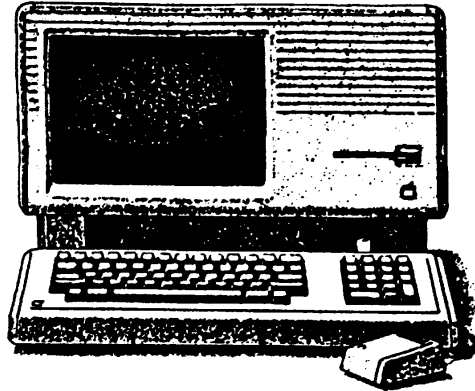Document# 31

Apple Lisa Information

FILE NAME

Lisa Product Introduction Plan

DISK #

COMMENTS

Apple Doc

David T. Craig
736 Edgewater, Wichita, Kansas 67230
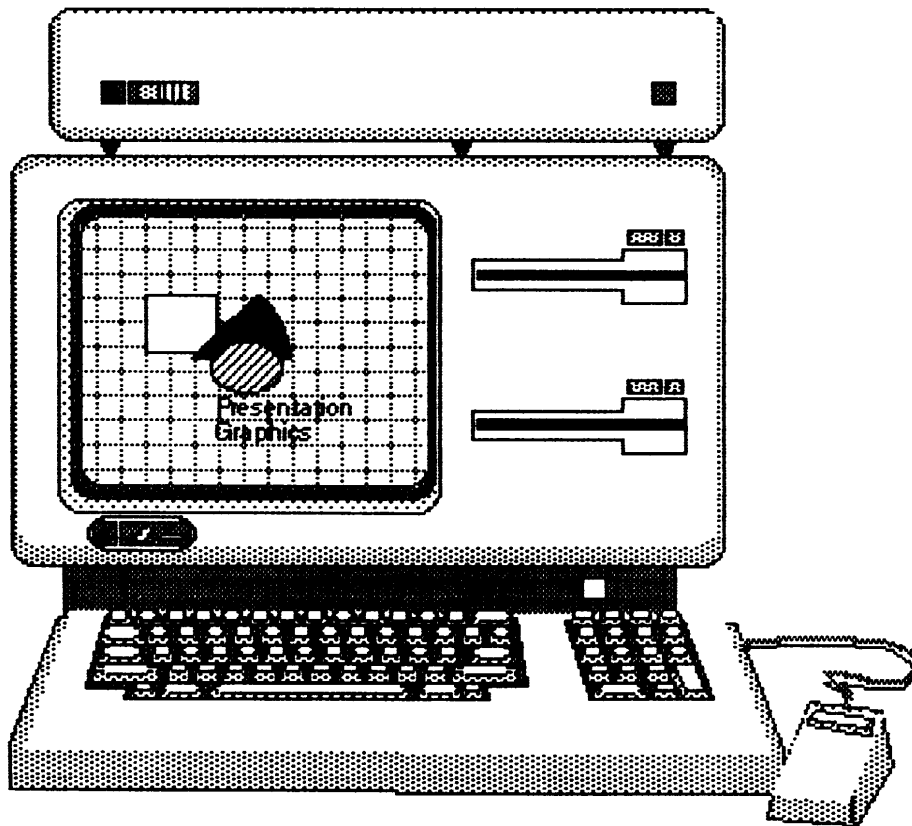(316) 733-0914

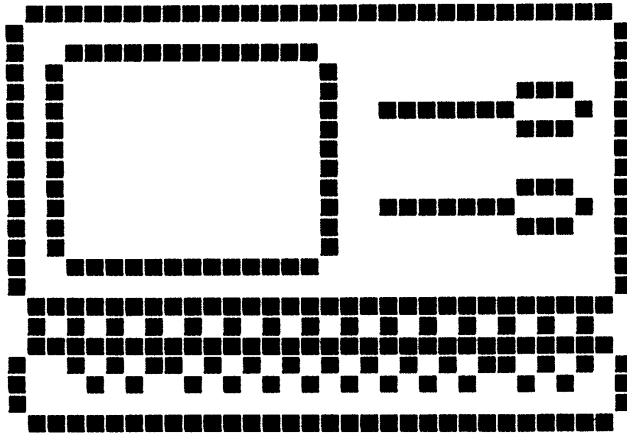# Apple Lisa Personal Computer
1983 to 1985

Product Intro Plan (14 Jan 83)

Presentation Graphics

David T. Craig - 736 Edgewater, Wichita, Kansas 67230 - (316) 733-0914

Lisa Product Introduction Plan

Plaintiff (s) Exhibit No. 350 for iden.
Defendant (s)

Deposition of
Marc Volz, History

Date 8-21-86

Confidential
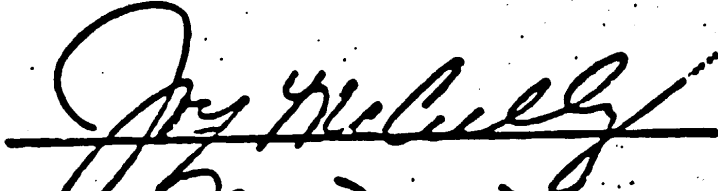**PURSUANT TO COURT ORDER**

apple computer
31200102
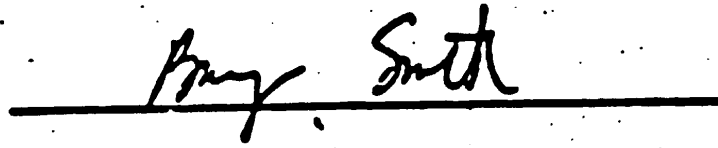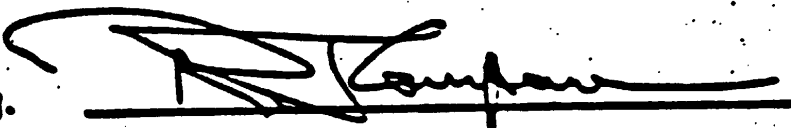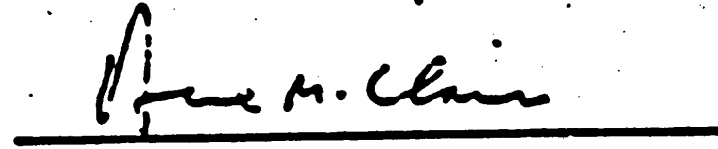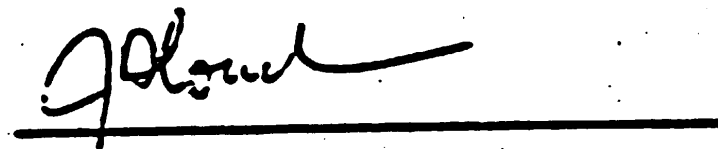
"002.PICT" 200 KB 2000-03-07 dpi: 72h x 72v pix: 2842h x 4042v

PRODUCT INTRODUCTION PLAN

JANUARY 14, 1983

APPROVALS:

NAME: **SIGNATURE:**

Joy McCully
POS Office Market Mgr.

Ellen Nold
POS Marketing Support Mgr.

Barry Smith
POS Software Prod. Mktg.

Rick Torpone
POS Hardware Prod. Mktg.

Deme Clainos
POS Division Mktg. Dir.

John Couch
POS Division Gen. Mgr.

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DOMESTIC PRODUCT INTRODUCTION PLAN

TABLE OF CONTENTS

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31200104

1. Executive Summary

January 19, 1983, marks the end of a long development effort to bring Lisa
to market, but also the beginning of a new era in personal computing. On that
date at the annual shareholder's meeting, Lisa will be officially announced
with simultaneous announcements in other apple countries throughout the world.
In conjunction with the announcement of the Apple //e, Lisa will be presented
as the first truly easy to learn and use, Personal Office Computer System for
under $10,000! This will again reinforce Apple Computer as the technological
leader in the growing Personal Computer arena.

Just as the Apple][first established Apple as the leader with an innovative
and flexible solution based on hardware technology, Lisa will establish the
standard for software technology of the 80s.

The following Product Introduction Plan outlines in detail the product, the
introduction scenario, the marketing and support strategies and open issues
related to launching the most comprehensive product offering Apple has ever
attempted.

A quick summary of the objectives are:
- Announce, launch and ship the Lisa Personal Office System as a bundled
  system for $9995;
  A 1 MB system with Keyboard and Mouse
  A 5 MB Profile hard disk system
  6 Professional application tools:
    LisaCalc - spread sheet
    LisaList - personal database
    LisaProject - resource scheduling
    LisaWrite - text processing
    LisaGraph - plotting
    LisaDraw - graphics editor
- Announce, launch and ship all supporting software, peripherals and accessories
- Sell at least 10,000 units in the last half of FY 83 and 42,000 units in FY 84
- Meet Corporate Return on Sales goals in FY 84
- Establish Lisa as THE Personal Office System of choice
- Provide complete support for our customers through innovative, cost effective
  programs

This Product Introduction Plan is targeted only to the domestic introduction. POS Europe
and POS International have issued an extensive PIP for Europe (November, 1982) addressing
the issues related to International rollout. PIPs for the individual countries
(including the major intercontinental markets) are currently under development.

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2. Product Strategy

2.1 Product Summary

The following section describes the features of Lisa software, hardware, peripherals, and accessories that will be announced on January 19, 1943.

Lisa Bundle

The Lisa concept is most apparent when a full set of applications with a common user interface and integration between tools can be utilized. Thus, we will be encouraging the use of the applications through an aggressively priced stand alone package that includes all of the most common tools needed by information professionals.
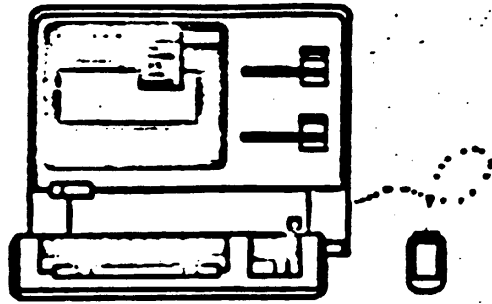
Lisa will only be available in the beginning as a bundle with the following:

- 1 MB Lisa microframe with keyboard and mouse
- 5 MB Profile hard disk system
- 6 Professional Series Applications
  LisaCalc - spread sheet
  LisaList - personal database
  LisaProject - project scheduling
  LisaWrite - word processing
  LisaGraph - plotting
  LisaDraw - graphics editor

In addition, there are communication applications, modems, printers, and other accessories that can be added to meet the specialized needs of the user. Detailed data sheets of each of the products are included as Attachment X at the end of this document.

SOFTWARE

Lisa's User Interface and applications are the heart of the product line. It must be seen to be believed!

All applications use a common filing and printing system. We also provide an interactive manual, LisaGuide, to introduce the user to Lisa concepts. Limited integration will allow the user to transfer LisaCalc data to LisaGraph and LisaWrite Documents; and graphs from LisaGraph or LisaProject to LisaDraw, with full integration to follow. All applications use a software protection scheme which allows users to make unlimited copies of tools for one given machine from a master. The master may be used on any Lisa.

