

000009

DATA BASE - MEDIUM/LARGE SYSTEM
USER REQUIREMENTS

MAY 1983



DATABASE - MEDIUM/LARGE SYSTEM USER REQUIREMENTS

- This data base is delivered as a separate section of the Field Service Report, Medium/Large System User Requirements.
 - The report presents an extensive analysis of all data comparing the results among the users of various vendors of small business systems and minicomputers.
 - This data base is provided for clients who wish to perform more extensive analysis of the responses of their own users and/or correlate the analysis to other data.
- APPENDIX A to this data base documentation provides all of the information required to access and analyze the discrete data contained on the diskettes.
- APPENDIX B is a copy of the questionnaire used to survey users and is the source document for the 324 records contained in the data base files.
- APPENDICES A and B are also printed and bound in the final report for permanent reference.
- Primary statistical analysis for the formal report was performed using ABSTAT, a program designed for use on CP/M-based systems.
 - The data base as delivered is usable by any CP/M-based program supporting Standard Data Format files (.SDF).
 - As explained in more detail in APPENDIX A, the files may also be converted directly to dBASE II files for manipulation by that data base management system.



APPENDIX A: DATA BASE FORMAT

A. DATA BASE OVERVIEW

- The user data base is delivered to clients on two 5.25 inch floppy diskettes written on APPLE COMPUTERS using the CP/M operating system.
- Data entry was accomplished using Ashton-Tate's dBASE II relational data base management system.
- Files are delivered to clients in Standard Data Format (.SDF) for CP/M.
 - Records are separated by carriage returns.
 - Fields are separated by commas.
- The data base for small system users is contained in three raw data files and one numeric file created from quantifiable raw text data.
 - LSA.SDF 43K
 - LSB.SDF 56K
 - LSC.SDF 33K
 - LSD.SDF 23K



- Original dBASE file structures are also provided for clients who wish to restore the files to the dBASE format for analysis. The dBASE structures are stored on corresponding file names appended with the .DBF extension:

- LSA.DBF IK
- LSB.DBF IK
- LSC.DBF IK
- LSD.DBF IK

B. DESCRIPTION OF FILES

- Exhibits A-1 through A-4 list the field names of the four files as originally created under dBASE II.
 - These field names and parameters are contained in the four dBASE II structure files (LSA.DBF, LSB.DBF, etc.) for restoring data from the SDF format to dBASE II format.
 - Fields are easily recognizable by the corresponding question numbers and/or data cell descriptors in the questionnaire reproduced in APPENDIX B.
 - The listings contain additional information about the data type, maximum allowable characters in the field, and the number of decimal positions.
 - For example, in Exhibit A-1, the Q2 field (number 18) is type N (numeric), is seven characters wide (six numerals and a decimal point), and contains two decimal positions.



- A second example in Exhibit A-1 is the field VENDOR which contains alphanumeric characters (C) and has a maximum capacity of 20 characters.
- LSA is a raw data file containing demographic data (some of which has been removed to protect the users), vendor, product, and responses to questions one through seven.
- LSB is a raw data file containing responses to questions 8 through 13 and question 17. Raw data is contained in this file in the form of text for yes and no answers to certain questions; these text data are transformed later into numerical equivalents in LSD.
- LSC is a raw data file containing responses to questions 14 through 16 and question 18. As in LSB above, certain text data will be transformed into numerical equivalents in LSD as discussed below.
- LSD is a file created from certain raw text data in LSB and LSC substituting numerical ranges for responses:
 - Yes/no responses (C1-C13) are translated as follows:
 - No = -1
 - Yes = +1
 - No answer = 0
 - The text responses (check marks) to B1-B30 found in LSC become numeric data in LSD found in the related fields named B1, B6, . . . B26 with the following translation:



- . Favor strongly = +2
- . Favor mildly = +1
- . Neutral = 0
- . Oppose mildly = -1
- . Oppose strongly = -2

- Similarly, the text responses from LSC in B31-B51 become numeric data in LSD FIELDS B31, B34, . . . B49 with three levels of translation:

- . Favor = +1
- . Neutral = 0
- . Oppose = -1

- Linkage of the files is accomplished with the questionnaire catalog number (CAT:NO) field which is common in all four files for each respondent to the questionnaire.

- Gaps in catalog number sequence are normal; the files have been completely edited for linkage consistency.

- The CAT:NO field contains one decimal position to allow the insertion of late responses in the proper sequence.

- The requirement of multiple files was imposed by constraints in dBASE II and the desirability of restoring the files to a popular CP/M-based data base management system.

