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ECONOMETRIC CONSULTING SERVICES
SURVEY

Prepared for

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ECONOMETRIC CONSULTING SERVICES SURVEY

I. INTRODUCTION

INPUT conducted a survey of some twenty-two companies to ascertain both their current use of econometric consulting services, and their plans or interest in both future and expanded use of services through timesharing. The survey was conducted by telephone in the period August 3 - 12, 1976. Approximately 35 minutes were spent with one or more persons at each company.

The geographic distribution of interviews was:

- 8 East Coast
- 7 Midwest
- 7 West Coast

The following types of companies participated in the interviews:

- 15 industrial
- 4 financial
- 3 government (including aerospace)

We found the respondents, once contacted, very receptive to being interviewed. Most expressed great interest in receiving a copy of the survey summary, promised in the interview. Only one executive refused to be interviewed. In all we were able to interview the people most intimately involved in using the various services offered. In many instances we interviewed more than one executive per company. We interviewed the following types of executives:

2 vice president and treasurer
9 manager/director market research
8 corporate economist
3 director corporate planning
2 comptroller
2 manager operations research

II. Management Summary

Although we found great interest in accurate and timely data bases of specific industries both within the United States and on an International basis, we did not find great interest in utilizing specialized micro-econometric models in conjunction with those data bases. Most of the persons interviewed gave a lukewarm to skeptical appraisal of the models in those companies which might or would make use of them. We have determined on the basis of this survey that even though industry model development may be feasible, it would be a hard sell.

However offering specialized domestic and international data bases in conjunction with adequate access software and data analysis (statistical, etc.) routines is of great interest to many respondents. Given the data bases, the access software and the analysis routine, and a cost/effective pricing structure, the interested corporate economists/planners would, we believe, use their industry specific expertise to construct their own specialized industry models.

The following additional findings came from data obtained during the survey.

- All respondents who use on-line econometric services use both the vendor's data bases, and access and analysis software, with their own in-house developed models. These models may be operated both on the vendor's equipment and their own in-house equipment. The respondents frequently develop and test the model on the timesharing network and then transfer the model to their internal computer.

- Most of the on-line users subscribe to an econometric service for the following reasons (in priority order):
 - 1) data base
 - scope
 - accuracy
 - timeliness
 - 2) access/analysis software to operate on data base
 - 3) cost
 - 4) econometric forecasting models
- Users feel that timesharing costs are too high. They are turning to internal computing systems for continued operations. Combined computing (using timesharing services and in-house facilities) is being used as a cost/effective alternative.

INPUT recommends that, subject to research confirmation, CSC obtain both national and international industry data bases and create the necessary access and modeling software to penetrate the econometric services marketplace. Models in themselves together with consulting services should be secondary considerations.

III. Recommendations for Further Research

The results of this survey are encouraging:

- o They point to a significant and growing market in the offering of economic and econometric services through timesharing resources.
- o There are strong indications that both domestic and international aggregate and industrial data bases which are detailed, accurate and timely are in demand.
- o There are indications that neither sophisticated econometric models nor a cadre of consultants are prerequisites for market entry.
- o There are ample indications that adequate access software and data analysis routines which run economically on the timesharing network are key to user utilization.

Market Research

In order to confirm these findings it is recommended that an extensive mail survey be initiated. To that end we have prepared a suggested questionnaire (attachment 1). We would propose to analyze the data gathered from the survey together with the data gathered from this phone survey and internally provided as necessary to determine: (1) market size; (2) entry approach; (3) entry costs; (4) projected revenue buildup and break-even point; and (5) profitability projections.

Research should be performed to gather data and insight on "How to get to the 'protein' in the financial econometric/economic analysis marketplace." For example, why aren't the

savings and loans, the credit unions, the independent banks using economic/econometric services utilizing timesharing resources? What are their needs? How should they be approached?