3120

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"006.PICT" 340 KB 2000-03-13 dpi: 72h x 72v pix: 2619h x 3827v

|

Lisa Desktop Manager
This is what the user will see first
and is the closest thing to what is
considered a more traditional
'operating system' except that in Lisa
it is a shell on top of the Lisa OS,
window manager, and printing software
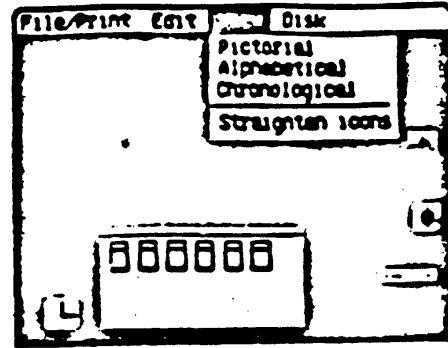
LisaDesk uses familiar objects on the
desktop, called icons, to indicate the
document, folder, or disk the user may
select to move, copy, file or throw in
the waste basket. The user may also define the characteristics of a standard
document and then create a stationery pad. The new document, when 'torn' from
the pad, is a template. When activated, it will automatically start the
application necessary to begin work in that letter, memo, worksheet, list,
chart, graph, or drawing. LisaDesk will automatically 'time stamp' the date
and time of creation and last modification. Disk or folder catalogs can be
displayed as pictorial 'icons' or in tabular form organized in alphabetical or
chronological order.

The printing software supports the Apple Dot Matrix and Daisy Wheel Printers.
Both are capable of printing text AND graphics - even the letter quality
printer with Apple's unique 130 character daisy wheel!

The Dot Matrix printer can print text and graphics (including all symbols)
in both high and low resolution and in landscape (horizontal) or portrait
(vertical) modes. The user can specify several type styles and sizes,
printer configurations, paper sizes and types, and fixed or proportional
space all from menus without having to bother with switches inside the
printer. Very large charts, such as critical path diagrams can be printed
up to 32 square feet!

Most important is the visual fidelity maintained throughout. What appears
on the screen is exactly what will be printed. All page breaks can be
previewed and there are no surprises when the final draft is done!

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"007.PICT" 377 KB 2000-03-07 dpi: 72h x 72v pix: 2848h x 3983v

LisaCalc

A powerful electronic spreadsheet and
financial modeling tool that is essentially
the same as Visicalc™, plus;
A superior user interface using graphics
and mouse.
15 digit Precision that conforms to the
IEEE standard for extended double precision.
Variable width columns.
Choice of several fixed pitch fonts.
Formulas and templates that can be protected
against accidental destruction.
Relational operators and IF, THEN, ELSE functions.
Date and calendar arithmetic.
Compound interest and annuity factor functions.
Block replication.
Missing Data indications.
Automatic calculation until convergence is reached.
Formulas can be printed along with values.
Printing in landscape mode with 15 pitch
font gives 132 columns on one page!
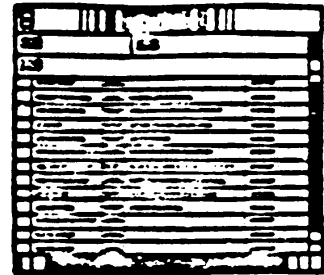
LisaCalc data can be transferred to other Lisacalc models, to LisaGraph
for plotting the data, or to LisaWrite for inclusion into a report or a
memo. Because the mouse provides quick control of the cursor and screen
windows, complex models can be created quickly and used to provide
effective 'what if' analysis. Using the small 15 pitch font, several
columns of data can be visible at one time for easy manipulation.

LisaList

A personal database that helps you create and
maintain all types of lists. Preparing special
reports from a master list is easy through a
simple query by example instead of a special
command language. By making specific columns
visible, reports contain only the information
needed.
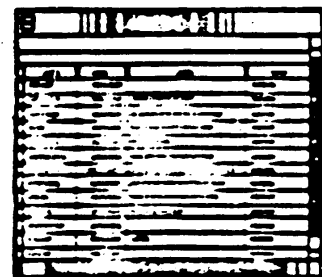
Special field types can be specified to be;
text, numeric, phone, zip, social security,
date, time, or money. All data entered is automatically checked against the
field type specified to minimize incorrect information. Since the data on
a database can often be very important, a file recovery mechanism can be used
to rebuild a file lost due to power failures or faulty media.

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LisaProject

A visual project scheduling tool that will
be to project managers, or anyone else who
must deal with time and resource allocation,
what Visicalc™ was to financial managers.
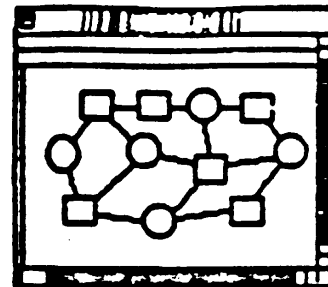
LisaProject uses the Lisa user interface to
input graphic data in the form of a PERT chart
to calculate the start and finish dates of up
to 1000 inter-related tasks that comprise a
project. In the same way that numerical models
could be implemented quickly without programming knowledge and 'what if' games
could be played on Visicalc™, complex projects can be created, updated and
changes simulated in 'what if' senarios on LisaProject.

Critical paths are instantly shown by highlighted lines. The user can even
zoom in or out to view the entire project or one small part. Milestones are
supported and the scheduling algorithm takes into account holidays and
parallel or redundant resources. The user can view the data alternatively
as a resource chart or organized by task. Critical resources and float times
are highlighted for easy identification and tracking.

LisaProject charts can be moved to LisaDraw for adding annotations or other
customizing.

LisaWrite

One of the most advanced text processors
available on personal computers. Normal
document editing is much easier with Lisa.
The mouse allows inserting, deleting, and
moving of text to be as easy as pointing.
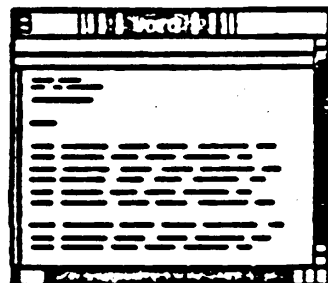
Formatting page layout is just as easy
with several fonts and type styles, fixed
and proportional space, bolding, italics,
underlining, sub and superscripting, left,
center, right and full justification, single, 1.5, double and triple line
spacing, single or multiline headers and footers, automatic page numbering,
automatic or manual page breaks, protection of text blocks from page breaks,
layout aids in inches or metric rulers, and up to eight split windows in
horizontal and vertical directions.

Search and replace is supported on any length string with single or global
replacement, wild card search, and you can choose to match or ignore
upper/lower case.

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LisaGraph

Complex data can be easily represented as a clear, concise chart for better communication. Data can be plotted as a bar, line, mixed bar and line, scatter, or pie chart. Data moved from LisaCalc is quickly plotted to show trends, and then the chart can be moved to LisaDraw to customize the drawing. For example, move a pie segment and add a drop shadow.
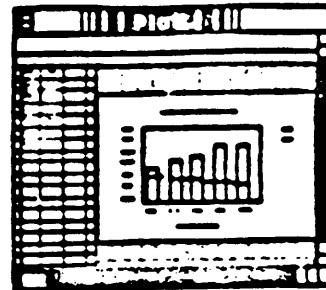
Formating all types of graphs is easy; it does not require a special graphics language. Data can be directly entered and the result is instantly plotted. Default titles are easily changed. All fonts are supported for typeset quality. Several chart sizes are available from quarter page to full page. Up to 2000 points can be plotted with up to eight y-values per x-value.

In addition to automatic plotting of data, axis legends are also scaled automatically. Legends can be manually scaled for unusual scales. View windows of data and chart areas can be controlled for easy viewing of both depending on complexity.

LisaDraw

A unique graphics presentation tool for everyone. Flow charts, technical diagrams, maps, pictures and symbols can be created quickly and easily. A picture IS worth a thousand words, and LisaDraw provides a very flexible tool to combine rectangles, lines, circles, curves, polygons and text to create anything one can imagine.
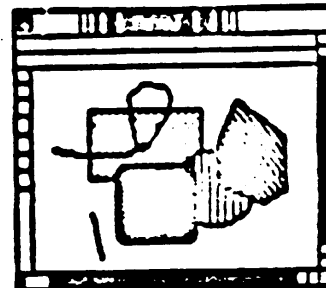
Just as a painter combines colors on a palette to apply to the canvas, LisaDraw provides a wealth of line styles, fill patterns, shapes and text styles as well as layout aids like inch and metric rulers, measure indications, auto grid paper, and alignment commands to create presentation quality drawings without learning a special graphics language. Objects can be grouped, aligned, streched, stacked on on top of another, and duplicated all with the ease of pointing with the mouse.

Templates can be created with special symbols to speed standard or commonly used forms such as flow charts or schematic drawings.

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"010.PICT" 396 KB 2000-03-13 dpi: 72h x 72v pix: 2861h x 3807v

DATACOMM

LisaTerminal

Access to remote databases like Dow Jones™,
the Source™, or a company's mainframe computers
can be accomplished within the Lisa environment
through LisaTerminal, a VT100 emulator. It can
also operate as a simple 'dumb terminal' to any
standard asynchronous RS-232c connection.
With a DC Hayes Smartmodem™, the user can call
a number automatically and load data into a file
to be transfered later, stored, or thrown away.
Data can also be cut into or cut of a LisaTerminal
window into LisaWrite for inclusion in a report.
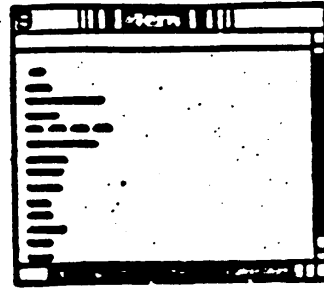
3270 Terminal

A standalone terminal emulator for the IBM world will be available first with
a built-in bisynch driver. This will allow the largest installed base of IBM
terminal equipment to be replaced with a Lisa!

NETWORK

AppleNet

Apple has developed a local area network that will play a central role in
allowing Lisa to penetrate the Office of the Future. It will allow Lisas
and all other Apple mainframe products to be linked together for fast and
efficient communication, resource sharing and common access to databases.
It has the advantage of being very low cost while maintaining Apple quality,
reliability, ease of installation, and safety. This will be available late '83.

SOFTWARE DEVELOPMENT

LisaWorkshop

The Lisa software development project required over 200 man-years of effort.
Most of that effort was toward laying the foundation for the applications and
that required extensions to Pascal and an sophisticated development environment,
in fact, one of best available on a personal computer. All of the software for
Lisa (except the very fast graphics routines) was developed in Pascal. A Lisa
Toolkit will soon be available late '83 to take advantage of the software libraries
created to make Lisa possible.

The Pascal compiles directly to 68000 machine code, and the editor has a Lisa
style interface .

Other languages available are BASIC-PLUS, COBOL (full GSA High Level), and
with FORTRAN, and Smalltalk (a research language) available later.