- The following information is included for those wishing to restore files to dBASE II format:

- The dBASE II files will require disk space as follows:



- . LSA.DBF 60K
- . LSB.DBF 73K
- . LSC.DBF 32K
- . LSD.DBF 19K

- Assume that a blank formatted disk is in CP/M drive C:, the original LSA files are in drive B:, and you wish to restore LSA to dBASE II format.

- Call dBASE in drive A:.

- Issue the following dBASE commands:
 - . USE B:LSA.
 - . COPY TO C:LSA STRUCTURE.
 - . USE C:LSA.
 - . APPEND FROM B:LSA.SDF DELIMITED.



EXHIBIT A-4
LSD FILE STRUCTURE

FIELD	NAME	TYPE	WIDTH	DEC
001	Cat:No	N	005	001
002	C1	N	002	
003	C2	N	002	
004	C3	N	002	
005	C4	N	002	
006	C5	N	002	
007	C6	N	002	
008	C7	N	002	
009	C8	N	002	
010	C9	N	002	
011	C10	N	002	
012	C11	N	002	
013	C12	N	002	
014	C13	N	002	
015	B1	N	002	
016	B6	N	002	
017	B11	N	002	
018	B16	N	002	
019	B21	N	002	
020	B26	N	002	
021	B31	N	002	
022	B34	N	002	
023	B37	N	002	
024	B40	N	002	
025	B43	N	002	
026	B46	N	002	
027	B49	N	002	



EXHIBIT A-3
LSC FILE STRUCTURE

FIELD	NAME	TYPE	WIDTH	DEC
001	Cat:No	N	005	001
002	Q 14:A62	N	002	
003	Q 14:A63	N	002	
004	Q 14:A64	N	002	
005	Q 14:A65	N	002	
006	Q 14:A66	N	002	
007	Q 14:A67	N	002	
008	Q 14:A68	N	002	
009	Q 14:A69	N	002	
010	Q 14:A70	N	002	
011	Q 14:A71	N	002	
012	Q 14:A72	N	002	
013	Q 14:A73	N	002	
014	Q 14:A74	N	002	
015	Q 14:A75	N	002	
016	Q 14:A76	N	002	
017	Q 14:A77	N	002	
018	Q 14:A78	N	002	
019	Q 14:A79	N	002	
020	Q 14:A80	N	002	
021	Q 14:A81	N	002	
022	Q 14:A82	N	002	
023	Q 14:A83	N	002	
024	Q 14:A84	N	002	
025	Q 14:A85	N	002	
026	Q 14:A86	N	002	
027	Q 14:A87	N	002	
028	Q 15	C	018	
029	Q 16	C	015	
030	Q 18	C	006	



EXHIBIT A-2
LSB FILE STRUCTURE

FIELD	NAME	TYPE	WIDTH	DEC
001	Cat:No	N	005	001
002	Q8:1:APP	C	031	
003	Q8:1:RATE	N	003	
004	Q8:2:APP	C	031	
005	Q8:2:RATE	N	003	
006	Q8:3:APP	X	031	
007	Q8:3:RATE	N	003	
008	Q9	N	003	
009	Q10:Q12	C	009	
010	Q13:Y:N	C	034	
011	Q13:A	N	005	001
012	Q13:B	N	005	001
013	Q13:C	N	005	001
014	Q13:D	N	005	001
015	Q13:E	N	005	001
016	Q13:F	N	005	001
017	Q13:G	N	005	001
018	Q13:H	N	005	001
019	Q13:I	N	005	001
020	Q13:J	N	005	001
021	Q17:A89	N	002	
022	Q17:A90	N	002	
023	Q17:A91	N	002	
024	Q17:A92	N	002	
025	Q17:A93	N	002	
026	Q17:A94	N	002	
027	Q17:A95	N	002	
028	Q17:A96	N	002	
029	Q17:A97	N	002	
030	Q17:A98	N	002	
031	Q17:A99	N	002	
032	Q17:A100	N	002	