Financial Modeling Language Study

CSC should conduct research to define a competitive programming system which aids the user in accessing time series data, conducting data analysis on data and in constructing economic and econometric models. What exists on INFONET and what the competition is using, such as PROBE, XSIM and TSAM, should be reviewed. A select and knowledgeable number of econometricians should be interviewed to determine the statistical contents of the library routines and the best features of the various languages used. A serious look should be taken at extending APL through MACRO calls to accomplish the entire job.

Data Base Acquisition and Maintenance Costs

The domestic data bases which exist on INFONET should be compared with those which are available, including the fees charged. The availability of foreign data bases, their royalty fees and maintenance costs, should be ascertained. The data bases at SRI and A.D.L. are of potential interest; their costs and potential use should be evaluated.

Competition

Data and insight into what the existing competition is doing in this marketplace should be collected; not only Chase and DRI but Rapidata, Tymshare, Cyphernetics, Interactive Computing, NCCS, etc. Information could be gathered which would contrast

their strengths and weaknesses, their pricing structure, the composition of their revenues, and their customer types.

IV. Analysis of Survey Responses

1. The number of respondents using econometric consulting services was very high - 15 out of 22. Of the 15 using such services, 9 were on-line; that is, using data bases and timesharing services. Of the 7 non-users, one (1) was in the process of selecting one or more services, and another (1) was in the process of considering it.
2. Surprisingly, Chase Econometrics was used by more than half of the 15 users. Some respondents used multiple services. The distribution of services used was:
 - 8 Chase Econometrics
 - 3 Data Resources Inc.
 - 1 Wharton
 - 2 Lionel Edie (Merrill Lynch Econometrics, Inc.)
 - 5 Other

The time used varied from 6 months to 6 years, indicating an increasing market activity. The average was just short of 4 years, with second service more recent, an average of 2 years. This might indicate an openness to use second sources, or at least not a pre-disposition against second source usage.

3. For those on-line users, the data base contents (scope, accuracy, timeliness) was the strongest reason for selection. Access/analysis software was second for the on-line users. Interaction with consulting economists was most important to off-line respondents.
4. Virtually all of the using respondents (14) looked at other competitive services in their selection process.

The major ones were:

- 9 DRI
- 6 Chase
- 5 Wharton

5. The information is used for a wide variety of planning and forecasting functions, the two most important of which are: (1) corporate financial decision making; and (2) long-range planning.
6. The majority (8) of the respondent users justified the service on a cost/effective use of the supplied data/data bases.
7. The respondents expressed three degrees of satisfaction with the services as contracted for:
 - 8 satisfactory
 - 4 acceptable
 - 3 unsatisfactory
8. The greatest strengths were, for the on-line users, (8), the data bases; and for the off-line users, the consulting economists (6). Surprisingly only two (2) respondents thought well of the econometric models utilized in the forecasting process. This could be interpreted as a warning sign in relation to developing micro-economic industry models.
9. As counterpoint to question 8, the econometric forecasting, as could be expected, was the greatest weakness noted by 7 of 15 respondents.
10. The respondents were generally at a loss to identify services, products or features they would like to see provided. There was some desire (4 respondents) for more industrial aggregate data bases.

11. A surprising number of respondents (9) were either using or would consider using a second source. Cost reduction was not a factor.
12. The average annual fixed cost for econometric consulting services was \$7,000 and the average cost of variable timesharing services for the on-line users was \$17,000.
13. Seven (7) respondents, primarily off-line users, reported that they had no current or anticipated growth. Eight (8) respondents, primarily on-line users, projected both a current and anticipated growth of 10% per year indicating an increasing usage (or price from inflation).
14. Most respondents would not break-out their payments by type of service used, i.e., publications, processing, consulting, etc. A detailed review of the contracts and bills through accounting would be necessary. Many respondents felt that this data would be company private.
15. Also most respondents could not further break-out their processing costs by use, such as retrieval of data or use of models. Only five would venture estimates. The averages are:

42%	data retrieval
26%	vendor model use
34%	own model use
16. Just over half (8) of the respondents who used econometric services used the data beyond their own departments. The other uses are quite diverse.

