILITY

- Vendors were asked to give their average annual sales growth rate from 1980 to 1982 and to project their growth rates for 1983 to 1984. Vendors were also asked what portion of their sales increase came from price increases.

- The RCS vendors said that in the past two years a material amount of their growth (4%) came from price increases. Details are shown in Exhibit VI-10.

- RCS vendors predict that price increases will play a smaller role in their growth from 1983 to 1984, and that their real growth rate will double from 7% to 14% in the forecast period.

EXHIBIT VI-8

KEY COST FACTORS CONSIDERED IN PRICING PROCESSING SERVICES

FACTOR	PERCENT OF TOTAL COST		TOTAL MENTIONS
	AVERAGE	RANGE	
RCS Vendors (6)			
Sales and Marketing	35%	7-60%	5
DP and Communications	33	26-42	6
Labor	26	17-38	2
General Administration	22	10-33	2
Research and Development	12	-	1
Batch (3)			
Production	35	-	1
Labor	33	30-35	2
Materials	30	-	1
Equipment	25	20-30	2
Sales and Marketing	25	-	1
EDP Operations	15	-	1
FM (2)			
Labor	54	38-70	2
Equipment	27	15-38	2
Sales and Marketing	19	-	1

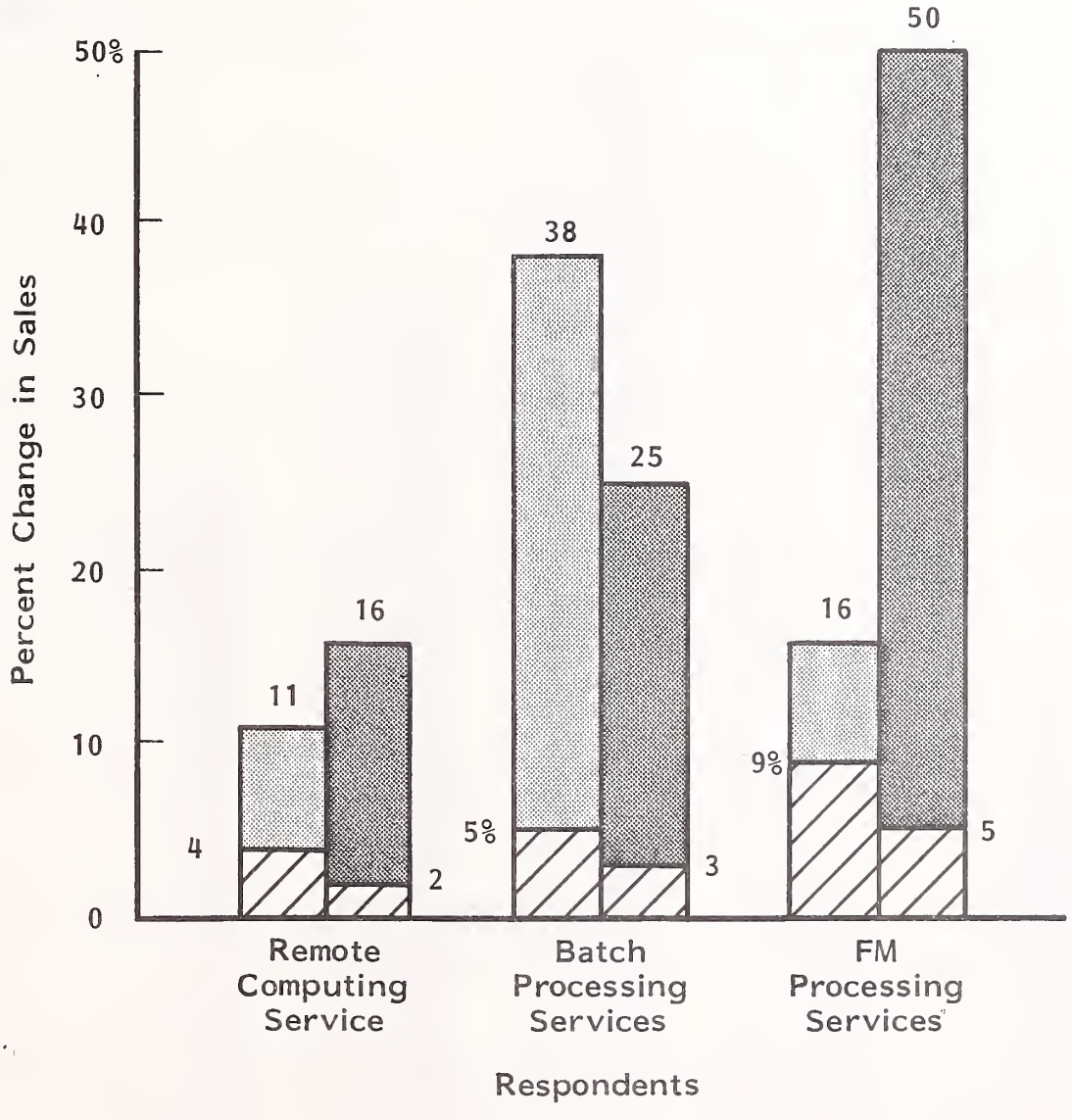
EXHIBIT VI-9

KEY COST FACTORS CONSIDERED IN PRICING INTEGRATED SYSTEMS

FACTOR	PERCENT OF TOTAL COST		TOTAL MENTIONS
	AVERAGE	RANGE	
Hardware	52%	40-65	4
Sales and Marketing	18.5	17-20	3
Installment and Support	12	12	2
Software Development	8.5	7-10	1
Administration	5	-	3

EXHIBIT VI-10

CONTRIBUTION OF PRICE INCREASE TO
SALES INCREASE OF PROCESSING SERVICES VENDORS



- Price increases for the batch respondents were higher than for the RCS vendors, but they played a much smaller role in their overall growth rate.

- In 1983 and 1984, batch processors forecast revenue growth and price increases that are lower than those of 1980-1982.

- From 1980 to 1982 more than half the growth rate of the FM processors came from price increases.

- FM processors predict that price increases will be much lower from 1983 to 1984. The very high projected growth rate is partly a function of the small size and ambitious plans of several of the respondents.

- The contribution of price increases to the growth of the systems integrators was on average very small, as shown in Exhibit VI-11.

  - Vendor C reported substantial price reductions for its products. When figuring a vendor average, these reductions largely offset the price increases of the other vendors.

  - The price increases of the other systems integrators made only modest contributions to their growth rates.