EXHIBIT A-1
LSA FILE STRUCTURE

FIELD	NAME	TYPE	WIDTH	DEC
001	Cat:No	N	005	001
002	Zip	C	005	
003	Industry	C	030	
004	Area	C	003	
005	Vendor	C	020	
006	Product	C	020	
007	Q1:A	N	002	
008	Q1:B	N	002	
009	Q1:C	N	002	
010	Q1:D	N	002	
011	Q1:E	N	002	
012	Q1:F	N	002	
013	Q1:G	N	002	
014	Q1:H	N	002	
015	Q1:I	N	002	
016	Q1:J	N	002	
017	Q1:K	N	002	
018	Q2	N	007	002
019	Q3	N	007	002
020	Q4	N	007	002
021	Q5:A:REQ	N	007	002
022	Q5:A:ACT	N	007	002
023	Q5:B:REQ	N	007	002
024	Q5:B:ACT	N	007	002
025	Q5:C:REQ	N	007	002
026	Q5:C:ACT	N	007	002
027	Q6:A	N	006	002
028	Q6:B	N	006	002
029	Q7	N	006	002



CONFIDENTIAL

INPUT QUESTIONNAIRE

* **CATALOG NO.**

F	L	S	1		

SIC. CODE

SIZE CODE

AREA CODE

STUDY CODE

DATE

MM DD YY

STUDY TITLE: _____
 TYPE OF INTERVIEW: VENDOR TELEPHONE
 USER ON-SITE
 MAIL

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.
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SUMMARY

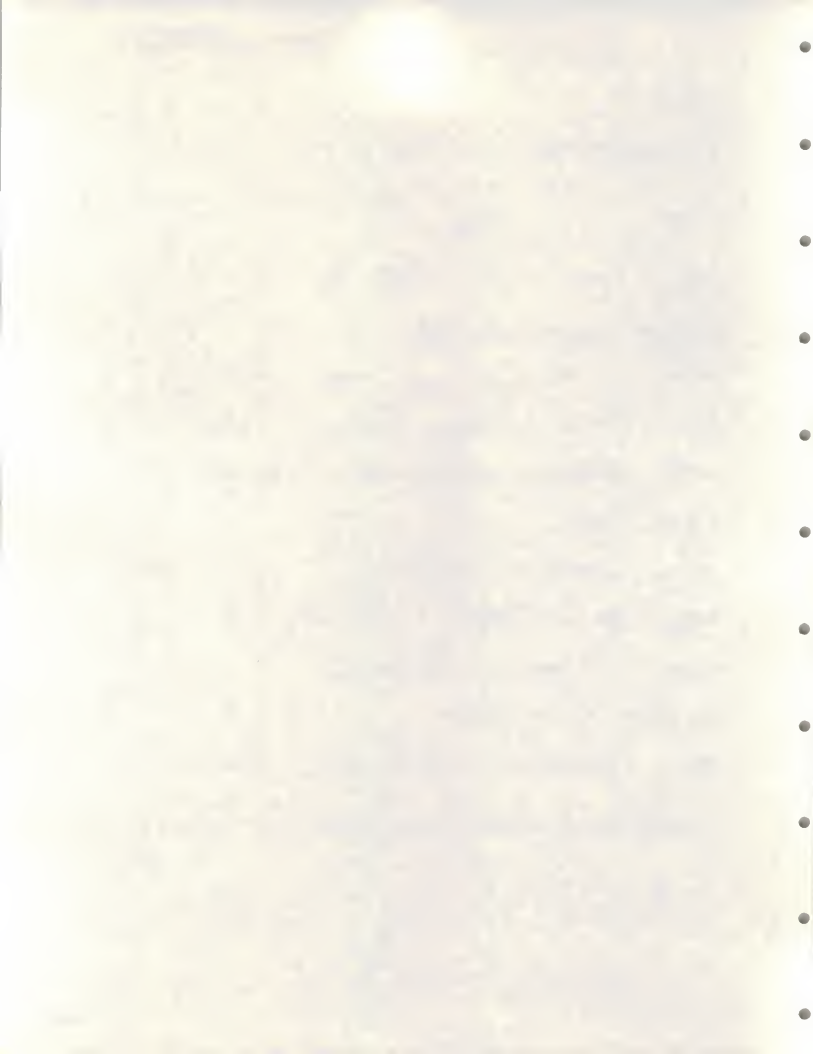
REFERENCES



User Interview Profile (R/A check proper row items.)

<u>VENDOR</u>	* <u>PRODUCT</u>
IBM _____	308X _____ 43XX _____ 303X _____
Burroughs _____	B5900 _____ B6900 _____
Honeywell _____	DPS7 _____ DPS8/ _____ 66DPS _____ 68DPS _____
Univac _____	90/60 _____ 90/80 _____ 1100/80 _____ 1100/90 _____
CDC _____	Omega/480 _____ Cyber 170/800 _____ Cyber 170/700 _____
Cray _____	Cray-1 _____
Tandem _____	Nonstop _____ Nonstop II _____
DEC _____	DEC-10 _____ DEC-20 _____ VAX-11/780 _____
Amdahl _____	470 series _____ 58XX series _____
Data General _____	Eclipse MV/6000 _____
NAS _____	AS/5000 series _____ AS/7000 series _____ AS/9000 _____

* DATA ENTRY: Enter only one vendor and one product per questionnaire.