17. As expected, virtually all the on-line users used PROBE or a similar language to do their own analysis and modeling.
18. All of the users of econometric consulting services do virtually all their studies in-house. In addition, several used the long-range planning services of SRI or A.D.L. for special projects. This might indicate that a staff of consultants is not a prerequisite for market entry of on-line services.
19. The relative importance of the vendor features was heavily dependent on whether or not the user is on-line or off-line.

Features	On-Line Rank	Off-Line Rank
Data Base Scope	8	4
Model Characteristics	6	5
Consulting Availability	4	6
Industry Data Availability	6	2
Quality & Reputation of Economists	6	2
Nature of Access Tools	8	1
Network Availability	8	1

(10 = highest importance, 1 = no importance)

20. The respondents were questioned both as to the U.S. and the International Marketplace. Of the 15 users, six (6) were only interested in the U.S. marketplace, and the others used or desired to use industry data in a variety of other countries. The priorities were directly related to the level of industrial development.
21. There were seven (7) respondents that did not as yet use econometric consulting services. Of the seven, two (2) were in the process of review or selection of a service, and three (3) more said they would consider use of a service sometime in the future.
22. Five (5) of the seven respondents who did not currently have econometric consulting services looked at one or more available services in detail, primarily Chase and DRI. This might indicate that the market for such services is growing.
23. All other people in the non-user companies who had a possible interest in econometric consulting services were contacted, including one large subsidiary. The people contacted were by and large the correct ones to be interviewed.
24. The interviews indicated that the respondents were about equally divided between being mildly interested (9) and not interested (10) in industry models of either the U.S. or International Marketplaces.
25. The potential use varied from company to company and was really industry specific and probably company specific. For example, the consumer products industry seemed to have other variables such as product availability which were more important than economic data for product forecasting.

26. The data bases and econometric consulting services were used primarily (14) by the respondents, another indication that we were in touch with the right people.
27. The industry models desired were specific to both the type of industry and the areas of interest in the company which were current at the time of call. This would again indicate that a wide variety of industry specific models would be required to service this marketplace in the manner intended; hence the approach might not be cost effective.
28. The majority of respondents (14) felt that the micro models would not necessarily be related to the macro national model. However, five (5) respondents, all economists, thought they would be related through a common set of assumptions (the given variables).
29. Nearly all the respondents (18) thought that the geographic considerations were the same. Only one dissented, indicating the desire to explore new international market areas.
30. None of the respondents was interested in exploring the many approaches to industry specific micro model contents.
31. Same question as 25 (redundant).
32. The majority of the respondents felt that they would not preclude a different vendor than the one that supplied the econometric consulting services.
33. Most (13) of the respondents were not willing to consider the monthly amount they would budget for use of industry specific micro econometric models with data bases. Of the nine (9) that did, the majority were willing to estimate only \$500/month/model.

Significant Comments (question 34)

We gave the respondents ample opportunity to "let their hair down" and give their considered advice, in confidence, to guide the vendors of econometric consulting services in their long-range planning. Although we did get some airing of personal dislikes, we did receive a number of constructive and carefully considered comments. Those comments have been summarized below:

"The consumer product market appears too narrow to warrant the use of sophisticated new econometric modeling. The availability (distribution) of the products and the quality of the marketing effort appear to be the primary determinants."

"The staff required and on-line timesharing costs are too high to justify on-line econometric models. We use the data bases and the access/analysis software together with our own models which we build on the timesharing network and then transfer to our internal computers."

"The greatest criticism we have of econometric forecasting models is that they are not dynamic enough to allow for structural changes in the economy, and for cyclic swings."

"It is essential to have really good documentation. Some vendor's software does not do what it is advertised to do. The 'learn while doing' approach on a terminal is unsatisfactory."

