

THE BUSINESS INFORMATION MARKET IS GROWING!

SALE OF ECONOMIC AND FINANCIAL DATA BY REMOTE
COMPUTER SERVICES:

- BY 1985: \$650,000,000
- GROWTH RATE PER YEAR: 22%

REMOTE COMPUTER SERVICE USERS WITH PERSONAL
COMPUTERS:

- BY DECEMBER 1982: 30%



WHO BUYS BUSINESS INFORMATION?

HEAVY USERS INCLUDE . . .

- FINANCIAL/BANKING
- GOVERNMENT
- ENERGY
- ELECTRONICS/COMPUTERS
- UTILITIES
- COMMUNICATIONS
- CONSTRUCTION
- TRANSPORTATION
- HEALTH CARE



WHO NEEDS BUSINESS INFORMATION?

ANY BUSINESS PERSON WHO NEEDS TO KNOW HOW CHANGES OUTSIDE HIS BUSINESS AFFECT WHAT GOES ON INSIDE HIS BUSINESS. . .

FOR EXAMPLE:

PURCHASING AGENTS —

- TO FORECAST RAW MATERIAL PRICES

SECURITY ANALYSTS —

- TO TRACK STOCK PRICES & ANALYZE TRENDS
- TO PROJECT CASH FLOW OR BALANCE SHEET INFORMATION

SALES MANAGERS —

- TO FORECAST GROWTH BY MARKET SEGMENTS

GENERAL MANAGERS —

- TO DEVELOP BUDGETS THAT INCLUDE INFLATION FACTORS FOR WAGE RATES, ENERGY COSTS, ETC.



VISICORP + DATA RESOURCES, INC. = VISILINK

A NEW PRODUCT THAT GIVES PERSONAL COMPUTER
USERS THE BUSINESS INFORMATION THEY NEED AND
THE POWER TO USE IT WITH VISICALC.



WHAT IS VISILINK?

WHAT ARE DATAKITS?

VISILINK

COMMUNICATIONS SOFTWARE THAT GIVES THE PERSONAL
COMPUTER USER ACCESS TO THE WORLD'S LARGEST
BANK OF BUSINESS AND ECONOMIC INFORMATION. . .

DATAKITS

BUSINESS INFORMATION FORMATTED FOR USE ON
PERSONAL COMPUTERS WITH VISICALC. . .



WHERE DO DATAKITS COME FROM?

DATA RESOURCES, INC.

- WORLD'S LARGEST COMPUTER ACCESSIBLE BANK OF BUSINESS AND ECONOMIC INFORMATION.
- WORLDWIDE PROFESSIONAL STAFF OF 600+ BUSINESS AND DATA SPECIALISTS, ECONOMISTS, AND PROGRAMMERS.
- A DIVISION OF MCGRAW-HILL, WITH ACCESS TO MCGRAW-HILL DATA AND INFORMATION.
- EXPERTISE IN BUSINESS AND ECONOMIC ANALYSIS BASED ON EXPERIENCE WORKING WITH MOST OF THE FORTUNE 500 COMPANIES.



WHY WILL BUSINESS PROFESSIONALS BUY VISILINK/DATAKITS?

DATA IS IN A USEFUL FORM

- FORMATTED AS VISICALC WORKSHEET

INFORMATION ACCESS IS TIMELY

- USE ON YOUR OWN COMPUTER
- 24 HOUR ACCESS TO INFORMATION

EXCLUSIVE ACCESS OF INFORMATION

- ONLY AVAILABLE THROUGH VISILINK

COSTS ARE CLEARLY DEFINED

- NO HIDDEN CONNECT CHARGES
- NO MINIMUM OR FIXED CHARGES
- COST EFFECTIVE



HOW ARE VISILINK/DATAKITS DIFFERENT
FROM THE SOURCE, DOW JONES, ETC.?

THEY

CHARGE FOR TIME

HAVE LIMITED DATA

INCLUDE A MIX OF DATA,
INCLUDING BIORHYTHMS
AND SPELLING FACTS

OFTEN SURPRISE YOU
WITH THE BILL

NO ANALYTICS FOR
PERSONAL COMPUTER

VISI LINK/DATAKITS

NO CHARGE FOR TIME

OFFER THE WORLD'S LARGEST
PRIVATE DATA BANKS

SPECIALIZE IN BUSINESS
AND ECONOMIC DATA
AND ANALYSIS, ONLY

SPELL OUT EVERY PRICE
IN ADVANCE

BRING ANALYTICS TO
PERSONAL COMPUTER



**STANDARD CATALOG
Version V1.0**

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\$US

Business Applications

Budget Planner

Based on forecasts of key factors affecting fixed and variable costs.

*** BUS/BUDGET/MFG
(Manufacturing Company)**

\$ 45

*** BUS/BUDGET/FIN
(Financial Institution)**

\$ 45

*** BUS/BUDGET/SER
(Service Organization)**

\$ 45

Product Line Forecast

*** BUS/PROD**

\$ 25

How a DataKit Looks on the Personal Computer

TREND ANALYSIS: END MARKETS (INDEX: 1967=1.000)

MARKETS	BASE	FORECAST		
	1Q83	2Q83	3Q83	4Q83
OFFICE	2.604	2.656	2.717	2.768
COMMUN	1.721	1.732	1.747	1.757
ELCTRC	3.502	3.651	3.791	3.904
INSTRU	1.845	1.888	1.936	1.971

COMPONENT SALES (UNITS)

	BASE	FORECAST			1983
	1Q83	2Q83	3Q83	4Q83	
OFFICE	*USER	0	0	0	0
COMMUN	*USER	0	0	0	0
ELCTRC	*USER	0	0	0	0
INSTRU	*USER	0	0	0	0
TOTAL		0	0	0	0

A DataKit After the User has Finished a Job

TREND ANALYSIS: END MARKETS (INDEX: 1967=1.000)

MARKETS	BASE	FORECAST		
	1Q83	2Q83	3Q83	4Q83
OFFICE	2.604	2.656	2.717	2.768
COMMUN	1.721	1.732	1.747	1.757
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INSTRU	1.845	1.888	1.936	1.971

COMPONENT SALES (UNITS)

