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CONSULTING OPPORTUNITIES IN END-USER SYSTEMS

Supplement to Final Report

Prepared
for
IBM Corporation
Pittsburgh Trading Area

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Exhibits

I

Introduction

This report is a supplement to the report prepared by INPUT, *U.S. Consulting Opportunities in End-User Systems*. This report focuses on the differences between nationwide findings and those for the Pittsburgh Trading Area (encompassing western Pennsylvania and West Virginia).

This report will follow the same organization as the U.S. report. Where there are major differences these will be described in detail.

In certain instances, the results in this report will be similar to those in the U.S. report. This situation arises because:

- There was no appreciable difference in ratings (such as for service requirements); or,
- The sample size for an individual Trading Area was not sufficient to draw definite conclusions. An example of this is being able to classify the strengths and weaknesses of IBM, but not being able to do so for individual competitors, since they were not cited enough in this particular sample. Where this occurs, INPUT has made comments on the extent to which it believes that findings from the national sample are applicable to the Trading Area.

INPUT recommends that this report be read in conjunction with the U.S. report.

II

Methodology

The methodology employed in conducting the research for this Trading Area was identical to that used in the nationwide study, with the obvious exception that the actual data used for this study was confined to that obtained from the Pittsburgh Trading Area. The questionnaire used was identical to that used in the nationwide study; thirty telephone interviews were conducted in January and February 1992.

The responsiveness and type of respondents were substantially the same as found in the nationwide study.

III

EUS Services Market Size

INPUT estimates that the market opportunity for EUS services in the Pittsburgh Trading Area was $120 million in 1991 (See Exhibit B-1). This compares to an equivalent market size for the entire Great Lakes Area of $525 million. The breakout of the opportunity into the four functional areas (strategy and planning; design; implementation; support and operations) appeared to be very similar to that developed from the national sample, although there was not enough data from this sample to derive specific breakouts for this TA sample.

Exhibit B-2 breaks this size down by major industry group. Process manufacturing and distribution represent the largest markets from a dollar standpoint. Market sizes were calculated as follows:

- The Pittsburgh Trading Area opportunity was calculated as a proportion of the Great Lakes Area, using the ratio of the employment in establishments of 50 or more between the Area and Trading Area.

- Employment by industry figures within the Trading Area were used as the basis for developing industry opportunity estimates; these figures were adjusted based on the intensity of LAN usage for each industry group.

Exhibit B-3 shows the expected growth for EUS services from 1991 to 1994.

- Data for growth in budgeted services shows a growth rate somewhat more than the 7% found nationwide.

- The underlying LAN growth is at the national average of 25%.

- The overall compound growth rate is 33%, compared to the national average of 30%.

As in the nationwide market, INPUT believes that the budgeted growth rates are minimums.

INPUT is not able to differentiate between the growth rates of industry groups in the Trading Area itself due to sample size. However, INPUT believes that the relationships between growth rates found nationally would be true on the local level as well. See Exhibit B-4 for the relative standing of different industries' growth rates.

IV

EUS Service Requirements

In the nationwide study, there was a pronounced shift from more generalized off-the-shelf, personal productivity applications to those that are more complex and business-related. Exhibit B-5 shows the trends for these two types of services in the Pittsburgh TA. The national trend toward industry-specific and "other general business applications" is not as strong in this TA.

Respondents in the Pittsburgh Trading Area provided ratings for the importance of their requirements for specific EUS services. These ratings did not differ significantly from those provided for the national study. As in the national study, INPUT concludes that most of these requirements are potentially important to the firms interviewed, but the firms find it very difficult to place one function requirement consistently above another at this time.

V

Use of External Suppliers of Services

The patterns of use of internal sources of service and the reasons for selecting an external vendor are quite similar for the nationwide study and for this Trading Area:

- Internally provided support is a combination of end-user self-support and that provided by a central IS department.

- Expertise and knowledge are the primary reasons for using an external vendor, followed by cost savings. Lack of in-house staff appeared to be somewhat more important motivating factors in this Trading Area than nationally.

- The vendor selection criteria ratings were virtually identical for this Trading Area as those nationally. The most important were quality, experience, speed, reputation and price.