"A programmed approach using sample problems to indoctrinate the user is suggested. The users' staff members change over time so adequate documentation is essential. Place phase-in changes on a scheduled basis. The 'gimmick-a-month-club' approach is not satisfactory."

"The timesharing companies are pricing themselves out of the market. The processing costs for econometric model use and for analysis software are too high."

"Data as a cost is too intangible to top management. It is hard to attach a value when costs get too high. We feel that econometric consulting services are skimming the cream (fat) off the surface leaving the real protein untouched — the mass market."

"We believe that greater attention should be given to data bases and to models which give physical production variables in an industry rather than just dollar equivalents (tonnage — gallons — etc.)"

"We feel three things are vital in offering on-line econometric services: (1) the data base — its scope, accuracy, and timeliness; (2) the software tools to access and analyze the data; and (3) reduce costs for user. The vendor-supplied econometric models are all well and good but not vital to using the service."

INPUT would be pleased to develop detailed proposals comprised of (1) technical approach; (2) statement of work; (3) expected output; (4) schedule; and (5) estimated fee to accomplish any or all of the research outlined above.

- Attachment 1: Suggested Mail Survey Questionnaire
- Attachment 2: Phone Survey Question Tabulations
- Attachment 3: Actual Telephone Survey Questionnaire
Used For This Research

ECONOMETRIC CONSULTING SURVEY

Suggested Mail Survey Questionnaire

SIC Code

Date

1. Do you use one or more of the following econometric services?
Please check all that apply.

	H o w L o n g			
	Less 1 yr	1-2 yrs	3-5 yrs	gtr 6 yrs
<input type="checkbox"/> None (please go to question 10)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Chase Econometrics	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Data Resources Inc.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Wharton School	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Merrill Lynch Econometrics Inc.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> G.E. Info Systems	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Rapidata	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Tymshare	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Cyphermatics	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Interactive Computing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Other _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

2. Why did you select them?
Please check all that apply.

- Data Base Scope Accuracy Timeliness
 Econometric Model
 Access Software
 Analysis Software
 Interaction with Consulting Economists
 Written Reports
 Other _____

3. Are you satisfied with current service?

- Satisfied
 Acceptable
 Unsatisfactory

4. How much per year do you pay for these services?

- | | |
|--|---|
| <input type="checkbox"/> Subscription (incl. data bases) | <input type="checkbox"/> Timesharing (variable) |
| <input type="checkbox"/> 0 - 1000 | <input type="checkbox"/> 0 - 1000 |
| <input type="checkbox"/> 1000 - 5000 | <input type="checkbox"/> 1000 - 5000 |
| <input type="checkbox"/> 5000 - 10,000 | <input type="checkbox"/> 5000 - 10,000 |
| <input type="checkbox"/> above 10,000 | <input type="checkbox"/> greater than 10,000 |

5. Have you increased usage of these services?

- | | |
|---|---|
| This year | Next year |
| <input type="checkbox"/> 0 - 5% | <input type="checkbox"/> 0 - 5% |
| <input type="checkbox"/> 5 - 10% | <input type="checkbox"/> 5 - 10% |
| <input type="checkbox"/> 10 - 25% | <input type="checkbox"/> 10 - 25% |
| <input type="checkbox"/> greater than 25% | <input type="checkbox"/> greater than 25% |

6. Can you estimate the subscription costs of the following items?

- | | 0-1000 | 1000-2000 | 2000-5000 | gtr 5000 |
|--|--------------------------|--------------------------|--------------------------|--------------------------|
| <input type="checkbox"/> Publications | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| <input type="checkbox"/> Data base subscriptions | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| <input type="checkbox"/> Consulting | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| <input type="checkbox"/> Education/training | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| <input type="checkbox"/> Special projects | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| <input type="checkbox"/> Other _____ | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

