SCRIPT
for
VIDEO PRODUCTION

of

XEROX DOCUMENTER:

COMPETITIVE VIDEO PRESENTATION

XEROX DOCUMENTER:

A DESK-TOP PUBLISHING SYSTEM

FOURTH DRAFT
June 16, l986

JOHN-MICHAEL BATTAGLIA
GALILEO II PRODUCTIONS
17 Los Altos Avenue
Los Altos, CA. 94022
(415) 948-6645

Background information on this production.

This video was designed to be one segment of a two-day sales training course presented to the Xerox sales force on the state of the desktop publishing marketplace, circa 1986.

Xerox's entry in the marketplace was the Documenter, a powerful workstation equipped with equally dazzling software that was adapted from another Xerox product to appeal to the burgeoning mass market for desktop publishing.

The major competition at the time was PageMaker on the Macintosh, still in its infancy in the development cycle, but becoming increasingly popular -- much to Xerox's alarm.

While other segments of the two-day seminar concentrated on different aspects of sales training, this video focused on highlighting the strengths and weaknesses of Xerox's Documenter vis-a-vis the competition.

The overall intention was to give the Xerox sales force a strategy for selling the features and benefits of the Documenter, while being fully aware of what Xerox was up against from the competition.

The overall structure of the video -- which runs a total of 90 minutes -- is a 15-minute introductory overview of key features, followed by several segments showing the Documenter in a detailed, head-to-head comparison with PageMaker on the Macintosh on certain key functions.

The enclosed writing sample contains the narration for the introductory section only. An excerpt of how this introductory material was visualized is included on my VHS portfolio tape.

I wrote, produced, and directed all segments of the video.

STRUCTURAL OUTLINE OF COMPETITIVE VIDEO

OPENING Segment:

The narrator/host gives an overview of the competitive spectrum of products in desk top publishing. (15:00)

BREAK

Segment #1:
USER INTERFACE and TABLES
on PAGEMAKER
and on DOCUMENTER

...narrator/host introduces Carl as an expert, independent consultant, i.e., an authority

Carl shows PageMaker on Macintosh
overview, ease-of-use graphics strength of pagemaker doing a table...weakness of MacDraw/PageMaker combination revealed
Carl shows table-making on Documenter (far superior)

BREAK/EXERCISE:
class creates a table on Documenter

Segment #2:
EDITING TEXT and GRAPHICS
on PAGEMAKER
and on DOCUMENTER

...logistics of using PageMaker are glimpsed through the cumbersome process of editing text and graphics
...Carl shows weak editing capabilities of PageMaker...inabililty to do search and replace operation...the highly involved process of shading a graphic, making a change to a graphics element in a document

...Carl shows direct contrast with how Documenter can do search and replace through a longer document; we edit a graphic, make some changes to a graphic

BREAK/EXERCISE:

class does a search and replace text exercise
class does a modify graphic exercise

Segment #3:
EQUATIONS in PAGEMAKER
and in DOCUMENTER

...the total inabililty to do equations on PageMaker/Macintosh
vs.
...how the documenter does equations with ease

BREAK/EXERCISE:

doing equations in Documenter...opening an equation frame...cutting it in a document

---

Segment #4:
COLUMNS

...doing columns in pagemaker
...doing columns in documenter

BREAK/EXERCISE:

...class makes columns in documenter...converts a single-column page to 2 and/or 3 column;
...class also constructs a page which has a banner headline followed by two-column text

---

Segment #5:
LOGISTICS difficulty on the Macintosh operating system;
IBM PC linkage on the Mac;
and PC Emulation on DOCUMENTER

PageMaker logistics of using so many disks emphasized;
PageMaker using "Switcher" minimizes logistics problem, but only slightly

...how MacLink connects Macintosh to the PC world

PC Window demonstrated on Documenter
how Documenter calls up pc window...
how several windows are open at one time...
Carl shows how we can take data from a lotus file and get business graphics like a bar chart...

BREAK/EXERCISE

class opens the pc window, loads lotus, and manipulates data, including entering a bar chart into a document via data driven graphics

---

Segment # 6
IBM AS A COMPETITOR

windows on the ibm
the monitors...the overview on ibm
IBM now and in the future -- strengths and weaknesses in regard to page composition software
INTERLEAF: don't sell against the interleaf on features, only on price/performance trade off

no break or exercise...continue through to:

CLOSING segment:
NARRATOR/HOST WRAP UP

...an edited montage of highlights of what went we just saw...with summarizing commentary by narrator/host...

[GRAPHICS FOR OPENING IMAGES]

[XEROX LOGO]

On-Camera Narrator:

WELCOME TO THE SESSION ON COMPETITIVE ANALYSIS.

I'M KAREN KARNER, AND I'LL BE YOUR HOST.

TO SELL DOCUMENTERS IN A COMPETITIVE ENVIRONMENT, YOU NEED AN EDGE. THE REAL EDGE WE'RE ABOUT TO GIVE YOU IS INFORMATION ABOUT THE OTHER GUY'S PRODUCT.

THE MAJOR COMPETITION YOU'LL BE UP AGAINST WILL CONSIST OF SOFTWARE WRITTEN FOR THE APPLE MACINTOSH AND THE IBM PC.

IN THIS PROGRAM, WE'RE GOING TO COMPARE DOCUMENTER'S STRENGTHS -- AND WEAKNESSES -- IN LIGHT OF THIS COMPETITION.

WE'RE ALSO GOING TO HAVE A SHOW-DOWN -- A KNOCK-DOWN, DRAG-OUT CONTEST IN WHICH DOCUMENTER GOES HEAD-TO-HEAD IN A DETAILED COMPARISON OF FEATURES WITH "PAGEMAKER" ON THE MACINTOSH, THE CURRENT MARKET LEADER IN PAGE COMPOSTION SOFTWARE.

TO BEGIN WITH, LET'S TAKE A LOOK AT THE BIG PICTURE. LET'S COMPARE DOCUMENTER AGAINST THE MACINTOSH AND THE IBM PC ON A FEW BASIC FEATURES.

à[STRAIGHT CUT ON MOVEMENT. WE COME IN CLOSER ON HER FACE, THEN PULL BACK TO REVEAL HER AT THE MACINTOSH.]

[USER INTERFACE.]

THE FIRST ITEM TO CONSIDER IS THE USER INTERFACE.

WE HAVE TO ACKNOWLEDGE THAT THE MACINTOSH INTERFACE IS EASIER TO LEARN AND EASIER TO USE THAN THE DOCUMENTER. A MAJOR APPEAL OF THE MAC IS THE CONSISTENCY ACROSS ALL ITS APPLICATIONS SOFTWARE.

PAGEMAKER MAKES OPTIMAL USE OF THE MACINTOSH INTERFACE. THIS MAKES LEARNING PAGEMAKER MORE LIKE AN EXTENSION OF LEARNING MACWRITE OR MACPAINT.

BUT THIS EASE OF USE COMES AT A HIGH PRICE IN TERMS OF ULTIMATE PRODUCTIVITY. BECAUSE ONCE YOU PUT PAGEMAKER TO THE TEST, ONCE YOU TRY TO DO LARGE PROJECTS WITH IT (LIKE A LOT OF EDITING, WITH A LOT OF TEXT AND GRAPHICS), THE MAC CAN GRIND TO A SCREECHING HALT.

THE DOCUMENTER DOES TAKE A LITTLE LONGER TO LEARN.

TO EXECUTE COMMANDS ON THE DOCUMENTER, YOU HAVE TO KEEP TRACK OF MORE AREAS . YOU'VE GOT THE MOUSE; YOU'VE GOT THE SPECIAL FUNCTION KEYS ON THE KEYBOARD; AND YOU'VE GOT THE PROPERTY SHEETS.

SO THERE'S DEFINITELY MORE TO LEARN ON THE DOCUMENTER.

BUT WITH THAT ADDED KNOWLEDGE COMES MORE POWER...

...MORE PRODUCTIVITY...

...MORE FEATURES -- ALL WELL-INTEGRATED!

THAT'S HOW YOU'LL BEAT THE COMPETITION:
...POWER, PRODUCTIVITY, INTEGRATION.

[THE DISPLAY SCREEN.]

NOW, LET'S TAKE A LOOK AT THE DISPLAY SCREEN.

DOCUMENTER IS A CLEAR WINNER HERE. DOCUMENTER'S DISPLAY SCREEN IS THE LARGEST IN THE INDUSTRY AND IT HAS THE HIGHEST RESOLUTION.

THIS ALLOWS FOR LARGER IMAGES AND FOR MORE MORE DESKTOP SPACE TO WORK WITH. YOU CAN PUT TWO FULL SIZE PAGES SIDE-BY-SIDE ON DOCUMENTER'S SCREEN AND READ THE TEXT CLEARLY ON EACH OF THEM.

THE STANDARD IBM GRAPHICS MONITOR DOESN'T HAVE THE SCREEN RESOLUTION TO DISPLAY MORE THAN A THIRD OF ONE PAGE; AND THE CHARACTERS WON'T BE NEARLY AS SHARP AS THOSE ON THE DOCUMENTER.

THE MACINTOSH IS ONLY SLIGHTLY BETTER. YOU CAN GET A FULL PAGE OF TEXT WITH PAGEMAKER ON THE MAC...

...BUT THE PRINT'S SO TINY THAT YOU VIRTUALLY NEED A MAGNIFYING GLASS TO READ IT.

[**MULTI-TASKING.**]

{CAN KAREN JUGGLE? IF SO, LET HER.}

THE GREAT MEASURE OF PRODUCTIVITY IS TIME. THE MORE YOU CAN DO IN A GIVEN PERIOD OF TIME, THE MORE PRODUCTIVE YOU ARE.

MULTI-TASKING MEANS THAT SEVERAL COMPUTER OPERATIONS CAN OCCUR IN PARALLEL, AT THE SAME TIME.

COMPARED TO THE COMPETITION, ONLY THE DOCUMENTER IS A TRUE MULTI-TASKING MACHINE, WHICH MAKES IT A GREAT TIME-SAVER AND PRODUCTIVITY TOOL.

FOR INSTANCE, MULTI-TASKING MEANS THAT YOU CAN EDIT SEVERAL DOCUMENTS IN OVERLAPPING WINDOWS.

YOU CAN RUN LOTUS 1-2-3 AND CUT-AND-PASTE DATA INTO ANOTHER DOCUMENT ON THE SAME SCREEN.

YOU CAN SEND A DOCUMENT TO THE LASER PRINTER AND -- WHILE PRINTING GOES ON IN THE BACKGROUND -- YOU CAN CONTINUE EDITING, ALL AT THE SAME TIME.

THE COMPETITION CAN'T COME CLOSE TO THIS FUNCTIONALITY. AT MOST, THE MACINTOSH PROVIDES A "SWITCHER" OPTION, WHICH ALLOWS YOU TO MOVE EASILY FROM APPLICATION TO APPLICATION. BUT THAT'S NOT REALLY MULTI-TASKING.

THE IBM PC OFFERS DOUBLE DOS OR MICROSOFT WINDOWS, BUT THAT ISN'T TRUE MULTI-TASKING EITHER, SINCE ONLY ONE APPLICATION IS ACTIVE AT ANY ONE TIME.

WITH THE MACINTOSH AND THE IBM, YOU SPEND A LOT OF TIME WAITING. TIME SPENT WAITING, IS TIME WASTED.

AND TIME WASTED, COSTS MONEY.

[**INTEGRATION OF DESKTOP ELEMENTS.**]

HAVING ALL YOUR DESKTOP ELEMENTS WELL INTEGRATED IS THE SIGN OF AN EFFICIENT, EASY-TO-USE SYSTEM.

COMPARED TO THE COMPETITION, THE DOCUMENTER IS FAR SUPERIOR IN THE WAY IT ALLOWS YOU TO COMBINE DOCUMENT ELEMENTS, LIKE TEXT AND GRAPHICS, INTO ONE DOCUMENT.

IBM IS DEPENDENT ON THE CONVERSION CAPABILITIES OF THE APPLICATION PROGRAMS, WHICH ARE CONSIDERABLY POORER BY COMPARISON.

THE MACINTOSH IS ONLY A LITTLE BETTER THAN THE IBM: IT USES A CLIPBOARD TO MOVE DATA FROM APPLICATION TO APPLICATION.

ONLY THE DOCUMENTER IS WELL-INTEGRATED.

[**INTEGRATION OF DESKTOP FUNCTIONS.**]

AS FAR AS INTEGRATING DESKTOP FUNCTIONS, DOCUMENTER REALLY SHINES IN ITS ABILITY TO INTEGRATE DIFFERENT DESKTOP FUNCTIONS EFFICIENTLY. LET'S SEE IF WE CAN GET AN INSIDER'S VIEW ON HOW DOCUMENTER INTEGRATES ITS DESKTOP FUNCTIONS.

[VIDEO SPECIAL EFFECT: NARRATOR APPEARS INSIDE THE COMPUTER]

IN BOTH THE IBM AND MACINTOSH ENVIRONMENTS, YOU MUST EXIT THE PROGRAM YOU'RE WORKING ON TO PERFORM ANY OTHER TASKS, AND THAT CAN BE A TEDIOUS AND TIME-CONSUMING PROCESS.

WITH DOCUMENTER, YOU CAN SHARE INFORMATION BETWEEN DIFFERENT DESKTOP ACTIVITIES VERY EASILY. LOADING DIFFERENT APPLICATIONS IS VIRTUALLY TRANSPARENT TO THE USER...

[**RUNNING IBM PC DOS PROGRAM.**]

...FOR EXAMPLE, DOCUMENTER HAS THE UNIQUE ABILITY TO ALLOW YOU TO RUN DOS PROGRAMS (LIKE WORDSTAR, OR LOTUS 1-2-3) IN ONE WINDOW, AND TO CUT-AND-PASTE DATA FROM THE DOS WORLD TO THE DOCUMENTER WORLD. NOW THAT'S REAL POWER!

WHILE THE IBM PC NATURALLY HAS FULL FUNCTIONALITY IN THE AREA OF RUNNING DOS PROGRAMS, IT IS DIFFICULT TO TRANSFER DATA FROM ONE APPLICATION TO ANOTHER IN THE IBM WORLD.

THE MACINTOSH HAS NO PC EMULATION CAPABILITIES, AND IT PROVIDES ONLY LIMITED ACCESS TO PC PROGRAMS THROUGH MacLINK.