1. On a scale of 1-10, please rate _____ (vendor) in the following categories:

	(1-10)
a) Service management communication	_____ (A1)
b) Hardware service engineer's communication	_____ (A2)
c) Software service engineer's communication	_____ (A3)
d) Ability to diagnose problems in hardware and to make quality repairs	_____ (A4)
e) Ability to maintain software	_____ (A5)
f) General responsiveness of the vendor organization	_____ (A6)
g) Overall service image	_____ (A7)
h) Taking the initiative to improve user operations	_____ (A8)
i) Resolution of invoicing disputes	_____ (A9)
j) Dispatching trouble calls	_____ (A10)
k) Escalation of extended downtime	_____ (A11)

Comments: _____



2. How long does it normally require _____ to repair your equipment? _____ hours. (R/A, fill in vendor name.)
(R1)

3. What is your requirement for hardware service response time?
_____ hours.
(R2)

4. What is the average time it takes _____ (vendor) to respond? _____ hours. (R/A, fill in vendor.)
(R3)

5. The following questions relate to software maintenance response time, i.e., the time required to have software maintenance person dedicated to resolution.

	Required (hours)	Actual Average (hours)
a) Response time of software engineer when system is inoperable	_____ (R4)	_____ (R5)
b) Response time when system is significantly degraded	_____ (R6)	_____ (R7)
c) Response time when problem is circumvented with mild degradation	_____ (R8)	_____ (R9)

6. a) What overall level of availability do you require of your equipment? (Availability is defined as the ratio of scheduled usage divided by the sum of scheduled time plus downtime plus recovery time.) _____ %
(R10)

 b) What level availability are you experiencing? _____
(R11)

7. What level of availability do you require of your equipment during your most critical periods? _____ %
(R12)



8. a) Please rank the 3 most critical applications using your _____
 _____ equipment with 1 being most critical (R/A, fill in
 appropriate vendor designation in blank space).
- b) On a scale of 1-10, with 10 representing critical to the survival
 of your business, how critical does downtime become during the
 following applications?

Applications	(a) Rank	(b) Rate
Order Entry/Accounts Receivable	(A12)	(A13)
Purchasing/Accounts Payable	(A14)	(A15)
General Ledger Accounting	(A16)	(A17)
Payroll	(A18)	(A19)
Materials/Inventory Controls	(A20)	(A21)
Cost Accounting	(A22)	(A23)
Engineering, Design/CAD	(A24)	(A25)
Process Control/CAM	(A26)	(A27)
PERT/CPM	(A28)	(A29)
Time Sharing	(A30)	(A31)
Reservations	(A32)	(A33)
Scientific Analysis	(A34)	(A35)
Business Modelling	(A36)	(A37)
Business Graphics	(A38)	(A39)
Transaction Control	(A40)	(A41)
Other _____	(A42)	(A43)



9. On a scale of 1-10, how important is a single source of maintenance to you? (1 = no importance, 5 = worth serious consideration, 10 = absolutely necessary) _____
(A51)
10. Do you employ third-party maintenance for any of your equipment?
Yes/No _____
(C1)
11. Have you considered third-party maintenance as a single source?
Yes/No _____
(C2)
12. Would you consider a maintenance management contract as an alternative to a single source or third-party? The management contract would provide you with a single interface to all vendors. Yes/No _____
(C3)

* DATA ENTRY: Questions 10-12 are single character entries, either "Y," or "N," or nothing.



13. Do you have a requirement for any of the following services, and if so, what would you consider a reasonable premium to pay over the basic maintenance charge?

Service	* Yes /No	Reasonable Premium (percent)
a) Stand-by coverage during critical periods	_____	_____ % (A52)
b) Guaranteed uptime	_____	_____ % (A53)
c) Guaranteed response time	_____	_____ % (A54)
d) On-site spare parts	_____	_____ % (A55)
e) Remote diagnostics	_____	_____ % (A56)
f) Preventive maintenance and field changes during off-prime hours	_____	_____ % (A57)
g) Occasional shift coverage (versus fixed schedule)	_____	_____ % (A58)
h) Full-time, on-site service engineer	_____	_____ % (A59)
i) Guaranteed repair time (hardware)	_____	_____ % (A60)
j) Guaranteed turnaround on software fixes	_____	_____ % (A61)

* DATA ENTRY: For "Yes/No" column see note on preceding page.