	BASE	FORECAST			1983
	1Q83	2Q83	3Q83	4Q83	

OFFICE	250	255	261	266	1032
COMMUN	162	163	164	165	655
ELCTRC	858	895	929	956	3638
INSTRU	27	28	28	29	112
TOTAL	1297	1340	1382	1416	5436

The DataKit After the User has Finished a Job

DRI Forecast Information (Price Indices 1967=1)

		Base Period	Forecast Period				
		81:3	81:4	82:1	82:2	82:3	82:4
DRI Macro Forecast							
CONTROL012582							
CPIU	CPI-URBAN	2.761	2.813	2.856	2.899	2.947	2.997
WPI	WPI-ALL	2.966	2.971	3.013	3.067	3.126	3.201
WPIIND	WPI-IND	3.073	3.106	3.15	3.206	3.267	3.344
WPI01	WPI-FARM	2.593	2.409	2.439	2.488	2.547	2.627
WPI02	WPI-FOOD	2.518	2.455	2.49	2.536	2.586	2.649
WPI03	WPI-TXTLE	2.019	2.035	2.051	2.067	2.087	2.112
WPI05	WPI-FUELS	6.993	7.034	7.17	7.291	7.417	7.601
WPI051	WPI-COAL	5.059	5.141	5.237	5.346	5.46	5.579
WPI053	WPI-GAS	9.674	9.83	10.183	10.579	11.017	11.499
WPI054	WPI-ELEC	3.754	3.829	3.945	4.027	4.114	4.207
WPI0561	WPI-CRD P	7.976	7.873	8.008	8.066	8.135	8.323
WPI057	WPI-RFD P	8.041	8.038	8.121	8.198	8.27	8.427
WPI06	WPI-CHEM	2.821	2.851	2.895	3.047	3.11	3.175
WPI07	WPI-PLSTC	2.335	2.285	2.419	2.452	2.49	2.533
WPI08	WPI-LUMBR	2.919	2.854	2.802	2.884	3.08	3.206
WPI09	WPI-PAPER	2.783	2.809	2.806	2.846	2.892	2.986
WPI10	WPI-METLS	3.05	3.061	3.114	3.193	3.284	3.384
WPI11	WPI-MACH	2.866	2.706	2.746	2.787	2.833	2.889
WPI14VR	WPI-TRNSE	2.479	2.545	2.589	2.617	2.67	2.73
JRWSSNF	LABOR INC	1.456	1.486	1.515	1.542	1.572	1.603
RM1	PRIME RTE (Percent)	20.32	17.01	15.93	13.93	14.88	15.88

USER indicates where data should be entered.

Budget Planner *USER* Company

	Base Period	Forecast Period				
	81:3	81:4	82:1	82:2	82:3	82:4
Unit Sales	30000	30450	31059	30748	31671	32304
Percent Change		1.50	2.00	-1.00	3.00	2.00
Unit Price	1.00	1.01	1.03	1.04	1.06	1.09
Dollar Sales	30000	30777	31837	32079	33670	35153
Variable Costs						
GAS	2000	2063	2180	2242	2405	2560
ELECTRICITY	2500	2588	2720	2749	2892	3017
REF PETRL	800	812	836	836	869	903
CHEMICALS	400	410	425	428	450	468
PLASTICS	1200	1192	1287	1292	1351	1402
METALS	2500	2547	2643	2683	2842	2967
LABOR	10000	10359	10773	10855	11398	11855
COGS	18400	18971	20863	21083	22206	23192
Gross Profit	10600	10806	10975	10996	11465	11962
% Sales	35.33	35.11	34.47	34.28	34.05	34.03
G&A	3000	3057	3103	3150	3202	3256
Selling	2000	2038	2089	2100	2135	2171
Interest	750	628	588	514	549	586
Fixed Costs	5750	5722	5780	5764	5886	6014
NIBT	4850	5084	5215	5232	5578	5848
Federal Taxes (Tax Rate)	1940	2034	2088	2093	2231	2379
		.4				
Net Income	2910	3051	3129	3139	3347	3569
% Sales	9.70	9.91	9.83	9.79	9.94	10.15

HARDWARE REQUIREMENTS
VISISERIES PRODUCTS
IBM PERSONAL COMPUTER

	VISICALC	VISIFILE	VISITREND/PLOT	VISIDEX	VISISCHEDULE	DESKTOP/PLAN
MINIMUM REQUIRED MEMORY	64K	64K	128K	64K	64K	64K
DISK DRIVES	1	2	1*	1*	2	2
DOS NEEDED	YES	YES	YES	YES	NO	YES
OTHER			**			

- * 2 DISK DRIVES RECOMMENDED
- ** IBM GRAPHICS MONITOR
 IBM GRAPHIC COLOR ADAPTER CARD
 SUPPORTS 8087



IBM
VISICALC SALES DEMONSTRATION

Creating an Income Statement

This is a keystroke-by-keystroke example of how VisiCalc can be used to produce a twelve month income statement. The example provides a quick and easy to understand demonstration of VisiCalc's features, and should make your sales presentations more effective.

The abbreviations used in this example for the keystroke entries are:

- Ⓡ Return (ENTER KEY ←)
- ⓔ ESC key
- Ⓝ Press key n times
(eg. 10 means press right arrow key ten times)
- SHIFT Shift Key

Here is the Keystroke format used in the demo:

Screen Coordinate	Entry
A1	SALES Ⓡ

To store a file type:

/SS
B: Eight digit max name.VC

To load a file type:

/SL
B: Use arrow → to locate file or type:
B: File name (.VC not necessary)