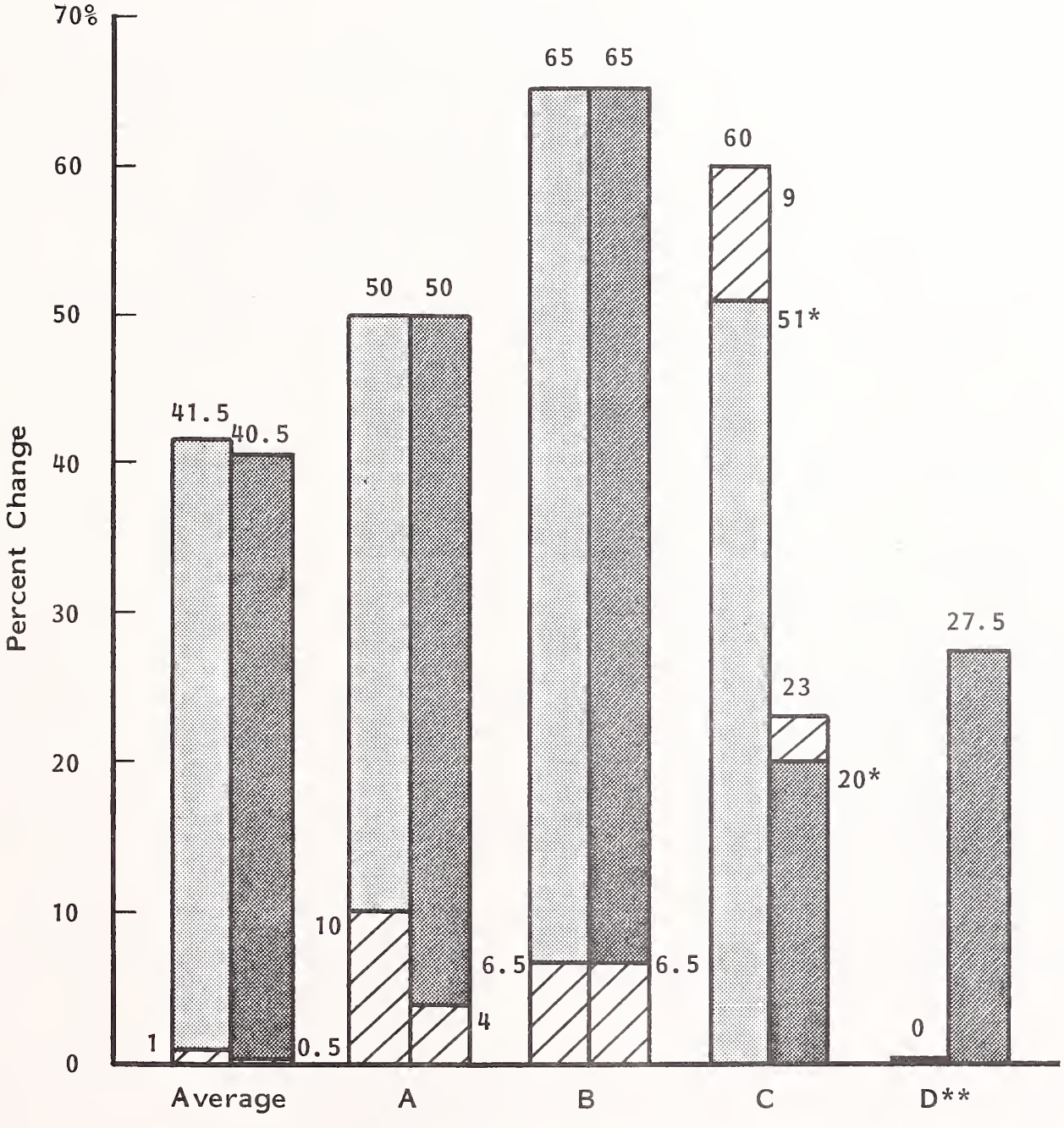
- Systems integrators, like the processing vendors, are projecting that future price changes will be more moderate than in the past.

- The RCS vendors reported that their pretax profit margins have been declining consistently for the past three years, as shown in Exhibit VI-12.

  - This is partly a result of price increases that don't keep pace with inflation.

EXHIBIT VI-11

CONTRIBUTION OF PRICE INCREASES TO SALES INCREASE OF SYSTEMS INTEGRATORS



* Reflects decline in prices

** Price increase not given

EXHIBIT VI-12

VENDORS' PRETAX PROFIT MARGINS

TYPE OF VENDOR	AVERAGE PRETAX PROFIT MARGINS		
	1980	1981	1982
Remote Computing Services (6)	17.7%	16.5%	11.3%
Batch Processing Services (2)	12.0	0.5	5.8
FM Processing Services (2)	13.0	11.5	12.5
Systems Integrators (3)	13.3	5.3	1.7
Weighted Average (13)	15.1	10.7	8.4

( ) = Number of Respondents

- Because of competition in a mature market, these vendors did not feel they could pass along all of their cost increases to their customers.

- These results contrast sharply with the RCS vendors' stated objective of maximizing profits.

- The batch processing vendors' profit margins declined by more than half from 1980 to 1982.

  - Their price increases (Exhibit VI-10) did not keep up with inflation.

  - These vendors also failed to meet their objective of maximizing profits.

- The FM processing services vendors were the only service mode that had a very minor decline in profit margins.

  - These vendors also raised their prices about twice as high as the other vendors and thus offset cost increases.

  - The strategic objective of the FM processors was to cover cost and increase market share.

  - Of all the service modes, these vendors came closest to meeting their objectives.

- The systems integrator respondents suffered the worst profit margin decline of all from 1980 to 1982.

  - The systems integrators had the smallest price increases of the four service modes.

  - They also failed to meet their objective of maximizing profits.

- They were successful in increasing their market share.

D. PRICING IN A CHANGING ENVIRONMENT

1. PRICING ISSUES

- INPUT asked the vendors what their single most difficult pricing issue was and what they were going to do about it.
  - The responses were instructive.
  - The vendors' comments are shown in Exhibits VI-13 through VI-16.
- Some common themes come out of the various issues.
  - Many of the vendors feel that they have a mature product and/or a mature industry.
  - Technological change is rapidly making many products obsolete.
  - Competition is fierce in product markets that are growing much more slowly than in the past.
  - Many vendors, after years in the business, still can't assign true cost to their products and services.
  - Discounting to gain or maintain market share or to simply cover cost is rampant and is causing profit margins to decline sharply and consistently over the last few years.

EXHIBIT VI-13

MOST DIFFICULT PRICING ISSUES FACING RCS VENDORS

ISSUE	ACTION
Vendor prices are not related to value received because of changes in technology.	Be more flexible in pricing.
Vendors need to evaluate customer's cost versus value received as related to customer's alternatives. RCS was the first personal computer. Now the "newest" personal computer is competing for the business.	Vendors need to implement more vertical industry pricing. They also need to offer more options and alternatives to customers so customers can tailor the service to their needs. New options will include micros and multi-user systems at the customer's site. Vendors must tailor pricing to suit large national clients who have an integrated application used at multiple sites. Vendors need to centralize training and hotline support to minimize on-site support. Must sell network services on a resource basis. Must charge for hardware and maintenance on a unit-installed basis. Must charge for application development.

Continued

EXHIBIT VI-13 (Cont.)

MOST DIFFICULT PRICING ISSUES FACING RCS VENDORS

ISSUE	ACTION
Vendors have been too lenient and flexible on payment schedules and must change.	Change policy.
Vendors don't understand their competitors' pricing well enough.	More research
Vendors don't have a good grasp of their true cost of operating products.	Improve accounting methods.
How do vendors combat the effect of competitors' only covering cost rather than making a profit. Vendors have very mature products without value-added service.	Add more value-added products. Graphics products. Combination of hardware and software integration.

Continued

EXHIBIT VI-13 (Cont.)

MOST DIFFICULT PRICING ISSUES FACING RCS VENDORS

ISSUE	ACTION
The price sensitivity of customers versus the profit objectives of vendors' companies.	Vendors are trying to measure customer sensitivity via customer surveys.

EXHIBIT VI-14

MOST DIFFICULT PRICING ISSUES FACING BATCH PROCESSING VENDORS

ISSUE	ACTION
Evaluating minimums versus flat fees versus transaction pricing. Vendors must also change to float-less pricing. (INPUT note: vendor is a bank that receives float or interest on a non-interest-paying account)	Vendors must define their business strategy and pricing objectives. Vendors have to reduce cost while increasing revenues. Vendors must perform a significant cost analysis.
Vendor's competitors are offering prices below costs in order to gain market share. It is difficult to decide how far vendors should go in following them.	Vendors will partially respond to the price cutting, but will put more emphasis on responding to client needs and will attempt to gain a competitive edge by offering superior-quality products.

EXHIBIT VI-15

MOST DIFFICULT PRICING ISSUES FACING FM PROCESSING VENDORS

ISSUE	ACTION
Assigning realistic cost to services.	Re-allocating cost and changing price schedule.
Developing cost estimates that will ensure appropriate profit. People tend to underestimate cost.	Continue educating customers on cost of data processing.

EXHIBIT VI-16

MOST DIFFICULT PRICING ISSUES FACING SYSTEMS INTEGRATORS

ISSUE	ACTION
Balancing price of timesharing versus turnkey product. There is a higher demand for timesharing, but more profit in turnkey.	Offer turnkey systems on a neutral basis.
The price of our hardware versus the price of competitors' hardware.	Complain to vendor and evaluate alternative vendors.
Large customers wanting discounts. Small companies can't afford the product.	Offer volume discounts. Reduce marketing cost.
Vendors don't have enough competitive pricing information.	Vendors are buying research programs to get better information on competitors' pricing.

- Many vendors recognize that they need to make a thorough reassessment of their products, their market position, and how they price their products.