[**FILE CONVERSIONS.**]

CONVERTING INDUSTRY BEST SELLERS (LIKE WORDSTAR, LOTUS, AND VISICALC) ON THE MACINTOSH CAN BE A MESSY, CUMBERSOME JOB.

YOU NEED TO HOOK THE MAC UP TO THE IBM WITH A CABLE AND THEN RUN TWO PROGRAMS SIMULTANEOUSLY. NO FUN AT ALL!

CONVERTING FILES ON DOCUMENTER IS FAR SUPERIOR TO MACINTOSH IN EASE OF USE. ALL YOU DO IS COPY YOUR FILE INTO THE FILE CONVERSION UTILITY, AND THE SYSTEM DOES THE REST.

[**FONTS.**]

THE ABILITY TO USE MULTIPLE TYPEFACE STYLES AND SIZES ON THE SAME PAGE IS IMPORTANT TO SOME CUSTOMERS, AND IBM AND MACINTOSH BOTH HAVE PHOTO-TYPSETTING DRIVERS WHICH ALLOW THEM ACCESS TO THE EXTENSIVE FONT LIBRARIES AVAILABLE IN OUTSIDE PRINTING HOUSES.

BUT THE VAST NUMBER OF CHOICES CAN BE SIMPLY OVERWHELMING TO THE AVERAGE CUSTOMER.

SINCE MARKET RESEARCH SHOWS THAT FEW PEOPLE USE MORE THAN THREE FONTS ANYWAY, DOCUMENTER'S COMPARATIVELY LIMITED SELECTION OF FONT SIZES AND TYPEFACES IS PROBABLY ADEQUATE FOR MOST CUSTOMER REQUIREMENTS.

[**SPECIAL APPLICATIONS.**]

IN THE AREA OF SPECIAL APPLICATIONS, DOCUMENTER WINS HANDS DOWN. DOCUMENTER ALLOWS YOU TO PERFORM OPERATIONS THAT FAR EXCEED THE CAPABILITIES OFFERED ON THE IBM PC AND THE MACINTOSH.

FOR INSTANCE, YOU HAVE A MULTI-LINGUAL KEYBOARD WITH OVER A DOZEN INTERNATIONAL LANGUAGES AT YOUR FINGERTIPS, INCLUDING FRENCH, GERMAN, SPANISH, GREEK, ITALIAN, RUSSIAN, CHINESE, AND JAPANESE.

YOU HAVE KEYBOARDS FOR OFFICE SYMBOLS, FOR LOGIC SYMBOLS, AND ONE FOR MATH SYMBOLS, SO YOU CAN DO COMPLEX EQUATIONS EASILY.

THE MACINTOSH HAS SOME MULTI-LINGUAL CAPABILITY, BUT LIKE THE IBM, IT IS NOT FULLY INTEGRATED.

[**LAYOUT COMPLEXITY.**]
{DRESS AND MAKE-UP KAREN IN A CHILDISH COSTUME;
HAVE KAREN USE A CHILD-LIKE DELIVERY. MIMIC LILY TOMLIN-STYLE?}

AS FAR AS LAYOUT COMPLEXITY, PAGEMAKER ON THE MACINTOSH DOES OFFER MORE FLEXIBILITY AND A GREATER DEGREE OF CREATIVE FREEDOM IN ACTUAL PAGE DESIGN.

POSITIONING TEXT ON GRAPHICS, OR GRAPHICS ON TOP OF TEXT. SEEING THE ELEMENTS PRINT OUT, ALL MERGED TOGETHER. IT'S FUN, ACTUALLY, IF YOU LIKE THAT SORT OF THING.

DOCUMENTER ALLOWS FOR GREATER VERSATILITY IN MIXING DOCUMENT ELEMENTS ON A PAGE. WITH DOCUMENTER, WHAT-YOU-SEE-IS-WHAT-YOU-GET.

IBM'S PUBLISHING PACKAGES ARE NOT VERY WELL INTEGRATED WITH OTHER APPLICATIONS. IBM HAS YET TO SOLVE THE PROBLEM OF PUTTING TEXT AND GRAPHICS ON THE SAME PAGE -- AND THAT'S THE TRUTH!!!

[**COST.**]
{APPEARING BEFORE A BIG DOLLAR SIGN PROP, KAREN TEARS OFF CHILD'S RIBBON FROM HER HAIR. SOUND EFX = CASH REGISTER:}

LET'S NOT KID ABOUT COST.

SINCE IBM IS ALREADY SO ENTRENCHED IN THE BUSINESS WORLD, PURCHASING A DESKTOP PUBLISHING SYSTEM FROM IBM WILL APPEAR AS A "SAFE" DECISION TO LOYAL IBM CUSTOMERS.

ROUGHLY THE SAME SITUATION APPLIES FOR APPLE, WHICH HAS DECIDED TO MAKE DESKTOP PUBLISHING THE CORNERSTONE OF THEIR CORPORATE STRATEGY.

BUT FULLY CONFIGURED, ALL THREE SYSTEMS WITH A LASER PRINTER FALL IN THE SAME BALLPARK. UNDER $15,000. AND THAT SAME AMOUNT OF MONEY BUYS MUCH MORE POWER AND FUNCTIONALITY WITH A DOCUMENTER.

[**SUPPORT.**]

IN TERMS OF SUPPORT, APPLE'S PRODUCTS ARE SUPPORTED BY RETAIL OUTLETS AND LOCAL USER GROUPS, A "CARRY-IN" ARRANGEMENT WHICH IS HIGHLY FRAGMENTED AND SPLINTERED AT BEST.

IBM AND XEROX BOTH HAVE EXCELLENT REPUTATIONS FOR DIRECTLY SUPPORTING AND SERVICING THEIR PRODUCTS, BUT CUSTOMERS STILL SEE XEROX PRIMARILY AS A COPIER COMPANY, NOT AS A COMPUTER COMPANY.

IBM IS MORE WIDELY PERCEIVED AS A COMPUTER COMPANY WHICH SUPPORTS ITS CUSTOMERS VERY WELL, AND, WHEN YOU'RE TRYING TO SELL A COMPUTER SYSTEM LIKE DOCUMENTER, THAT CUSTOMER PERCEPTION CAN OFTEN GIVE BIG BLUE A DECIDED SELLING ADVANTAGE.

[**GROWTH TO NETWORK.**]

FINALLY, LET'S TALK ABOUT NETWORKING --THE COST-EFFICIENT AND CONVENIENT ABILITY TO SHARE INFORMATION AND RESOURCES WITH OTHER COMPUTERS.

ALL THREE SYSTEMS DO HAVE SOME ABILITY TO LINK UP WITH MINICOMPUTERS, MAINFRAMES, AND PERIPHERAL EQUIPMENT LIKE LASER PRINTERS, PLOTTERS, AND MASS STORAGE DEVICES.

HOWEVER, APPLETALK IS THE SLOWEST, BOTH IN TERMS OF TRANSMISSION SPEED AND IN EFFICIENCY. LACKING NETWORK SUPPORTING SOFTWARE, APPLETALK'S 3RD PARTY FILE-SERVING CAPABILITY CAN ONLY HANDLE PRINT REQUESTS ONE-BY-ONE, OFTEN RESULTING IN A SLOW-MOVING TRAFFIC JAM ON A BUSY ELECTRONIC FREEWAY.

IBM'S PC NET AND TOKEN RING SYSTEMS DO MOVE THE TRAFFIC A LITTLE BIT (AND A LITTLE BYTE!) FASTER, BUT THEY ARE STILL QUITE LIMITED IN THEIR ABILITY TO FULLY SHARE NETWORK RESOURCES.

WIDELY ACCEPTED AS THE INDUSTRY STANDARD FOR NETWORKING, XEROX'S ETHERNET TRANSMITS DATA AT SPEEDS UP TO

10 MILLION BITS PER SECOND -- MORE THAN TWICE AS FAST AS IBM'S TOKEN RING.

AND SINCE NETWORK ACTIVITIES ARE SPOOLED OFF INTO A BUFFER, USERS DON'T HAVE TO WORRY ABOUT GOING OFF-LINE BECAUSE OF SOME ELECTRONIC TRAFFIC JAM.

PRODUCTIVITY CONTINUES UNINTERRUPTED THROUGHOUT THE NETWORK.

[WRAP-UP OF INTRODUCTORY SEGMENT]

O.K. THE BOTTOM LINE ON THE VARIOUS COMPETITIVE PRODUCTS COMES DOWN TO THIS:

THE DOCUMENTER IS A HIGH-POWERED, WELL-INTEGRATED, MULTI-TASKING WORKSTATION FOR THE BUSINESS ENVIRONMENT.

THE COMPETITION IS BASICALLY COMPRISED OF NON-INTEGRATED, SINGLE-PROCESSOR, PERSONAL COMPUTERS.

WHAT'S THE DIFFERENCE BETWEEN A WORKSTATION AND A PERSONAL COMPUTER?

AS SCIENTISTS AND ENGINEERS HAVE KNOWN ALL ALONG, WORKSTATIONS ARE MUCH MORE PRODUCTIVE THAN PC'S.

WORKSTATIONS ARE DISTINGUISHED BY THEIR LARGER-THAN-NORMAL, HIGH RESOLUTION GRAPHICS SCREEN:

...THEY HAVE SOFTWARE WHICH ALLOWS THEM TO PERFORM MORE THAN ONE TASK AT THE SAME TIME;

...THEY CAN DISPLAY MULTIPLE OPERATIONS ON THE SAME SCREEN;

...AND THEY HAVE COMMUNICATIONS CAPABILITIES WHICH ALLOW THEM TO WORK AS STAND-ALONES, OR TO NETWORK INTO A LARGER SYSTEM.

IN A NUTSHELL, THEN, THE DIFFERENCE IS POWER AND PRODUCTIVITY, ACHIEVED THROUGH A TIME-SAVING INTEGRATION OF SEVERAL IMPORTANT FUNCTIONS.

O.K. THAT'S THE OVERALL PICTURE. NOW, LET'S TAKE A BREAK. WHEN YOU COME BACK, WE'LL SEE HOW DOCUMENTER STACKS UP IN A HEAD-TO-HEAD COMPARISON OF CERTAIN KEY FEATURES AGAINST PAGEMAKER ON THE MACINTOSH.

[PRODUCTION NOTE: THESE ARE THE ITEMS TO BE ILLUSTRATED IN GRAPHIC FORM.]

COMPETITIVE ANALYSIS (overall comparison of features)

FEATURE	**DOCUMENTER**	**MACINTOSH w / PAGEMAKER**	**IBM PC/AT**
USER INTERFACE		+	
DISPLAY SCREEN	+		
MULTI-TASKING	+		
INTEGRATION OF DOCUMENT ELEMENTS	+		
INTEGRATION OF DESKTOP FUNCTIONS	+		
DOS PROGRAMS (IBM PC)	=		=
FILE CONVERSION (EASE OF USE)	+		
SPECIAL APPLICATIONS	+		
FONTS		+	
LAYOUT COMPLEXITY		+	
COST	=	=	=
GROWTH TO NETWORK	+		
SUPPORT			+

Segment #1:
USER INTERFACE and TABLES
on PAGEMAKER
and on DOCUMENTER

...narrator/host introduces Carl as an expert, independent consultant, i.e., an authority

Carl show PageMaker on Macintosh
overview, ease-of-use graphics strength of pagemaker doing a table...weakness of macdraw/pagemaker combination revealed
Carl shows table-making on Documenter (far superior)

BREAK/EXERCISE:
class creates a table on Documenter

[PRODUCTION NOTE:
Karen's lines are in lower case;
CARL'S LINES ARE IN UPPPERCASE.]

Hello, again.

Now, we're going to focus on a head-to-head comparison of significant features between Documenter and PageMaker on the Macintosh, currently the leading desktop publishing product you'll be selling against. At least for the next few months.

IBM intends to enter the desktop publishing in a big way, so you can expect to see PageMaker on the IBM PC in the near future. But the software features will probably be fundamentally the same as those on the Macintosh. And since the non-integrated, single processor hardware environment and the small, low resolution monitor constitutes the IBM world as well as the Macintosh's, the basic comparisons we make in this program regarding PageMaker on the Macintosh will apply to PageMaker on the IBM also.

Towards the end of our presentation, we'll go into more detail about the inherent design limitations of the IBM PC which we believe will make it a weak competitor in the desktop publishing arena; and we'll also tell you how to sell against Interleaf, the high-end, desk top publishing software that runs on the new IBM RT.

To give you an opportunity to perform some hands-on exercises with the Documenters in your classroom, we'll be interrupting this video presentation at various times throughout the program.

In this first segment, we'll give you an introduction to PageMaker's user interface on the Mac, and then we'll compare how tables are created in PageMaker and on the Documenter.

Now, to guide us through this competitive analysis, we'll be calling on the expertise of Carl Roetter [ROY'-TER], an independent product development specialist whose comments reflect Xerox's in-depth analysis of the marketplace for desktop publishing.

All ready, Carl?

READY, KAREN.

Good, then let's begin. Carl, give us an overview of Pagemaker on the Macintosh. Show us some of its strengths and its weaknesses, so we know what we're up against.

O.K., I'LL BE GLAD TO.

AS PAGEMAKER BOOTS UP YOU GET THE FAMILIAR APPLE INTERFACE, SO WE CAN EITHER OPEN UP A FILE OR CREATE A NEW ONE. LET'S OPEN UP THIS ONE.

Whoa!!! Wait just a minute, Carl. That screen! It's so small. And that print. It's tiny. I can hardly make out the words.
It's a good thing I brought along my magnifying glass or I might not be able to read the print.
[Carl laughs as Karen thrusts a magnifying glass in front of screen.]

WELL, THAT'S TRUE. BUT YOU CAN ALWAYS INCREASE THE SIZE OF THE PAGE. YOU CAN GO TO 50% OF THE ACTUAL PRINT OUT. YOU CAN SEE THE ACTUAL PRINT OUT SIZE. OR, IF YOU REALLY WANT TO SEE THE PRINT CLEARER, YOU CAN ALWAYS DOUBLE THE SIZE OF THE PAGE.

Oh, well, that's certainly big enough. But now I can't see an entire page any more. That's not so great.

YOU'RE RIGHT. YOU'VE HIT ON ONE OF PAGEMAKER'S WEAKNESSES. BUT ONE OF THE REAL STRENGTHS OF PAGEMAKER ON THE MACINTOSH IS THAT THE USER INTERFACE IS ACTUALLY FAIRLY EASY TO USE. EASIER, PERHAPS, THAN DOCUMENTER.