VISICALC DEMONSTRATION: A 12-MONTH INCOME STATEMENT

<u>Explanation</u>	<u>Cursor Coordinate</u>	<u>Entry</u>
The application begins with the labeling of the rows and columns	A1	Sales (R) ↓ ↓
Notice that the coordinate A3 holds "COST OF GOODS SOLD" (shown at the Entry Contents line at the top of screen) although the display at the cursor shows only "COST OF G". VisiCalc stores your entire entry, but displays only what is allowed by the display format, in this case 9 digits. We can expand the display field up to 77 digits:	A3	Cost of Goods Sold (R)
	A3	/GC77 (R)
Restore it back to 9 digits and continue with the row labels.		/GC9 (R)
	A5	Administrative (R)
	A7	Profit (R)
	A8	SHIFT " SHIFT % OF SALES (R)
Enter the first month's numbers and formulas. Sales are 100.	B1	SHIFT > B1 (R) 100 (R)
Cost of goods sold are 60% of Sales. Notice you can use the cursor to enter coordinates in a formula or type those coordinates.	B3	↓ ↓ .6 SHIFT * ↑↑ (R)
		or .6 SHIFT * B1 (R)
Administrative costs are 25% of Sales	B5	↓ ↓ .25 SHIFT * ↑④ (R)
		or .25 SHIFT * B1 (R)
Profits equal Sales (B1) minus Cost of Goods Sold (B3) minus Administrative Costs (B5)	B7	↓ ↓ SHIFT + ↑⑥ - ↑④ - ↑② (R) or SHIFT = B1 - B3 - B5 (R)

VISICALC DEMONSTRATION: A 12-MONTH INCOME STATEMENT

<u>Explanation</u>	<u>Cursor Coordinate</u>	<u>Entry</u>
Profit as a percent of sales equals profit (B7) divided by Sales (B1) times one hundred.	B8	\downarrow $\frac{\text{SHIFT } (\uparrow / \uparrow \textcircled{7} \text{ SHIFT})}{\text{SHIFT} * 100 \textcircled{R}}$ or $\frac{\text{SHIFT } (B7/B1 \text{ SHIFT})}{\text{SHIFT} * 100 \textcircled{R}}$
Examine VisiCalc's powerful recalculation "What if...?" capability. What if sales were 150 instead of 100?	B1	$\uparrow \textcircled{7} \textcircled{R}$ 150
When 150 was entered, replacing 100, all fields changed to reflect the formulas (e.g., costs of goods sold at 60% of sales now are 90)		
The format of the output is not in dollars. Change the format to the more common business format -- dollars and cents.		/GF <u>SHIFT</u> \$
A one month income statement is not necessarily of much value so create a year's worth. Sales for month two will be 25% greater than the sales for month 1.	C1	\rightarrow $1.25 \text{ SHIFT} * \leftarrow \textcircled{R}$ or $1.25 \text{ SHIFT} * B1 \textcircled{R}$
Cost of Goods Sold will remain 60% of Sales but administrative costs will grow by 5% a month.	C5	$\downarrow \textcircled{4}$ $1.05 \text{ SHIFT} * \leftarrow \textcircled{R}$ or $1.05 \text{ SHIFT} * B5 \textcircled{R}$
Replicate (or duplicate) the formula for twelve months using VisiCalc's replicate functions. First, replicate administrative costs.	C5	/R \textcircled{R} D5.M5

VISICALC DEMONSTRATION: A 12-MONTH INCOME STATEMENT

<u>Explanation</u>	<u>Cursor Coordinate</u>	<u>Entry</u>
We are telling VisiCalc to repeat the formula 1.05 times the previous month's cost from D5 to M5.		(R)
VisiCalc prompts you to indicate whether the data is to be replicated with no change (N) (that is, always 1.05 x B5) or relative (R) (that is, 1.05 times the previous month's administrative costs).		R
Repeat the replication process with the other formulas. First sales.	C1	↑ (4) /R (R) D1.M1 (R) R
Then cost of Goods Sold	B3	↓ (2) /R (R) ← C3.M3 (R) R
Then Profits and % of Sales	B7	↓ (4) /R B7 ↓ B8 (R) C7.M7 (R) RRRRI
The 12 month projection is completed but there are no column headings. To add headings, first instruct VisiCalc to insert two blank rows at the top of the worksheet. All formulas are automatically adjusted for the new coordinates.	A1	SHIFT > A1 (R) /IR /IR
Label the column:	A1	Month (R)
Number the months from 1 to 12:	B1	→ 1 (R) /FI

VISICALC DEMONSTRATION: A 12-MONTH INCOME STATEMENT

Explanation

Cursor
Coordinate

Entry

The last command converts the format of coordinate B2 to an integer since month 1.00 doesn't mean anything. Each coordinate can have an individual formula which overrides the global format of dollars and cents we set earlier.

Continue to label the twelve months.

C1

→
1 SHIFT + ← (R)
/FI
/R (R) D1.M1 (R) R

Examine the twelve months by moving the cursor to the right. Perhaps we would like to know total sales and total profits for the twelve month period.

N1

→ (11)
TOTAL (R)
/FR

VisiCalc has many built in functions including Sum, Minimum, Maximum, Average, Net Present Value, Trig functions and Logarithmic functions. Find the sum total of sales for months 1-12

N3

↓ (2)
@ SUM SHIFT (B3.M3 SHIFT) (R)

Replicate this Sum function to total the Cost of Goods Sold line, the Administrative line, etc.

/R (R) ↓ (2) . ↓ (6) (R) RR
/R (R) N5.N9 (R) RR

For % of Sale take an average of the % for 12 months

N10

@ AVERAGE SHIFT (B10.M10 SHIFT) (R)

When you replicated the function from N5 to N9, you summed two non-existent rows N6 and N8. Fix that.

N6

↓ (3)
/B (R)

N8

↓ (2)
/B (R)

VISICALC DEMONSTRATION: A 12-MONTH INCOME STATEMENT

Explanation

Cursor
Coordinate

Entry

Because it is difficult to understand the numbers without the labels, VisiCalc has several display setup features to increase readability. Here, you will lock into the far left column the headings for the rows.

A1 SHIFT > A1 (R)
 /TV
 → (13)

VisiCalc can also split the screen into two windows. It can split vertically or horizontally. Try vertical first:

B1 ← (12)
 /TN
C1 →
 /WV

We can look at the first month and the twelfth month (as well as the totals) at the same time.

N1 ; → (11)

It would be nice to change sales in month 1 and instantly see the affect on total sales.

B3 ; ↓ (2)
 125 (R)

That's part of VisiCalc's powerful "What if...?" recalculation feature.

You can also split the screen horizontally and see the first 3 months and the last two with the totals. First, you split the screen.

A3 /W1
 ←
 /TV
 SHIFT > A11 (R)
 /WH

Next, bring the data into the bottom window.