- A number of vendors have plans to address their problems. Some are offensive, but more are defensive.

2. PRICING AUDIT

- INPUT recommends that vendors audit their products and services pricing to determine if pricing is optimal with respect to meeting company goals and objectives.

- Of course, goals and objectives should first be clearly defined.

  - Many of the vendors interviewed for this study gave the impression that they hadn't recently thought about goals and objectives.

  - Their goals and objectives have remained unchanged for many years.

  - With the kinds of changes taking place in the market today, vendors must revisit and reevaluate whether their goals and objectives still make sense in the current environment.

- Pricing's strategic role in achieving the company's objectives must also be examined.

  - The pricing process must be adequate to fill the needs of the new environment.

  - Pricing practices that were all right in a high-growth market won't serve the needs of vendors in a mature or saturated market, or in markets being assaulted by newer technologies.

- An audit of pricing should start with an evaluation of all of the factors that affect a product vis-a-vis its competition.

- Exhibit VI-17 contains a number of pricing factors and their associated pricing characteristics broken down into four major categories.

  - Product characteristics.

  - Market characteristics.

  - Sales characteristics.

  - Company characteristics.

- The form is designed to facilitate a comparison of the relative price value of two competitive products.

  - Each product should be assigned a rating of one to five for each characteristic, where "one" means low price and "five" means high price.

- The pricing criteria are characteristics that determine if a product should have a low price or a high price.

  - For example, an RCS data base that is offered exclusively by one vendor (proprietary) may command a high price (rating=five).

  - On the other hand, a stock, market-price data base offered by dozens of vendors (a commodity) would have a low price (rating=one).

- Users of the chart can rate their product versus a competitive product (i.e., a data tabulation application on an RCS service, versus the same application on a personal computer) to arrive at a relative price value for each characteristic.

EXHIBIT VI-17

CRITERIA FOR EVALUATING OR ESTABLISHING PRICES
IN A COMPETITIVE ENVIRONMENT

PRICING FACTOR	PRICING CRITERIA		CIRCLE RATING	
			Our Product	Competitor's Product
	Low Price	High Price	Low High	Low High
Product Characteristics				
Exclusiveness	Commodity	Proprietary	1 2 3 4 5	1 2 3 4 5
Production	Mass Production or Standard	Custom Made	1 2 3 4 5	1 2 3 4 5
Obsolescence	Long Life	Short Life	1 2 3 4 5	1 2 3 4 5
Useful Life	Short	Long	1 2 3 4 5	1 2 3 4 5
Technological Change	Slow	Rapid	1 2 3 4 5	1 2 3 4 5
Versatility	One Use	Multi-use	1 2 3 4 5	1 2 3 4 5
Quality	Low	High	1 2 3 4 5	1 2 3 4 5
Subtotal			_____	_____
Market Characteristics				
Coverage	Intensive	Selective	1 2 3 4 5	1 2 3 4 5
Share	Large	Small	1 2 3 4 5	1 2 3 4 5
Evolution	Mature	New	1 2 3 4 5	1 2 3 4 5
Subtotal			_____	_____
Sales Characteristics				
Advertising and Production	Little or None	Very Much	1 2 3 4 5	1 2 3 4 5
Distribution Channels	Inexpensive	Expensive	1 2 3 4 5	1 2 3 4 5
Promotional Value	Great	None	1 2 3 4 5	1 2 3 4 5
Hidden Value	High or Much	Low or None	1 2 3 4 5	1 2 3 4 5
Other Services	Few or None	Many	1 2 3 4 5	1 2 3 4 5
Turn Over	Fast	Slow	1 2 3 4 5	1 2 3 4 5
Subtotal			_____	_____
Company Characteristics				
Application Knowledge	Little	Expert	1 2 3 4 5	1 2 3 4 5
Industry Knowledge	Little	Expert	1 2 3 4 5	1 2 3 4 5
Reputation	Poor	Excellent	1 2 3 4 5	1 2 3 4 5
Subtotal			_____	_____
Total			_____	_____

- The ratings are then totaled and compared.

- A comparison of actual prices should reveal whether a product is underpriced or overpriced relative to the competition.

- The main reason one should go through this exercise is to raise questions and establish a basis for finding answers.

  - As one goes through this rating process, one should also be listing the reasons for the ratings.

  - All of the participants in the pricing process should go through this exercise separately and individually.

  - The results should then be compared and the reasons reviewed and discussed.

- Going through this process should generate some good, fresh ideas about how pricing or other strategies can be made to work more effectively.

- This form should also be useful in establishing prices for new products or for taking existing products into new markets.

- Use of this form cannot solve fundamental problems in the pricing process such as lack of quality data, but it may help identify those problems or even suggest a solution.

APPENDIX A: DEFINITIONS

APPENDIX A: DEFINITIONS

A. REVENUE

- All revenue and user expenditures reported are available (i.e., noncaptive) revenue, as defined below.

- NONCAPTIVE INFORMATION SERVICES REVENUE - Revenue received for computer services provided within the United States from users who are not part of the same parent corporation as the vendor.

- CAPTIVE INFORMATION SERVICES REVENUE - Revenue received from users who are part of the same parent corporation as the vendor.

- TOTAL INFORMATION SERVICES REVENUE - Revenue received from services provided by vendors who perform:

  - Data processing functions using vendor computers (processing services).

  - Services that assist users to perform such functions on their own computers (software products and/or professional services).

  - A combination of hardware and software, integrated into a total system (integrated systems).

- OTHER REVENUE - Revenue derived from lines of business other than those defined above.

B. SERVICE MODES

- PROCESSING SERVICES - Includes remote computing services, batch services, and processing facilities management.

  - REMOTE COMPUTING SERVICES (RCS) - Provision of data processing to a user by means of terminals at the user's sites(s) that are connected by a data communications network to the vendor's central computer. There are five submodes of RCS:

    . INTERACTIVE (timesharing) - Characterized by the 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.

    . REMOTE BATCH - Where the user hands over control of a job to the vendor's computer, which schedules job execution according to priorities and resource requirements.

    . DATA BASE - Characterized by the retrieval and processing of information from a vendor-maintained data base. The data base may be owned by the vendor or a third party.

    . USER SITE HARDWARE SERVICES (USHS) - These offerings provided by RCS vendors place programmable hardware on the user's site (rather than the EDP center). USHS offers:

      - Access to a communications network.

- Access through the network to the RCS vendor's larger computers.

- Significant software as part of the service.

. VIDEOTEX - A variant of interactive remote computing services.

- Access may be through cable television systems as well as ordinary telephone lines.

- The display is a television set equipped with a keypad or typewriter keyboard and special circuitry.

- The user may not create programs on the remote computer.

- The user may query or enter transactions to the remote computer through menu-driven software.

- Prestel and QUBE are examples of videotex.

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

- PROCESSING FACILITIES MANAGEMENT (PFM) (also referred to as "Resource Management" or "Systems Management") - PFM is the management of all or part of a user's data processing functions under a long-term contract (not less than one year). This would include both remote computing and batch services. To qualify as PFM, the contractor must directly plan, control, operate, and own the facility provided to the user, either on-site, through communications lines, or via a mixed mode.

- PROFESSIONAL SERVICES - Made up of services in the following categories:

  - EDUCATION SERVICES - EDP products and/or services - related to corporations, not individuals.

  - CONSULTING SERVICES - EDP management consulting and feasibility studies, for example.

  - PROGRAMMING AND ANALYSIS - Including system design, contract programming, and "body shopping."

  - PROFESSIONAL SERVICES FACILITIES MANAGEMENT (PSFM) - This is the counterpart to processing facilities management, except that in this case the computers are owned by the client, not the vendor; the vendor provides people to operate and manage the client facility.

- INTEGRATED SYSTEMS (also known as Turnkey Systems) - An integration of systems and applications software, with hardware packaged as a single entity. The value added by the vendor is primarily in the software. Most CAD/CAM systems and many small-business systems are integrated systems. This does not include specialized hardware systems such as word processors, cash registers, and process control systems.