PAGEMAKER IN PARTICULAR IS EASY TO USE, BECAUSE IT'S BEEN DESIGNED ALONG THE METAPHOR OF A PASTE-UP PAGE SITTING ON TOP OF A WORK TABLE. THIS MAKES THE TRANSITION FROM PAPER-BASED PRODUCTION TO COMPUTER-BASED PRODUCTION FAIRLY EASY FOR MOST PEOPLE.

YOU CAN SELECT BLOCKS OF TEXT OR PICTURES, MOVE THEM OFF THE PAGE, AND PLACE THEM ON THE TABLE TOP. YOU CAN PICK THEM UP OFF THE TABLE TOP AND INSERT THEM ANYWHERE ON THE PAGE YOU LIKE. THIS METAPHOR IS REALLY AN ELECTRONIC INTERPRETATION OF HOW PEOPLE ACTUALLY WORK IN THE REAL WORLD.

So, for somebody who is used to working in a physical world, like we all are, this metaphor of a piece of paper on a table, or on a desk top, is very easy to pick up.

THAT'S RIGHT. IT'S BASED ON PHYSICAL CONCEPTS WE ARE ALL FAMILIAR WITH. SO IT'S VERY EASY TO USE. MOVING THINGS LIKE LINES OR GRAPHIC DRAWINGS ANYWHERE ON YOUR TABLE TOP IS FAIRLY EASY TO DO. AND THAT'S A POWERFUL CONCEPTUAL BOON TO THE PRODUCT.

BECAUSE YOU CAN SET THINGS ON TOP OF EACH OTHER, LIKE TEXT ON GRAPHICS, OR GRAPHICS ON TEXT, AND THE PAGE'LL PRINT OUT JUST LIKE THAT.

Well, that makes PageMaker a very flexible tool for doing page composition, doesn't it?

IT SURE DOES. IT'S SO FLEXIBLE, IN FACT, THAT IF I WANTED TO, I COULD ACTUALLY MOVE THE DOCUMENT OFF THE PAPER. ALL THIS IS POSSIBLE BECAUSE PAGEMAKER TAKES A MUCH LESS FORMAL APPROACH THAN DOCUMENTER. IN PAGEMAKER, YOU CAN PLAY AROUND WITH THE FORM OF THE DOCUMENT MORE. YOU CAN GET MORE "CREATIVE," IF YOU WILL.

I suppose the free-form idea is appealling for doing some tasks (like newsletters or one-page advertising flyers), but how is PageMaker at producing large documents with multiple revisions.

WELL, NOW YOU'RE TOUCHING ON ANOTHER ONE OF PAGEMAKER'S MAJOR WEAKNESSES. PAGEMAKER IS LIMITED TO DOCUMENTS OF ONLY 16 PAGES.

Really! That's a big limitation.

I AGREE.

It wouldn't be much good for editing and laying out large reports or technical documents then, would it?

WELL, YOU COULD GET AROUND THAT BY COMBINING SEVERAL DOCUMENTS AND NUMBERING YOUR PAGES ACCORDINGLY. BUT ONE OF PAGEMAKER'S REAL WEAKNESSES IS THAT IT'S NOT REALLY AN EDITOR. IT'S ONLY DESIGNED TO FUNCTION AS A PAGE LAYOUT DEVICE. ALTHOUGH YOU CAN DO SOME MINOR EDITING IN IT, BASICALLY ALL OF YOUR EDITING AND ALL OF YOUR DRAWING IS DONE OUTSIDE OF PAGEMAKER.

What do you mean? We can't draw inside Pagemaker?

PRACTICALLY SPEAKING, NOT REALLY. IT HAS VERY PRIMITIVE DRAWING CAPABILITIES. YOU HAVE TO MAKE YOUR DRAWINGS IN MACDRAW OR IN MACPAINT, AND THEN CUT AND PASTE THEM INTO PAGEMAKER.

You're kidding? So, how would you create a table like that one?

I'LL SHOW YOU. TO CREATE A TABLE, WE EXIT FROM PAGEMAKER. LET'S GO TO MACDRAW.

IN CREATING A TABLE, WE'RE GOING TO SEE TWO THINGS:
1...IT'S DIFFICULT TO DO A TABLE IN MACDRAW
2...YOU HAVE TO GO THROUGH A FAIRLY TIME-CONSUMING CUT-AND-PASTE ROUTINE EVERY TIME YOU WANT TO MAKE A CHANGE TO THE TABLE

I PICK UP A FRAME AND I DRAW. I THINK TO MYSELF: "WHAT'S THE APPARENT SIZE OF MY TABLE?" MY TABLE'S GONNA BE -- THIS BIG.

SO THEN I PICK MY LINE WIDTH. I WANT TO HAVE 3 COLUMNS.

HERE IS WHERE IT GETS A LITTLE DIFFICULT. BECAUSE NOW I HAVE TO MATHEMATICALLY DETERMINE THE WIDTH OF MY COLUMNS. HOW AM I GOING TO DO THAT? FIRST, I CALL UP A RULER ON SCREEN. THEN, I MEASURE THE WIDTH OF EACH OF MY COLUMNS, USING THE CALCULATOR. FOUR DIVIDED BY THREE EQUALS...1.3.

I just knew you were a calculating type of guy. Why, you're even figuring out the width of each of the columns?

I HAVE TO. I TAKE MY ENTIRE BOX WIDTH AND DIVIDE IT BY THREE, AND I GET THE WIDTH OF MY 3 COLUMNS.

NOW I DRAW IN THE LINES. YOU HOPE YOU PLACE THE LINES EQUALLY SPACED, BUT YOU CAN'T REALLY BE SURE.

AS YOU CAN SEE IT TAKES A BIT OF TIME TO GET THEM EXACT.

So, I notice.

NOW, WE ENTER SOME TEXT. I WANT TO PUT HEADERS IN THERE. SO, I GO TO STYLE. I PULL DOWN TO CENTER. I PICK UP THE "T" FOR TEXT AND PLACE IT HERE. I DON'T REALLY KNOW FOR SURE IF I AM CENTERING THE TEXT ACCURATELY IN THIS FRAME.

THE ONLY THING THE "CENTERING" COMMAND DOES IS CENTER THE TEXT FROM WHERE I FIRST CLICKED. DETERMING THE CENTER OF THAT COLUMN IS SOMETHING I HAVE TO DO BY EYE.

Well, how can you have any assurance that the text is actually centered in that space?

YOU CAN'T, REALLY. YOU HAVE NO CHOICE BUT TO DO IT BY EYE. IF I'M OFF A LITTLE BIT, I GO UP HERE, AND ADJUST.

NOW LET'S SAY I WANT TO PUT TEXT DOWN HERE. I DO THE SAME THING. I ENTER TEXT. [PAUSE.]

AND THEN "OH, NUTS!". LOOK WHAT I'VE DONE.

You've put too much text in the body of the first column.

THAT'S RIGHT.

So what are you going to do?

I HAVE TO GO BACK HERE. INCREASE THE WIDTH OF THIS COLUMN...GO BACK TO THIS LINE. INCREASE THE WIDTH OF THIS COLUMN. GO BACK TO THIS LINE. INCREASE THE WIDTH OF THIS COLUMN. AS WE'LL SOON SEE, DOCUMENTER WOULD INCREASE THE TABLE SIZE FOR ME AUTOMATICALLY.

Documenter would make room for the text?

THAT'S RIGHT - AUTOMATICALLY! DOCUMENTER WOULD ALSO AUTOMATICALLY ALIGN THIS TEXT. LET ME GO OVER HERE. I HAVEN'T GOT THIS AND THIS ALIGNED YET.

That's right. You've got the heading for second column off-center. You've had to guestimate where the center would be...

RIGHT...THIS ONE IS TOO HIGH...THIS ONE IS TOO LOW...NEITHER ONE OF THEM IS CORRECTLY CENTERED...

They're not centered nor are they lined up...

NOW I'M GOING TO ENTER SOME TEXT IN COLUMN TWO. [PAUSE.]

[Carl enters text messily into the body of column 2, i.e. off-horizontal.]

OK. THE PROBLEM NOW IS THAT THE TEXT IN COLUMN 2 IS NOT ALIGNED WITH TEXT IN COLUMN 1. SO, NOW I HAVE TO BRING THE TEXT INTO ALIGNMENT.

Isn't there any other way to adjust the text, except by eye?

WELL, IN FACT, THERE IS. WHAT I NEED TO DO IS SELECT BOTH OF THESE COLUMNS...LIKE THIS. THEN I GO TO "ARRANGE," AND I SAY "ALIGN OBJECTS." I WANT TO "ALIGN TOPS." NOW I CAN HORIZONTALLY ALIGN THE TOPS OF THOSE TWO OBJECTS.

BUT THIS DOESN'T HELP ME TO ALIGN THIS TO THE VERTICAL CENTER. SO, THE FIRST THING I HAVE TO DO IS GET THESE FOUR OBJECTS IN COLUMN TWO CENTERED BY EYE...

Wow! What an involved process!

SO I GO TO ARRANGE...ALIGN OBJECTS...LEFT, RIGHT, CENTERS. THERE! NOW I'VE GOT COLUMN TWO LINED-UP VERTICALLY.

This is blowing me away...

NOW I HAVE TO ALIGN COLUMN ONE VERTICALLY...LEFT, RIGHT, CENTERS...

...AND I FINALLY GOT TWO COLUMNS SET UP IN MY TABLE.

Well, don't take a break yet, Carl. I haven't forgotten that you're not even in PageMaker. You're still in MacDraw.

THAT'S RIGHT. SO, NOW I HAVE TO SAVE THIS TABLE IN THE CORRECT FORMAT, WHICH IS THE PIC FORMAT. IF I SAVE THE TABLE IN THE WRONG FORMAT, I WON'T BE ABLE TO RETRIEVE IT WHEN I'M IN PAGEMAKER, AND I'LL HAVE TO COME ALL THE WAY BACK.

SO, NOW THAT I'VE SAVED IT PROPERLY, WE CAN QUIT THIS ROUTINE AND MOVE OURSELVES BACK INTO PAGEMAKER.

This is a real bear. Meanwhile the clock is running.

IT SURE IS. THIS IS A SLOW PROCESS. NOW, WE NEED A PAGE WHERE WE CAN "PLACE" THE TABLE.

OK. NOW, WE'LL COPY THE TABLE ONTO THE PAGE. HERE IT COMES.

Oops! I see a typo, Carl. Maybe you better change it. Never know, a mistake like that could de-rail a train.

[Short laugh.] CAN'T DO IT.

Really! Why not?

BECAUSE PAGEMAKER SEES THIS TABLE AS A GRAPHIC ENTITY, COMPLETE ONTO ITSELF. I CAN'T JUST GO IN AND CHANGE INDIVIDUAL ELEMENTS. SO IF I MISPELL SOMETHING, OR IF I WANT TO EDIT THE TEXT, OR IF I WANT TO CHANGE THE TYPEFACE, I HAVE TO RETURN TO MACDRAW AND GO THROUGH THE WHOLE PROCESS ALL OVER AGAIN.

[Uproarious laughter.] Of realigning everything? You've got to be kidding!!!! What if you wanted to add another column or row to the table?

SAME THING. I'D HAVE TO GO BACK INTO MACDRAW AND MANUALLY RESTRUCTURE THE ENTIRE TABLE. LET'S SAY I WANTED TO GO TO FOUR COLUMNS. I'D HAVE TO RE-CALCULATE THE SPACING OF THE LINES, MOVE THE LINES OVER TO ACCOMODATE THE NEW COLUMN WIDTHS, ALIGN ALL THE TEXT, AND VISUALLY CENTER EVERYTHING ALL OVER AGAIN.

This is an incredibly cumbersome way to build a table. There must be an easier way.

THERE IS. ON THE DOCUMENTER.

Good! Let's do it.

[Karen and Carl move over to the Documenter.]

O.K. LET OPEN A BLANK DOCUMENT AND PUT IT IN THE EDIT MODE. FIRST, WE CLICK OUR "LITTLE ARROW" IN THE DOCUMENT WHERE WE WANT TO POSITION OUR TABLE. NOW, WE CREATE THE TABLE BY HOLDING DOWN THE FUNCTION KEY LABELLED "KEYBOARD," AND BY SELECTING "SPECIAL."

IF WE ALSO WANT TO "SHOW" THIS SPECIAL KEYBOARD, WE SELECT "SHOW", AND WE NOW HAVE THE "SPECIAL" KEYBOARD DISPLAYED ON THE SCREEN.

Wait a second. Let me have a closer look. What've you got here, Carl? Graph, text, column, row, ...

TO TELL THE SYSTEM WHAT WE WANT TO DO, WE CAN PRESS THE CORRESPONDING KEY ON THE KEYBOARD, OR WE CAN USE THE MOUSE TO CLICK ON ONE OF THOSE ITEMS.

[Carl moves the mouse pointer to "column" on the screen, and presses the mouse to activate a table.]

SINCE WE WANT TO CREATE A TABLE, WE SELECT EITHER "ROW" OR "COLUMN"...

Hey!!! You popped a table into the document -- just like that!

(YEAH, ISN'T THAT GREAT?)

...AND WHEN I GO TO "PROPS," I CAN CHOOSE THE PROPERTIES I WANT TO APPLY TO THIS TABLE. FOR INSTANCE, TO DETERMINE THE SIZE OF THE TABLE, I JUST GO TO "TABLE PROPERTIES," SET THE NUMBER OF ROWS AT, LET'S SAY, 5. SET THE NUMBER OF COLUMNS TO 3. PRESS "DONE." AND -- BINGO! -- THERE'S OUR TABLE.

Beautiful! That's so fast! In PageMaker, I mean, in MacDraw, it was so complicated, and it took so long to do this much. Here, you didn't have to pull out any calculator, or draw all those lines, or align everything.

THAT'S RIGHT. AND LOOK HOW EASILY DOCUMENTER DID THE SAME THING, WITH A COUPLE OF QUICK KEYSTROKES.

Yeah, that's great.

NOW LET'S ENTER SOME TEXT. [PAUSE.]

[Carl enters the same text as he had entered on the Macintosh. The railroad table.]

It looks like the text is being centered as you enter it.

IT IS -- AUTOMATICALLY.

Hey, look at that. You entered more text than could fit in that space and the table automatically expanded to accomodate you.

THAT'S RIGHT. AND NOTICE THAT WHEN I WANT TO GO FROM SECTION TO SECTION, I DON'T EVEN HAVE TO REPOSITION THE MOUSE. ALL I DO IS TOUCH THE "NEXT" KEY TO GO TO THE NEXT COLUMN AND ENTER TEXT.