7. Can you give an estimate of processing costs?

- | | 0-1000 | 100-2000 | 2000-5000 | gtr 5000 |
|--|--------------------------|--------------------------|--------------------------|--------------------------|
| <input type="checkbox"/> Data retrieval | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| <input type="checkbox"/> Use of vendor supplied software | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| <input type="checkbox"/> Use of own models on
timesharing network | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

8. Which of the following financial modeling programming languages do you use?
Please check all that apply.

- | | | |
|--------------------------------------|-------------------------------|-------------------------------|
| <input type="checkbox"/> PROBE | <input type="checkbox"/> XSIM | <input type="checkbox"/> TSAM |
| <input type="checkbox"/> Other _____ | | <input type="checkbox"/> None |

9. In selecting a vendor, please rank each of the following features:
Use the scale: 10 = highest importance, 1 = no importance.

Features	Rank
Data Base Scope	
Model Characteristics	
Consulting Availability	
Industry Data Availability	
Quality and Reputation of Economists	
Nature of Access Tools	
Network Availability	

Please skip to question 12.

10. Why don't you use them now?

- | | | |
|---|--------------------------|--------------------------|
| <input type="checkbox"/> Considering their use in near future | 6 mo | 1-2 yrs |
| <input type="checkbox"/> Don't need that degree of sophistication | <input type="checkbox"/> | <input type="checkbox"/> |
| <input type="checkbox"/> No good industry data | | |
| <input type="checkbox"/> Decentralized planning, done by subsidiaries, etc. | | |
| <input type="checkbox"/> Other _____ | | |

11. Have you reviewed any of the following econometric services?
Please check all that apply.

- None
- Chase Econometrics
- Data Resources Inc.
- Wharton School
- Merrill Lynch Econometrics Inc.
- Rapidata
- G.E. Info Systems
- Tymshare
- Cyphernetics
- Interactive Computing
- Other _____

12. Which geographic areas are of greatest interest for your company's products?

	Please rank 1 to 10
<input type="checkbox"/> U.S. only	_____
<input type="checkbox"/> U.S.	_____
<input type="checkbox"/> Common Market	_____
<input type="checkbox"/> Canada	_____
<input type="checkbox"/> Japan	_____
<input type="checkbox"/> South America	_____
<input type="checkbox"/> Middle East	_____
<input type="checkbox"/> Far East	_____
<input type="checkbox"/> Oceania	_____
<input type="checkbox"/> Africa	_____
<input type="checkbox"/> Soviet Bloc	_____
<input type="checkbox"/> Other _____	_____

13. Please list up to five (5) areas for which you feel detailed industry data bases are needed.

	U.S.	International
_____	<input type="checkbox"/>	<input type="checkbox"/>
_____	<input type="checkbox"/>	<input type="checkbox"/>
_____	<input type="checkbox"/>	<input type="checkbox"/>
_____	<input type="checkbox"/>	<input type="checkbox"/>
_____	<input type="checkbox"/>	<input type="checkbox"/>

14. Please indicate your position with the company.

- Vice President/Treasurer
- Manager/Director Market Research
- Corporate Economist
- Director Corporate Planning
- Comptroller
- Manager Operations Research
- Other _____

Thank You!

CONFIDENTIAL

INPUT QUESTIONNAIRE

CATALOG. NO.									
SIC. CODE									
SIZE CODE									
AREA CODE									
STUDY CODE									
DATE									
	MM	DD	YY						

STUDY TITLE:
TYPE OF INTERVIEW:

INTERVIEWER: _____

COMPANY: _____ CO. TYPE: _____

ADDRESS: _____ SALES: _____

_____ # EMPL: _____

INDUSTRY

- | | | |
|---|------------------------------------|---|
| <input type="checkbox"/> DISCRETE MANUFACTURING | <input type="checkbox"/> UTILITIES | <input type="checkbox"/> INSURANCE |
| <input type="checkbox"/> PROCESS MANUFACTURING | <input type="checkbox"/> RETAIL | <input type="checkbox"/> GOVERNMENT - FEDERAL |
| <input type="checkbox"/> TRANSPORTATION | <input type="checkbox"/> BANKING | <input type="checkbox"/> GOVERNMENT - STATE & LOCAL |
| <input type="checkbox"/> MEDICAL | <input type="checkbox"/> WHOLESALE | <input type="checkbox"/> EDUCATION |
| <input type="checkbox"/> SERVICES | <input type="checkbox"/> OTHER | |

INTERVIEWS

NAME	TITLE	TELEPHONE NO.