14. a) Please rate, on a scale of 1-10, your requirements for the following vendor goods and services.
- b) Please rate your current level of satisfaction with the goods and services you receive from your equipment and/or maintenance vendor.

Vendor Goods and Services	Scale 1-10	
	Requirement (a)	Current Level (b)
Environmental Planning	_____ (A62)	_____ (A63)
Physical Site Planning	_____ (A64)	_____ (A65)
Consulting	_____ (A66)	_____ (A67)
Documentation	_____ (A68)	_____ (A69)
Training	_____ (A70)	_____ (A71)
Installation Planning	_____ (A72)	_____ (A73)
Hardware Maintenance	_____ (A74)	_____ (A75)
Software Maintenance	_____ (A76)	_____ (A77)
Supplies Sales	_____ (A78)	_____ (A79)
Add-on Sales	_____ (A80)	_____ (A81)
Site Audits	_____ (A82)	_____ (A83)
Relocation	_____ (A84)	_____ (A85)
De-installation	_____ (A86)	_____ (A87)



- 15) Would you favor or oppose having the field service engineer in a sales role for the following:

	Favor		Neutral	Oppose	
	Strongly	Mildly		Mildly	Strongly
Supplies	<input type="text"/> (B1)	<input type="text"/> (B2)	<input type="text"/> (B3)	<input type="text"/> (B4)	<input type="text"/> (B5)
Hardware features	<input type="text"/> (B6)	<input type="text"/> (B7)	<input type="text"/> (B8)	<input type="text"/> (B9)	<input type="text"/> (B10)
Add-on equipment	<input type="text"/> (B11)	<input type="text"/> (B12)	<input type="text"/> (B13)	<input type="text"/> (B14)	<input type="text"/> (B15)
New models of equipment	<input type="text"/> (B16)	<input type="text"/> (B17)	<input type="text"/> (B18)	<input type="text"/> (B19)	<input type="text"/> (B20)
Upgrades	<input type="text"/> (B21)	<input type="text"/> (B22)	<input type="text"/> (B23)	<input type="text"/> (B24)	<input type="text"/> (B25)
Software packages	<input type="text"/> (B26)	<input type="text"/> (B27)	<input type="text"/> (B28)	<input type="text"/> (B29)	<input type="text"/> (B30)

16. Regarding your maintenance contracts, which of the following provisions do you favor or oppose?

	Favor	Neutral	Oppose
Long-term contracts > 1 year	<input type="text"/> (B31)	<input type="text"/> (B32)	<input type="text"/> (B33)
Automatic renewal	<input type="text"/> (B34)	<input type="text"/> (B35)	<input type="text"/> (B36)
Variable shift coverage	<input type="text"/> (B37)	<input type="text"/> (B38)	<input type="text"/> (B39)
Standardized forms (versus negotiated contracts)	<input type="text"/> (B40)	<input type="text"/> (B41)	<input type="text"/> (B42)
Annual invoicing	<input type="text"/> (B43)	<input type="text"/> (B44)	<input type="text"/> (B45)



17. Assuming appropriate discounts or premiums as applicable, please rate the relative importance of receiving your hardware and software maintenance by the following methods: (scale 1-10)

	(1-10)	
	Hardware	Software
Traditional, on-site response to trouble calls	_____ (A89)	_____ (A90)
Your involvement in diagnosis working with support center without remote diagnostics	_____ (A91)	_____ (A92)
Your involvement in diagnosis with remote diagnostics	_____ (A93)	_____ (A94)
Your involvement replacing circuit boards, other components, or patching software	_____ (A95)	_____ (A96)
Delivering portable modules to repair centers	_____ (A97)	_____ (A98)
On-site stand-by of service personnel during critical periods.	_____ (A99)	_____ (A100)

18. Do you favor or oppose the unbundling of maintenance requirements?

	Favor	Neutral	Oppose
Hardware	_____ (B46)	_____ (B47)	_____ (B48)
Software	_____ (B49)	_____ (B50)	_____ (B51)

Handwritten notes, possibly a list or series of entries, covering the majority of the page. The text is too faint to transcribe accurately but appears to be organized in a structured manner.



19. In your opinion, what changes should _____
(vendor) make to significantly improve the level of service?

20. Are the improvements needed generally throughout field service or
just at _____ (vendor)?

Comments: _____