; ↑ (10)

Move the cursor to the total column.

→ (13)

VISICALC DEMONSTRATION: A 12-MONTH INCOME STATEMENT

<u>Explanation</u>	<u>Cursor Coordinate</u>	<u>Entry</u>
Change the sales for month 1 to 175. Watch the screen	B3	; SHIFT 175 B3 (R)

Once you have created models with VisiCalc you can store them onto disk, recall them from disk, and print them on a printer--all with easy commands.

IBM VISIFILE DEMONSTRATION

Use the following as a guide in learning and demoing the product. It has been designed so that you can enter the tutorial at any point, if you already have an existing file. However, it will be most effective as a learning experience if you follow its sequence.

The first time through this demo, start with Section A. On subsequent run-throughs, Section A and B should be omitted. Please note that a successful demo does not necessarily need to cover all these functions. A short demo could be presented using Sections C through E.

A. Preparing the Demonstration

If you want to use the sample file from the program disk, you must complete the following steps to copy it to a data diskette. Otherwise, you need to have your own data file on a data diskette.

1. Boot IBM DOS 1.1 in drive A. Enter date when prompted.
2. Format a new data diskette by inserting a blank diskette in drive B and typing format b: (enter)
3. Insert program disk #3 into drive A and type copy vf0*.* b: (enter) to copy the sample data to your data disk.

B. Making VisiFile Self Loading

At this point, you should make your VisiFile program self loading so that for future demonstrations, you will be able to boot right from the program disk #1. To do this:

1. Insert DOS 1.1 into drive A. Remove write protect tab from program disk #1 and insert into drive B.
2. Type sys b: (enter)
3. Type copy command.com b: (enter)
4. Type copy basic.com b: (enter)
5. Replace write protect tab on program disk.
6. Remove IBM DOS from drive A and insert VisiFile program disk #1 in drive A. Insert data disk (with sample data) in drive B.
7. Press Ctrl, Alt, and DEL simultaneously to boot the program.

C. Running the Demonstration

If you haven't already done so, boot the VisiFile program disk #1 in drive A and insert the sample data disk in drive B.

D. MAINTENANCE of a Defined File

1. Choose maintain from the main menu using the arrow keys or just type M.
2. Choose add - to add new records to the file.
 - a. Fill in the information using audience participation. Do not fill in net amount since it will be automatically calculated. Dates must be typed in as xx-xx-xx or xx/xx/xx. Note that the autodate fields have already been filled in. The update field is updated every time you change a field of the record.
 - b. Press F4 (enter) to add new record.
 - c. Note that the calculated field, net amount, has been filled in and that the upper right hand corner shows 9 records instead of 8.
3. Choose change to change existing records.
 - a. Fill in any record number (up to 9 in this example).
 - b. Change any information by simply retyping. Move within fields and from field to field using the return and arrow keys. Change the amount and/or discount rate.
 - c. Press F4 when finished.
 - d. Point out that the net amount field has been recalculated and the last update field now contains the current date.
4. Choose delete to delete existing records.
 - a. Fill in any record number up to 9.
 - b. Press F4 to delete - note that F3 will cancel the command.
 - c. To recover the deleted record - press C for change, the record number (enter), C, and F4 (enter). It is now completely recovered.
5. Choose view to select a given record.
 - a. Enter any record number.
 - b. To view subsequent records, you can either press (enter) twice for each or press F6 to lock you in view mode. Then, press (enter) once for each subsequent record. To unlock, press F6 again.

6. Choose select-rec to search for given information.
 - a. Choose view to look at a selected record.
 - b. Select amount from field menu.
 - c. Select > from relations menu.
 - d. Enter 2000 to find records with amount greater than 2000\$.
 - e. Select &=and.
 - f. Select discount.
 - g. Select <=.
 - h. Enter 7.
 - i. Select Accept. You will now be searching for all records that have amount greater than 2000 and that also have a discount <10%.
 - j. Enter a beginning record number to start search.
 - k. Keep pressing (enter) to get selected records. Select Quit to return to maintenance menu.

Note that many more complicated features can be demonstrated with the select-rec function. Some of these include:

- (1) Selecting change, replace, or delete after select-rec will allow you to modify all selected records.
- (2) 'or' relation criteria could be specified. For example, you could look for those records that have amount >1000 'or' a discount <10.

Also, point out that the record could be searched in index order rather than by record number. This index consists of values of certain fields which are specified by the user.

1. Select Quit to return to the main menu.

E. Choose Print to Print a Report

1. Choose Report.
2. Choose Print.
3. Choose Samprpt.
4. Choose Printer. If you don't have a printer hooked-up, select display. This will print the report on the screen.
5. Choose Quit.

Point out that records can be customized to your needs. Not only can the fields be printed out in any manner, you can also select only certain records.

6. Choose Print to print a new report.
 7. Choose Samprt.
 8. Choose Selection to enable record selection.
 9. Choose Printer or Display depending on whether the output will go to the printer or to the terminal.
 10. Choose Amount from field menu.
 11. Choose Range.
 12. Type 2000 (enter) 3000 (enter).
 13. Choose accept.
- The report now prints only those records with amount between 2000 and 3000.
14. Choose Quit twice until you return to the main menu.

F. Choose Define to Define a New File

1. Choose create.
2. Fill in any information, for example personnel. Point out that only users with the correct password will be able to access this file.

			secret
Last Name	20	A	N
First Name	15	A	N
Street	20	A	N

Point out that the number of characters remaining is decreasing. This is the number of additional characters that can be added to each record.

City	15	A	N
State	2	A	N
Zip	9	A	N

Point out that the data type defaults to A (alphanumeric), so that you can just press return to enter this data type. The protection field (N or Y) can be set to Y, preventing data in this field from being updated or changed.

Units	5	N	N
Cost	5	N	N
Total Cost	6	N	N
Last Update	8	S	N

Point out that the auto-stamp field automatically enters the current date when the record is modified.

3. When you are finished defining fields, press F4.
4. Enter the computed field formula:
 $C = A * B$
You have just defined the total cost to be the units times the cost.
5. Press F4.