- Integrated systems revenue in this report is divided into two categories:

- INDUSTRY-SPECIFIC systems; i.e., systems that serve a specific function for a given industry sector such as seismic processing systems, automobile dealer parts inventory, CAD/CAM systems, discrete manufacturing control systems, etc.

- CROSS-INDUSTRY systems; i.e., systems that provide a specific function that is applicable to a wide range of industry sectors such as financial planning systems, payroll systems, personnel management systems, etc.

- Revenues include hardware, software, and support functions.

- SOFTWARE PRODUCTS - This category includes users' purchases of applications and systems packages for use on in-house computer systems. Included are 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. There are several subcategories of software products:

  - APPLICATIONS PRODUCTS - Software that performs user functions. Applications products consist of:

    . CROSS-INDUSTRY PRODUCTS - Used in multiple-user industry sectors. Examples are payroll, inventory control, and financial planning.

    . INDUSTRY-SPECIALIZED PRODUCTS - Used in a specific industry sector such as banking and finance, transportation, or discrete manufacturing. Examples are demand deposit accounting and airline scheduling.

- SYSTEMS PRODUCTS - Software that enables the computer/communications system to perform basic functions. They consist of:

  . SYSTEMS CONTROL PRODUCTS - These products function, during applications program execution, to manage the computer system resource. Examples include operating systems, communication monitors, emulators, and spoolers.

  . DATA CENTER MANAGEMENT PRODUCTS - Used by operations personnel to manage the computer system resources and personnel more effectively. Examples include performance measurement, job accounting, computer operations scheduling, and utilities.

  . APPLICATION DEVELOPMENT PRODUCTS - Used to prepare applications for execution by assisting in designing, programming, testing, and related functions. Examples include languages, sorts, productivity aids, data dictionaries, data base management systems, report writers, project control systems, and retrieval systems.

C. TYPES OF PROCESSING SERVICES

- Processing services encompass processing services facilities management, remote computing services, and batch services. They are categorized by type of service bought by users:

  - Cross-industry services involve the processing of applications that are targeted to specific user departments (e.g., finance, personnel, sales), but cut across industry lines. Most general ledger, accounts receivable, payroll, and personnel applications fall into this category. Function-

specific 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 included in this category. General purpose tools such as financial planning systems, linear regression packages, and other statistical routines are also included. However, when the application, tool, or data base is designed for use in a specific industry, then the service is industry specific.

- Industry-specific 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 applications "tool" that the user employs to produce a unique solution. Specialty applications can be oriented toward either business or science. Industry-specific 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-specific 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. This is done with basic software that enables users to develop their 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.

D. OTHER CONSIDERATIONS

- When questions arise as to the proper place to count certain user expenditures, INPUT addresses the questions from the user viewpoint by asking, "What do users perceive they are buying?"

E. INDUSTRY SECTOR DEFINITIONS

- The standard industrial classification (SIC) codes are used to define the economic activity contained in generic sectors such as "process manufacturing," "insurance," "transportation," etc.

- Detailed in Exhibit A-1 are the specific industries (and their SIC codes) included under these generic industry sectors.

EXHIBIT A-1

INDUSTRY SECTOR DEFINITIONS

INDUSTRY SECTOR	INDUSTRY SIC	INDUSTRY NAME
Discrete Manufacturing	23	Apparel
	25	Furniture
	27	Printing
	31	Leather
	34	Metal
	35	Machinery
	36	Electronics
	37	Transportation
	38	Scientific and Control Instruments
	39	Miscellaneous Manufacturing
Process Manufacturing	10	Metal Mining
	11	Anthracite Mining
	12	Coal Mining
	13	Oil and Gas Extraction
	20	Food Products
	21	Tobacco
	22	Textile Products
	24	Lumber and Wood Products
	26	Paper Products
	28	Chemicals
	29	Petroleum
	30	Rubber and Plastics
	32	Stone, Glass, Clay
	33	Primary Metals

Continued

EXHIBIT A-1 (Cont.)

INDUSTRY SECTOR DEFINITIONS

INDUSTRY SECTOR	INDUSTRY SIC	INDUSTRY NAME
Transportation	40	Railroads
	41	Local Transit
	42	Motor Freight
	43	U.S. Postal Service
	44	Water Transportation
	45	Air
	46	Pipelines
	47	Transportation Services
Utilities	48	Communications
	49	Electric, Gas, and Sanitary
Banking and Finance	60	Banks
	61	Credit Agencies
	62	Security and Commodity Brokers
	67	Holding and Investment Offices
Insurance	63	Insurance (Life, Health, Etc.)
	64	Insurance Agents
Medical	80	Health Services

Continued

EXHIBIT A-1 (Cont.)

INDUSTRY SECTOR DEFINITIONS

INDUSTRY SECTOR	INDUSTRY SIC	INDUSTRY NAME
Education	82	Educational Services
Retail	52	Building Materials, Hardware
	53	General Merchandise
	54	Food
	55	Automotive and Gas Stations
	56	Apparel
	57	Furniture
	58	Eating and Drinking
	59	Miscellaneous Retail
Wholesale	50	Durable Goods
	51	Nondurable Goods
State and Local Government	91-97	As Appropriate
Federal Government	91-97	As Appropriate
Services	73	Business Services (excluding information services companies themselves)

Continued

EXHIBIT A-1 (Cont.)

INDUSTRY SECTOR DEFINITIONS

INDUSTRY SECTOR	INDUSTRY SIC	INDUSTRY NAME
Other Industries	01-09	Agriculture, Forestry, and Fishing
	15-17	Construction
	65	Real Estate
	66	Combinations of Real Estate, Insurance, Loans, Law Offices
	70	Hotels, Rooming Houses, Camps, and Other Lodging Places
	72	Personal Services
	75	Automotive Repair, Services, and Garages
	76	Miscellaneous Repair Services
	78	Motion Pictures
	79	Amusement and Recreation Services, Except Motion Pictures
	83	Social Services
	84	Museums, Art Galleries, Botanical and Zoological Gardens
	86	Membership Organizations
	89	Miscellaneous Services

APPENDIX B: RELATED INPUT REPORTS

APPENDIX B: RELATED INPUT REPORTS

- Trends in Computer Services Pricing, 1980.
- Trends in Services and Software Pricing, 1978.
- Personal Computer Opportunities for Remote Computing Services Vendors, 1983.
- Engineering and Scientific Market Opportunities for RCS Vendors, 1983.

APPENDIX C: PROCESSING SERVICES VENDOR PROFILE

APPENDIX C: PROCESSING SERVICES VENDOR PROFILE

- Six RCS vendors, three batch processing vendors, and two FM processing services vendors were interviewed.

- Typically, vendors did not respond to all questions, either because they did not have the information or because they considered the answer confidential and/or proprietary.

- The type and size of the respondents as measured in revenues is shown in Exhibit C-1.

  - The range and average size of the RCS and batch processing companies is fairly typical and representative of their respective service modes in the industry.

  - The one batch processing vendor that did not disclose its revenues is believed by INPUT to fit within the range given in the exhibit.

  - The FM processing companies included one very small vendor shown in the exhibit and another of medium size, approximately 35 to 50 million dollars in revenue.

- There are great variations between the service modes with respect to the types of service principally sold by the respondents. Details are shown in Exhibit C-2.