SUMMARY

REFERENCES



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INPUT QUESTIONNAIRE

CATALOG. NO.

STUDY TITLE: ECONOMETRIC CONSULTING SERVICES

1. Do you purchase economic consulting services? _____
(if answer yes, continue: if answer no, go to question 21)
2. Which do you use? For how long?
3. Why were they selected?
4. Did you look at any others? Which ones?
5. What do you use the information for?
6. How do you justify the service?
7. Are you satisfied with your current service?

8. What are the strengths of services you use and/or have evaluated?
9. What are the weaknesses of the services you use and/or have evaluated?
10. Are there any services, products or features you would like to see provided?
11. What would make you use another service?
- a) Need for a second source? _____
 - b) Expanded capabilities? Which ones?
 - c) Reduced cost? _____ How much? _____%
12. How much per year do you pay for your current service/s?
13. What was the growth from last year? _____%
- What will be the growth next year? _____%



14. How much of the money you pay goes for:

- a) Publications? _____
- b) Processing? _____
- c) Consulting? _____
- d) Education/Training? _____
- e) Special Projects? _____

15. For processing, how much is due to:

- a) Retrieval of data? _____%
- b) Use of vendor supplied models? _____%
- c) Use of own system and/or models? _____%

16. Do you use the data in other areas beyond the scope of the service?

17. Do you use financial "English-like" tools?

18. How much outside support do you need in hours per week?

Economic _____

Technical (data processing) _____



FOR NON-USERS OF ECONOMETRIC CONSULTING SERVICES

21. Why don't you use them? Will you in the future?

22. Have you looked at any in detail? Which ones?

23. Does anybody else in the company buy such services? Who?

MICRO-ECONOMIC MODEL (Need to lead in with comments on uses of this model)

24. We may be able to offer very specialized models for several industries with international scope. Would this be useful to you?

25. What use would you make of them? (list uses)





32. Is it valuable to have the same vendor providing the macro and microeconomic services?
33. Assuming the potential value, there would be a monthly budget established; for such service, would you expect that to be in the \$10,000/month range, higher or lower?
\$ _____/month
34. Are there any comments you would offer to a vendor of econometric consulting and processing services?



QUESTION

ECONOMETRIC SERVICES SURVEY

8/10/76

DATA ITEM	ECON01	ECON02	ECON03	ECON04	ECON05	ECON06	ECON07	ECON08	ECON09	ECON10	ECON11	ECON12	ECON13	ECON14	ECON15	ECON16	ECON17	ECON18	ECON19	ECON20	ECON21	ECON22	ECON23	
EXECUTIVE INTERVIEWED																								2
VP TREASURER	X											X												
MANAGER/DIRECTOR MKT RESEARCH	X	X			X		X	X		X		X			X							X		9
ECONOMIST		X	X	X	X	X									X	X	X							8
DIR CORPORATE PLANNING									X		X										X			3
COMPTROLLER												X										X		2
MANAGER OPERATIONS RESEARCH																		X			X			2