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"011.PICT" 411 KB 2000-03-07 dpi: 72h x 72v pix: 2980h x 3826v

Lisa

With its attractive office styling, silent operation,
and modular design, the Lisa system blends naturally
into any office environment. The system console,
housing a 12" display, two disk drives, and system
electronics, is compact enough to fit comfortably on
a desk, a typing return, or credenza. The separate
keyboard and mouse allow any user to take advantage of
the naturally harmonious relationship between eyes,
hands, and the various system components.
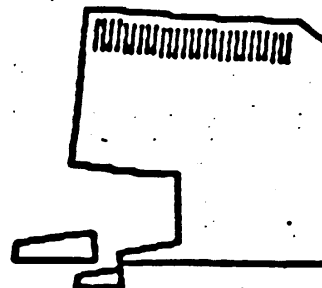
The system console contains a 12" diagonal, high resolution, low-glare display
screen. The use of a high efficiency phosphor to display black characters and
graphics on a white background, provides the most ergonomic and pleasing image
to the eye since there is no strong contrast change from the image we are used
to seeing on paper. The screen is a bit-mapped image of 364 lines of 720 dots
each. This makes possible the high resolution graphics, variable font sizes,
proportional space text, and the visual fidelity with the print capability.
Contrast is software controlled to provide a long phosphor life.

File storage is provided by two high density mini-floppy style disk drives and
a Profile 5 MB hard disk subsystem. The Profile can be used to store all system
software, applications and user documents. The internal floppy disk
storage capacity is an industry high of 860,000 characters (formatted) each.
Consistent with the overall philosophy of a truly easy to use system, the
diskettes are automatically loaded and ejected under software control in
order to ensure directories are consistent before release.

Processing is accomplished by the highly acclaimed 32-bit MC68000. The system
includes a full megabyte of memory which is controlled by a very flexible
memory management unit. Built-in diagnostics establish a high confidence
level at start-up time and the internal modularity provide easy serviceability.

All input/output functions are handled by three microprocessors operating on the
MC68000 shared bus. Serial communication capabilities are provided through two
RS-232C ports accesible on the rear panel. One port has full modem capability
including auto-dial, auto-answer. A built-in parallel port is used to interface
directly to the Profile hard disk.

The keyboard has been designed to be comfortable and efficient. In addition to
the standard typewriter layout, a numeric keypad is provided for fast data
entry. All 73 keys can be software programmed for special functions or to
provide special characters or symbols. The electronics have n-key rollover for
the speed fast typists require. Help cards are attached to the bottom (Attachment ?)

The on/off switch is even software controlled to prevent the user from turning
off the system accidentally before the documents were properlyu stored away.
This is truly user friendly; it to protect the users from themselves!

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"012.PICT" 479 KB 2000-03-13 dpi: 72h x 72v pix: 2785h x 3869v

Source: David T Craig

THE LISA CONCEPT

In order to understand what makes Lisa different from other personal computers, we need to understand what Apple did back in 1976. The personal computer market was in its infancy and the Apple II was a very clever, relatively inexpensive computer with lots of slots to use the system for anything. And that is exactly what happened. Add-on producers developed everything under the sun for the Apple II, and software was developed first for the Apple II and then maybe for others. This gave Apple a powerful leverage point.

Personal Office Systems Market

SOFTWARE TECHNOLOGY

LISA (1983)

Personal Computer Market

HARDWARE TECHNOLOGY

APPLE II (1977)
APPLE /// (1980)
EP PC (1980)
IBM PC (1981)
DEC PC (1982)

Warning !!!
New Technology
Minefield

Software Technology Creates a New Market
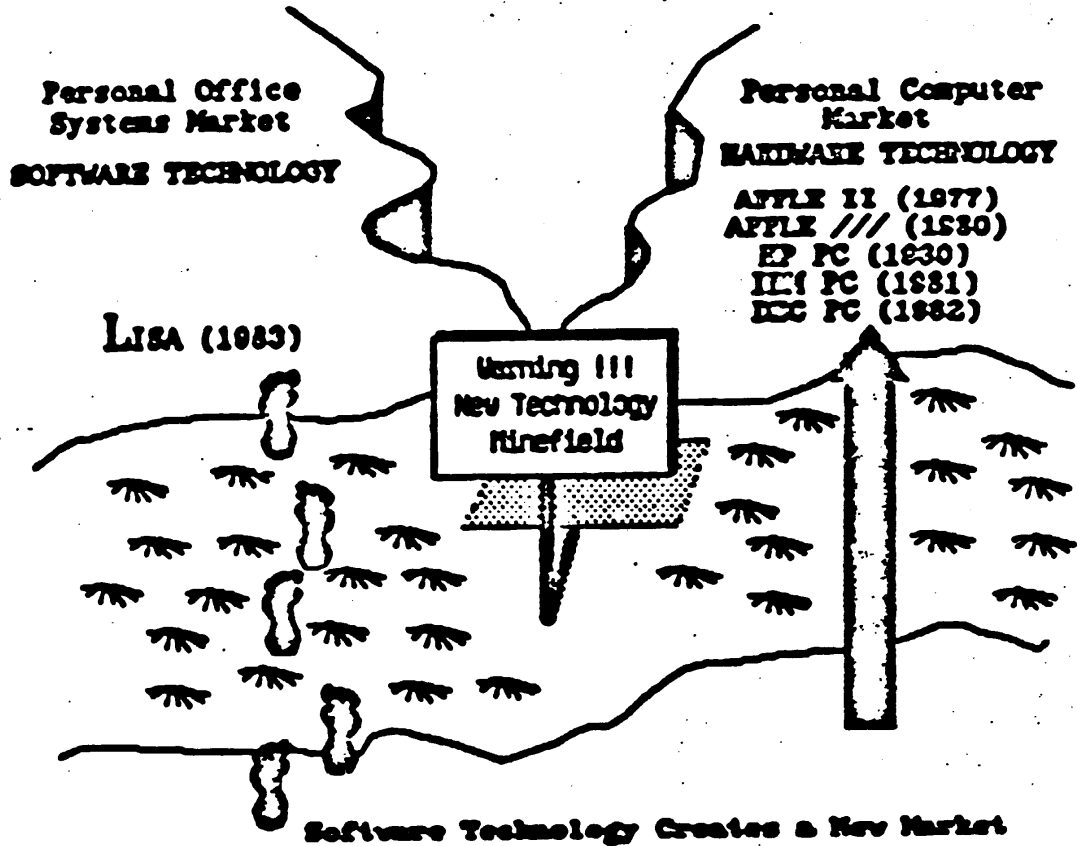
With the introduction of 'Big Blue' and other corporate heavyweights, the PC market has grown considerably. However, for Apple to continue growing at the rate we are accustomed to, we decided to go after the relatively untapped market of the information professional through personal office systems.

Although data processing has been around for decades and display word processors have been with us since 1971, the total installed base is but a few hundred thousand. If Apple were to be successful where others have failed, we needed to develop a new technology in software to create that new market.

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"013.PICT" 320 KB 2000-03-13 dpi: 72h x 72v pix: 2711h x 3902v

The Lisa Pyramid

As with all new products, it is difficult to explain why it is better than what existed before. Lisa is no different. In fact, we have found in numerous sneak previews Lisa is very difficult to describe. Unless one sees the system, it is almost impossible to appreciate what Lisa represents. One tool we have found effective in organizing the many issues is what we call the Lisa Pyramid. The next figure is a diagram that should be refered to often in this discussion.

The top part of the pyramid represents the solutions required by the target customer in an office, the information professional. The generic applications are all tools which can be used by almost anyone in an office. They are not canned vertical applications geared for a specific kind of worker like an insurance agent. They are the extension of the idea behind the original Visicalc". It was a 'rental bicycle' which extended the capabilities of the user. Visicalc" was the first computer tool to achieve even remotely 'mass market' appeal among managers and professionals. It is no longer possible for a company such as Apple to introduce a computer with no software and be successful. Even IBM with all the resources of the largest computer company in the world had to use a 'standard' operating system to take advantage of the second largest base of software. Thus, it was imperative that at introduction we supply a full complement of TOOLS. In addition it is important to encourage the development of vertical market applications by third party vendors. That requires us to open up the system as was done on the Apple II and even to provide a LisaToolkit for those vendors who will be able to leverage our development effort and use our user interface subroutines. In other words, we will be providing the equivalent of 'slots' in a software technology instead of slots that helped the Apple II. In addition, networks and datacom are necessary in order to provide access to other databases and to facilitate the communication needs of the office professional.

The middle layer of the pyramid represents the technology that had to be created in order to produce a truly 'easy to use' system. The original prototype of this kind of technology was created within Xerox at the Palo Alto Research Center (PARC). This is where the bulk of the more than 200 man-year effort went in developing Lisa. Many of the refinements and contributions of Apple are in the areas of Integration and a User Interface that is easy to learn. The one button mouse and the software to allow that was key to that accomplishment. The moment the user had to think about which button to push, the system is no longer intuitive. In addition, the user no longer has to remember commands that require conscious thought, like when we drive to work the same way every day, it becomes intuitive.

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"014.PICT" 459 KB 2000-03-13 dpi: 72h x 72v pix: 2599h x 3740v

The third cornerstone is Visual Fidelity, or what you see on the screen is exactly what you get when printed. Even though it was fairly well understood how to make that happen, what is unusual about Lisa is the exceptional quality of the Dot Matrix printer for less than $695, and being able to provide graphics from a Daisy Wheel Printer for true letter quality at $2195!

The bottom layer is the foundation for the layers above. The major design issues were all dictated by the needs of the software rather than the traditional way in which the hardware is designed and then handed to the software engineers for software conversion. The key points are that the MC68000 was the only processor that would allow us to have a strong enough foundation for the future to make this kind of investment. It is a very advanced architecture and is well suited as an applications engine. The Operating System needed to be a multi-tasking to allow multiple folders on the screen to allow for integration. The Graphics Mouse Technology is key to making the user interface possible.