EXHIBIT C-1

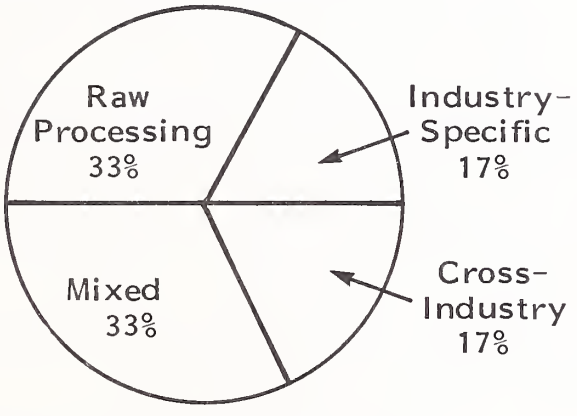
RESPONDENT VENDOR REVENUES

TYPE OF COMPANY	NUMBER OF COMPANIES	($ millions) RANGE	($ millions) TYPICAL
RCS	6	13-284	135
Batch	2	50-75	63
FM	1	5	5
Total	9	5-284	79

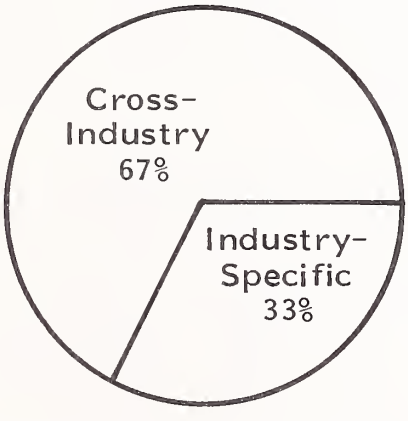
EXHIBIT C-2

PRINCIPAL TYPES OF SERVICE OF RESPONDENT PROCESSING SERVICES VENDORS

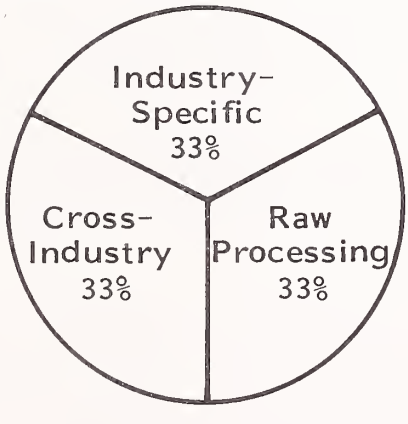
Remote Computing Companies



Batch Processing Companies



Facilities Management Companies



- The RCS companies were the most diverse with respect to characterizing themselves by principal type of service.

  - A third of the respondents said they primarily sold raw processing time. One of these two respondents specialized in offering certain systems software product services.

  - Another third said their type of service was mixed between industry-specific, cross-industry, and raw processing. These respondents are typical of many of the larger RCS firms.

  - The remaining vendor respondents were industry-specific and cross-industry types.

- None of the three batch services offered only raw processing or a mix of service types. Two-thirds of the vendors were cross-industry and one-third were industry-specific types.

- The FM processing companies were evenly divided among the three service types. One vendor reported that its revenues were split between industry-specific and cross-industry applications, while the other vendor had only raw processing revenue. Of the three modes sampled, this category was least representative of the vendors' service mode.

- Overall, the respondents painted a diverse picture of the processing services industry. This diversity is reflected in many of their responses.

- The largest revenue producing applications of processing services companies are shown in Exhibit C-3.

- The RCS respondents included two vendors (A and C) that offered primarily remote batch processing services, while the other four vendors primarily offered interactive remote computing services.

EXHIBIT C-3

LARGEST REVENUE-PRODUCING APPLICATIONS OF
RESPONDENT PROCESSING SERVICES VENDORS

TYPE OF VENDOR	FIRST APPLICATION	PERCENT OF REVENUE	SECOND APPLICATION	PERCENT OF REVENUE
RCS Companies				
Vendor A	Stock Transfer	40%	Mutual Fund Accounting	25%
Vendor B	Financial Analysis	15	Data Base Management System	15
Vendor C	Data Base Management Systems	NR	CICS-based Service	NR
Vendor D	Marketing	50	Federal Government	10
Vendor E	Information Analysis	10	Marketing	3
Vendor F	None	100	-	-
Batch Companies				
Vendor A	Payroll	70	Report Generation	20
Vendor B	Mailing List	NR	List Processing	NR
Vendor C	Tax Return Processing	100	-	-
FM Processing				
Vendor A	None	100	-	-
Vendor B	Financial Modeling	50	Financial Management	35

NR = No response.

- Vendor A's services were industry-specific while C's were all raw processing.

- Three of the interactive services' major applications fit into the category of information analysis; one was in finance, another in marketing, and the other unspecified. All three are major RCS vendors.

- The fourth interactive vendor (Vendor F) had no applications that were major sources of revenue. This vendor was very small, with less than $25 million in revenue.

- The batch processing respondents are all very specialized.

  - None of the companies derived less than 90% of their revenues from their two major applications.

  - Two of these companies were among the most profitable ones surveyed. The third was not profitable, but did show good trends in that direction.

- One of the FM processing companies had no major applications, while the other specialized entirely in financial applications.

  - The specialized company was also highly industry-specific.

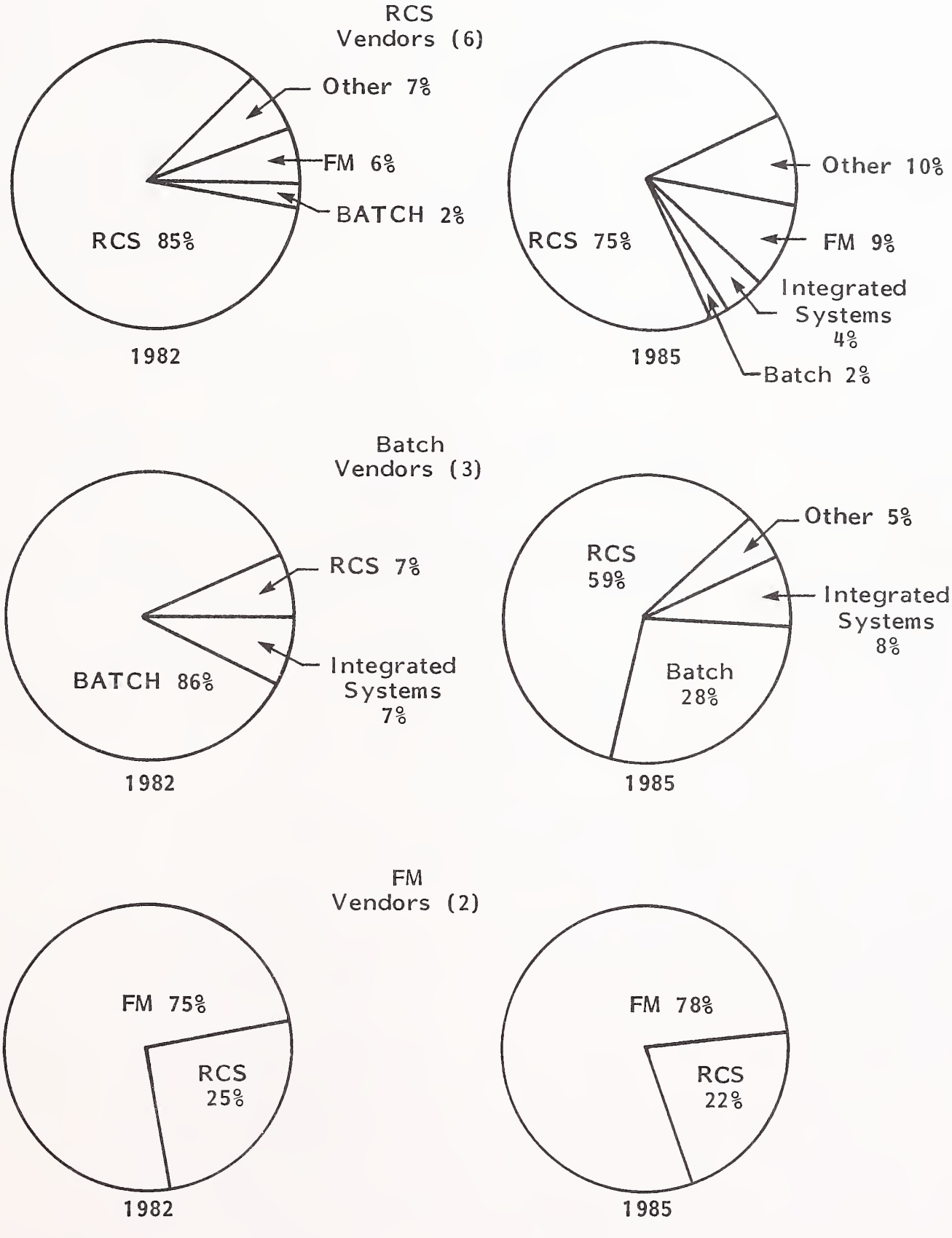
  - The other vendor was a subsidiary of a major RCS vendor.