Oh, yeah. That's so much easier and faster.

NOW WATCH THIS. BY SIMPLY PRESSING "NEXT" AFTER THE THIRD COLUMN,...

You got an entirely new column.

THAT'S RIGHT. IDENTICAL IN FORM AND SIZE TO ALL THE OTHERS. WITH JUST ONE KEYSTROKE, I GOT AN ENTIRELY NEW COLUMN. AUTOMATICALLY.

That's a terrific feature. But, oh, look Carl. [Drawn out, teasingly, like Ed McMahon introducing Johnny Carson] There's that same typo.

["NEW WORK" INSTEAD OF "NEW YORK."

NO PROBLEM. I WOULDN'T WANT TO DERAIL ANY TRAINS, SO I'LL JUST MAKE THAT CHANGE RIGHT NOW. THERE YOU GO. HAPPY NOW?

Yes, thank you.

AND, I THINK WE'LL BE GETTING AHEAD OF OURSELVES FOR ME TO SHOW YOU THIS NOW, BUT, IF I WANT TO CHANGE THE FONT SIZE OR THE TYPEFACE, THIS IS ALL I HAVE TO DO.

If I remember correctly, on the Macintosh, you'd have to exit PageMaker and go back to MacDraw to do something like that.

GOOD MEMORY. AND HERE'S ANOTHER THING: YOU CAN ALWAYS MAKE A COLUMN OR ROW BIGGER BY HITTING "RETURN." THAT'S THE EASY WAY TO MAKE THINGS STRETCH.

This is impressive. With just a few simple keystrokes, we've already far exceeded the Macintosh way of doing things.

EXACTLY. BUT WE'RE NOT DONE YET. BECAUSE DOCUMENTER CAN DO EVEN MORE, AND JUST AS EASILY. LET'S EMBELLISH OUR TABLE.

BY GOING INTO PROPERTIES, I CAN CHOOSE THE TYPE OF BORDER I WANT AROUND THE TABLE.

I CAN CHOOSE THE STYLE OF THE LINE. THE THICKNESS OF THE LINE.

I CAN SET THE MARGINS IN WHATEVER UNITS I LIKE.

I CAN IDENTIFY THE TABLE WITH A CAPTION.

I CAN SET THE TABLE'S HEIGHT AND WIDTH TO BE FIXED OR VARYING. FOR EXAMPLE, IF I CHOOSE VARYING, THE TABLE WILL GROW HORIZONTALLY AND VERTICALLY AS I ENTER MORE DATA.

You mean, to allow more text, like you did with that "New York Central" box?

THAT'S RIGHT. AND IF WE WANT TO POSITION THE TABLE IN A SPECIFIC PLACE ON THE PAGE, FOR EXAMPLE, FLUSH LEFT, WE CAN DO THAT HERE, TOO.

NOW, WE SAY "DONE," AND ALL THESE PROPERTIES ARE APPLIED TO THE TABLE.

And all that messy stuff we had to do in MacDraw, like aligning text? We don't have to bother with that here?

NOPE. NOT AT ALL.

Well! This is amazing. It's certainly an easier way to build tables.

NO DOUBT ABOUT IT.

O.K. Thank you, Carl. This was an inspiring demonstration.

We've just seen how easy it is to create and edit tables on the Documenter, as compared to how difficult achieving the same goal can be in PageMaker on the Macintosh.

Since PageMaker has no drawing capabilities per se, you must go into a program like MacDraw or MacPaint to create your table. There, you calculate the width of the rows and columns by yourself, draw the individual lines in by hand, align the text by eye, and if you make any mistakes, or if you want to expand the table, you have to go back to the beginning and do the whole thing all over again.

In contrast, Documenter pops a table into your document with a click of the mouse, calculates and draws in your lines for you, centers and aligns your text automatically, and expands the table to accomodate additional text, or entire rows and columns, by simply pressing the "Next" key. All changes to the table can be effected easily and quickly in the Document itself.

As for what's "next" on our program for you, now it's time for you to practice entering tables with the Documenters in your training class. Carl and I will continue with our competitive analysis as soon as you complete your exercise.

[PRODUCTION NOTE: END OF VIDEO SEGMENT #1...BREAK FOR EXERCISE AT END OF SEGMENT #1]

INSERT PAGE #27.1

Segment #2:
EDITING TEXT and GRAPHICS
on PAGEMAKER
and on DOCUMENTER

...logistics of using pagemaker are glimpsed through the cumbersome process of editing text and graphics
...Carl shows weak editing capabilities of pagemaker...inabililty to do search and replace operation...the highly involved process of shading a graphic, making a change to a graphics element in a document

...Carl shows direct contrast with how Documenter can do search and replace through a longer document, and we edit a graphic, make some changes to a graphic

BREAK/EXERCISE:

class does a search and replace text exercise
class does a modify graphic exercise

Welcome back. In this segment, we'll be comparing the text editing and the graphics editing capabilities of both Pagemaker and Documenter.

Carl, you said earlier that Pagemaker is not really an editor. Could you expand on that, please?

SURE. PAGEMAKER'S STRENGTH LIES IN ITS FLEXIBILITY. PAGEMAKER IS EXTREMELY FLEXIBLE IN WHAT IT CAN BUILD. YOU HAVE A PROBLEM, HOWEVER, IF YOU NEED TO DO A LOT OF EDITING, BECAUSE PAGEMAKER DOES NOT HAVE POWERFUL EDITING FEATURES.

What do you mean by that?

PAGEMAKER'S LAYOUT AND EDITING FUNCTIONS ARE NOT WELL-INTEGRATED. HERE, I'LL SHOW YOU.

Can you do any editing at all?

OH, YES, SOME PRIMITIVE EDITING IS POSSIBLE.

Well, maybe you should put a capital "M" in PageMaker. I believe that's the way it's spelled.

O.K. THAT'S EASY ENOUGH. YOU CAN INSERT CHARACTERS OR PHRASES, LIKE THIS WITH NO PROBLEM.

AND YOU CAN DELETE TEXT YOU DON'T WANT.

AND YOU CAN GRAB THIS TEXT, AND ATTACH ATTRIBUTES TO IT, LIKE MAKING IT BOLD FACE.

How about correcting the little "m's" in all those other PageMakers by making them uppercase as well?

NOW YOU'RE ASKING FOR SOME LARGE-SCALE EDITING, NAMELY "SEARCH-AND-REPLACE." IN ORDER TO DO THAT, YOU'D HAVE TO LEAVE PAGEMAKER, AND GO INTO THE DOCUMENT WHERE YOU DID YOUR ORIGINAL EDITING.

You mean that this document you are working on is not the original document?!!

NOT AT ALL. IT'S IMPORTANT TO UNDERSTAND THAT THERE ARE ACTUALLY TWO COPIES OF THIS DOCUMENT ON THE DISK. ONE IS THE MICROSOFT WORD VERSION; AND THE OTHER IS THIS ONE, THE PAGEMAKER VERSION.

THE TWO FILES ARE NOT LINKED. IF I EDIT THE MICROSOFT WORD VERSION, I AM NOT AFFECTIING THIS PAGEMAKER VERSION AT ALL.

So the system lacks integration from this standpoint as well?

THAT'S RIGHT. LET ME DEMONSTRATE THE TYPICAL EDITING PROCESS YOU HAVE TO GO THROUGH.

[Carl simulates the process of making a global search and replace operation in the Pagemaker document, namely by closing down PageMaker, going into Microsoft Word, making the changes, and coming back to PageMaker.]

I HAVE TO SHUT DOWN PAGEMAKER...

GO INTO MICROSOFT WORD...

MAKE THE EDITS...

SHUT DOWN MICROSOFT WORD...

COME BACK INTO PAGEMAKER...

DELETE ALL THE OLD TEXT FROM THE PAGEMAKER DOCUMENT...

PLACE ALL THE NEW EDITS INTO THE PAGEMAKER DOCUMENT...

AND LAY THE PAGES OUT ALL OVER AGAIN.

This is another tedious and time-consuming process.

THAT'S TRUE. BECAUSE, BASICALLY WHAT I HAVE TO DO IS RE-BUILD THE DOCUMENT VIRTUALLY FROM SCRATCH, JUST TO GET A FEW SIMPLE EDITS INTO PAGEMAKER.

That sounds like a real pain, just for a few changes to the text?

BELIEVE ME, IT IS.

Does the same thing apply to the graphics?

YES. BUT IT'S WORSE. AT LEAST I CAN DO A LITTLE BIT OF EDITNG ON THE TEXT.

BUT WITH A DRAWING -- IT'S DIFFERENT. EXCEPT FOR SIMPLE GRAPHICS CREATED DIRECTLY WITH PAGEMAKER'S LIMITED DRAWING CAPABILITIES, YOU CAN'T EDIT DRAWINGS YOU IMPORT FROM MACDRAW OR MACPAINT. FORGET ABOUT IT! YOU JUST CAN'T DO IT.

LET'S TAKE THIS GRAPHIC. THIS GRAPHIC WAS CREATED BY USING MACDRAW. I CAN PICK THAT GRAPHIC UP, AND I CAN MOVE IT OUT HERE.

BUT IF I WANT TO MODIFY THE GRAPHIC IN SOME WAY, LIKE CHANGE THE SHADING, OR THE THICKNESS OF THE LINES, I HAVE TO GO BACK TO THE ORIGINAL GRAPHIC, MAKE THE CHANGES IN MACDRAW OR MACPAINT, AND BRING THE GRAPHIC BACK FOR REPLACEMENT IN THE PAGEMAKER DOCUMENT

[Carl shows the process of closing down Pagemaker; opening Macdraw; opening the file which has the graphic he wants to modify; making some changes to the shading or line style or something; closing down macdraw; and coming back to pagemaker to effectuate the change.]

[To emphasize the absurdity of this key process in the Pagemaker system, and to save video running time, we film Carl's activities in "pixillated animation" style, meaning that we only capture, say, one frame of action per second (film normally runs at 24 frames per second). When played back, we see Carl's actions highly condensed in time, and the net effect is satiric and comic -- we see a man hastily entering and exiting files, switching disks, making his changes. Since this is Pagemaker's standard mode of operation, we will draw upon this sequence again in the video to underscore this major defect in Pagemaker's operation.]

Whew! You have to do all that to make a simple change?

THAT'S RIGHT. ALL I WANTED TO DO WAS CHANGE THE SHADING. AND IF I DON'T LIKE IT YET, I HAVE TO GO ALL THE WAY BACK AND DO IT AGAIN.

There must be a better way.

[Knowing smile.] THERE IS.

Documenter?

YOU GOT IT.

Show me.

[Transition: Carl and Karen move over to the Documenter.]

[Carl opens up a document, which is identical to the one we saw on the Macintosh.]

O.K. LET'S OPEN UP THIS DOCUMENT.

[The headline, "PAGEMAKER LEADS IN DESKTOP PUBLISHING" triggers a "Hey, what-the-hell!" from the narrator.]

Hey, wait a minute, Carl. Look at that! You can't say that! Not on the Documenter. These people are from Xerox. What are you doing?

[Half ignoring her, Carl proceeds to put the document into the edit mode.]

HA! HA! DON'T WORRY ABOUT IT. WE'LL TAKE CARE OF THAT SOON ENOUGH. LET ME SHOW YOU HOW TO DO GRAPHICS IN DOCUMENTER FIRST.

[Still puzzled, Karen goes along with Carl.]

O.K. If you say so. But I hope you know what you're doing.

GRAPHIC ELEMENTS ARE CONTAINED WITHIN BOXES CALLED GRAPHIC FRAMES, SO WE NEED TO CREATE A GRAPHIC FRAME ON THE PAGE.

IN ORDER TO DO THAT, THE FIRST THING WE HAVE TO DO IS "SHOW STRUCTURE," SO WE SELECT THAT FROM THE AUXILLIARY MENU UP HERE.

NOW WE CLICK ON THE PAGE WHERE WE WANT OUR GRAPHIC FRAME TO COME IN.

THEN WE HOLD DOWN THE "KEYBOARD" KEY AND SELECT THE "SPECIAL" FUNCTION KEY. THE LETTER "A" CORRESPONDS TO A GRAPHIC FRAME, SO WE PRESS COULD PRESS "A", OR WE COULD CLICK ON THE KEY WITH THE MOUSE. PERSONALLY, I LIKE USING THE MOUSE.

[Carl moves the mouse pointer to "graph" on the screen, and presses the mouse to activate a table.]

NOW THAT FRAME'S OBVIOUSLY TOO SMALL TO WORK WITH, SO WE HAVE TO STRETCH IT LIKE THIS.

NOW THAT IT'S BIG ENOUGH TO WORK INSIDE, WE OPEN OUR "GRAPHICS TRANSFER DOCUMENT" AND COPY THE BASIC GRAPHICS ELEMENT WE WANT. LET'S COPY A RECTANGLE.

That's just like copying text.

THAT'S RIGHT. I CAN MOVE THESE OBJECTS, OR I CAN COPY THEM, OR I CAN DELETE THEM. JUST LIKE TEXT.

AND SINCE I WANT TO CREATE A SIMPLE BAR CHART WITH THREE BARS, I'M GOING TO COPY THAT FIRST BAR HERE, AND HERE.

NOW, I'M GOING TO RE-SIZE THOSE OBJECTS LIKE THIS.

AND LIKE TEXT, GRAPHICS ELEMENTS HAVE PROPERTIES, SO I SELECT THIS ONE AND OPEN UP A "PROPS" SHEET. NOW I CAN CHANGE THE APPEARANACE OF THE OBJECT ANY WAY I LIKE.

I CAN CHANGE THE TYPE OF LINE, THE SHADING, AND THE TEXTURE.

AND I CAN "APPLY" THESE PROPERTIES TO SEE IF I LIKE THEM. IF I DON'T LIKE THEM, I CAN MAKE MORE CHANGES AND "APPLY" THEM TO SEE IF I LIKE THESE BETTER.

WHEN I'M SATISFIED WITH THESE, I SAY "DONE."

NOW IF I WANT THIS MIDDLE BAR TO BE JUST LIKE THIS FIRST ONE, I SELECT IT, PRESS THE "SAME" KEY, GO TO THE FIRST ONE, CLICK WITH THE MOUSE, AND THE MIDDLE ONE IS THE SAME AS THE FIRST ONE.

Well, that's much, much easier than what we saw in PageMaker. How about changing text?