G. Printing a File Definition
(Make sure you have a printer before you use this option.)

1. Choose Print.
2. Choose your new file name.
3. Enter password.

H. Reorganizing a File

REORGANIZING a file to adapt to new information needs. You can add, delete or change the length of fields. The file is automatically reorganized and only the information that is changing needs to be typed in.

1. Choose Define from the main menu.
2. Choose Redefine.
3. Select Orders.
4. Enter new file parameters.
5. Press F4 when you have redefined what you want.
6. Enter new computed field formulas.
7. Press F4 when you are finished.
8. Choose Quit.
9. You should now choose maintain to show that the information has been carried across to the new file.

I. Custom Mapping
(Make sure orders is the currently selected file. If it is not, choose select-file, then orders.) A custom map allows you to create your "own form" for data input.

1. Choose other.
2. Choose mapping.
3. Choose Create.
4. Press F4 to select field.
5. Select Grab to reposition it.
6. Use arrows to move field where desired.
7. Press F4 to accept new position.
8. Select next field to move on.
9. Repeat (1) through (8) for each field.
10. Select Quit to save map.
11. Enter map name.
12. Choose Quit twice.
13. Choose maintain to use your new custom map.

J. SORTING a File Into a Different Sequence

All the above instructions have considered the file in order number sequence. Let us create a different sort order (index) for printing or copying.

1. Choose index from the main menu.
2. Choose create.
3. Type lastname (enter) which will sort in ascending order by lastname. (Point out that you can sort on up to 10 fields at once.)
4. Choose lastname.
5. Press sort. The file is now sorted by last name.
6. Choose Quit.
7. Return to main menu. Select print, report and modify.
8. Select SAMPRT, change response of print in index order question to Y.
9. Press F4 twice. You have just altered your print format to allow you to print records in sorted order.
10. Choose print, samprt, and direct output to either printer or display.

IBM VisiTrend/Plot

IBM VisiTrend/Plot

Keystroke Demo

The following exercise is a guide through the main features of the VisiTrend/Plot program. Menu selections to be made are capitalized to distinguish them from the explanations.

When the program is first loaded it is in the Storage Management are, where the data files are created and modified. Files can also be loaded from the VisiCalc or VisiFile programs at this point. The ability to share data files is one of the unique characteristics of the VisiSeries.

The Files used for this demonstration are located on the Example Diskette which was received with the VisiTrend/Plot program.

STORAGE MANAGEMENT

1. Insert Program Disk 1 into Drive 1 and turn on the computer. When prompted for Program Disk II, insert it into Drive one. When the program is loaded, a menu will appear. The cursor will be on the word LOAD. Press the ENTER (↵) key to list the sample files on the program disk.
2. When the list appears, position the cursor on the file SAMPLE 1. SER and press ENTER.

The two series in this file are now displayed. A series is a group of data points and a corresponding time scale. The names of the series are located on the left side of the screen. Next is the periodicity (PER), which means frequency. For example, 1 means yearly - 12 means monthly. Next is the starting date of the series, the ending date of the series, and the total number of date points for each series.

3. Press ENTER to go back to the main menu.

VISIPILOT

VisiPlot is the portion of the program which allows for the plotting of the series into different graph types.

1. Place the cursor on PLOT. (This can be accomplished by moving the cursor with the cursor arrows and pressing ENTER. There is an additional way to make a menu selection. By typing the first two letters of the selection desired, the program will automatically locate and initiate that selection).

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The VisiPlot menu will appear, with all the possible graph types.

LINE GRAPH

1. To select a line graph, position the cursor on LINE and press ENTER. The data loaded while in the Storage Management area will be displayed.

When plotting a line graph there are different ways to select the series depending on the number to be plotted.

2. To select two series, position the cursor on FLOPPY SALES and press the SPACE BAR. An asterick will appear in the left column. Now, position the cursor on FLOPPY DENSITY and press ENTER.
3. The main plot menu is now on the screen. Position the cursor on PLOT and press ENTER. The program automatically scales the data and creates a line graph with both of the series selected.

Notice that the line graphs have symbols to distinguish between the different series being plotted.

BAR CHART

1. Press ENTER to go back to the main plot menu.
2. Position the cursor on SELECT to choose the next graph type. To create a comparative Left/Right bar graph, position the cursor on BAR and press ENTER. The prompt reads "choose left bar series". Place the cursor on FLOPPY SALES and press ENTER. The prompt now reads "choose right bar series". Place the cursor on FLOPPY DENSITY and press ENTER. Place the cursor on PLOT and press ENTER.

The comparative left/right bar chart is now displayed on the screen.

TITLES

The graph needs some titling to further explain its contents.

1. Press ENTER to bring back the main plot menu. Position the cursor on OPTIONS and press ENTER.
2. Position the cursor on TITLE and press ENTER.
3. Select TOP and press ENTER. Type "FLOPPY SALES vs. FLOPPY DENSITY" and press ENTER.

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4. Position the cursor on SIDE and press ENTER. Type "DOLLARS" and press ENTER. Select INVERSE and press ENTER.

At any time, the legend lines at the bottom of the graph can be displayed. Pressing the ESC key will remove the menu, showing the legend. Pressing the ESC key again will re-display the menu.

5. Press the ESC key to see the legend lines. Press ESC again to return to the menu.
6. Position the cursor on EXIT and press ENTER, to return to the main menu.

VISITREND

1. Position the cursor on EXIT and press ENTER. Select TREND and press ENTER.
2. When the TREND menu appears, select ANALYSE and press ENTER.
3. Position the cursor on STATISTICS and press ENTER. (The file SAMPLE 1.SER that was loaded in the STORAGE MANAGEMENT area appears.) Position the cursor on FLOPPY SALES and press ENTER. Select KEEP and press ENTER. The descriptive statistics will be displayed. With the cursor on CONTINUE press ENTER.
4. Position the cursor on FUNCTION and press ENTER. To perform a moving average, position the cursor on MOVING-AVERAGE and press ENTER. Now, select the series FLOPPY SALES and press ENTER. When the prompt says "How many periods?" Type in 5 and press ENTER. The program returns to the Main Menu. Select EDIT. Select the new series just created, FLOPPY SALES. MOS. This series is the moving average of FLOPPY SALES. Press ESC. Position the cursor on EXIT and press ENTER.
5. Select FUNCTION again. To determine percent change, position cursor on PERCENT CHANGE and press ENTER. Again, select FLOPPY SALES and press ENTER. When the menu appears, select EDIT and select the newly created series FLOPPY SALES. %. The numbers displayed are the new series just created. Press ESC and position the cursor on EXIT, press ENTER.