  - Both vendors are profitable, and together they were the most profitable of the three processing service modes.

- The vendors' sources of revenue and their projected changes in sources of revenue are shown in Exhibit C-4 by service mode.

EXHIBIT C-4

PROJECTED CHANGE IN SOURCES OF REVENUES
BY SERVICE MODE



- The remote computing respondents sell primarily RCS, but they project that this will change significantly by 1985.

  - The projected change is significant when one considers that these are fairly large companies.

  - RCS respondents project that they will be selling less RCS, with no change in batch processing. On the other hand, FM processing and other sources of revenue will increase about 30%.

  - By 1985, the RCS vendors expect to be deriving about 4% of their revenue from integrated systems, compared to none in 1982.

  - The "other" revenue will come from selling personal computers, minicomputers, professional services, and software.

- The batch processing vendors forecast a dramatic change in their service mode revenues by 1985.

  - Only 7% of their 1982 revenues came from RCS, but by 1985 they expect RCS to account for 59% of their business. A large portion of this will be remote batch services.

  - The batch vendors expect integrated systems to become a slightly higher percentage of their business.

  - In 1985, about 5% of their revenues will come from software (compared to none in 1982). Software is marked "other" in Exhibit C-4.

- The FM processing companies derived 75% of their business from FMPS, and the remainder from RCS. They project a slight growth in the proportion of FMPS versus RCS, and no new sources of revenue by 1985.

APPENDIX D: PROCESSING SERVICES USER PROFILE

APPENDIX D: PROCESSING SERVICES USER PROFILE

- The processing services users interviewed for this study were all executives that made purchasing decisions on processing services.

- The users represented four different industry sectors, as shown in Exhibit D-1.

- The size of the user companies (as measured in sales) is heavily weighted toward Fortune-500-type companies, as shown in Exhibit D-2.

  - This type of company is the primary target for many processing service vendors.

  - Large companies also account for a substantial portion of the total user expenditure for processing services.

  - The mean size of the FM processing services is somewhat lower than the industry average, but several large companies are included in this sample.

- As shown in Exhibit D-3, the processing services user respondents represent a diverse range of departments.

EXHIBIT D-1

TYPE OF INDUSTRY BY TYPE OF USER

TYPE OF INDUSTRY	TYPE AND NUMBER OF RESPONDENTS			
	REMOTE COMPUTING SERVICE	BATCH PROCESSING SERVICE	FM PROCESSING SERVICE	TOTAL
Discrete Manufacturing	8	3	1	12
Process Manufacturing	11	3	-	14
Services	1	-	-	1
Insurance	-	1	4	5
Total	20	7	5	32

EXHIBIT D-2

TYPE OF USER BY AMOUNT OF SALES

TYPE OF USER	USERS' SALES ($ millions)		
	AVERAGE	RANGE	MEAN
Remote Computing Service (20)	$4,112	$400-28,200	$900
Batch Processing (7)	617	80-1,600	600
FM Processing (5)	660	10-2,590	20

( ) = Number of Respondents.

EXHIBIT D-3

USER RESPONDENTS' DEPARTMENTS

RESPONDENTS' DEPARTMENT	NUMBER OF RESPONDENTS			
	REMOTE COMPUTING SERVICE	BATCH PROCESSING SERVICE	FM PROCESSING SERVICE	TOTAL
Administration	3	2	2	7
Manufacturing/Engineering	4	3	0	7
Information Systems	5	1	1	7
Marketing	3	0	1	4
Finance	3	1	0	4
Other	2	0	1	3
Total	20	7	5	32

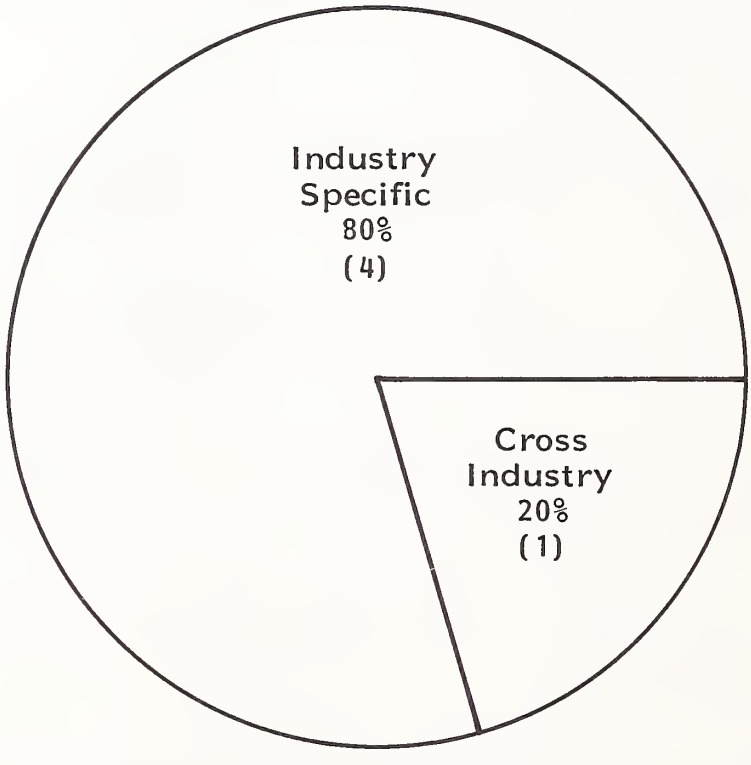
APPENDIX E: INTEGRATED SYSTEMS VENDOR PROFILE

APPENDIX E: INTEGRATED SYSTEMS VENDOR PROFILE

- Four system integrators (SI) were interviewed for this study.
  - Their revenues ranged from $7 million to $44 million, with an average of $23 million.
  - The president of one company was interviewed and in the other three companies the sales or marketing vice-president was interviewed.
- The four vendors offered four industry-specific products and one of the vendors also offered a cross-industry product, as shown in Exhibit E-1.
- In 1982 most of the vendors' revenue came from the sale of integrated systems, as shown in Exhibit E-2.
  - In 1982 the vendors received a small amount of revenue from RCS and batch processing.
  - RCS was projected to increase slightly by 1985, while batch processing is expected to disappear entirely.
  - The other revenue increases are projected to come from software sales.

EXHIBIT E-1

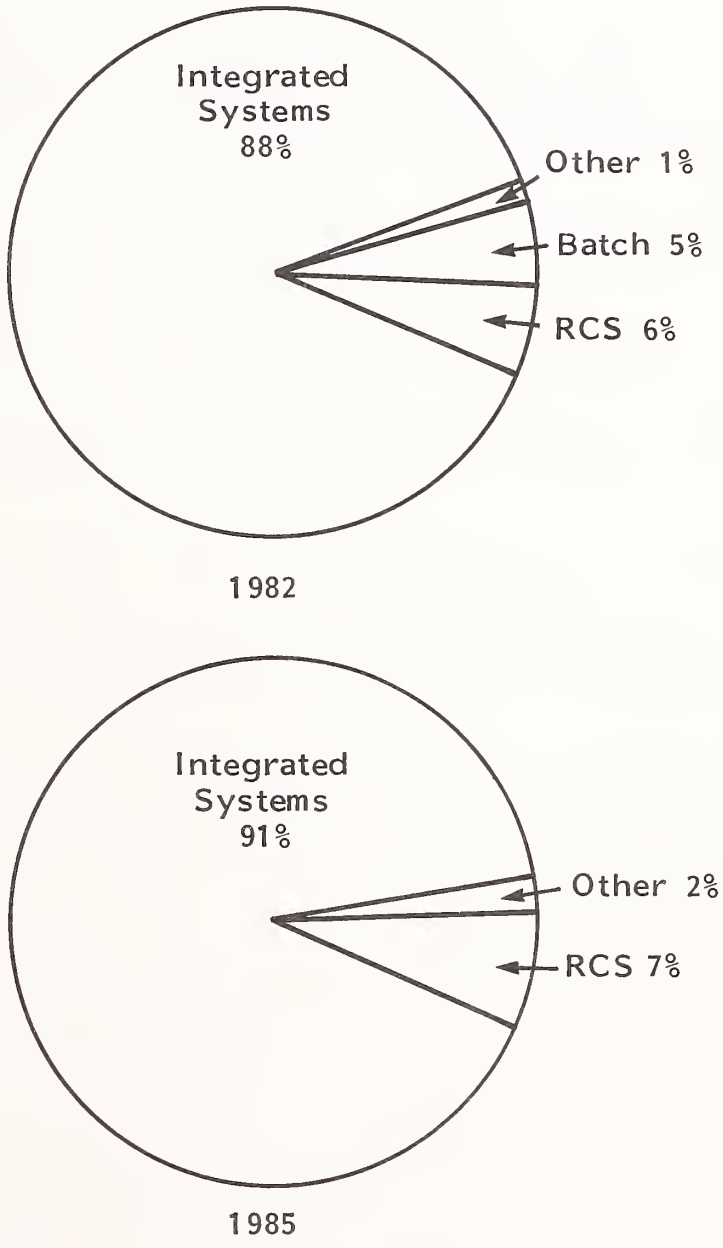
PRINCIPAL SERVICES OF SYSTEMS INTEGRATORS



( ) = Number of Products Offered by Respondents.