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"015.PICT" 240 KB 2000-03-13 dpi: 72h x 72v pix: 2498h x 3737v

Lisa
Concept
Pyramid

Layers

Cornerstones

Lisa
Solutions

Network
AppleNet™

Generic
Applications
LisaCalc™
LisaList™
LisaProject™
LisaWrite™
LisaGraph™
LisaDraw™
Other Apps for
'Software Slots'

Datacomm
LisaTerminal™
3270

Integration
Applications
Cut & Paste
Communication
LisaToolkit
'Software Slots'

Lisa
Technology

User Interface
Pull Down Menu™
Learning Advantage™
Desktop Manager
consistent use
of graphics
point vs type

Visual Fidelity
What you see is
what you get
Graphics
Printing

Multi-Tasking
Operating System
Memory Management
Open

Lisa
Foundation

Graphics Mouse
Technology
one button Mouse
fast hi-resolution
bit-map screen
bit-map printing
multiple fonts

MC68000
32-bit architecture

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"016.PICT" 279 KB 2000-03-07 dpi: 72h x 72v pix: 3014h x 4076v

LisaCalc -- for fast, powerful analysis

Lisa SOLUTIONS

what if? →

Sales Revenue by Quarter
($,000)

Product	Q1	Q2
Soap	31	38
Can Foods	52	57
Vegtables	25	28
Dairy Foods	20	25
Frozen Foods	13	16
Magazines	12	9
Total Revenue	$153	$169

Lisa TECHNOLOGY

INTEGRATION
Cut & Paste data to LisaGraph
Cut & Paste data to Lisawrite

USER INTERFACE
Use Mouse to move to any part of the model
Generate formulas without touching the keyboard

VISUAL FIDELITY
Customize formats and protection for each cell
One step printing

Lisa FOUNDATION

GRAPHICS MOUSE TECHNOLOGY
State-of-the-art graphics printing
Multiple typestyles for presentation-quality

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3120011

"017.PICT" 261 KB 2000-03-13 dpi: 72h x 72v pix: 2901h x 3999v

LisaCalc -- to simplify complex analysis

☁ G Cells:		Value:	
☁ M Formula:			
	A		B
1			Last Quarter
2			
3	Number of Units Sold		700
4	Avg Sale Price per Unit	$	200
5	Avg Cost per Unit	$	100
6			
7	Sales Revenue	$	140,000
8	Cost of Goods Sold	$	70,000
9	Operating Expenses	$	30,000
10	PROFIT	$	40,000

- Large capacity, Model size is 255 x 255

- Easier Model Building

- Include LisaCalc data in reports

- Precision and accuracy (IEEE floating point standard)

- Quality and easy printing

31200

"018.PICT" 292 KB 2000-03-13 dpi: 72h x 72v pix: 2863h x 3931v

Source: David T Craig

LisaProject -- for planning and tracking projects

Lisa
SOLUTIONS
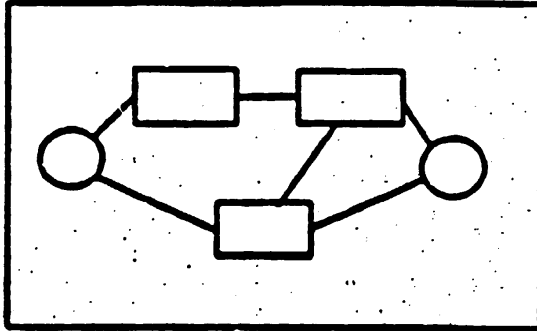
Lisa
TECHNOLOGY
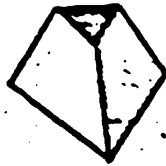
INTEGRATION
Cut & Paste data to LisaDraw

USER INTERFACE

Use Mouse to move to any part of the model
Create tasks and milestones by just drawing
with the Mouse

VISUAL FIDELITY
Charts graphical display project status
One step printing

Lisa
FOUNDATION

GRAPHICS MOUSE TECHNOLOGY
State-of-the-art graphics printing
Multiple typestyles for presentation-quality

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"019.PICT" 243 KB 2000-03-13 dpi: 72h x 72v pix: 2817h x 3992v

LisaProject
makes project management easy

Product Design
Ranger Mfg, Inc.
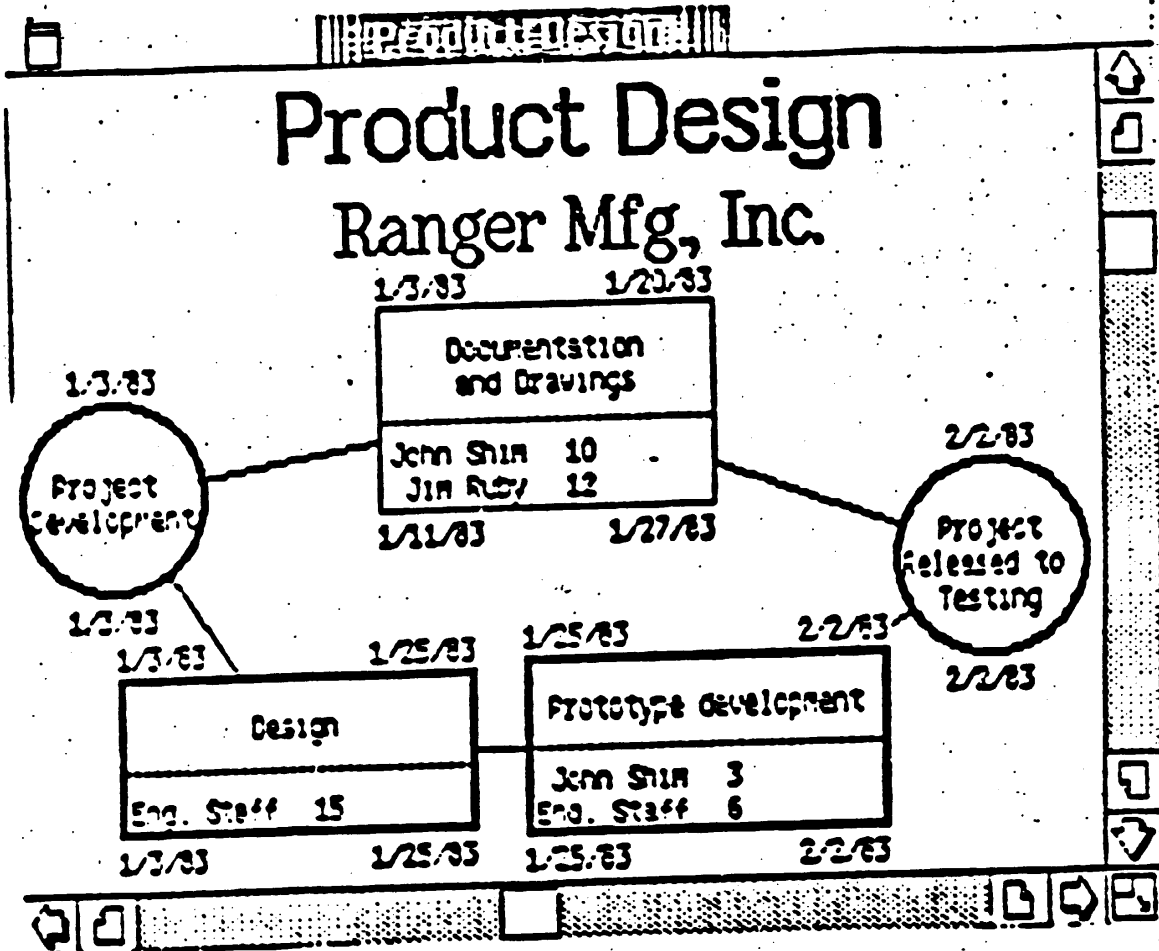
- Presents information graphically for better understanding

- Schedule, Resource, and Task charts emphasize different aspects

- Perform "what if?" analysis instantly

- Multiple typestyles for presentation-quality

- Quality and easy printing

3120

"020.PICT" 327 KB 2000-03-13 dpi: 72h x 72v pix: 2871h x 3866v

LisaList -- for managing information

Staff Reviews

Employee Name	Dept	Last review
Eastwood, Dan	31	Feb 15, 82
Ellers, Wayne	52	Feb 20, 82
Goodman, John	25	Feb 1, 82
Gregory, Fred	20	Jan 14, 82
Hillman, Liz	13	Jan 28, 82
Madison, Mary	12	Dec 15, 82
Nichols, Jack	45	Dec 18, 82

Lisa SOLUTIONS

→ Managing Valuable Information

Lisa TECHNOLOGY
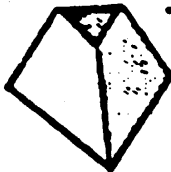
INTEGRATION
Same editing commands as LisaCalc
Cut & Paste data to LisaWrite

USER INTERFACE
Use Mouse and Menus to create and modify lists
Relational, table oriented interface

VISUAL FIDELITY
Automatic Formatting based on 1 of 8 datatypes
One step printing

Lisa FOUNDATION

GRAPHICS MOUSE TECHNOLOGY
State-of-the-art printing
Multiple typestyles for presentation-quality

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"021.PICT" 268 KB 2000-03-13 dpi: 72h x 72v pix: 2925h x 3873v

LisaList -- to simplify the management of complex information

Last Name	Position	Salary	Social Security #
Alexander	31	$29,600.00	012-45-8765
Andrews	39	$52,800.00	357-53-5475
Atkinson	31	$27,500.00	695-63-4210
Averill	31	$27,500.00	193-12-0312
Bacarak	31	$27,500.00	695-63-4210
Baker	38	$12,800.00	357-53-5475
Banks	37	$29,600.00	695-32-0145
Baron	38	$12,800.00	357-53-5475
Baron	38	$12,800.00	787-95-6404
Barrymore	29	$33,540.00	455-78-7142
Barrymore	28	$33,540.00	236-72-2031

- Add, remove or hide columns and change column order and width at anytime

- Search and Sort on any combination of columns

- 8 datatypes such as Date, or Time for automatic formatting and checking

- Up to 100 columns/list and approximately 1000 characters/row

- Maximum size list size is approximately 600K:
  (e.g. 12000 rows of 50 characters each or 6000 rows of 100 characters each)

"022.PICT" 341 KB 2000-03-13 dpi: 72h x 72v pix: 2853h x 3956v

LisaWrite — for fast, quality documents

1

Lisa Solutions

MEMORANDUM

TO: Regional Sales Managers
FROM: Dave Clark
RE: 1982 Sales Results

Excellent year! Domestic sales
beat forecast by 17%. As the
figures below show, our late
spring campaign was a great
success.

Region	Q1	Q2	Q3	Q4
East	254	245	298	318
North	99	99	123	115
West	136	159	153	190

Lisa Technology

INTEGRATION
Cut & Paste whole models from LisaCalc
Cut & Paste between memos, reports

USER INTERFACE
Use mouse to move, add, or delete text quickly
All formatting commands in menus – nothing
    to remember

VISUAL FIDELITY
Word-wrap, typestyles, page breaks
Print once - no more guessing

Lisa Foundation

GRAPHICS MOUSE TECHNOLOGY
State-of-the-art printing
Multiple fonts for headings, subheadings, etc.
Special characters for foreign languages and
    statistical applications

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3120012?

LisaWrite — to prepare quality memos and reports

MEMORANDUM

TO: Regional Sales Managers
FROM: David Clark
RE: 1982 Sales Results

Excellent year! Domestic sales were 9% above quota — and it was quota at that. As the figures below indicate, our late spring campa success, primarily due to your extraordinary coordination efforts. K work!

(Thousands)	Q1	Q2	Q3	Q4
East	$ 2,460	$ 2,497	$ 2,534	$ 2,572
South	820	832	845	857
Central	1,918	1,947	1,976	2,006

- Full editing capabilities on characters, words, paragraphs, and more

- Incredible formatting flexibility – margins, tabs, justification, etc.