CHANGING TEXT IS SIMPLE, TOO. YOU INSERT NEW TEXT LIKE THIS. SIMPLY SELECT WHERE YOU WANT THE TEXT TO COME IN, AND TYPE IT IN.

IF YOU WANT TO DELETE SOMETHING, YOU SELECT IT, AND PRESS DELETE.

IF YOU WANT TO MOVE TEXT, YOU HIGHLIGHT IT, PRESS MOVE, AND YOU MOVE IT TO ANOTHER LOCATION.

COPY WORKS THE SAME WAY. SELECT SOMETHING. PRESS COPY. PUT THE COPIED TEXT WHEREVER YOU WANT, AND CLICK.

How about doing some "large scale editing," as you called it? Like search and replace text?

O.K. SURE. TO SEARCH AND REPLACE, WE USE THE FUNCTION KEY CALLED "FIND". THAT OPENS UP A PROPERTIES SHEET AND ASKS US WHAT WE WANT TO FIND.

LET'S SAY "PAGEMAKER".

WE WANT TO REPLACE ALL INSTANCES OF PAGEMAKER, IRRESPECTIVE OF CASE, AND WE WANT THE NEW TEXT TO TAKE ON THE SAME PROPERTIES AS THE WORDS NEXT TO IT.

IN THIS BOX, WE CAN TYPE IN WHAT WE WANT TO REPLACE "PAGEMAKER" WITH. NOW, WHAT WOULD YOU LIKE TO REPLACE "PAGEMAKER" WITH?

Ha! Ha! I see. "Documenter" of course.

GOOD. WE'LL ENTER "DOCUMENTER." NOW WE CLICK ON "DONE."

You're pretty clever, aren't you?

JUST HAVING SOME FUN.

O.K. HERE ARE THE CHANGES. AND THE NEW LEADER IN DESK TOP PUBLISHING SOFTWARE IS...

Documenter!

SEE, I TOLD YOU NOT TO WORRY.

You make it look so easy.

IT IS. ONCE YOU LEARN HOW TO USE THE SOFTWARE.

O.K. Well, thanks again, Carl.

Let's recap.

[O.K. Well, thanks again, Carl.

Let's recap.]

Although PageMaker is extremely flexible in what you can build, it has only primitive editing capabilities. No search and replace functions. Also, the lack of integration between the PageMaker file and the original text file requires you to exit the PageMaker version, make your changes in the original text file, and then come back to rebuild the entire document virtually from scratch. And if you want to edit a graphic element in PageMaker, well, forget it, because it can't be done. You have to go back and forth to MacDraw.

In contrast, Documenter is well-integrated and allows changes to the text and the graphic elements to be done quickly and easily. Simply highlight the area you want to change, call up the properties sheet, and apply your changes.

O.K. Now it's time for you to practice with the Documenters in your training class. We'll continue with our competitive analysis as soon as you complete your exercise.

PRODUCTION NOTE: BREAK FOR EXERCISE AT END OF SEGMENT #2

Segment #3:
EQUATIONS in PAGEMAKER

and in DOCUMENTER

the total inabililty to do equations on pagemaker/macintosh
how the documenter does equations with ease

BREAK/EXERCISE:

doing equations in Documenter...opening an equation frame...cutting it in a document

---

Welcome back. Since you may find that many of your prospects will have a need for formatting complex procedures like mathematical equations, we are now going to demonstrate how Pagemaker on the Macintosh does this, and how Documenter does it better. Ready, Carl?

RIGHT. O.K. LET'S DO EQUATIONS

SINCE THERE IS NO FORMALIZED EQUATION FORMATTING SYSTEM IN PAGEMAKER, WE CREATE EQUATIONS MANUALLY BY SELECTING SYMBOLS AND INDIVIDUALLY PLACING THESE SYMBOLS, ONE BY ONE, WHERE WE WANT THEM.

WE BEGIN BY SELECTING THE SYMBOL FONT.

Are these symbol fonts in Pagemaker?

NO. ACTUALLY THEY'RE IN THE MACINTOSH AND THE LASER PRINTER. AND THEY ARE AVAILABLE IN ALL THE APPLICATION PROGRAMS, INCLUDING MACWRITE AND MICROSOFT WORD.

So, you always have the same fonts available in all applications, because they're installed on the system, just like Documenter.

THAT'S RIGHT. O.K. THERE'S A SYMBOL FONT.

LET'S GO TO PAGE 5 IN THIS DOCUMENT.

I'LL GO TO THE BOTTOM AND DO SOME TYPING, WITH THE SYMBOL FONT I JUST SELECTED.

Hey! Everything you're typing is coming in -- in Greek!

THAT'S RIGHT. BECAUSE I SELECTED THE GREEK SYMBOL FONT.

Why Greek?

BECAUSE I WANT TO MAKE A POINT, AND THE POINT IS THAT: THE SYMBOL FONT LIBRARY ON THE MACINTOSH IS QUITE LIMITED. SURE WE GOT GREEK, AND MAYBE A LOT OF TECHNICAL PUBLICATIONS READ LIKE THEY WERE ACTUALLY WRITTEN IN GREEK, BUT YOU'LL NOTICE THAT WE DON'T HAVE THE SAME KIND OF CAPABILITY FOR MATHEMATICAL SYMBOLS. IF WE WANT TO DO EQUATIONS ON THIS SYSTEM, WE'VE GOT PROBLEMS, BECAUSE WE SIMPLY DO NOT HAVE ALL THE NECESSARY MATHEMATICAL SYMBOLS.

FOR EXAMPLE, LET'S SAY WE WANT TO SHOW DIVISION. WE TYPE ONE TIMES TWO AND DRAW A LINE UNDER IT.

You really are manually positioning each symbol. It looks pretty basic.

IT'S DOWNRIGHT PRIMITIVE. MACINTOSH WITH PAGEMAKER IS DEFINITELY NOT AN ENVIRONMENT FOR DOING TECHNICAL PUBLICATIONS!

So, are we going to create an equation in PageMaker, or not?

I DON'T THINK YOU CAN REALISTICALLY DO THEM HERE...BECAUSE YOU NEED THE FLEXIBILILTY OF A FULL-FLEDGED DRAWING PACKAGE...

So, what would you do? If you were "stuck" with the Macintosh system.

WELL, NEITHER PAGEMAKER NOR MACDRAW HAS EQUATION FORMATTING SYSTEMS, BUT MACDRAW IS A BETTER DRAWING PACKAGE THAN PAGEMAKER. IT HAS BETTER ALIGNMENT CAPABILITIES, SO I WOULD CHOOSE MACDRAW.

So, actually doing equations with Pagemaker on the Macintosh is kind of like drawing those complex tables?

WORSE. BECAUSE YOU MAY NOT HAVE ALL THE SYMBOLS. YOU CERTAINLY DON'T HAVE ALL THE LOGIC SYMBOLS. YOU DONT HAVE ALL THE MATH SYMBOLS. YOU'RE VERY LIMITED TO WHAT YOU CAN DO, AND WHAT YOU CAN DO, YOU HAVE TO DO MANUALLY.

So, how does Documenter handle equations?

WITH EASE. JUST WATCH.

RIGHT OFF, YOU CAN SEE THAT THE KEYBOARD SHOWS A LOT MORE VERSATILITY.

YOU CAN CHANGE THE PHYSICAL KEYBOARD TO WHATEVER YOU LIKE.

YOU CAN GO DOWN HERE AND SEE THE LOGIC KEYBOARD ...YOU CAN SEE THE GREEK...

YOU CAN HAVE FRENCH, GERMAN, DVORAK, ITALIAN, RUSSIAN, FRENCH CANADIAN, AND "SPECIAL." SPECIAL IS THE KEYBOARD WHICH OPENS UP TO A WIDE RANGE OF KEYBOARD OPTIONS. HERE YOU GET THE TEXT FRAMES, THE GRAPHIC FRAMES, THE EQUATION FRAME, COLUMNS, ROWS, THE TIME, PAGE...

WE CAN SHOW THE KEYBOARD ON THE SCREEN BY PRESSING "SHOW" AND "SET."

SO, IF I WANT TO CREATE AN EQUATION, I SELECT IT AND -- POP! -- I'VE OPENED UP AN EQUATION FRAME IN THE DOCUMENT.

Wow! It's a frame...an equation frame...

YES, AN EQUATION FRAME...

FIRST, LET'S SELECT A BIGGER TYPE STYLE SO WE CAN READ IT BETTER AS I ENTER THE DATA...SO I'LL GO TO PROPS...MAKE A QUICK CHANGE...

NOW I'M GOING TO GRAB IT, PRESS STRETCH...TO MAKE IT BIGGER AND EASIER TO WORK IN...

I PICK THE MATH KEYBOARD, TOUCH SET TO SHOW THE KEYBOARD...AND O.K. WE'RE READY TO ENTER OUR EQUATION.

[Carl types in a complex equation.]

So, what's that, Carl?

OH, THAT'S PLANCK'S RADIATION LAW FOR DETERMINING THE RADIANT ENERGY PER SECOND EMITTED AT ANY WAVELENGTH FROM A SQUARE CENTIMETER OF THE SURFACE OF A BLACK BODY OF ANY TEMPERATURE.

Of course. I should have recognized it. I use it all the time in the kitchen.

WELL, THE POINT IS THAT WE CAN FORMAT A COMPLEX EQUATION VERY QUCIKLY. HERE'S ANOTHER SET OF EXAMPLES.

[Carl clicks on a page showing complex mathematical equations.]

OBVIOUSLY, DOCUMENTER HAS MUCH POWER HERE. IT PERFORMS AT A DIFFICULTY LEVEL FAR BEYOND WHAT CAN BE DONE IN MACDRAW. SO, IT'S CLEARLY SUPERIOR IN THAT AREA.

Thanks again, Carl for demonstrating Documenter's strength in formatting complex equations easily and quickly. In contrast, doing equations in PageMaker on the Macintosh is primitive.

Now, we're going to take a break while you do an exercise in formatting equations on the Documenter.

[PRODUCTION NOTE: END OF VIDEO SEGMENT #3...BREAK FOR EXERCISE AT END OF SEGMENT #3]

Segment #4:
COLUMNS

doing columns in pagemaker
doing columns in documenter

BREAK/EXERCISE:

class makes columns in documenter: class converts a single column page to 2 and/or 3 column;
class also constructs a page which has a banner headline followed by two-column text (a more advanced exercise)

Welcome back. In this segment, we'll be looking at the way text is put into multiple column formats by PageMaker on the Macintosh and by Documenter.

O.K., Carl, you said that PageMaker was a very flexible page composition tool. Show us now how it puts text into different columns.

SURE. WE HAVE PAGEMAKER RUNNING, SO LET'S OPEN A NEW DOCUMENT. WE DO THAT BY GOING TO THE FILE MENU AND PICKING "NEW." WE GET A DIALOGUE BOX THAT ASKS US THE SIZE OF THE DOCUMENT, WHETHER WE WANT IT HORIZONTAL OR VERTICAL, AND A START PAGE NUMBER.

What's so important about a start number?

THE START NUMBER IS A KEY ELEMENT BECUASE PAGEMAKER IS LIMITED TO DOCUMENTS UP TO 16 PAGES. IF WE ULTIMATELY WANT TO PRODUCE A DOCUMENT THAT IS LONGER THAN 16 PAGES, THE ONLY WAY TO DO THAT IS TO CHAIN INDIVIDUAL DOCUMENTS TOGETHER BY SELECTING THE APPROPRIATE PAGE NUMBER EACH DOCUMENT SHOULD START WITH.

So, creating longer documents can be done in PAGEMAKER, but it's harder to keep track of.

THAT'S CORRECT. BUT RIGHT NOW WE'RE ONLY GOING TO DO A SMALL, 2-PAGE DOCUMENT FOR DEMONSTRATION PURPOSES, SO WE'LL SELECT PAGE NUMBER 1, AND SAY "O.K."

PAGEMAKER NOW CREATES A DOCUMENT PAGE ON THE SCREEN.

LET'S SAY WE WANT OUR TEXT TO BE PRESENTED IN 3 COLUMNS.

WE GO OVER TO THE "TOOLS" AREA, WE PULL DOWN THE COLUMN GUIDES, AND WE RELEASE.

PAGEMAKER ASKS US FOR THE NUMBER OF COLUMNS. WE SAY "3."

WE CAN PICK THE SPACE BETWEEN THE COLUMNS. THIS LOOKS LIKE A GOOD SPACE, SO WE SAY "O.K."

PAGEMAKER DRAWS 3 COLUMNS ON THE SCREEN FOR US.

TO GRAB OUR TEXT, WE GO OVER THE FILE MENU AND PULL DOWN "PLACE." WE NOW GET A DIALOGUE BOX THAT LISTS THE VARIOUS DOCUMENTS FILED ON OUR DISK. SO, WE SWITCH TO FLOPPY DRIVE, OPEN UP A FOLDER, SELECT OUR TEXT, AND "PLACE."

PAGEMAKER NOW GIVES US AN ICON, WHICH LOOKS LIKE A BLOCK OF TEXT. WE MOVE THE ICON TO THE UPPER LEFT CORNER OF THE COLUMN WHERE WE WANT TO INSERT OUR TEXT, AND WE CLICK.

PAGEMAKER THEN SENSES THE COLUMN WIDTH AND FILLS THE COLUMN WITH TEXT FROM TOP TO BOTTOM.

WHEN THE TEXT FILLS THE COLUMN IT STOPS. IN ORDER TO FILL THE 2ND AND 3RD COLUMNS, WE HAVE TO MOVE OVER TO THE BOTTOM OF COLUMN NUMBER 1 AND CLICK INTO THAT LITTLE AREA THAT HAS A PLUS SIGN IN IT.

WE DOUBLE CLICK ON THAT AND HERE COMES OUR TEXT PLACEMENT ICON ONCE AGAIN.

NOW WE MOVE THE ICON TO THE TOP OF COLUMN 2, CLICK THE MOUSE, AND TEXT FLOWS INTO COLUMN NUBMER 2.

Seems like it takes a lot of extra work to fill up text one column at a time.

YEAH, YOU'D THINK IT'D SPILL TEXT FROM COLUMN TO COLUMN.

It ought to. After all, it seems like the most logical thing to do.

WELL, PAGEMAKER DOESN'T DO THAT AUTOMATICALLY. YOU HAVE TO DO IT MANUALLY.

SO, LET'S DOUBLE CLICK AT THE BOTTOM OF COLUMN NUMBER 2. WE GET OUR ICON BACK. WE CLICK AT COLUMN 3, AND NOW COLUMN 3 FILLS WITH TEXT.