EXHIBIT E-2

PROJECTED CHANGES IN REVENUE SOURCES OF SYSTEMS INTEGRATORS



- The largest revenue-producing applications of the system integrators are shown in Exhibit E-3.

  - Seventy-five percent of the respondent vendors had more than one major product.

  - Two vendors sold to the manufacturing sector, one sold to the accounting sector, and one specialized in CAD/CAM.

EXHIBIT E-3

LARGEST REVENUE-PRODUCING APPLICATIONS
OF SYSTEMS INTEGRATORS

VENDOR	FIRST APPLICATION	PERCENT OF REVENUE	SECOND APPLICATION	PERCENT OF REVENUE
Vendor A	Manufacturing	50%	Legal	50%
Vendor B	Manufacturing	100	-	-
Vendor C	Client Accounting	60	Job Costing	30
Vendor D	Architectural CAD/CAM	55	Mechanical CAD/CAM	35

APPENDIX F: INTEGRATED SYSTEMS USER PROFILE

APPENDIX F: INTEGRATED SYSTEMS USER PROFILE

- Ten users of integrated systems were interviewed for this study.
- Industry sectors represented by the users are shown in Exhibit F-1.
- The size of the users, as measured in annual revenues, ranged from $118 million to $5.52 billion.
  - The average revenue size of the users is $2.04 billion.
  - The typical revenue size is $600 million.
- A wide variety of departments used integrated systems, as is shown in Exhibit F-2.

EXHIBIT F-1

INDUSTRY SECTORS OF INTEGRATED SYSTEMS USERS

INDUSTRY	NUMBER OF RESPONDENTS
Discrete Manufacturing	4
Process Manufacturing	5
Services	1
Total	10

EXHIBIT F-2

INTEGRATED SYSTEMS USERS' DEPARTMENTS

DEPARTMENT	NUMBER OF RESPONDENTS
Engineering	2
Chief Executive	2
Finance	2
Information Systems	2
Personnel	1
No Response	1

APPENDIX G: VENDOR QUESTIONNAIRE

VENDOR QUESTIONNAIRE

1. What were your company sales for the most recent fiscal year?

   Sales $_____ million

   F.Y. end _____

2. What percent of your company's revenue is derived from the following:

	1982	Projected 1985
Remote Computing Service	_____	_____
Batch Processing	_____	_____
FM Processing	_____	_____
Integrated Systems	_____	_____
Other (describe)_____	_____	_____
Total	100%	100%

3. Your largest service is (interviewer complete based on 1982 percent in question #2 above):

   ☐ Remote Computing
   ☐ Batch Processing
   ☐ FM Processing
   ☐ Integrated Systems
   ☐ Other (terminate interview)

   Therefore, please answer the following questions with only that service in mind.

4. Would your principal service be best described as:

   ☐ Industry Specific
   ☐ Functional Specific
   ☐ Other (raw processing)
   ☐ All of the above

5. What are the two largest revenue producing applications that your company sells?

	Application	Percent of Revenue
A.	_____	_____
B.	_____	_____

The remaining questions will relate to your largest revenue producing application.

6. For your primary service, what percentage of your revenues are derived from the following pricing methods:

	1982	1985
Resource	_____	_____
Transaction	_____	_____
Fixed Price	_____	_____
Other	_____	_____
Total	100%	100%

A. If other, please describe other pricing method.

_____

_____

_____

B. Why is _____ pricing method used more than the others?

_____

_____

_____

_____

7. Are there any terms or conditions that your customers want that you do not want to provide? If so, describe and explain.

_____

_____

_____

8. What discounts from basic list price do you provide, and what qualifying criteria do you use?

Basis	Qualifying Criteria	Discount (percent) Minimum	Maximum
Volume	_____	_____	_____
Term Contract	_____	_____	_____
Usage Pattern (e.g., nonprime usage, data entry mode)	_____	_____	_____
Government Sector	_____	_____	_____
Education Sector	_____	_____	_____
Other*	_____	_____	_____

*Please describe the other discounting method:

_____

_____

_____

_____

9A. What percent of you business is sold at a discount? _____

9B. Do you provide cost or price protection to you customers?

Yes No

If yes, describe: _____

_____

9C. To what extent are your pricing decisions affected by the following (5 = high, 1 = low)

	Rating
Cost Changes	_____
Company Pricing Objectives	_____
Top Management Attitudes	_____
Customer Demand	_____
Sales Force Attitudes	_____
Competitive	_____
Deflation	_____
Product Position in Product Life Cycle	_____
Other (specify) _____	_____

_____

a. Discuss high ratings: _____

_____

_____

9D. For each of the following categories how would you rate the quality of the data which is available to help make pricing decisions (5 = high, 1 = low):

	Rating
Cost Change Data	_____
Customer Pricing Sensitivity Data	_____
Competitive Actions Data	_____
Product Profitability Data	_____
Market Size, Share Data	_____
Other (specify) _____	_____

_____

10. Who is responsible and accountable for pricing your service. Please give title and functional responsibility:

	Title	Functional Responsibility
A.	_____	_____
B.	_____	_____
C.	_____	_____

If more than one person, describe how they relate to each other:

_____

_____

_____

11. Please rate the following strategic objectives in your pricing procedure (5 = high importance, 1 = low importance):

	Rating
Increase Market Share	_____
Maximize Profits	_____
Cover Costs	_____
Other	_____

If other is indicated, please describe and explain:

_____

_____

_____

Why is the above your objective? _____

_____

_____

_____

12. We would like you to state the key cost factors you consider in pricing your service.

Factor	Percent of Total Cost

Please state what percent of total cost is for each of the above cost factors (record answers above).

Probe: _____

13A. Pricing

I am going to read you a list of services which are commonly offered by vendors. We would like to know if you sell them as separate components or bundled with the cost of other services. We would like to have your estimate of gross profit margin on each.

Service Component	Component	Bundled	Fixed	Gross Profit Margin
Central Processing Unit				
Immediate	☐	☐	☐	_____
Preferred	☐	☐	☐	_____
Connect Time				
Prime	☐	☐	☐	_____
Nonprime	☐	☐	☐	_____
Storage				
Daily Access	☐	☐	☐	_____
Limited Access	☐	☐	☐	_____
*Communications	☐	☐	☐	_____
Hardware (USHS)	☐	☐	☐	_____
Software Premium	☐	☐	☐	_____
*Hardware Maintenance	☐	☐	☐	_____
*Software Maintenance	☐	☐	☐	_____
Response Time	☐	☐	☐	_____
Daily Backup (storage)	☐	☐	☐	_____
*Backup System	☐	☐	☐	_____
*Application Consultant/Support	☐	☐	☐	_____
*On-site Training	☐	☐	☐	_____
*Vendor Site Training	☐	☐	☐	_____
*Manuals/Documentation	☐	☐	☐	_____
*Hotline Support	☐	☐	☐	_____
*Custom Programming	☐	☐	☐	_____
*Other Services (describe)	☐	☐	☐	_____

_____

_____

*Integrated System Only

13B. Transaction. Please describe (include profit margin):

13C. Fixed. Please describe (including profit margin):

13D. What changes and/or innovations have been made in your pricing methods in the past 12 months?