VI

Competitive Position

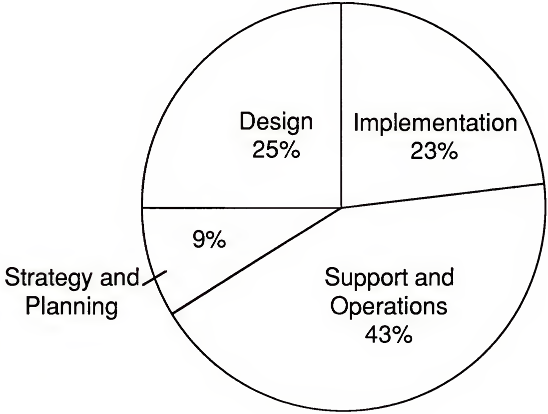
As in the national sample, local service vendors dominate as the current source of supply (see Exhibit B-6). IBM was the second most-used vendor, as in the national study. The list of local vendors named for this Trading Area is shown in Exhibit B-7.

As in the national sample, the local service vendors as a group are rating highest in this Trading Area (Exhibit B-8). IBM was ranked second, followed by Andersen, EDS and JWP.

IBM's strengths and weaknesses (shown in Exhibit B-9) were comparable to those described nationally. INPUT could not develop strength and weakness exhibits for other individual vendors because, in INPUT's opinion, the small samples would not produce figures that could be meaningfully compared from vendor to vendor. However, the comments provided on individual vendors were comparable to those reported in the nationwide report.

Exhibit B-1

1991 Pittsburgh TA EUS Services Expenditures by Type of Service



1991 Services Market = $120 million

Exhibit B-2

1991 EUS Service Market Opportunity: Pittsburgh TA*

Industry	$ Millions	Percent
Banking	9	7
Insurance	4	3
Discrete Manufacturing	14	12
Process Manufacturing	25	21
Distribution	29	25
State/Local	19	16
Telecommunications, etc.	13	10
Federal	8	6
Total	$ 120	100

* Includes Western Pennsylvania and West Virginia

Note: Individual dollars and percents rounded, therefore, may not equal total

Exhibit B-3

Pittsburgh TA
EUS Services Growth Components, 1991-1994

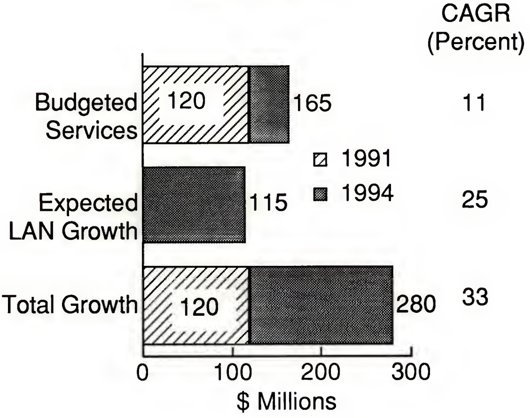


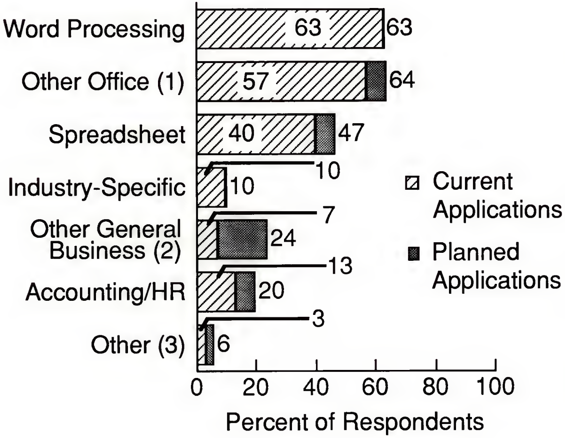
Exhibit B-4

1991 EUS Services Variances in Growth Rate By Industry

Industry Group	Points Above or Below Average Growth
Banking/Finance	+5
Insurance	-3
Discrete Manufacturing	0
Process Manufacturing	+5
Wholesale/Retail Distribution	-3
State/Local Government (including Education)	-5
Telecommunications, Utilities and Transportation	+3
Federal Government	-5