IT'S IMPORTANT TO REALIZE THAT PAGEMAKER IS GRABBING A COPY OF THE ORIGINAL TEXT FILE THAT WAS CREATED IN MICROSOFT WORD. THERE ARE TWO COPIES OF THE SAME TEXT FILE ON THE DISK.

One in Microsoft Word. And one in PageMaker.

RIGHT. AND WE DRAW UPON THE PAGEMAKER VERSION ONLY.

WELL, WE DON'T HAVE ALL OF OUR TEXT YET, SO WE HAVE TO CONTINUE ON TO ANOTHER PAGE.

EVER THOUGH IT'S CALLED "PAGEMAKER," PAGEMAKER WON'T CREATE A SECOND PAGE FOR US AUTOMATICALLY.

SO, WE GO TO THE PAGE MENU, AND WE PULL DOWN TO INSERT A NEW PAGE. AS WE RELEASE, PAGEMAKER QUERIES: "SHOULD THE NEW PAGE BE BEFORE OR AFTER THE CURRENT PAGE?"

SINCE WE WANT THE PAGE TO GO "AFTER," WE PRESS O.K., AND PAGEMAKER PUTS A LITTLE ICON AT THE BOTTOM OF THE SCREEN THAT MEANS "PAGE 2 IS NOW HERE."

WELL, PAGE 2 MIGHT BE THERE, BUT WE'RE STILL NOT READY TO FILL THE PAGE WITH TEXT.

You don't have columns there yet.

THAT'S RIGHT. AND TO GET COLUMNS, WE HAVE TO START BACK AT THE BEGINNING.

SO, WE GO TO COLUMN GUIDES, AND WE TELL PAGEMAKER WE WANT 3 COLUMNS.

Now that we have 3 columns on page 2, can we bring text in?

YES, BUT FIRST WE HAVE TO GO BACK TO PAGE ONE AND GET THE TEXT, BECAUSE THE WAY WE SPILL TEXT OVER FROM COLUMN TO COLUMN IS TO CLICK ON IT AT THE BOTTOM OF THE PREVIOUS COLUMN, REMEMBER.

SO WE GO BACK TO COLUMN NUMBER 1. WE WAIT FOR PAGEMAKER TO FILL ALL 3 COLUMNS, THEN WE GO TO THE END OF COLUMN 3, DOUBLE CLICK ON THE TEXT PLACEMENT ICON, SWITCH BACK TO PAGE 2, BRING THE ICON OVER TO THE TOP OF THE COLUMN 1, AND CLICK WHERE WE WANT TEXT TO COME IN. NOW WE'VE FILLED COLUMN ONE OF PAGE TWO.

If you had a longer document, you'd have to do the same thing to fill in the text, wouldn't you? Page by page, column by column?

YOU GOT IT.

It sounds pretty involved and time-consuming.

IT IS. THOUGH IT GETS THE JOB DONE. EVENTUALLY.

Suppose, after looking at it, I decide that I don't like the way the text looks on the page? Suppose I want to change to, say, two columns instead of three?

THAT'S A NORMAL REQUEST. FIRST, WE HAVE TO GO BACK TO PAGE ONE. NOW WE HAVE TO GO BACK TO "COLUMN GUIDES." I PICK 2 COLUMNS.

O.K. NOW MY DOCUMENT IS LAID OUT IN 2 COLUMN FORMAT, BUT...

...But, the text is still in 3 columns!!!

à[LIVE INTERACTION, CARL AND NARRATOR.]

YES, AND WHAT'S WORSE, THERE IS NO WAY TO CHANGE THE TEXT TO 2 COLUMNS, SHORT OF COMPLETELY DELETING THE TEXT FROM EACH OF THE COLUMNS, ONE COLUMN AT A TIME, AND THEN RE-LOADING ALL THE TEXT BACK INTO THE DOCUMENT...

[both, in unison:]

...ONE COLUMN AT A TIME!

One column at a time!

[They laugh together at the absurdity of the tedious process.]

That's great, Carl. There really must be an easier and faster way to do columns.

[Carl smiles knowingly.]

THERE IS.

On the Documenter?

OF COURSE. YOU READY?

You bet. Show me.

[Transition to Carl and Narrator at Documenter.]

O.K. WE HAVE A DOCUMENT HERE WITH THE TEXT IN SINGLE COLUMN FORMAT. LET'S SAY WE WANT TO RE-FORMAT THE DOCUMENT INTO MULTIPLE COLUMNS, O.K.?

O.K.

FIRST, WE NEED TO SHOW THE STRUCTURE OF THE PAGE. THIS DOCUMENT IS ALREADY IN THE EDIT MODE, SO WE GO UP TO THIS MENU HERE AND SAY "SHOW STRUCTURE." THAT REVEALS TO US THE "PAGE FORMAT CHARACTER" HERE. WE SELECT THIS PAGE FORMAT CHARACTER AND PRESS "PROPS."

NOW WE CAN SEE THE PAGE LAYOUT, THE PAGE HEADINGS, AND THE PAGE NUMBERING.

RIGHT NOW, SINCE WE'RE CONCERNED WITH PAGE LAYOUT, WE'LL LOOK DOWN AT THE BOTTOM OF THE DIALOGUE WINDOW, WHERE WE CAN SEE A SERIES OF BOXES: ONE FOR DETERMINING THE NUMBER OF COLUMNS; ONE TO DETERMINE IF WE WANT THE COLUMNS TO BE EVENLY BALANCED OR NOT; AND ONE TO DETERMINE THE SPACE BETWEEN THE COLUMNS.

LET'S PICK 3 COLUMNS, LIKE WE DID IN PAGEMAKER. EVERYTHING ELSE IS FINE, SO WE SELECT "DONE."

AND, NOW, IN ORDER TO AUTOMATICALLY COLUMNIZE THE TEXT THROUGHOUT THE ENTIRE LENGTH OF THE DOCUMENT WITH ONE COMMAND, WE SELECT "PAGINATE."

àCUT AWAY TO LIVE ACTION WHILE SYSTEM PAGINATES...

[Surprise and wonderment. Appreciation.]
Did you say that Documenter is going through the entire document and automatically re-formatting all the text into 3 columns?

THAT'S RIGHT. KIND OF BEATS DOING IT MANUALLY COLUMN-BY-COLUMN, PAGE-BY-PAGE DOESN'T IT?

There's no real comparison.

O.K. PAGINATION IS COMPLETE, AND THE TEXT OF THE ENTIRE DOCUMENT HAS BEEN PLACED INTO 3 EVENLY BALANCED COLUMNS, JUST LIKE THIS.

[Carl clicks on second page.]

NOTCE THAT THE TEXT FLOWS RIGHT AROUND GRAPHIC ELEMENTS, AND STILL RETAINS THE FORMAT COMMAND TO BE IN 3 COLUMNS.

That's great! Now what if I decide I don't like the text in 3 columns after all? Suppose that I want to change everything to 2 columns.

YOU REMEMBER WHAT A HEADACHE THAT WAS IN PAGEMAKER? WELL, WATCH THIS.

WE SELECT THE PAGE FORMAT CHARACTER. WE PRESS "PROPS."

WE GO TO THE COLUMN NUMBER BOX. WE REPLACE THE "3" WITH A "2." WE PRESS "DONE."

Now we re-paginate the document.

THAT'S RIGHT. AND HERE WE ARE -- IN 2 COLUMNS -- ALL THROUGHOUT THE DOCUMEWNT.

[Carl clicks on page 2, then page 3. We see dual column text, as well as text that has flowed around a graphic element.]

That's fantastic, Carl. After seeing this, I can't imagine anyone using a cumbersome system like PageMaker's.

WELL, THE MACINTOSH DOES HAVE ITS FAN CLUB, YOU KNOW.

That's true. Tell me, can Documenter do multiple column formats on the same page?

SURE. LET ME OPEN ANOTHER DOCUMENT AND SHOW YOU.

[Carl opens a document, and we see a page which has a banner headline at the top; followed by two columns of text for the top third of the page; then a graphic element is centered around the middle; followed by single column text for the remainder of the page.]

THERE. HOW'S THAT?

It's great, but how is that done? Is it difficult?

YOU HAVE TO USE TEXT FRAMES AND GRAPHIC FRAMES TO GET SEVERAL DIFFERENT COLUMN WIDTHS ON THE SAME PAGE, BUT IT'S NOT REALLY THAT DIFFICULT. NOT NEARLY AS DIFFICULT AS DOING COLUMNS ON THE PAGEMAKER, ANYWAY.

O.K. Thanks again, Carl.

We've just seen how tedious and time-consuming making columns in PageMaker can be, as compared to how easy you and how fast can create columns and change page formats on the Documenter.

Now it's time for you to practice making columns with the Documenters in your training class. We'll continue with our competitive analysis as soon as you complete your exercise.

[PRODUCTION NOTE: END OF VIDEO SEGMENT #4...BREAK FOR EXERCISE AT END OF SEGMENT #4]

Segment #5:
LOGISTICS difficulty on the Macintosh operating system;
IBM PC linkage on the Mac;
and PC Emulation on DOCUMENTER

pagemaker logistics of using so many disks emphasized;
pagemaker using "Switcher" minimizes logistics problem, but only slightly

how maclink connects macintosh to the pc world

pc window demonstrated on documenter
how documenter calls up pc window...
how several windows are open at one time...
carl shows how we can take data from a lotus file and get business graphics like a bar chart...

BREAK/EXERCISE

class opens the pc window, loads lotus, and manipulates data, including entering a bar chart into a document via data driven graphics

---

O.K. Welcome back. You may have noticed by now that in order to get things done in Pagemaker, you often have to spend a lot of time exiting the program and working in MacDraw or Microsoft Word in order to make the changes you eventually want to see in PageMaker. That could be quite time-consuming. So, in this segment, we're going to see if there's any better way to do all this on the Macintosh.

And since IBM is a factor to be reckoned with in the business world, we're also going to look at the way Macintosh links up with the IBM world, and compare that with the PC emulation window which Xerox's Documenter gives you.

So, tell us, Carl. Is there any way to get around the cumbersome logistics of forever loading and unloading programs and switching disks in order to do desktop publishing on the Macintosh?

NOT REALLY. THE BEST SPEED IMPROVEMENT COMES FROM A PROGRAM ON APPLE CALLED "SWITCHER"...SWITCHER ALLOWS YOU TO HAVE MORE THAT ONE PROGRAM IN MEMORY AT ONE TIME...BUT YOU HAVE TO HAVE ENOUGH MEMORY. SO ON A 512k MAC, YOU COULD ONLY HAVE PAGEMAKER...BUT ON A 1 MEGABYTE MAC, YOU COULD HAVE PAGEMAKER AND MACDRAW AND MACWRITE...

Well, how does it work?

O.K. I'LL SHOW YOU. WE CLICK ON THE SLOT WE WANT TO PUT IT IN ...WE GO TO SWITCHER AND WE SAY CONFIGURE AND INSTALL...

AND THE FIRST THING I'M GOING TO CONFIGURE AND INSTALL IS MICROSOFT WORD...SO I PRESS WORD, I PRESS OPEN...IT ASKS HOW MUCH MEMORY DO YOU WANT TO GIVE TO IT...I SAY 200 K...NOW YOU CAN'T EDIT A VERY BIG FILE IN 200 K... NOW THE NICE THING ABOUT THE APPLE SYSTEM IS THAT IT IS A VIRTUAL MEMORY SYSTEM...THERE IS NOT A LIMIT ON THE FILE SIZE, BUT HERE I'VE SET A LIMIT ON HOW BIG A FILE I CAN EDIT IN MICROSOFT WORD...CAUSE I'VE ONLY ALLOCATED IT 200 K...THE REASON I'VE DONE THAT IS BECAUSE I WANT TO GO INTO THE SWITCHER AND CONFIGURE AND INSTALL MACDRAW...OK...AND I'M GOING TO GIVE IT 128 K...

NOW I'M GOING TO CONFIGURE AND INSTALL PAGEMAKER...I'M GOING TO GIVE IT ALL THE 256K THAT'S LEFT...

It needed all that as a minimum?

THAT'S RIGHT. I'M GOING TO SAVE THIS SET...LET'S CALL IT "SUPERPAGE."

NOW I'M GOING TO START UP SUPERPAGE...IT'LL BOOT AND LOAD PAGEMAKER, MICROSOFT WORD, AND MACDRAW...AND THEN I CAN USE THIS LITTLE ARROW TO MOVE FROM ONE TO THE OTHER...

I'LL JUST STICK THIS DISK IN, SINCE IT'S GOING TO ASK FOR IT SOON...

It's taking quite a while, isn't it?

MAYBE, BUT AS COMPARED TO 20 MINUTES ON THE DOCUMENTER, YOU REALLY CAN'T CRITICIZE THE LOAD TIME.

Oh.

O.K. NOW HERE I AM IN MICROSOFT WORD...AND, TO MOVE TO MACDRAW, ALL I HAVE TO DO IS CLICK THAT LITTLE ICON -- THAT ARROW IN THE UPPER RIGHT HAND CORNER -- NOW I'M IN MACDRAW...

OK, HERE I AM IN MICROSOFT WORD....HERE I AM IN MACDRAW. HERE I AM IN PAGEMAKER...

Oh, "Switcher" works by horizontally switching pages. It does save some time then.

YEAH, BUT YOU STILL HAVE TO GO THROUGH THIS PROCESS OF MOVING IN AND OUT OF PROGRAMS. THERE'S REALLY NO WAY AROUND THAT.

AND THIS PROBLEM COMES TO THE FOREFRONT WHEN YOU CONNECT THE MACINTOSH TO THE IBM WORLD.

How so?

I'LL SHOW YOU.

FIRST LET ME POINT OUT THE DIFFICULTIES MACINTOSH HAS IN EXCHANGING DATA WITH THE BIG BLUE WORLD OF IBM...

IT IS POSSIBLE TO MOVE DATA AND EVEN TO MOVE FILES LIKE WORDSTAR, MICROSOFT WORD, LOTUS, MULTIPLAN, FROM IBM DISKS INTO FILES READABLE ON THE MACINTOSH...HOWEVER, IT IS A RATHER ROUNDABOUT PROCESS...

YOU NEED TO BUY A SOFTWARE PACKAGE, LIKE MACLINK. YOU NEED TO BUY A SPECIAL CABLE THAT WILL PHYSICALLY CONNECT THE TWO MACHINES...YOU MUST RUN THE SOFTWARE PACKAGE ON BOTH THE IBM AND THE MACINTOSH...