GRAPHING THE VISITREND DATA

1. Place the cursor on PLOT and press ENTER.
2. Select a Line graph by positioning the cursor on LINE and pressing ENTER. Position the cursor on FLOPPY SALES and press the space bar. Position the cursor on FLOPPY SALES. MOS and press ENTER. Select FORMAT, press ENTER. Select LINES and press ENTER.
3. Position the cursor on PLOT and press ENTER.

IBM VISIDEX DEMONSTRATION

A. BOOTING VISIDEX

1. Put program disk in Drive A.
2. Put Data disk in Drive B.
3. Type year - () then press ← (from now on called ENTER).
4. Type current month - () ENTER.
5. Type current day - () ENTER.
6. Press ENTER (leaving name as listed).
7. Press ENTER (leaving name as listed).

*To do a soft boot back to DOS (without turning off the machine)
Press ALT, CTRL and DEL simultaneously.

**To bring VisiDex back to its initial screen type /SN.

Note that the displayed status screen keeps track of the creation date, update date, unused characters and keys on the data disk. When the number of free characters falls below 5000, you should create another data diskette. (You may also use the /SB command to compact data on a back up copy, in order to use any space created by deleting data.)

8. Press ENTER. This is the editing screen. We will investigate several editing commands (shown at the top of the editing screen) in parts J. - L.

B. ENTERING FREE FORM INFORMATION

Type in some data. For example:

THIS IS A VISIDEX DEMO. VISIDEX IS A UNIQUE AND INNOVATIVE PRODUCT.
ITS FEATURES INCLUDE:

FREE FORMAT DATA
STRUCTURED FORMAT DATA
FAST KEYWORD AND KEYDATE ACCESS
EXTENSIVE CROSS REFERENCING
NON-KEYWORD ACCESS
FLEXIBLE PRINTING
CALENDAR REMINDER

Notice the word wrap. Use the backspace (upper right ←) key to correct any immediate typos.

IBM VISIDEX DEMONSTRATION

C. CREATING KEYWORDS

In order to store and retrieve screens, we need to create at least one keyword per screen. The VISIDEX program maintains an index of keywords so that any keyworded information can be found quickly. The keyword need not be part of the data to be stored under that keyword. We could use CTRL K with the cursor positioned at the end of the keyword, in the editing mode, but let's go to the keyword menu.

1. Press /K.
2. Let us make DEMO a keyword. Use the CTRL and L and R arrow commands to move the cursor to the first letter in DEMO. Press C. Notice that the keywords are displayed at the bottom of the screen.
3. Press the space bar several times to display the definitions of the various keyword commands.
4. Create several more keywords for this screen. Make VISIDEX a keyword.
5. We can even create a keyword which does not exist in the screen text. Press E. Type EXAMPLE. Press ENTER.
6. We can also drop keywords with the D command.
7. The last step is to place the screen on the disk. Press P. We are automatically returned to the EDIT mode where we can create another screen.

D. KEYWORD RETRIEVAL

1. To complete a logical work sequence, we will retrieve the previously created screen. First access the screen by one of the keywords. Press /K. Press G for getting a screen.
2. Type in one of the keywords - DEMO, VISIDEX or EXAMPLE. Press ENTER. Notice the fast retrieval.
3. Notice the prompts at the bottom of the screen. Since this is the screen we want, press ESC to accept the screen.
4. You can now use any of the editing commands (see J. - L.) to update the screen. Then you would use /KP to place the updated screen on disk.

E. NON-KEYWORD RETRIEVAL

Let us try a non-keyword access. First use CTRL HOME to clear the screen.

1. Press /KG.
2. Enter an ampersand (&) followed by any word you remember from the screen. For example, &FEATURES, &UNIQUE, &VISIDEX DEMO, &FLEXIBLE or anything else you remember. Notice how quickly the screen is retrieved. However, non-keyword access is not generally as fast as keyword access because the program must check the text rather than the keyword index.
3. Press ESC to accept the screen.

IBM VISIDEX DEMONSTRATION

4. Combinations of keyword, non-keyword, partial strings (wildcards) and numeric searches may also be used to quickly access information. For example, clear the screen with CTRL HOME. Now press/KG. Enter &IN-E. This finds the non-keyword "innovative".
5. Press ESC to accept this screen.

F. ENTERING STRUCTURED FORMAT INFORMATION

Now we will explore creating a data template for faster data entry of related records.

1. Use CTRL HOME to clear the screen. Now you have a blank editing screen. Let us use inverse video to highlight the template. Press CTRL B, type NAME, touch the space bar, press CTRL V.
2. Use this procedure to type in field names, such as

NAME - (already typed)

CITY

STATE

ZIP

3. Now create a data template keyword. Press /KE. Enter a name for the template. Precede it by #. For example, #ADDRESS. Press ENTER.
4. Press P to save the template.
5. Now to retrieve the template, type /KG. Enter #ADDRESS.
6. Now fill in the template with any name and address. Notice that the ENTER KEY will correctly position you at the next field.
7. This screen is automatically designated by the keyword, ADDRESS. You may create additional keywords if you wish.
8. Place the screen with /KP. Notice the next blank template is automatically displayed. Fill in several template screens.
9. To stop the automatic presentation of the next blank template, press CTRL HOME.
10. Whenever you want to add more names to your ADDRESS file just retrieve the #ADDRESS keyword.
11. To retrieve individual completed template screens, just retrieve the ADDRESS keyword and/or any other keyword (or non-keyword) you remember.
12. To print your address list, press /P. Press ENTER.
13. Enter K to print all screens stored under a particular keyword. Input the number of lines you want printed from the top of each screen. Enter 8. Press ENTER.

IBM VISIDEX DEMONSTRATION

14. Choose not to print the inverse characters. Press N. Press ENTER.
15. Enter the keyword, ADDRESS. Press ENTER. The list of addresses will be printed.