Exhibit B-5

Application Focus: Pittsburgh TA

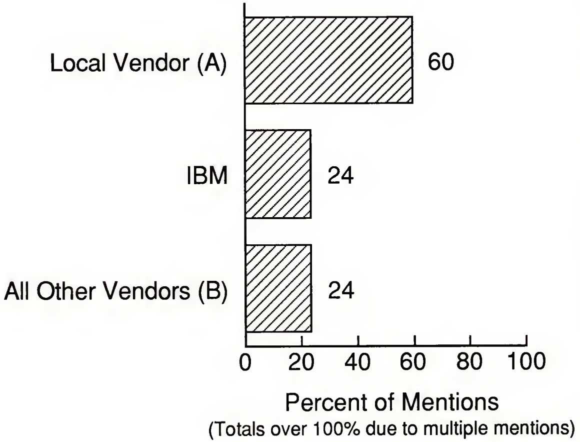


Examples
(1) Electronic mail, graphics, data base
(2) Sales/marketing, decision support, forecasting
(3) 3270 emulation, branch support

Open-ended question coded

Exhibit B-6

Vendors Supplying Services in Pittsburgh TA (Number of Mentions)



A: See list in Exhibit B-7
B: Includes DEC, Novell, Andersen, Bull, Sun, Computerland

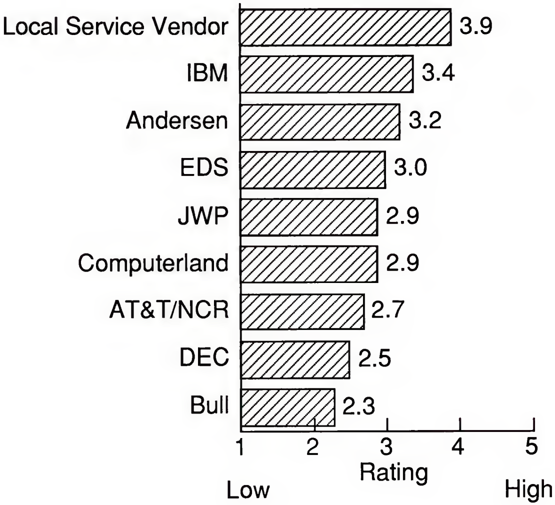
Exhibit B-7

Local Service Vendors: Pittsburgh

- Command
- Computer Connections
- Computer Warehouse
- Grid
- Inaldec
- Monterey
- PC Solutions
- Pittsburgh Computer Systems
- Strategy One
- Telesys Computer
- Westinghouse

Exhibit B-8

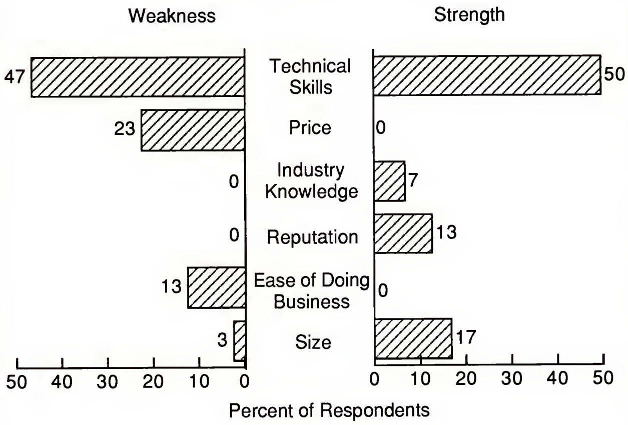
User Rating of Vendors' Ability to Meet User Needs (Pittsburgh TA)



Differences of 0.4 or less are not meaningful.

Exhibit B-9

IBM Strengths and Weaknesses (Pittsburgh TA)



Open-ended questions coded

About INPUT

INPUT provides planning information, analysis, and recommendations for the information technology industries. Through market research, technology forecasting, and competitive analysis, INPUT supports client management in making informed decisions.

Subscription services, proprietary research/consulting, merger/acquisition assistance, and multiclient studies are provided to users and vendors of information systems and services. INPUT specializes in the software and services industry which includes software products, systems operations, processing services, network services, systems integration, professional services, turnkey systems, and customer services. Particular areas of expertise include CASE analysis, information systems planning, and outsourcing.

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Formed as a privately held corporation in 1974, INPUT has become a leading international research and consulting firm. Clients include more than 100 of the world's largest and most technically advanced companies.

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