AS LONG AS YOU HAVE THE PROPER SOFTWARE AT THE MACINTOSH TO RECEIVE THE FILES, THEY WILL CONVERT SUCCESSFULLY. FOR INSTANCE, CONVERTING A TEXT FILE IS NOT TOO BAD. AND, IF YOU HAVE MICROSOFT WORD OR WORDSTAR FILES ON THE IBM, YOU CAN MOVE THEM OVER TO THE MACINTOSH AND READ THEM IN MACWRITE OR MICROSOFT WORD ON THE MAC.

But can you go directly from an IBM file to a PageMaker file?

NO. YOU GENERALLY CANNOT GO DIRECTLY FROM IBM FILES TO PAGEMAKER. YOU HAVE TO MAKE THE INTERMEDITATE STEP OF GOING TO MICROSOFT WORD, OR TO MACWRITE FIRST.

How about Lotus or Symphony files?

IF YOU'RE MOVING OVER LOTUS OR SYMPHONY FILES, THEY MUST FIRST BE READ INTO EXCEL, OR INTO JAZZ. THEN THEY MUST BE CUT-AND-PASTED INTO THE CLIP BOARD FROM JAZZ, AND THEN INTO PAGEMAKER. YOU HAVE TO USE THE CLIP BOARD, BECAUSE PAGEMAKER WILL NOT IMPORT FROM JAZZ FILES!

[The best way to show this would to make fun of it...perhaps with a pixillated, animated sequence shot on film, like we saw earlier.]

AGAIN, THIS MEANS YOU HAVE TO TAKE YOUR FILE FROM THE IBM PC, MOVE IT TO THE MAC...LOAD JAZZ...LOOK AT YOUR FILE IN JAZZ...CUT

AND PASTE THE NUMBERS...PUT THEM INTO THE CLIPBOARD...SHUT DOWN JAZZ...LOAD PAGEMAKER...CUT THE NUMBERS AND PLACE THEM INTO PAGEMAKER...GOT IT?!

So, you have to go through three different programs...loading and shutting down, plus running a cable between two machines...all this in order to go what the doucmenter can do on the same screen with multiple windows open...

YOU GOT IT!

Does it really have to be all that complicated? Surely there must be an easier way?

NOT ON THE MACINTOSH. THE LOGISTICS ARE JUST TOO COMPLICATED. THE MACINTOSH HAS ONE INTERNAL DISK DRIVE AND A 20-MEGABYTE HARD DISK...BUT IN ORDER TO OPERATE A MAC PLUS [ONLY A MAC PLUS?] YOU MUST HAVE A SYSTEM DISK IN THE FLOPPY ALL THE TIME...

Naturally, you're going to tell me that Documenter has a much better way of exchanging data with the big blue world of IBM?

NATURALLY. I'M EVEN GOING TO SHOW YOU.

Great. This I gotta see.

O.K. WATCH. I GO OVER HERE AND CLICK ON THIS ICON TO LOAD THE PC EMULATION.

Hey, wait a minute. You still have your other documents opened. Don't you at least have to close them up first?

NOPE. ANOTHER PRIMARY ADVANTAGE TO THE PC EMULATION FEATURE IS THAT YOU CAN EMULATE AN IBM PC IN ONE WINDOW, AND YOU CAN BE DOING SOMETHING COMPLETELY DIFFERENT, LIKE EDITING TEXT OR DOING PAGE COMPOSITION, IN ANOTHER.

That's fantastic.

YEAH, IT REALLY IS. THAT'S A BREAKTHROUGH.

O.K. IT'S PC TIME...LET'S LOOK AT OUR DIRECTORY...HERE'S OUR PC WINDOW...AND HERE'S OUR DOCUMENT WINDOW...IF WE LIKE, WE COULD CUT FROM ONE WINDOW TO ANOTHER...

Well, let's do that.

O.K. THERE'S LOTUS 1-2-3. LET'S RUN LOTUS.

So, what you're saying is that you can have your PC file running at the same time you're working on a document ...and at any point in time, you can cut from window to window.

THAT'S RIGHT. AND I THINK IT'S A REAL POWERFUL FEATURE THAT YOU CAN HAVE MULTIPLE OPERATIONS AT THE SAME TIME. àYOU COULD HAVE A PC OPERATION WITH ANY SIZE WINDOW ON THE SCREEN...

Well, enlighten us. I'm not sure I fully appreciate why having two applications going on at the same time that would be valuable.

O.K. I'LL SHOW YOU. HERE'S A LOTUS SPREADSHEET. LET'S SAY YOU'RE DOING A BUSINESS REPORT...FOR EXAMPLE, YOU COULD BE RUNNING LOTUS IN THE PC WINDOW, AND DOING YOUR CALCULATIONS IN LOTUS. AND YOU'VE GOT YOUR REPORT, OR YOUR PROPOSAL, OR YOUR PRESENTATION OVER HERE IN THIS WINDOW.

NOW, BASED UPON THOSE CALCULATIONS, YOU'RE MAKING CONCLUSIONS, RIGHT?

Right.

SO WHILE YOU'RE MANIPULATING DATA AND ANALYZING YOUR CALCULATIONS IN THE PC ONE WINDOW, YOU COULD BE WRITING YOUR CONCLUSIONS IN THE OTHER.

Sure.

AND LET'S SAY YOU WANT TO USE THIS DATA TO CREATE A BAR GRAPH, OR A CHART FOR YOUR REPORT.

YOU TAKE THE DATA AND PUT IT THROUGH THE DATA DRIVEN GRAPHICS APPLICATION, AND OUT COMES YOUR BAR GRAPH, ALL READY TO BE INSERTED IN YOUR REPORT.

==========

[PRODUCTION NOTE: I (JOHN-MICHAEL) have not yet seen this particular operation performed, but I understand that it can be done. If so, we should show it, since it dramatically shows integration of the PC window with an external program like Lotus, and the data driven graphics, with other documents.) I need an example.

==========

AND THIS IS HOW YOU SWITCH BACK AND FORTH...YOU SIMPLY CLICK...

That's great! Compared to the Macintosh system, everything seems so well integrated?

THAT'S RIGHT. INTEGRATION. DOING MULTIPLE TASKS AT THE SAME TIME. THOSE ARE A COUPLE OF THE REAL STRENGTHS OF DOCUMENTER.

Whew! O.K. Thank you, Carl.

We've just seen a dramatic example of how well Documenter's functions are integrated, especially how you can run applications like Lotus in the IBM PC window and cut-and-paste data into a document window on the same screen, even getting your business graphics in the process.

In contrast, we've examined the unwieldly way Macintosh uses a cable to connect to the IBM world, and the logistically cumbersome switching environment which requires the use of so many program disks.

Now it's time for you to integrate some of this material with a hands-on exercise. We'll continue with this competitive analysis when you're done.

[PRODUCTION NOTE: END OF VIDEO SEGMENT #5...BREAK FOR EXERCISE AT END OF SEGMENT #5]

Segment # 6
IBM AS A COMPETITOR

windows on the ibm
the monitors...the overview on ibm
IBM now and in the future -- strengths and weaknesses in regard to page composition software
INTERLEAF: don't sell against the interleaf on features, only on price/performance trade off

no break or exercise...continue through to:

Welcome back to the final segment of this competitive analysis. In this segment, we're going to talk about the competitor no computer manufacturer can afford to ignore -- IBM.

We can't really show you a head-to-head features comparison between Documenter and an IBM-based product right now, because there currently isn't any desktop publishing software on the standard IBM PC which is in the same class as Documenter. However, we do know that several companies are planning to introduce such software in the near future, so you should know what you are up against in order to develop an appropriate selling strategy.

Carl, what are your thoughts about positioning Documenter against IBM?

WELL, WHEN YOU'RE TRYING TO SELL DOCUMENTER AGAINST IBM, I THINK IT IS IMPERATIVE TO KEEP THE PERSPECTIVE OF THE CUSTOMER UPPERMOST IN YOUR MIND. AND FROM THE PERSPECTIVE OF THE CUSTOMER IN THE BUSINESS WORLD, IBM IS THE KING.

How do you mean that?

IN TERMS OF SHEER BUSINESS BRUTE FORCE, OF BEING ABLE TO GET WORK DONE, IBM HAS SIGNIFICANT ADVANTAGES OVER THE DOCUMENTER IN BUSINESS APPLICATIONS. IBM HAS ACCOUNTING

PACKAGES, IT HAS SPREADSHEETS AND INTEGRATED PACKAGES LIKE LOTUS AND SYMPHONY, IT HAS POWERFUL DATA BASES LIKE DBASE AND FOCUS AND MICROFOCUS, IT HAS BUSINESS GRAPHICS, IT HAS SCHEDULING PROGRAMS, IT HAS STRONG WORD PROCESSING PROGRAMS, LIKE WORDSTAR, MULTIMATE, WORD PERFECT, MICROSOFT WORD. EVERYBODY WRITES SOFTWARE FOR IBM. EVEN WANG IS STARTING TO MAKE ITS WORD PROCESSING PROGRAM AVAILABLE ON THE IBM PC.

YOU NAME IT, IT'S ON THE IBM.

But Documenter has software like that, too. The Documenter has an editor for word processing, a spreadsheet, business graphics and it even has a list manager.

THAT'S TRUE, BUT IF WE HONESTLY COMPARE DOCUMENTER'S SOFTWARE IN THOSE REALMS TO THE IBM PC, WE HAVE TO CONCLUDE THAT ITS SPREADSHEET IS NOT AT ALL COMPETITIVE WITH THE MORE ADVANCED SPREADSHEETS AVAILABLE ON THE IBM; AND ITS LIST MANAGER IS LIKEWISE NOT COMPETITIVE.à IT HAS NO DATA BASE PROGRAMS [CARL: TRUE OR NOT?]; AND IT DOES HAVE EDITING CAPABILITIES, YES, BUT NO WAY SHOULD YOU CONSIDER POSITIONING DOCUMENTER IT AS A "WORD PROCESSOR." AMONG OTHER THINGS, THERE'S WAY TOO MUCH OF A TIME DELAY BETWEEN THE TIME YOU INPUT CHARACTERS ON THE KEYBOARD AND THE TIME THEY ACTUALLY APPEAR ON THE SCREEN. YOU COULD FORGET WHAT YOU TYPED.

But Documenter has the PC window. Doesn't that allow Documenter to capitalize upon all that business power of the IBM?

NOT REALLY.

Why not?

QUITE SIMPLY, BECAUSE IT IS NOT AS FAST AT DISPLAYING THE PC SCREEN. I THINK YOU HAVE TO LOOK AT THE PC-WINDOW, NOT AS A REPLACEMENT FOR AN IBM PC, BUT AS A WAY TO TAKE DATA THAT HAS BEEN PRODUCED ON PC'S (RUNNING LOTUS, OR SYMPHONY, OR WHATEVER,) AND BRING IT OVER BY DISK TO THE DOCUMENTER.

So, you see the documenter's primary functionality as a business workstation in its ability to receive data that has been massaged through the pc window?

THAT'S CORRECT. THEN YOU CAN RUN LOTUS IN THE PC WINDOW, CREATE YOUR BUSINESS GRAPHICS, PASTE YOUR DATA INTO THE DOCUMENTER, LAY OUT YOUR PAGES ON THE LARGE SCREEN, AND ASSEMBLE CAMERA-READY, PROFESSIONALLY-LOOKING DOCUMENTS THAT YOU CAN PRINT ON THE LASER PRINTER.

YOU SEE, IT IS IN THE AREA OF PAGE COMPOSITION THAT DOCUMENTER EXCELS AND WILL CONTINUE TO EXCEL. WITH THE POSSIBLE EXCEPTION OF A DESKTOP PUBLISHING SYSTEM WHICH XEROX RECENTLY ACQUIRED FROM VENTURA, RIGHT NOW THERE IS NO PRODUCT ON THE IBM PC THAT CAN COMPETE AGAINST DOCUMENTER OR PAGEMAKER.

Carl, I notice that you keep referring to the current state of the market. Yet the trade magazines report that several companies, like MicroPro (the Word Star people) and Software Publishing (who produce the popular pfs line) are planning to introduce desk top publishing software for the IBM in the near future. How will that affect Documenter's positioning in the marketplace?

[Carl laughs slightly.] WELL, I DON'T HAVE A CRYSTAL BALL, BUT I CAN TELL YOU THAT, WHILE THE IBM PC DOES HAVE THE MOST GUTS IN ITS ABILTIY TO DO THINGS LIKE WORDPROCESSING, DATA PROCESSING AND SPREADSHEETS, IT HAS INHERENT LIMITATIONS IN ITS DESIGN WHICH MAKE IT A WEAK CONTENDER IN THE AREA OF DESK-TOP PUBLISHING.

Oh, really. Like what?

THE PC'S PRINCIPAL WEAK POINT IS ITS INABILITY TO DO PAGE COMPOSITION AND SEND THE OUTPUT TO A LASER PRINTER.

FOR INSTANCE, JUST LOOK AT THIS SCREEN. THE IBM SCREEN HAS A SIGNIFICANTLY LOWER HORIZONTAL/VERTICAL (?) RESOLUTION THAT MACINTOSH OR DOCUMENTER. AT 640 BY 200 LINES IN THE BLACK-AND WHITE MODE, THE IBM STANDARD GRAPHIC ADAPTER IS HALF THE HORIZONTAL RESOLUTION OF THE MACINTOSH, MAYBE A LITTLE MORE.

THE MAC IS 512 BY 324. DOCUMENTER IS CONSIDERABLY MORE AT 1024 X 1024 FOR THE 19-INCHER.

How significant are those numbers?

YOU'VE ALREADY SEEN WHAT PAGEMAKER LOOKS LIKE IN A FULL PAGE DISPLAY ON THE MACINTOSH, RIGHT?

Right, it's pretty small.

WELL, ON AN IBM PRODUCT, AT MOST, YOU'RE ONLY GOING TO BE ABLE TO LOOK AT A THIRD OF A PAGE.

You mean you can see less on the IBM screen than on the Mac? I'm not sure I understand why.

BECAUSE THE STANDARD IBM MONITOR ONLY HAS 200 HORIZONTAL LINES OF RESOLUTION, AND IN THAT AMOUNT OF SPACE YOU SIMPLY DON'T HAVE ENOUGH RESOLUTION TO SHOW 66 LINES 8 DOTS HIGH.

Oh, now I see.

BESIDES THIS, THE IBM DOESN'T REALLY HAVE THE HARDWARE TO HANDLE A MOUSE VERY EFFICIENTLY.