H. CALENDAR REMINDER

A special VISIDEX feature is the calendar reminder. You can create screens and store them under keydates. Then you are automatically reminded when booting the product on and/or before the keydate.

1. Enter some reminder information on the edit screen. For example,

CALL JOE SMITH RE: CONTRACT

BUY JANE'S BIRTHDAY GIFT

DENTIST APPOINTMENT 3:00

2. Press /C to invoke the calendar menu. You may use the space bar to display the definitions of the various calendar commands.
3. Press P to place the screen on disk. You will be prompted for the month and date on which you wish the reminder to appear. To see the immediate results of the calendar reminder, use today's date.
4. You may now enter a warning number telling the program when to start reminding you. It will remind you up to 15 days before the keydate. Press ENTER.
5. You may also choose to be reminded weekly, on the same date every month or on the same weekday every month. Press ENTER to accept the default.
6. Now, reboot the product to see the calendar reminder at work /SN.

I. STORAGE

You may delete a calendar reminder from the disk with one of the storage (/S) commands. The storage commands also enable you to load new data disks without rebooting, back up and compress data, initialize data diskettes and transfer screens between disks.

J. EDITING TEXT

You can edit screens during and after data entry.

1. Use /KG DEMO to retrieve the data entry.
2. Press CTRL Y to invoke the HELP feature.
3. Experiment with different commands.
4. Press HOME key to position the cursor at the upper left corner.

IBM VISIDEX DEMONSTRATION

5. Use CTRL E to empty the text buffer.
6. Use INS to insert a blank line at the top of the screen.
7. Use $\leftarrow \rightarrow$ (TAB key) to tab across the screen. Type VISIDEX DEMO.
8. Press \downarrow once to position the cursor down one line.
9. Press INS key to insert a blank line.
10. To indent a line move the cursor to the F in FREE. Press CTRL X five times. You have just inserted blank spaces. Put the cursor back of the F in FREE and touch the BACKSPACE key five times to correct.

K. MOVING TEXT

1. Now we will move some text. Press \downarrow two times.
2. Press the DEL key to delete the line where the cursor is positioned.
3. Press \downarrow to move down one more line.
4. Press INS key to insert the previously deleted line.

L. HIGHLIGHTING TEXT

1. Move the cursor down several lines to a blank line. Press CTRL F (flashing) or CTRL B (black on white) to highlight information.
2. Type VISIDEX IS ALSO EASY TO USE. Press CTRL V to return to normal video.

IBM VisiSchedule

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KEYSTROKE DEMO/TUTORIAL

DEVELOPING A SEMINAR SCHEDULE

Please use the following as a guide in quickly learning and demoing the VisiSchedule product.

Sections A through H serve as a fast demo illustrating most, but not all, of the VisiSchedule functionality. If you have enough time, Sections I through M could also be covered.

As you progress through the following demo, you will be developing a simple schedule for setting up a seminar. It will include the various tasks to be accomplished, deadlines, costs, personnel requirements, and so on. You will experience the ease of planning and modifying a project with the VisiSchedule program.

The Reference section of the VisiSchedule manual can be used to quickly clarify any point in the demo.

A. BOOTING VISICHEDULE

1. Insert the program disk in drive 1 and the data disk in drive 2. (You may use the Example Disk as the data disk or format a blank disk with DOS or with VisiSchedule. See B. 2. for formatting instructions.)
2. Turn on your PC. The VisiSchedule program will boot in about 30 seconds. The Startup menu will appear.
3. Use the Right and Left arrow keys to move the cursor to each function or type the first letter of a function to move to it quickly. For example, type R to move the cursor to REPORTER. Notice the expanded function definition which appears above the menu as the cursor rests on each function.
4. Select TODAY by moving the cursor to TODAY and pressing (←) ENTER. Enter the current date. Press ENTER.
5. Notice that the cursor automatically moves to the next function. Select REPORTER. Press ENTER. Enter your name and press ENTER.
6. Select CONTINUE. Press ENTER. Since you now should be comfortable with pressing ENTER to select a function, we will not remind you of this anymore.

IBM VisiSchedule

B. MAIN MENU.

1. Look over the Main Menu and the VisiSchedule status areas. Use the arrow keys or first letter selection to display the expanded definition of each function. You can also use the space bar to quickly move between the top and bottom lines of the menu. Try it.
2. If you are not using the Example Disk, you will need to format a new data disk. Select FORMAT. Place a blank disk in drive 2 and press RETURN. (If the disk is not blank, you will be prompted to erase and format it.)
3. We are now ready to create a project. Select MODIFY.

C. ENTERING PROJECT DESCRIPTION DATA

We will enter some information about the overall project.

1. Select DESCRIP.
2. This is the project description screen. We will fill in each item. Select TITLE; enter SEMINAR. Did you remember to press ENTER? Notice the project description has been updated to include the information you just entered.
3. Select LEADER; enter your name.
4. Since we want the time to be in days, the project to start on the current date, and the manpower expressed as \$, we can pass over these functions and accept the default values.
5. Select COST; select \$.
6. We will accept the default of YES for critical, so that VisiSchedule will display the critical path. We could change the revision number which will be printed on reports if we wished.
7. We can re-select and edit any information we have entered at any time. Since we have correctly completed all entries, select QUIT.

D. ENTERING MANPOWER SKILLS AND COSTS

We will allocate three skill categories and costs to each job. (there are a maximum of nine skill categories per project.) First, we must define those skill categories and costs.

1. Select MANPOWER. Move the cursor to skill #1 and press ENTER.

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2. Select OCCUPATION; enter SALES EDUCATION REP and press ENTER.
3. Select SALARY; enter 150 and press ENTER. Select QUIT.
4. For skills #2 and #3, enter the following information:
Skill #2 - SALES REP \$150
Skill #3 - SALES ADMINISTRATOR \$100
5. Select DONE from the Skill list.

E. ENTERING HOLIDAYS

The VisiSchedule program allows you to define your work week as well as days and weeks off. We will use the default work week (Monday through Friday) and default holidays, so we do not need to select WORK.