- Professional quality with proportional spacing and large typestyles

- Cut & Paste tables from LisaCalc directly into reports

- Global search and replace capabilities

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"024.PICT" 292 KB 2000-03-13 dpi: 72h x 72v pix: 2932h x 4081v

LisaGraph — for fast, quality plotting

Lisa
SOLUTIONS

Actual vs. Forecast
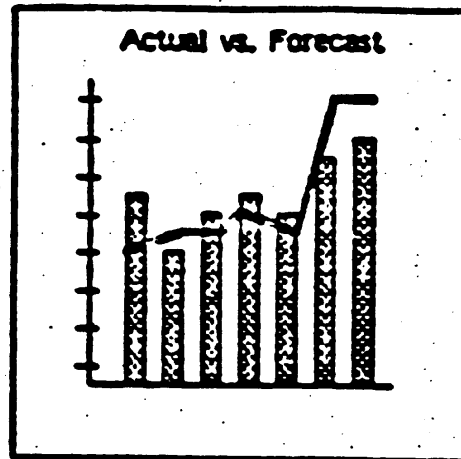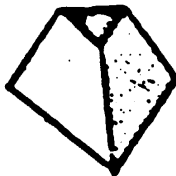
Lisa
TECHNOLOGY

INTEGRATION
Cut & Paste data from LisaCalc
Cut & Paste graph to LisaDraw

USER INTERFACE
Change graph type via mouse and menus
Graph and data viewed and edited side-by-side

VISUAL FIDELITY
Titles where you see them
Graph size same on paper and screen

Lisa
FOUNDATION

GRAPHICS MOUSE TECHNOLOGY
State-of-the-art graphics printing
Multiple fonts for presentation-quality

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LisaGraph — to simplify complex data
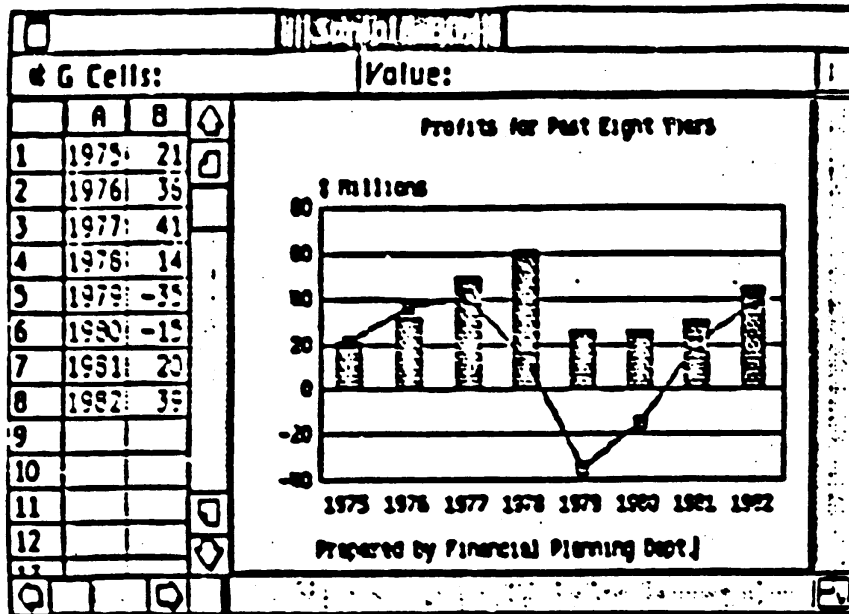
- **Bar, Line, Scatter, Pie, and Mixed Bar & Line Charts**

- **Plot data from LisaCalc quickly and easily (5 steps)**

- **Instant plotting — with both data and graph visible**

- **Cut & paste your graph to LisaDraw for total customization**

- **Large typestyles for titles to give a professional appearance**

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"026.PICT" 285 KB 2000-03-13 dpi: 72h x 72v pix: 2934h x 4112v

LisaDraw — for any kind of illustration

Lisa
SOLUTIONS
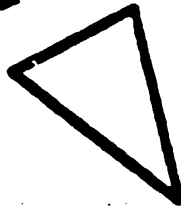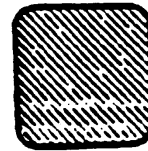
Lisa
TECHNOLOGY

INTEGRATION
  Cut & Paste charts from LisaGraph, LisaProject
  Same text editing interface as LisaWrite

USER INTERFACE
  Use mouse to draw everything
  Drawing aids to make everyone an expert!

VISUAL FIDELITY
  Dot for dot equality between screen and paper

Lisa
FOUNDATION

GRAPHICS MOUSE TECHNOLOGY
  LisaDraw is not possible without GMT
  Multiple fonts for presentation-quality
  State-of-the-art graphics printing

3120012

"027.PICT" 252 KB 2000-03-13 dpi: 72h x 72v pix: 2959h x 4026v

LisaDraw — when a picture is worth a 1000 words
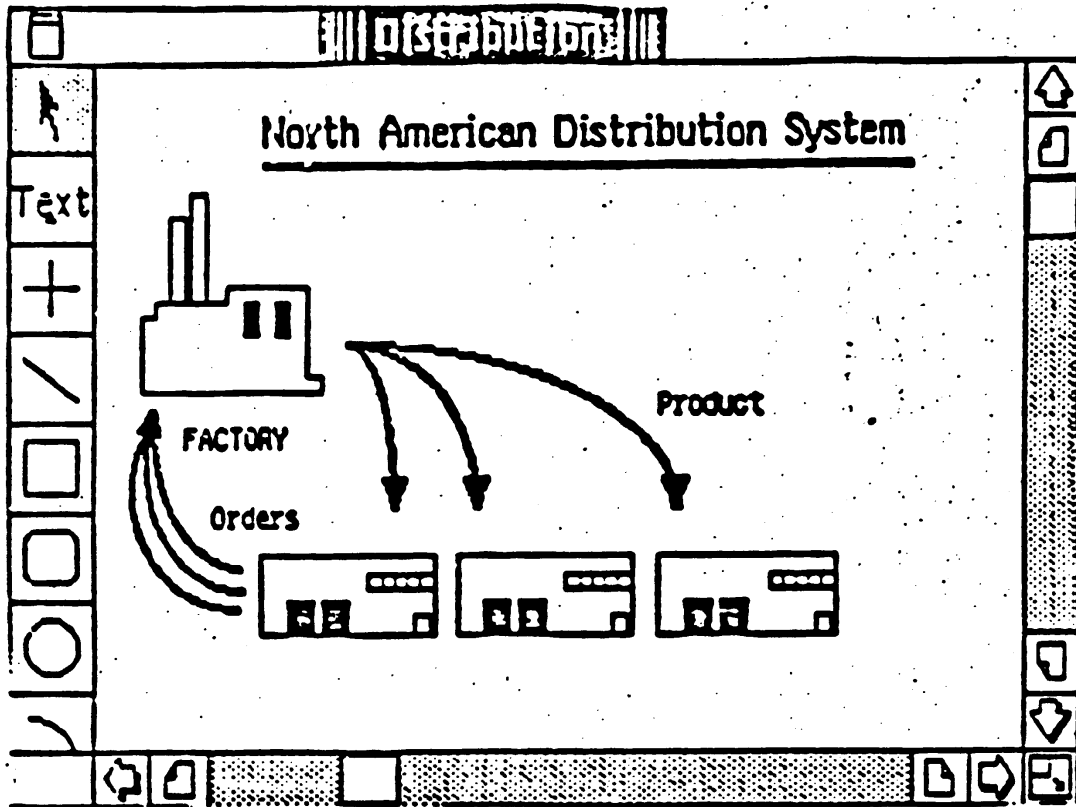
- Draw lines, rectangles, circles, freehand, arcs, polygons

- Edit graphics as easily as text — move it, stretch it, shade it

- Professional quality text as well — for mixed text and graphics

- High-resolution printing for use in reports and presentations

- Rulers, grids, and other aids to get it perfect every time

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"028.PICT" 313 KB 2000-03-13 dpi: 72h x 72v pix: 2949h x 4030v

2.2 Pricing and Profits

POSD's flagship and, in fact, sole system offering at first release will be the Lisa Office System, a bundle consisting of six integrated applications running on a powerful hardware configuration of a full 1 MB Lisa and a Profile 5MB hard disk.

To achieve the strategic objective of establishing Lisa as the system of choice in the office before competition responds and to maximize profits, the Lisa Office System's suggested retail price will be set aggresively at $9995.

From a strategic perspective the aggresive posture enables Lisa to compete favorably against lower price-performance systems such as the IBM PC with 1-2-3 or VISI-ON. Additionally, since POSD has decided not to offer a 512KB hardware box to create a buy-in price point, trade-up sales to the Lisa Office System are ruled out. The price of $9995 is required, therefore, to position Lisa as an attractive entry in the price sensitive office markets.

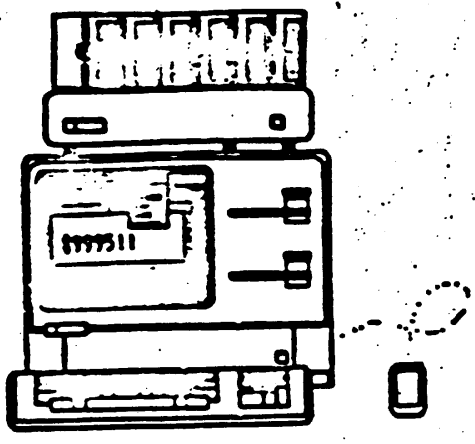The price of $9995 meets financial as well as strategic objectives. A marketing research study conducted by POSD found demand for Lisa among sneak preview participants to be extremely price sensitive. Over the price range considered, a 1% decrease in price would stimulate demand by 2.7%. It is logical to conclude that a high degree of price sensitivity among sneak participants implies an equal or even higher degree of price sensitivity among Lisa's broad based target market.

In conjunction with the market research study, we conducted an analysis of the fixed-variable nature of both divisional and corporate operating costs. It was found that in fiscal year 1983, 73% of division and corporate operating costs are fixed.

POSD COST STRUCTURE
OPERATING EXPENSE SUMMARY
Q3 & Q4 FY 83

ESTIMATED POSD REVENUE $52.8 MILLION

	TOTAL	FIXED ($M)	VARIABLE ($M)
OTHER COS	.22	— (0%)	.22 (100%)
CORPORATE OPERATING EXPENSES	16.88	11.80 (70%)	5.08 (30%)
POSD OPERATING EXPENSES	11.92	9.51 (80%)	2.41 (20%)
TOTAL EXPENSES	29.02	21.31 (73%)	7.71 (27%)

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"029.PICT" 376 KB 2000-03-13 dpi: 72h x 72v pix: 2746h x 3865v

The combination of price sensitive demand and a high proportion of fixed costs, argues convincingly for aggresive pricing. The price of $9995, just below the psychological threshold price point of $10,000, maximizes POSD's return on investment. A higher price would result in a drastic decline in demand, thus raising unit costs and lowering profitability. A lower price, on the other hand, would not stimulate demand sufficiently to offset the lower price realization.

As the following chart illustrates, a price of $9995 will yield a pretax return on sales of 20% by fiscal year 1984. Return on sales performance improves steadily after the first six months of shipment as the Lisa Office System with an external Profile is replaced by the Lisa "1.5" with an integral winchester disk.