USING A MOUSE ON AN IBM ISN'T VERY PRECISE. IT'S NOT EASY TO AIM THAT BIG ARROW ON THOSE SMALL CHARACTERS.

SUBJECTIVELY, IT JUST DOESN'T FEEL SMOOTH. IT'S KIND OF LIKE DRIVING A CAR WITH LOOSE STEERING. YOU'RE ALWAYS UNDERSHOOTING OR OVERSHOOTING YOUR MARK.

And, besides all this, performing operations with a mouse will probably be considerably slower, right?

THAT'S RIGHT. THE HARDWARE JUST ISN'T THERE.

IN FACT, WITH THE POSSIBLE EXCEPTION OF WINDOWING ENVIRONMENTS LIKE MICROSOFT WINDOWS HERE, OR LIKE GEM, THE IBM

DOES NOT HAVE AN OPERATING SYSTEM FOR DOING CUT-AND-PASTE OPERATIONS EITHER.

When you say those are possibilities, what do you mean?

WELL, IT COULD BE THAT SOMEBODY MIGHT COME OUT WITH A PAGEMAKER UNDER MICROSOFT WINDOWS, OR UNDER GEM, AND THAT WOULD SIGNIFICANTLY REDUCE IBM'S TASK BECAUSE THEN THEY WOULDN'T HAVE TO CARRY THE HARDWARE OVERHEAD.

So, it seems pretty clear that the standard IBM graphics adapter is insufficient to do anything approaching the Macintosh or the Documenter.

THAT TRUE. HOWEVER, A CUSTOMER CAN GET AROUND SOME OF THIS BY MAKING A JUMP TO THE IBM EXTENDED GRAPHICS ADAPTER, WHICH DOUBLES THE VERTICAL RESOLUTION AND ADDS COLOR. AND WITH THE IBM AT, YOU GAIN THREE TIMES THE PROCESSING POWER, WHICH IS AS MUCH AS YOU'LL NEED FOR THIS KIND OF WORK.

So, at that point does IBM become competitive?

AT THAT POINT, IBM CAN ENTER THE BALLPARK. AT THAT POINT YOU'RE LOOKING AT 640 BY 350 LINES OF RESOLUTION. AT THAT POINT, YOU'RE PROBABLY LOOKING AT COMPETITIVE PRODUCTS. BUT THE SOFTWARE HAS TO CATCH UP.

Which is probably what this new breed of products is designed to do, right?

PROBABLY. BUT EVEN THEN, THERE ARE A NUMBER OF DESIGN PROBLEMS THAT ARE LIKELY TO STILL PERSIST.

Give us a "for instance."

WELL, THE CURRENT IBM TECHNOLOGY REALLY ONLY ALLOWS FOR 640K. NOW SOME OF THESE WINDOWING ENVIRONMENTS DO ALLOW YOU TO GO FROM ONE APPLICATION TO ANOTHER BY USING EXTENDED MEMORY. BUT YOUR PROGRAM CAN NEVER BE MORE THAN 640K. SO YOU CAN ONLY RUN SEPARATE PROGRAMS IN BLOCKS OF 640K.

And how does all this impact the desk top publishing market Documenter faces?

IT'S NOT CLEAR HOW ALL THIS IMPACTS THE MARKET AT THIS POINT, BECAUSE THE PRODUCTS AREN'T RELEASED YET. BUT I THINK IBM CUSTOMERS ARE PROBABLY GOING TO BE FACED WITH THE SAME KIND OF SWITCHING BETWEEN PROGRAMS ENVIRONMENT WE SEE ON THE MACINTOSH. AN ENVRIONMENT WHERE YOU'RE GOING TO BE EDITING IN MICROSOFT WORD, YOU'RE GOING TO BE CREATING SPREADSHEETS IN LOTUS, AND YOU'LL HAVE TO SHUT DOWN ONE PROGRAM, ENTER ANOTHER, AND CUT-AND-PASTE THE DATA TO A CLIPBOARD BEFORE YOU CAN ENTER IT IN YOUR DOCUMENT AND ASSEMBLE YOUR PAGE LAYOUT.

So, the lack of integration will remain a big problem.

ABSOLUTELY. AND NO MATTER WHAT MECHANISM IS DESIGNED FOR SWITCHING BETWEEN PROGRAMS, IT WOULD STILL BE MORE DIFFICULT TO OPERATE THAN DOCUMENTER. BECAUSE YOU WOULD STILL HAVE TO GO OUT OF ONE APPLICATION, GO INTO ANOTHER, MAKE YOUR EDITS, SAVE THEM TO DISK, GO BACK TO YOUR ORIGINAL DOCUMENT, LOAD IT UP, DELETE THE UNWANTED ELEMENTS, AND MAKE ALL THE CHANGES.

So, when there are competitive IBM products on the market, the best we can expect for IBM will be something similar to a Macintosh environment?

YEAH, I THINK THAT'S ABOUT RIGHT. THEY CAN PUT WINDOWS ON THE IBM PC, BUT IT'LL BE JUST LIKE PUTTING SWITCHER IN THE MACINTOSH. THEY HAVEN'T SOLVED THE WHOLE PROBLEM. BECAUSE THEY HAVEN'T SOLVED HOW TO INTEGRATE TABLES OR GRAPHICS; THEY HAVEN'T SOLVED HOW TO INTEGRATE EQUATIONS; THEY HAVEN'T SOLVED TOTAL INTEGRATION.

THAT'S TRUE, UNLESS...

Unless what?

...UNLESS CUSTOMERS ARE WILLING TO MAKE THE JUMP TO AN IBM RT, AND THEY WANT TO GO TO "INTERLEAF." AT THAT POINT IN TIME, YOU ARE UP AGAINST A SIGNIFICANTLY ENHANCED SYSTEM, ONE THAT COSTS

TWICE AS MUCH AS DOCUMENTER, AND (PAUSE) DON'T SELL AGAINST IT!...

[Karen laughs, quizzically amused.]

Why not?

...EXCEPT ON PRICE. AT THAT POINT, YOUR BEST STRATEGY IS TO SAY YOU HAVE 90% OF THE CAPABILITY OF INTERLEAF AT HALF THE PRICE.
à PLUS YOU HAVE THE DOS WINDOW ON THE SCREEN, WHICH INTERLEAF CAN NOT DO...
That's it?

90% OF THE CAPABILITY AT A LOWER PRICE.

You mind expanding on Interleaf?

SURE, IF YOU LIKE. WHAT DO YOU WANT ME TO SAY? INTERLEAF IS A SUPERIOR PRODUCT TO DOCUMENTER. ON A FEATURES-BY-FEATURES COMPARISON, INTERLEAF BLOWS DOCUMENTER OUT OF THE WATER.

I'm not so sure I like hearing that. How can I really sell against a product that is as good as you say it is?

WELL, I THINK YOU HAVE TO REALIZE THAT INTERLEAF IS DESIGNED TO RUN ON 32-BIT MACHINES LIKE APOLLO AND SUN. DOCUMENTER IS A 16-BIT SYSTEM. NATURALLY, IF YOU GO TO A 32-BIT SYSTEM LIKE APOLLO AND SUN, AND YOU USE A PRODUCT LIKE INTERLEAF, YOU'RE GOING TO GET MORE FUNCTIONALITY.

YOU'RE ALSO GOING TO HAVE TO SPEND ABOUT TWICE AS MUCH TO GET THAT FUNCTIONALITY.

I THINK WHAT YOU DO IS YOU REMIND THE CUSTOMER THAT YOU'VE DEMONSTRATED A VERY PROFESSIONAL SYSTEM THAT COSTS UP TO $15,000. IF THE CUSTOMER WANTS TO JUMP TO A $30,000 SYSTEM, NATURALLY THEY'RE GOING TO GET MORE FUNCTIONALITY. BUT NOT THAT MUCH MORE. YOUR RESPONSE SHOULD BE TO SAY THAT YOU CAN GIVE THEM 90% OF THE FUNCTIONALITY OF THESE HIGHER-PRICED SYSTEMS AT HALF THE PRICE.

What if 90% isn't good enough?

IF THAT MUCH FUNCTIONALITY IS NOT SUFFICIENT FOR THE CUSTOMER, THEN HE IS LOOKING TO BE IN A DIFFERENT LEAGUE, AND HE SHOULDN'T BE LOOKING AT MACINTOSH OR DOCUMENTER OR IBM PC. HE'S LOOKING TO BE IN WITH APPOLLO, SUN, IBM RT, ETC.

I'VE SEEN INTERLEAF AND I'VE WORKED WITH IT BRIEFLY. AND I BELIEVE THAT IF YOU TRY TO SELL AGAINST INTERLEAF ON FUNCTIONALITY, YOU'RE GOING TO LOSE.

If I can't beat Interleaf on features, how can I win?

ON PRICE-PERFORMANCE TRADE-OFFS, AND, INTERESTINGLY ENOUGH, ON INTERCHANGEABILITY WITH THE IBM WORLD. BECAUSE, AT THE MOMENT, IT CLEARLY DOES NOT EXIST.

Come again? How can I beat an IBM product on interchangeability within the IBM world?

AT THE PRESENT, INTERLEAF REALLY DOES NOT HAVE A WAY TO TRANSFER FILES LIKE WORDSTAR, MICROSOFT WORD, LOTUS, OR SYMPHONY.

YOU CAN MOVE ASCII FILES, BUT ONLY THROUGH THE UNIX OPERATING SYSTEM WITH A UNIX TRAINED OPERATOR AT THE HELM.

I DON'T THINK IT WILL BE A WEAKNESS FOR VERY LONG, THOUGH. I'D BE WILLING TO BET THAT SOMETIME SOON SOME LITTLE SOFTWARE COMPANY WILL WRITE A UTILITY TO SELL TO INTERLEAF BUYERS THAT WILL BRIDGE THIS GAP.

But, at the moment, that software doesn't exist?

THAT'S RIGHT, BUT DON'T COUNT ON THAT SITUATION LASTING VERY LONG. SO DON'T SELL AGAINST INTERLEAF, EXCEPT ON PRICE. IT'S A PRICE - PERFORMANCE QUESTION, PURE AND SIMPLE.

And how much are we talking about again?

WE'RE TALKING ABOUT $15,000 AND DOWN FOR THE DOCUMENTER WITH A LASER PRINTER, VERSUS $27,000 AND UP FOR INTERLEAF ON THE IBM RT, WITHOUT A PRINTER.

O.K. Thank you very much, Carl. For your technical expertise and for your honest assessment of the market place for desk top publishing.

CLOSING segment:
NARRATOR/HOST WRAP UP

...an edited montage of highlights of what went we just saw...with summarizing commentary by narrator/host.

Now, let's review briefly what we seen in this video presentation.

To summarize some of the main points of PageMaker...

A major strength of PageMaker is that it is fairly easy to use, since it is consistent with the standard Macintosh interface of readily available pull down menus, and since it utilizes a real-world metaphor of a paste-up page on a desk top.

Another major strength of PageMaker is the degree of flexibility it allows you. You can have columns of any size anywhere, including multiple width columns on the same page; you can move graphics anywhere, on or off the page, including on top of text, and the superimposed graphic will print out with the text. Compared to Documenter, this makes PageMaker much more flexible from the standpoint of being able to lay out a page.

On the other hand, PageMaker has certain weaknesses which make it very vulnerable. PageMaker lacks powerful editing features, like search and replace. You have to leave PageMaker and do your editing in your original word processing file, and cut the changes back into your PageMaker document, because the two files are not linked.

Similarly, you can't edit graphic elements in your PageMaker document without switching back and forth to a program like MacDraw or MacPaint, a time-consuming and tedious process.

PageMaker does not do tables, so you have to use MacDraw, which has no automatic alignment features anywhere near the table-setting capabilities of Documenter.

You can't really do equations with nearly the ease you can do them in Documenter.

Overall, PageMaker on the Macintosh is logistically quite cumbersome to operate. In order to access several different programs, you have to shut down one and open another one, a process that involves a considerable amount that is only slightly minimized with the use of a program like "Switcher."

Connecting the Macintosh to the IBM world with software like MacLink and a cable is considerably more involved and time consuming that opening the PC window on Documenter.

And, ultimately, PageMaker's refusal to let you see an entire page without wearing magnifying glasses, and its document limit length of 16 pages make it unsuitable for doing long documents requiring a lot of revisions.

As for IBM, while there is no product currently on the market which is competitive to Documenter or PageMaker in the same price range, several companies have announced plans to release software in the near future.

Even when these products are released, their features should be examined and compared in light of certain inherent limitations in the design of the IBM PC which may make such products relatively weak contenders in the area of desk top publishing.

These factors include:
...a low resolution monitor, which will not allow users to get a full page on the screen;
...a hardware environment that cannot adequately support the use of a mouse;

...a limited memory capacity of 640K, which would necessitate switching back and forth from various programs in order to perform different applications, much like the Macintosh environment;
...an operating system that would need a "windowing environment" to allow cut and paste operations;
...a limited page composition capability
...no ability to send output to a laser printer.

While a high resolution and an extended graphics card can alleviate some of these problems and allow IBM to become competitive in desk top publishing, it is unlikely that the yet-to-be released software will be overcome the inherent design flaws of the IBM to produce a truly integrated environment on the PC.

Interleaf on the IBM RT is a well integrated environment that is faster, easier-to-use, and has more power than Documenter. It also costs twice as much. Your best bet is not to compete against it on features, but to offer a "price-performance" trade-off. Carl suggests you sell Documenter against Interleaf as having 90% of the Interleaf's capability at half the price.

Of course, as for Documenter, your main features are:
...the large screen;
...the ability to clearly see the whole page at once;
...the ability to have multiple windows open at one time, and to cut-and-paste easily between documents;
...the editing and repagination capability, without having to go in and out of multiple applications, or switch a bunch of program disks;
...the powerful table-making function;
...the versatile, multi-lingual keyboard;àwhich also has:
...the ability to do complex equations easily; and, of course,
...the IBM PC window, which you can run simultaneously with your other operations, while you cut-and-paste data directly from programs like Lotus into your documents;

Although Documenter is probably harder to use in the beginning because the functions are so distributed -- some functions are executed done by the keyboard, others are done by opening objects like the graphics transfer document, and still others by using the property sheet -- the

Documenter is far and away the most integrated system on the market, and that's where you're going to make your sales...

...by offering an integrated package on a workstation that contains a number of powerful functions that all kinds of businesses can use in producing high quality, professional-looking, camera ready documents.

Good luck, and good selling!