F. ENTERING JOB DATA

1. Most of the data entry happens in the SCHEDULE portion of the MODIFY menu. Select SCHEDULE. Take a moment to view the expanded definitions of the functions in this menu.
2. We will enter job information on five jobs. Select ADD and AFTER. Select NAME; enter SEND GUIDELINES.
3. Select DURATION; enter 3.
4. Select COST; enter 6.
5. Select SKILL; select #1 (Sales Education Rep) and enter 1. Select CONTINUE.
6. Select DEADLINE; enter 5 (this is the integer day number, shown at the bottom of the date row which corresponds to the actual date above it).
7. Select ACCEPT and notice the job as it is added to the schedule on the screen.
8. For the next four jobs, use the same sequence and enter the following information:

Job #2
NAME = MAIL INVITATIONS
DURATION = 5
PREREQUISITE = 1 (This is the job that must be completed before job 2 can begin. It will always default to the previous job.)

COST = 20
SKILL = #2 ; enter 1
ACCEPT

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Job #3
NAME = PHONE FOLLOW-UP
DURATION = 4
PREREQUISITES = 2
COST = 15
SKILL = #2 ; enter 1
ACCEPT

Job #4
NAME - HOTEL AND EQUIPMENT
DURATION = 2
PREREQUISITE = 1
SKILL = #2 ; enter 1
 #3 ; enter 1
DEADLINE = 12
ACCEPT

Job #5
NAME = SEMINAR
DURATION = 1
PREREQUISITES = 3,4
COSTS = 500
SKILL = #1 ; enter 1
 #2 ; enter 1
 #3 ; enter 1

9. Since you have finished entering job data, select QUIT to return to the MODIFY menu.
10. Select QUIT to return to the MAIN menu.

G. PRINTING REPORTS

The VisiSchedule program produces four reports: a Summary Report, a Job Description Report, a Tabular Report and a Time Schedule Graph. The last three of these allow you to choose the whole project or just a subset, to choose all the skills or just one and to choose to sort the reports in a variety of orders. We will print two of these reports.

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1. Select PRINT from the Main menu. The SETUP function lets you set up parameters for your printer. Select SETUP and inspect the current options. Change these as needed for your printer. Select QUIT.
2. Select SUMMARY. If you have a printer turn it on and select NO. If you do not have a printer, enter YES to preview the report on your screen.
3. Select GRAPH. Select ORDER and inspect the different ways that the jobs may be sorted. Select CURRENT ORDER. Select PRINT.
If the whole schedule is too wide for your printer, you may later tape the parts together to see the entire project at once.
4. If you do not wish to print more reports at this time, select QUIT to return to the Main Menu.

H. SAVING PROJECTS

You will want to save your work under a file name so that it can be loaded for updates and revisions in the future.

1. Select SAVE from the Main Menu.
2. Select NEW NAME; enter SEMINAR.

I. UPDATING SCHEDULES

You have now completed a simple project plan with VisiSchedule!

You may modify any part of any job, show job completion, highlight prerequisites and successors, set milestones for a Milestone Report, automatically level resources, and display manpower levels or costs. The impact of any changes will become immediately evident.

To illustrate additional power and flexibility, we will make some changes to the schedule and instantly see their effect on the overall schedule.

1. Select MODIFY. Select SCHEDULE.
2. We need to check some details with our key accounts after sending the guidelines. We will include a new job in the schedule for this. In addition, we want to change all jobs that had job #1 as a prerequisite, so that they will have this new job as a prerequisite instead. INSERT is a fast way of doing this. INSERT causes the inserted job to take on all the successors of the job it is inserted after.

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- Select INSERT. Select JOB. Enter job #1. Select AFTER.
3. Select NAME; enter CALL KEY ACCOUNTS.
Select DURATION; enter 2.
Select COST; enter 5.
Select SKILL; select #2; enter 2.
ACCEPT

This job has been inserted in the sequence between jobs #1 and #2.

J. COMPLETE, MOVE, RENUMBER, SLIP

Now it is three days into the project and job #1 is completed on schedule. However, due to an emergency no further work can be started until time unit 7. Let us enter these updates. To make the project look neater, we will move job #4 and renumber the jobs.

1. Select COMPLETE. Enter 1. Enter 3. Notice the schedule symbols have changed to reflect this completed job.
2. Since job #4's deadline falls before the completion of job #2, it will look neater to display job #4 before job #2. Select MOVE. Enter job #4. Select job #2. Select BEFORE.
3. Select MORE. Notice the functions available on this menu. Select SLIP. Enter 7.
4. Select RENUM. Enter YES to renumber the jobs consecutively. Select QUIT.

You may wish to save these changes for further updates. If you save this project under an existing file name the existing project is replaced.

K. HIGHLIGHT, DISPLAY

1. You can highlight the prerequisites and successors of a given job. Choose HIGHLIGHT from the MORE menu. Enter 6 (for job). This highlighting will stay and remain valid through schedule changes until you turn it off by again selecting HIGHLIGHT and entering 0.
2. Let us display cost and manpower levels. Select DISPLAY. Select MANPOWER. Enter 2 to display the daily sales rep requirements. Notice how the figures are staggered on two lines to show as much information in as little space as possible. Select DISPLAY. Select SALARY. Enter 0 to show the total salaries per day. Select DISPLAY and NONE to turn the display off.

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L. MILESTONE, LEVEL, SCHEDULE

We will not cover these options. Briefly,

1. You can use the MILESTONE function (More menu) to designate the beginning or end of certain jobs as Milestones for a special Milestone Tabular Report.
2. The LEVEL function (More menu) automatically levels manpower levels cummulatively by skill levels. It does this by scheduling jobs within their slack times in order to minimize manpower peaks.
3. The SCHEDULE function (Schedule menu) allows the manual overriding of the start dates of given jobs. It is also useful for resource leveling on a per job basis.

M. DELETE, CLEAR, DRIVE, WRITEDOS

We will not cover these options from the Main menu. Briefly,

1. DELETE is used to destroy an existing project file.
2. CLEAR is used to clear memory. Memory must be cleared before loading or creating a new project and before using the WRITEDOS function to create a DIF file.
3. DRIVE is used to change the data drive. Valid drive numbers are 2 through 6. The program disk must stay in drive 1.
4. WRITEDOS is used to convert the cost and manpower figures from a previously stored report (PRINT function) into DIF format for transferral to another VISI program such as VisiTrend/Plot or VisiCalc.