ESTIMATED LISA PROFITABILITY
PRETAX RETURN ON SALES

%ROS

25	
20	
15	
10	
5	
0	
-5	
-10	

Q3'83   Q4'83   Q1'84   Q2'84   Q3'84   Q4'84

FISCAL QUARTERS
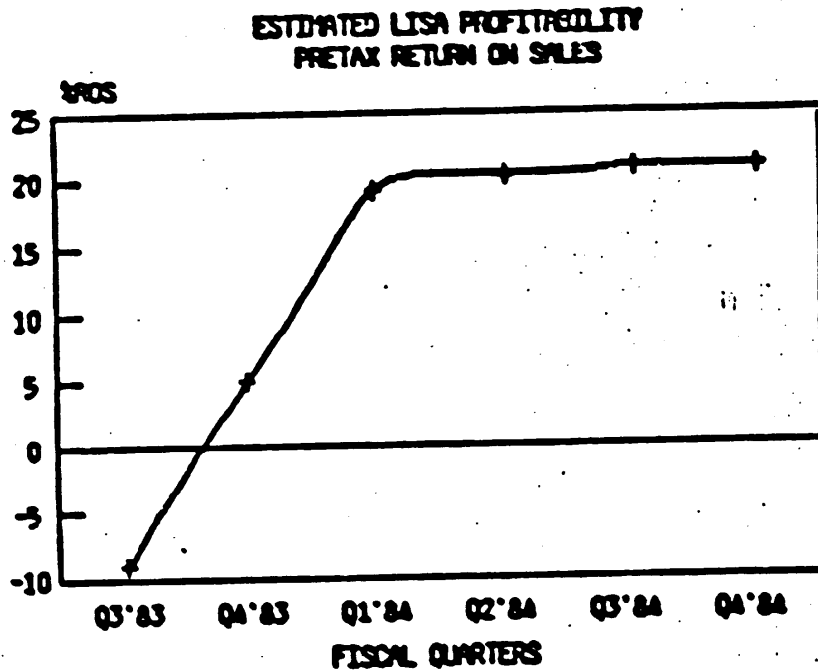
The improvements in pretax ROS can also be attributed to a steady decline in standard costs as a function of both volume and time as well as a spreading of operating costs over a growing volume of sales.

Attachment A includes costs, sales mix assumptions and discounts by channel.

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2.3 Third Party Software Plan

Lisa's potential as a target machine for Value Added Resellers (VARs), 3rd Party Software Houses, and Volume End Users (VEUs) is tremendous. Each of opportunities as large as the office market, as described in the POS VAR Business Plan (3/19/82).

Prior to Lisa's introduction, PCS will have a limited number of machines and support capabilities for outside organizations. We will use these resources to "seed" machines in strategically important areas. The extent of this program will be decided after POS determines what we can offer outside firms in the way of development environments (monitor, Lisa OS, UNIX, M/PM) as well as Lisa software components (Application Window, OEM Tool Kit).

The distinction between VARs, 3rd Party Software, and VEUs is an important one. VARs are those organizations who buy machines from Apple, add product value in software and/or hardware, and then resell the machines. Typically they address a market that complements our markets. Prime VAR application areas for Lisa include Engineering Workstations, CAD/CAM, Programmer Workstations, Typesetting Systems, Decision Support Systems, and Small Business Systems.

3rd Party Software Houses add product value but do not sell machines. Typically they either sell their product to Apple who in turn markets it, or they sell their product directly into existing channels. Early potential seeds in this area would be for key system software (BASIC, COBOL, Datacom, Unix, M/PM) or for key applications to complement our product line (PERT, Small Business Software, relational Data Bases, Electronic Mail, advanced financial packages).

VEUs are customers who both buy in substantial quantity and who add their own software for internal use. Examples are banks who write software for branch offices, accounting firms who write their own auditing software, and engineering companies that write their internal applications.

In each of these areas, the key will be leverage. Given limited resources, we will pick those situations which will provide the greatest payoff in the long term.

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3. Marketing Strategy

3.1   Market Segment Analysis

In the U.S. alone, there are than a million secretaries, 11 million professionals. The productivity of these individuals has become a major concern: $300 billion was spent in 1980 on white collar wages and benefits in the U.S. alone. As "the Economist" described in its December 27, 1980 issue: "Booz Allen (the noted management consulting firm) believes office productivity in America probably reached its peak in 1978 and has been falling since." Apple has a major opportunity to increase the effectiveness of typical office workers through personal office systems.
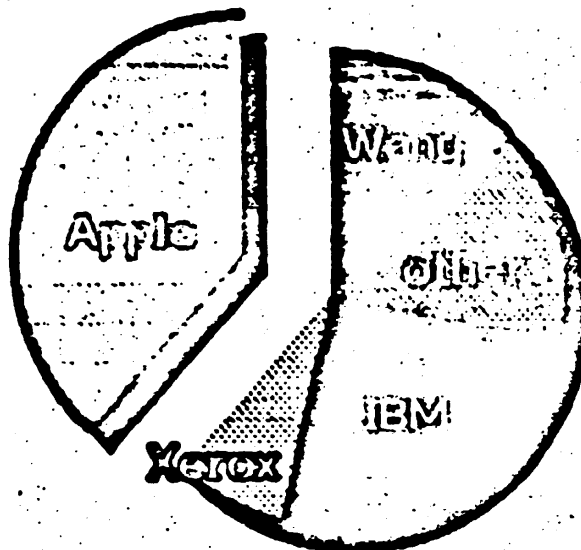
Although data processing has been around for decades and display word processors have been with us since 1971, the market for personal office systems is relatively untapped. The total installed base of standalone word processors in the U.S. is but a few hundred thousand, and the Yankee Group research firm claims that in the U.S. there is only one computer terminal for every 48 employees (in Europe it is less than one per 100).

The so-called "Office of the Future" firms have also succeeded in alienating a large number of office workers. The National Association of Office Workers' report, "Race Against Time: Automation of the Office" (April 1979) claimed that office automation (i.e., WP) would turn offices into assembly lines--leading to degraded, deskilled, and devalued jobs, unemployment, and occupational stress and danger. The report claimed that IBM and other vendors encourage customers to rearrange their offices, instituting typing pools and other "innovations," primarily because the equipment has been considered too expensive for a typical secretary. As "the Economist" reports:

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"032.PICT" 370 KB 2000-03-13 dpi: 72h x 72v pix: 2686h x 3828v

"None of the electronic office equipment manufacturers has yet succeeded in making the devices sufficiently 'friendly' so that typical office workers can use them easily and well . . . Much of the electronic office machinery coming on the market requires users to be familiar with special codes and certain computer techniques . . . Though great strides have indeed been made to crank out more paper, few equipment suppliers have begun to think about trying to improve the quality of the information printed on it . . ."

To date, vendors who bill themselves as selling "office automation" or "office systems" are quickly buried by the excessive demands and expectations of Fortune 500 firms, who are clearly the Venus Flytraps of the potential customer base. No single vendor is even close to offering the total office system that the large firms have come to believe they demand. Meanwhile, by virtue of NOT being billed as an "office system," the personal computer can be seen as a natural and beneficial experience for the individual professional.

The PCS marketing strategy has always called for a mass marketing approach to a broad office worker audience. However, while the strategy calls for a very "horizontal sell" to the widest audience possible, certain filters are workable in qualifying prospects as good leads.

It is estimated that there are 32 million office workers in the United States:

    1 million typists
    4 million secretaries
    11 million managers/supervisors
    16 million professional/technical

The worldwide numbers are at least double those of the U.S., although there is a relatively higher proportion of small firms.

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"033.PICT" 282 KB 2000-03-13 dpi: 72h x 72v pix: 2025h x 3767v

Lisa is positioned as a solution for "all" office workers, not just one segment such as secretaries or professionals. It is expected that all individuals in a business unit, such as a department, will need the same capabilities to share files, etc. Lisa is simple enough so that "first time" computer users are not intimidated, but powerful enough so that a computer literate individual does not feel hampered. Virtually all users may become sophisticated at least on some applications rapidly.

An important strategy element for us will be selling to those individual managers, professionals, and secretaries in an organization who are perceived as the leaders (in either personal power or position). As these individuals promote Lisa internally, others will surely demand the product. This phenomenon is referred to as "coming out of the woodwork" syndrome by the Office Automation manager at Lincoln National Life Insurance Company. Once word spreads about an exciting product, people everywhere begin demanding one and looking for means to justify its acquisition. This phenomenon is becoming routine for Apple IIs and ///s in businesses, and Lisa should also benefit from it.

As soon as small business software is available, Lisa is perfectly positioned to be a major force in the small business market. Reasons for this power include our bottom-up sales dominance, attractiveness as a standalone system (and not as part of a large one), and the shorter selling cycles in the small firms.

All indications point to Lisa's being perfectly positioned for the office market: speakers in seminars, writers in the trade press, and corporate individuals who have seen Lisa specify that a good system must have word processing, graphics, visicalc-type capabilities, and data bases. And they must be integrated! Only Lisa currently fulfills these requirements.

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Lisa Target Market

Any *Knowledge Worker* or *Support Staff Member* who considers *Anaylsis* or *Information Management* an integral part of his/her job.

The *Office Environment* may be in a large company, a small company, or a home.

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Lisa Market Size (U.S.)

Number of Knowledge Workers

SMALL
COMPANIES
(<$5M)

51%

9%

LARGE
COMPANIES
(>$120M)

MEDIUM
COMPANIES
($5M-$120)
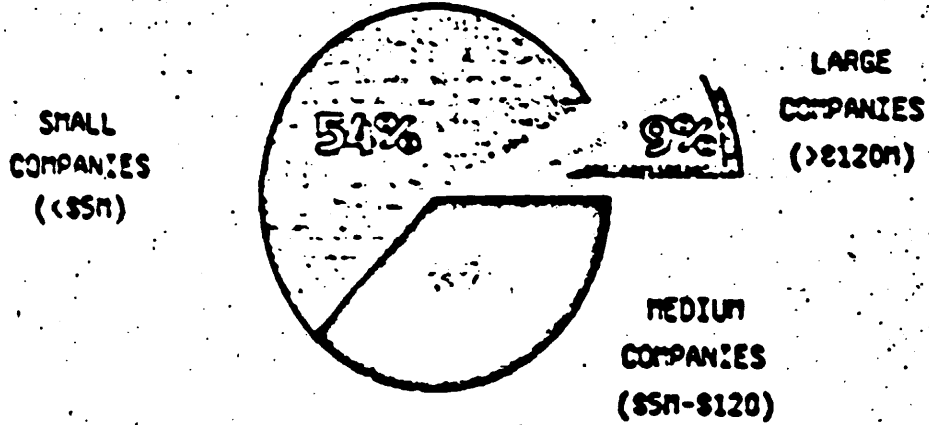
32.4 Million Managers and Professionals

Anticipated Distribution of Lisa Sales
(12 Months)

SMALL
COMPANIES
(<$5M)

15%

35%

LARGE
COMPANIES
(>$120M)

51%

MEDIUM
COMPANIES
($5M-$120)
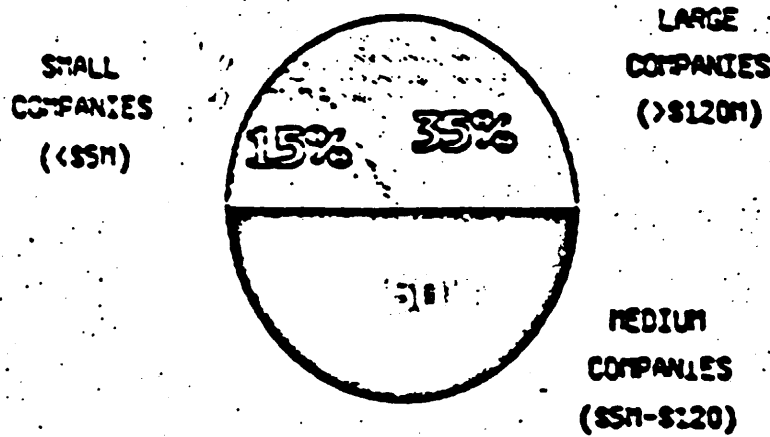
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"036.PICT" 172 KB 2000-03-13 dpi: 72h x 72v pix: 1994h x 3639v

3.2 Lisa Positioning

Apple Computer, the recognized leader in the personal
computer industry, has pioneered quality, innovative,
affordable, and usable computers for the individual.
In the office, the emphasis has been on improving the way
individual professionals make decisions, analyze and
manage information, and communicate with others more
effectively.