ECONOMETRIC SERVICES SURVEY

8/10/76

QUESTION 1, 2

DATA ITEM	ECON01	ECON02	ECON03	ECON04	ECON05	ECON06	ECON07	ECON08	ECON09	ECON10	ECON11	ECON12	ECON13	ECON14	ECON15	ECON16	ECON17	ECON18	ECON19	ECON20	ECON21	ECON22	ECON23	
1) USE ECONOMETRIC SERVICE		X	X	X		X	X	X	X	X		X	X		X		X			X	X	X		15
DONT USE ECONOMETRIC SERVICE	X				X						X	X			X			X	X					7
2) WHO CHASE				X		X		X		X			X	X			X				X			8
DRI		X	X														X							3
WHARREN									X															1
LIONEL EDIE							X															X		2
OTHER 1A. G.E., RANDOLPH TIMOTHAE, Cyphernetics		X						X						X		X						X		5
3) How long FIRST (YRS)		3	6	2		4	4	2	2	2			4	6		6	1/2			4	5	4		38
SECOND (YRS)		1/2								1/3				3			3					2		2



QUESTION

4

DATA ITEM	Econ 01	Econ 02	Econ 03	Econ 04	Econ 05	Econ 06	Econ 07	Econ 08	Econ 09	Econ 10	Econ 11	Econ 12	Econ 13	Econ 14	Econ 15	Econ 16	Econ 17	Econ 18	Econ 19	Econ 20	Econ 21	Econ 22	Econ 23	
4) Looked at others		X	X	X		X	X	X	X	X		X					X							14
DID NOT LOOK AT OTHERS																							X	
Which ones DRE				X		X		X	X	X				X			X					X	X	9
CHASE		X	X				X		X							X							X	6
WATSON			X			X				X				X		X								5
RAPIDATA				X		X																		2
GE						X	X																	2
U.S. ECONOMETRICS														X										1
Lionel Edie																						X		1





QUESTION 10/11

DATA ITEM	ECAN01	ECAN02	ECAN03	ECAN04	ECAN05	ECAN06	ECAN07	ECAN08	ECAN09	ECAN10	ECAN11	ECAN12	ECAN13	ECAN14	ECAN15	ECAN16	ECAN17	ECAN18	ECAN19	ECAN20	ECAN21	ECAN22	ECAN23	
10 ADDITIONAL SERVICES ALTERNATE FORECASTS		X																						1
INTERNATIONAL DATA BASES			X																					1
AGGREGATE INDUSTRY MIXABLE/ DATA BASES				X				X				X								X				4
NOTE NOTED						X	X		X	X				X			X				X	X		8
PHYSICAL PRODUCTION DATA & EQUIVALENTS														X										
11 CONSIDER USE SECOND SERVICE		X	X				X	X	X	X							X				X	X		9
NOT USE SECOND SERVICE				X		X						X	X		X					X				6
REDUCE COST IN %		0	0			0	50	0	0								90				0	0		

$$\begin{array}{r} 17 \\ 6 \overline{) 102} \\ \underline{42} \\ 60 \\ \underline{60} \\ 0 \end{array}$$

$$\begin{array}{r} 7 \\ 13 \overline{) 91} \\ \underline{91} \\ 0 \end{array}$$

ECONOMETRIC SERVICES SURVEY

8/10/76

QUESTION 16, 17, 18

DATA ITEM	ECAN01	ECAN02	ECAN03	ECAN04	ECAN05	ECAN06	ECAN07	ECAN08	ECAN09	ECAN10	ECAN11	ECAN12	ECAN13	ECAN14	ECAN15	ECAN16	ECAN17	ECAN18	ECAN19	ECAN20	ECAN21	ECAN22	ECAN23	
ADDITIONAL DATA USE		X	X	X		X			X					X			X							8
NO ADDITIONAL USE							X			X									X	X	X			7
Where OTHER FINANCIAL SERVICES		X	X													X								3
PRODUCER FORECASTING				X					X								X							3
CORPORATE OFFICES						X								X										2
CORPORATE STAFF														X										1
FINANCIAL TOOLS USE			X	X		X		X		X					X		X				X			8
NO FINANCIAL TOOLS USE		X					X		X			X				X		X		X	X			7
Outside Support							X		X															2
Primarily in home		X	X	X		X	X	X	X	X		X	X		X	X				X	X	X		15