Have they been successful or not? Why?

14. What average percentage sales increase have you had over the last two years, and what are you projecting for the next two years?

A. 1980-1982 _____% 1983-1984 _____%

B. What portion of the sales increases would you attribute to price increases?

1980-1982 _____% 1983-1984 _____%

15. Please rate how sensitive your customers are to price increases (5 = very sensitive, 1 = not sensitive): _____

Why? _____

_____

_____

_____

16A. Have you changed the way you price your service in the past 12 months?

☐ Yes ☐ No

If yes, how? _____

_____

_____

Why? _____

_____

_____

16B. Do you plan to change the way you price (charge for) your service in the next year? ☐ Yes ☐ No

If yes, how? _____

_____

_____

Why? _____

_____

_____

16C. Please rate how important to your customers are the following factors in selecting a vendor (5 = high, 1 = low)

Service Quality _____

Vendor's Knowledge of Application _____

Vendor's Knowledge of Client's Industry _____

Vendor Reputation _____

Customer Support _____

Price of Service _____

17. What is the single most difficult pricing issue you have to face and why?

_____

_____

_____

18. What do you intend to do about it?

_____

_____

_____

_____

19. What was your company's pretax profit margin in fiscal year:

1982 _____

1981 _____

1980 _____

Thank You.

APPENDIX H: USER QUESTIONNAIRE

USER QUESTIONNAIRE

1A. What were your (circle one) company/division sales for the most recent fiscal year?

Sales $_____ million

Fiscal Year End _____

1B. What is your principal product or service? _____

2. What were your (circle one) company/division total expenditures for data processing for the same period?

By the EDP Organization $ _____ million

By the Non IS Departments $ _____ million

Total $ _____ million

3. What percent of total IS expenditures was for the purchase of the following:

Remote Computing Service	_____%	$_____
Batch Processing	_____%	$_____
FM Processing Servicess	_____%	$_____
Integrated Systems	_____%	$_____
Total	_____%	$_____

4. Your largest use of outside services mentioned is for (check one):

☐ Remote Computing

☐ Batch Processing

☐ FM Processing

☐ Integrated Systems

Therefore, please answer the following questions with only that service in mind.

5. What is the most important or primary application for which you use this service?

_____

_____

6A. What is the second most important application for which you use this service?

_____

_____

6B. What are your total annual computer services expenditures for:

Application 1 $_____

Application 2 $_____

7. If the application goes down (can't operate) for any reason, what is the cost to your company in profits and/or revenue?

	Application 1	Application 2
Revenue Cost*	_____	_____
Profit Cost*	_____	_____

*Per ☐ Hour ☐ Day ☐ Month

8. Are the costs other than financial associated with these application downtimes, e.g. morale, etc? Please explain.

_____

_____

_____

_____

If integrated systems was checked in question 4, go to question 11.

9. Do you pay for this service by:

- ☐ Resource (e.g., connect time, etc.)
- ☐ Transaction (unit basis)
- ☐ Fixed Price
- ☐ Other (e.g., some combination of above)

Please describe if other: (fix %'s to combinations)

_____

_____

_____

10. Do you like this type of pricing? Yes No

Why? _____

_____

_____

_____

If user is paying by:

Transaction go to question 12.

Fixed Price go to question 16.

11A. Resource Pricing

I am going to read you a list of services which are often offered by vendors. I would like to know if you pay for them as separate components or bundled with the cost of other services; and how important it is to your most important application. Also, your feelings on cost effectiveness. 1 is low, 10 is high.

Service	Priced as Component	Priced as Bundled	Your Preference Component	Your Preference Bundled	Importance To You (1 to 10)	Cost Effectiveness (1 to 10)
Central Processing Unit						
Immediate	☐	☐	☐	☐	____	____
Deferred (when free)	☐	☐	☐	☐	____	____
Connect Time						
Prime	☐	☐	☐	☐	____	____
Nonprime	☐	☐	☐	☐	____	____
Storage						
Daily Access	☐	☐	☐	☐	____	____
Limited Access	☐	☐	☐	☐	____	____
*Communications	☐	☐	☐	☐	____	____
Hardware (USHS)	☐	☐	☐	☐	____	____
Software Premium	☐	☐	☐	☐	____	____
*Hardware Maintenance	☐	☐	☐	☐	____	____
*Software Maintenance	☐	☐	☐	☐	____	____
Response Time	☐	☐	☐	☐	____	____
Daily Backup (Storage)	☐	☐	☐	☐	____	____
*Backup System	☐	☐	☐	☐	____	____
*Application Consultant/ Support	☐	☐	☐	☐	____	____
*On-Site Training	☐	☐	☐	☐	____	____
*Vendor Site Training	☐	☐	☐	☐	____	____
*Manuals/Documentation	☐	☐	☐	☐	____	____
*Hotline	☐	☐	☐	☐	____	____
*Custom Programming	☐	☐	☐	☐	____	____
*Other Services (describe)	☐	☐	☐	☐	____	____

_____

_____

*Integrated Systems Only.

11B. Please explain why your preference is different than how you currently pay (for one or two important areas):

_____

_____

11C. Item(s) _____ is most important. Why?

_____

_____

_____

11D. Item(s) _____ is least cost effective. Why?

_____

_____

_____

11E. Are you considering changing processing vendors? ☐ Yes ☐ No

11F. If your present pricing arrangement is unsatisfactory, would you prefer
☐ Transaction Pricing ☐ Fixed Pricing ☐ Other(explain)

Why? _____

_____

_____

If integrated systems, go to question 18.

If fixed pricing, go to question 16.

Transaction Pricing

12. (Skip if you came from resource)

Would you prefer to pay by ☐ Resource ☐ Fixed Price?

Why? _____

_____

13. What is included in the cost of the transaction?

_____

_____

14. Is their a minimum charge in addition to transaction fee?

☐ Yes ☐ No How much _____ per _____

15. Are there other (hidden) charges?

☐ Yes ☐ No

If yes, describe: _____

_____

A. Are there any changes to the transaction pricing arrangement that you would like to see changed? Describe:

Describe: _____

_____

_____

_____

If resource is checked above, go to question 11, otherwise return to question 18.

16. **Fixed Price**

Would you prefer ☐ Resource ☐ Transaction

Why? _____

_____

17. Are there any changes to the fixed price arrangement you have that you would like to see changed?

Describe: _____

_____

_____

If resource was checked off, go to question 11.
If transaction was checked off, go to question 12 - 15.
Otherwise, go to question 18.

Integrated Systems

18. Why did you select an integrated system instead of:

    A. A processing service?

    _____

    _____

    _____

    B. Buying the software and using it on an in-house system?

    _____

    _____

    _____

19. Are you considering changing vendors? ☐ Yes ☐ No

    Why? _____

    _____

    _____

20. Are there any changes in the terms and conditions under which you bought your system that you would like to see changed?

    Describe: _____

    _____

    _____

Universal Questions

21. Can you control and predict the cost of your service?
☐ Yes ☐ No

22. If no, what could the vendor do to help you do this?

_____

_____

23. Are you planning to change the way you do this application?
☐ Yes ☐ No

If yes, how and why? _____

_____

_____

24. Do you receive a discount from your vendors' standard prices?
☐ Yes ☐ No

25. If yes, how much? _____

Why (qualify)? _____

_____

26. Please rate the following in terms of importance in selecting a vendor (5 = high, 1 = low):

	Rating
Service Quality	_____
Vendor's Knowledge of Application	_____
Vendor's Knowledge of Your Industry	_____
Vendor's Reputation	_____
Customer Support	_____
Price of Service	_____
Resource Price Structure	_____
Transaction Price Structure	_____
Fixed Price Structure	_____
Discount Available	_____
Component Pricing	_____
Turnaround/Response Time	_____
Other Factors (describe)	_____

_____

_____

_____

27. Are there certain types of pricing arrangements which you would like to see that are not currently being offered by vendors?

Describe: _____

_____

_____