Apple's newest personal computer for the office, Lisa, is a
revolutionary management decision support tool. State-of-
the-art hardware and revolutionary software, which represents
a $50M and 200 person-year investment, offer an unparalled user
interface and integration of fundamental management
applications. Lisa Technology", built on extensive use of graphics,
consistent user interface, and a pointing device (called a "mouse")
emulates the way an individual works in the office. The
integration of data between applications such as word
processing, data management, spreadsheet, graphics, project
scheduling, communications, and additional tools that will
be supplied by Apple and independent software vendors set
the standard for new office systems. Lisa is the first in
a new generation of personal computers from Apple for
the office.

The Apple IIe, with its new features and capabilities,
enhances the Apple II's position as the most cost-effective
general purpose personal computer in the office.

The Apple ///, the mid-range of Apple's product line, is an
extension of the Apple IIe in capacity, expandability, color
graphics, and development tools. The Apple /// is
particularly suited for small business applications.

Data communications and local area networks are fundamental
for individuals in the office to create, share, and use
information. Apple will introduce data communication
products and Applenet, a local area network product,
during 1983.

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3.3 Introduction Plan

Creating the Personal Office System market poses some major challenges for Apple. An overview of the introduction strategy for this market is provided below, followed by more details in the following sections.

ANNOUNCEMENT/PUBLIC RELATIONS

A concurrent announcement of Lisa and IIe will be made at the Stockholder's meeting on January 19, 1983. Shipments of Lisa will begin in late spring 1983. Lisa will be Apple's first major new product line announcement since the Apple ///, so we want to make a big splash with public relations and advertising.

Since December 1982, the most prestigious trade and business publications have visited PCS Division in preparation for articles/cover stories. Covers are planned for *Byte, Personal Computing, Popular Computing* and *Computer Dealer,* and possibly one or more of the major business publications. Major industry consultants were brought in for sneaks in December; others will be given priority at the OAC Trade Show in Philadephia in February. *Seybold Report* will do an entire special issue in February on Lisa.

The Apple announcement ad, "Evolution/Revolution" will run in the *Wall Street Journal* 1/21 and 1/24.

SALES CHANNELS

At announcement, two channels of distribution will sell Lisa- a subset of Apple's existing dealer base and Apple National Account Execs.

Personal Office System Dealer

Sneaks for approximately 150 of the top Apple dealers were held in Cupertino in November. From this group, approximately 135 dealers (to be known as Personal Office System Dealers) will be selected as "Lisa Information Center" dealers to be in place at announcement time.

Apple is issuing a new Dealer Master Agreement around March 1, 1983, to be signed by April 1; the Lisa product line will be an addendum to this contract. As soon as the "Information Center" dealers sign the master agreement with the Lisa addendum, they will become authorized Personal Office System Dealers. Each of these dealers must also submit a business plan to the regional managers by January 21, 1983.

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National Account Execs

Approximately 60 National Account Executives will be in place at introduction; they will market directly to the Fortune 1000 accounts.

SNEAK PREVIEWS

Approximately 70 large companies, 15 consultants, and members of the key trade and business press have seen Sneak previews of Lisa. A special room was built in the POS Division to accommodate these presentations, and the materials used in these presentations form the basis of the presentation slides being provided to the field. The Sneaks proved extremely successful and provided valuable feedback from customers with regard to the product itself, position, service and support. See Attachment K for a list of all Sneak attendees.

SEMINARS

Teams from POS/Sales will visit 16 cities in the U.S. and 3 in Canada March 7 through April 7 to present Lisa seminars. The purpose of this program is to introduce Lisa to as many accounts as possible in this timeframe and to provide instruction to the field on how to give a Lisa seminar.

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"039.PICT" 207 KB 2000-03-13 dpi: 72h x 72v pix: 2287h x 3737v

|

3.4 MARKETING COMMUNICATIONS

SNEAK PREVIEWS

Sneak Previews addressed the need to communicate the Lisa strategy to selected larger customers well before introduction. The Sneaks began in late May and will continue until announcement on January 19. After that, Headquarters Sales will take over corporate visits. Approximately 70 companies attended the previews; sometimes they were scheduled for every day in a week. In addition, the presentation skills of the members of the POS Division were honed, and the materials developed for these presentations will be sent to the field via slides for their own presentations to accounts/seminars.

PUBLIC RELATIONS

Public Relations will manage the release of information in order to properly position Lisa. Two groups of leading industry consultants were given Sneak previews; these individuals are influential in providing information to trade and business publications, as well as speaking at conferences and making product recommendations to the marketplace.

The following individuals attended Sneaks:

Consultants

John Murphy, Advanced Office Concepts (Amy Wohl's company)

Esther Dyson, Rosen Research

Joe Ehardt, Seybold Reports

Jonathan Seybold, Seybold Reports

Richard Dalton, Open Systems

Portia Isaacson, Future Computing

Ben Wiseman and Kim Lin, Dataquest

Ben Rosen, Rosen Reports

Molly Upton, International Data Corporation

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Publications

Electronics Magazine
Computer Dealer°
Wall Street Journal
Infoworld
Newsweek
Business Week
Byte
Popular Computing
Personal Computing
Chicago Tribune
Peninsula Times Tribune
San Francisco Examiner

In addition, Steve Jobs, John Couch, and Paul Dali will make a press tour January 10 & 11 to visit Forbes, Fortune, Wall Street Journal, New York Times, Boston Globe, Business Week, Newsweek and Time for articles to break shortly after announcement.

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MERCHANDISING

The challenge of merchandising will be to "put Lisa's sizzle on paper." And on video. And on demo.

The merchandising must, like Lisa, be integrated. Brochures, Data Sheets, in-store promotions, software packaging and other collateral material will appear as a family (for example, like Visicorp material). Like Lisa, the materials will be graphic and experiential.

No only will the "look" be integrated, but also the message. To emphasize the Lisa positioning, the message will focus on human potential, not productivity or office automation.

Demos and video will bring the experience of Lisa closer to the user. To that end, demos will not be limited to simply viewing: they will allow the user to experience Lisa by using it to produce results.

ADVERTISING

Lisa advertising will be limited to short-lead time media (newspaper and radio) at announcement. PR is expected to carry much of the early marketing communications load. Major advertising will start in March to coincide with ship date. Major advertising would also be used to promote the Roadshow.

The advertising message will focus on "human potential," through better decisions, higher work quality, and better communication of information.

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SEMINARS

Professional seminars are expected to be the major vehicle for presenting Lisa to accounts. In order to introduce Lisa quickly after introduction to major accounts, as well as train the field in giving professional seminars, POS and Sales will send teams to 16 U.S. cities and 3 Canadian cities in March to present the first round of Lisa seminars. (See attachments for a list of the cities.) Each team will be in each city two days:

Day 1

8 - 10 a.m.   Seminar to local Personal Office System dealers. (see attachment for agenda). This seminar will "show by example" how to give a Lisa presentation. It will be exactly the same presentation as given to Apple National Account Rep customers later in the day.

1 - 3 p.m.   Seminar to Apple National Account Rep customers.

3:30 - 5:30   Seminar to Apple National Account Rep customers.

Day 2

9 - 12   Visit National Account Rep customer accounts

1 - 5   Visit local Personal Office System dealers

A comprehensive seminar package will be sent to the field in early March.

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TRADE SHOWS

Both trade shows and seminars are believed to be the most effective method of introducing Lisa to customers. Trade shows should provide greater opportunity to USE Lisa. In addition to the booth space, a suite will also be obtained for presentations to selected customers attending the show(s). The first show Lisa will appear is a small regional show, Office Automation Expo, in San Francisco. The first major show after announcement is the AFIPS Office Automation Show in Philadelphia. 50 hands-on machines will be set up at the Hilton Hotel (next to the Convention Center).

1/25/82	Infosystems Office Automation Expo, San Francisco
2/21/83	AFIPS Office Automation Conference, Philadelphia
5/16/83	NCC, Anaheim
6/83	IWP Syntopicon, San Francisco

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3.5 Competitive Analysis

Stiff competition will come from IBM, Xerox, Wang, Datapoint, and DEC. These firms all have (or will have) versatile workstation products that can be produced in high volumes. In addition they all draw upon substantial sales, service, and financial resources.

With the IBM 5150, a solid personal computer, IBM is rapidly moving to secure the personal computing business of its business clientele. However, as Ben Rosen and others have pointed out, the 5150 offers comparatively little in the way of innovation. Nevertheless, even though it cannot compare to Lisa technically, it is selling extremely well for now—and without a strong competitive response from Apple until Lisa debuts. IBM is clearly attempting to lock-up corporate customers who want personal computing. IBM has had the resources to do Lisa-ish projects fifty times over. Their "wait and see" tradition probably indicates that Lisa will give Apple a product capability edge throughout most of 1984.

Xerox has a strong brand image in the office market, excellent relations with Fortune 500-sized firms, 8000 salespeople, a large field sales organization, and an image of technical leadership during to its frontrunning Star and Ethernet announcements. In addition, Xerox is beginning to take Apple head-on by selling the new 820 through computer stores. However, the 820 has done poorly and now appears to be losing dealer "share of mind." In addition, Ethernet's survivability as a standard has repeatedly been challenged, and the company to date has only 700 sites where customers have installed Stars. A final nail in the coffin is the high price of a useful Xerox network, since the products do not work well as standalone systems like Lisa: the average system price of the 70 Star installations is $270,000. Since Xerox lacks a low-cost, Star-like machine that is genuinely standalone, Star should help educate the market and contribute to Lisa sales as customers recognize that Lisa is the affordable approach.

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In addition to Wang, Datapoint, DEC, and the other major office workstation vendors, a plethora of 16-bit CPU, bitmap display office workstation products have leapt into the fray in the last year. The battle is shaping up between 8086-family machines and those using the Motorola MC68000; Convergent Technologies (8086) has already established the early lead among OEM suppliers by signing agreements with Savin, Rolm, Thomson-CSF, Burroughs, and NCR. IBM has helped to legitimize Convergent by choosing the 8086 and 8088 for the displaywriter and 5150.

Time is of the essence. The office workstation market right now is somewhat like the personal computer market in 1977: poised for tremendous growth that Apple can capture and gain a strong foothold within - if we can move quickly to introduce our product into the market while the window is open.

Complete competitive analysis by company, are included as Attachment D.