ECONOMETRIC SERVICES SURVEY

8/10/76

QUESTION 19

DATA ITEM	ECAN01	ECAN02	ECAN03	ECAN04	ECAN05	ECAN06	ECAN07	ECAN08	ECAN09	ECAN10	ECAN11	ECAN12	ECAN13	ECAN14	ECAN15	ECAN16	ECAN17	ECAN18	ECAN19	ECAN20	ECAN21	ECAN22	ECAN23		
FEATURES - on line			10	10		7		10		8											10			8	
DATA BASE SCOPE OFF		4					1		8			2				0					6		2		4
MURGL CHARACTERISTICS			4	5		1		7		10			7		5	5						7			6
CONSULTING AVAIL		3					1		9			2									7		6		5
		1					8		2			8										2			4
Industry Data Availability			1	10		3		10		2			5		8	6						10			6
		1					1		9			2									1		1		2
Quality of Consultants			7	0		1		1		9			10		9	9						2			5
		7					7		10			8									8		9		8
NATURE OF ACCESS TOOLS			9	8		9		10		8			8		7	2						9			8
N		1						1		1		2									1		1		1
NETWORK AVAILABILITY			10	8		10		10		11			8		8	2						7			8
		1					1		1			2									1		1		1





QUESTION 22, 23

DATA ITEM	ECON01	ECON02	ECON03	ECON04	ECON05	ECON06	ECON07	ECON08	ECON09	ECON10	ECON11	ECON12	ECON13	ECON14	ECON15	ECON16	ECON17	ECON18	ECON19	ECON20	ECON21	ECON22	ECON23	
LOOKED IN DETAIL at Services	✓				✓						✓				✓			✓						5
CHASE	✓				✓						✓				✓			✓						5
DRI	✓				✓						✓				✓			✓						5
WATERBURY															✓									1
GE					✓																			2
UCLA																		✓						1
RAPIDATA					✓						✓													2
INTERDATA					✓																			1
NOT INTERESTED												✓					✓		✓					2
ANYONE ELSE IN COMPANY	✓																		✓					2
MARKET RESEARCH	✓										✓	✓												3
SUBSIDIARIES																			✓					1
NO ONE ELSE					✓										✓			✓						3



QUESTION 24, 25

DATA ITEM	ECAN01	ECAN02	ECAN03	ECAN04	ECAN05	ECAN06	ECAN07	ECAN08	ECAN09	ECAN10	ECAN11	ECAN12	ECAN13	ECAN14	ECAN15	ECAN16	ECAN17	ECAN18	ECAN19	ECAN20	ECAN21	ECAN22	ECAN23	
Interest in using International Models				X										X							X			3
U.S. Industry Models	X			X			X			X					X			X						7
Not interested		X	X		X	X					X	X			X	X					X	X		10
Mildly interested	X			X				X	X			X					X	X	X					9
Potential User Long Range Planning	X								X		X						X				X			5
Development Planning			X																			X		2
Economic Planning				X																				1
Product Development			X																					1
Supply Demand Forecast						X			X															2
Operating Dismuss Commodities (A2,)												X												1
Acquisition/Dispossession																	X							1
Contingency Planning																				X				1
No use		X			X	X					X				X	X		X			X	X		9





QUESTION 27

DATA ITEM	ECAN01	ECAN02	ECAN03	ECAN04	ECAN05	ECAN06	ECAN07	ECAN08	ECAN09	ECAN10	ECAN11	ECAN12	ECAN13	ECAN14	ECAN15	ECAN16	ECAN17	ECAN18	ECAN19	ECAN20	ECAN21	ECAN22	ECAN23	
Industry Models																								
Textiles				X																		X		
Auto				X					X	X										X				
Paints				X																				
Banking					X																			
S/L				X																				
Consumer finance commodities (raw materials)				X					X					X										
Consumer products						X															X			
Housing new							X				X									X				
Housing replacement							X																	
High Technology								X													X			
Publications																X								
Petrochemicals																						X		