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4 Support Strategy

4.1 Product Testing

Product testing verifies that the product meets specifications: functionality, reliability, ease of use. In addition, it verifies that the marketing support system—manuals, hotline and service—is also functional and reliable. Towards these ends, we have instituted five related tests:
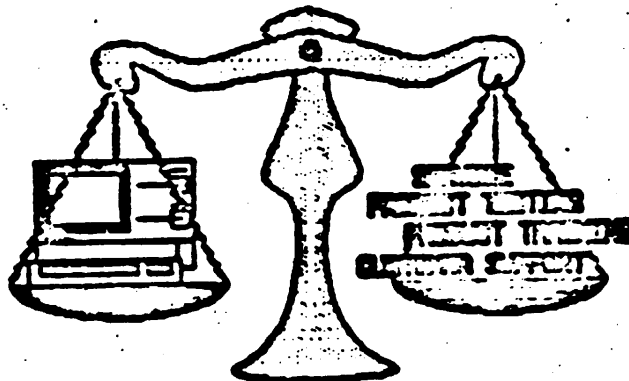
1. **User Testing**

   These tests assure that the product is easy to use and that the manuals, computer-assisted-instruction, and other instructional devices indeed help the user become skillful in the shortest time possible. POS Training supports the rest of POS in setting up and interpreting the results of user tests.

2. **Software Testing**

   These tests assure that the software conforms to specifications and is robust enough to perform satisfactorily under adverse conditions and configurations. NPR will perform conformance tests, performance measurements and system integration tests.

3. **Hardware Testing**

   Operations have performed design maturity tests to assure that the hardware can perform under physical stress. In addition, they will test for reliability, performing Mean Time Between Failures tests.

4. **Alpha Testing**

   This test, which occurs after NPR has finished its battery of tests, is a trial run of the software and training at several in-house sites unconnected with the development of Lisa. Sites will be monitored for learning rate and bugs. Product Support will answer the hotline, but the Distribution, Service and Support Division, responsible for the "real" customer hotline, will use Alpha to learn about the kinds and quantities of calls we can expect at first release. Test sites will be supported by POS.

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5. Beta Testing (Early Release Program)

Beta is a full dress rehearsal of the product and its support system. Approximately 125 Lisas will be placed in customers' businesses. They will learn to use Lisa in the same way the majority of our end-users will. They will be supported by our 800 hotline, and their machines will be serviced by RCA.

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4.2 Training

Training's objective is to provide knowledge about the product efficiently and cost-effectively to all of Lisa's major users and supporters. Training has 11 major audiences: end users, Apple sales people, manufacturers' reps sales, dealer sales, Customer Support Specialists (who answer the hotline), Sales Support Analysts, Area/Regional trainers, trainers in manufacturers' reps, trainers in large accounts, Technical Support Specialists, and value-added retailers. Every group but the last will receive its introduction to Lisa through a combination of Computer Assisted Instruction and print. This orientation will allow all users to become minimally competent on an application in thirty minutes. Training materials will be thoroughly user-tested to assure quick and lasting learning.

Wrapped around this introduction will be other materials to help each group do its own special job. While POS Training has responsibility for the orientation materials, other groups will often provide information needed for the wrap-around materials.

Dealers will not be certified to sell Lisa unless they maintain trained salespeople and a trained technician on staff. Dealers will continue to be supported in their technical questions by trained Technical Support Specialists in the regional support offices.
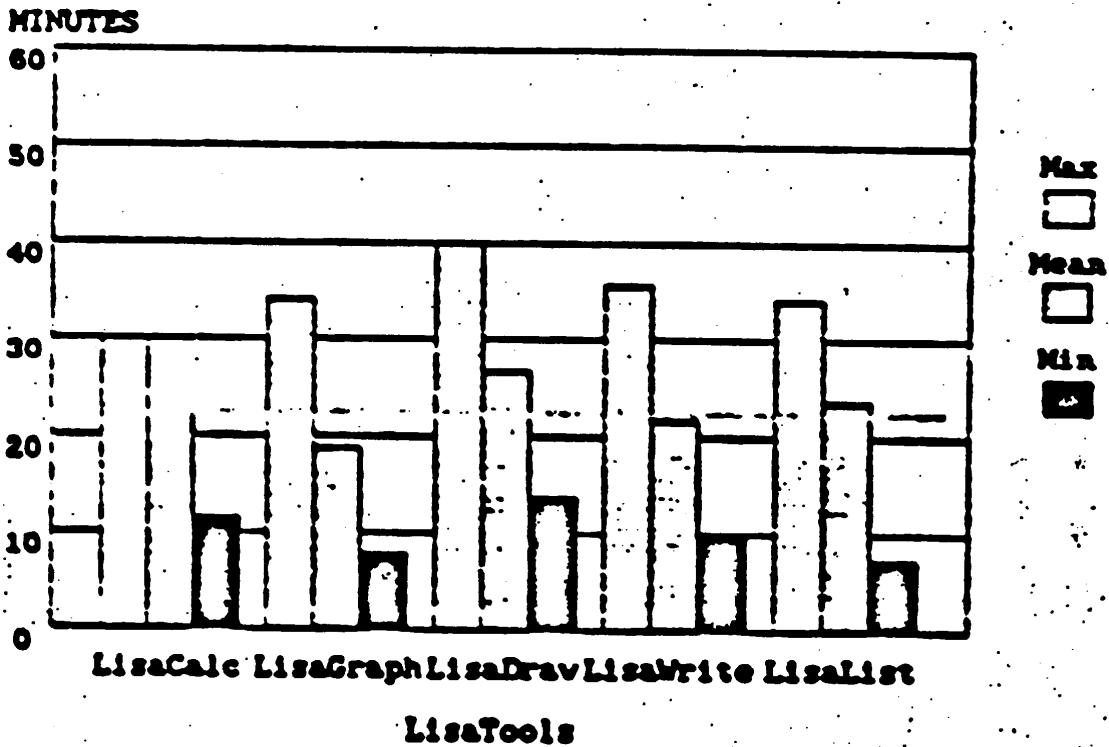
POS Product Support is responsible for the training of value-added retailers. POS Training will help Product Support develop training materials for the third party vendors.

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Lisa helps you to be productive...

easily and quickly

Completion times for 'Getting Started'

MINUTES

Legend: Max, Mean, Min

X-axis: LisaCalc LisaGraph LisaDraw LisaWrite LisaList

LisaTools

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4.3 Service

The Lisa Service program addresses the special requirements of the office market. The goal is to provide an easily managed range of service options that cover the demands of a variety of Lisa customers. The options are:

1. **On Site Service Contracts**

   RCA will provide 4-hour response to on-site service calls under a yearly service contract. RCA will be dispatched by the Telephone Support group.

2. **Carry-in Service**

   The customer will bring the defective product to an authorized Level 1 dealer for repair. The standard warranty will cover parts and labor for 90 days. Those purchasing AppleCare dealer service contracts may have their Lisas serviced while they wait.

3. **Factory Authorized Level 1 and 2**

   Customers may elect to have their own repair facility on-site. Level 1 training will be bundled with the cost of the spares.

Value Added Retailers and Original Equipment Manufacturers may choose which service program best fits their needs from the plans above.

A chart of the available hardware maintenance and software support options is included as Attachment L.

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4.4 Customer Support

The Lisa customer requires prompt, professional support. On-site support, however, is contrary to POS's approach. We choose instead to offer high-quality, cost-effective, support over the telephone. A centralized customer telephone support facility—either at corporate or in a local regional office—will be necessary in Fiscal Year 1963, but our eventual plan is to have support lines in all the regions, accessed through a single, widely publicized 800 number.

The support lines will be staffed by intelligent, empathetic people, who are good at solving problems and at teaching over the telephone. Most Customer Support Specialists will not be technical whizzes, though every support line center will be staffed with at least one technically competent professional. At least 90 days of the support line service will be bundled with Lisa. After the first ninety days customers can buy access to the support lines by purchasing coupons that allow them one answer to one question.

Users may report bugs to support line operations. They will not, of course, be charged for bug reports. If the bug is known, they will be given a workaround or a restriction. If it is not known, we will verify it and call back with a workaround.

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Comprehensive Customer Support Program

Software Maintenance and Support

- Answers to questions about the applications
- Answers to questions about languages
- Software and manual updates
- Response to bug reports

## Hardware Maintenance and Support (Joint Apple and RCA Program)

- Installation
- On-site maintenance (4-hour response)
- AppleCare carry-in maintenance

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6. Risks and Open Issues

Most of the significant open issues presented in the first PIP have been resolved due to significant contributions and hard work by several groups at Apple.
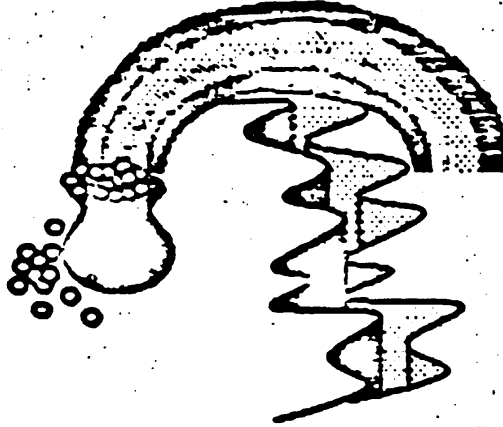
The key risk at this point is, as with any project of this size, whether the software will be complete on the target date. The indicators are that it will. For the last several months we have been tracking the software development efforts closely. The difference between the target date and actual completion of a milestone has been converging each time. Measurable results are also indicated by the rate of bugs reported versus bugs fixed. Thus, we are confident that we can maintain the schedule. The entire POS division is committed to delivery of a quality product. We are also all aware that the market window is also closing, so a total commitment is required to make it happen.

One technical risk which has been resolved is that of fonts and printing. Product marketing and the Software Print Shop have done an excellent job of getting printing on schedule for first release. In addition, they have provided very innovative capabilities, such as high-quality graphics on the LQP.

We have also identified resources to create software to duplicate and verify our production disks.
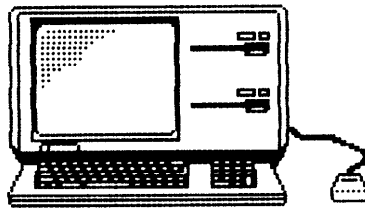
KEY BUSINESS RISKS

1. We are limited in the amount and timing of software we can offer to outside developers (OEMs, VARs, third party). First release Lisa office applications have consumed most of our engineering resources.

   We face a risk in introducing Lisa with almost no software other than what we are providing. We know that this was a significant problem in the Apple /// introduction. This issue has been discussed in the VAR Business Plan (3/25/82) and we are now doing our best to play catch-up in seeding third-party houses, as well as building software development tools.

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| Source: David T Craig | Page 0055 of 0056 |

2. We may confuse the customer about product line compatibility between Lisa and Mac.

3. An important issue is deciding how many field and corporate "services" we can and should provide for key customers. These include such activities as the Font Center, datacom/network installation and support, pre- and post-sale and user applications support, and specialized requests.

4. Competition. The later we are to market, the more we suffer from insufficient functionality and the lack of a complete system solution, e.g., that provided by full network/datacom capability, total integration.

5. Above all, this introduction is a massive task that will require the full attention of many of the best people and resources of Apple.

Apple Lisa Personal Computer
1983 - 1985

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