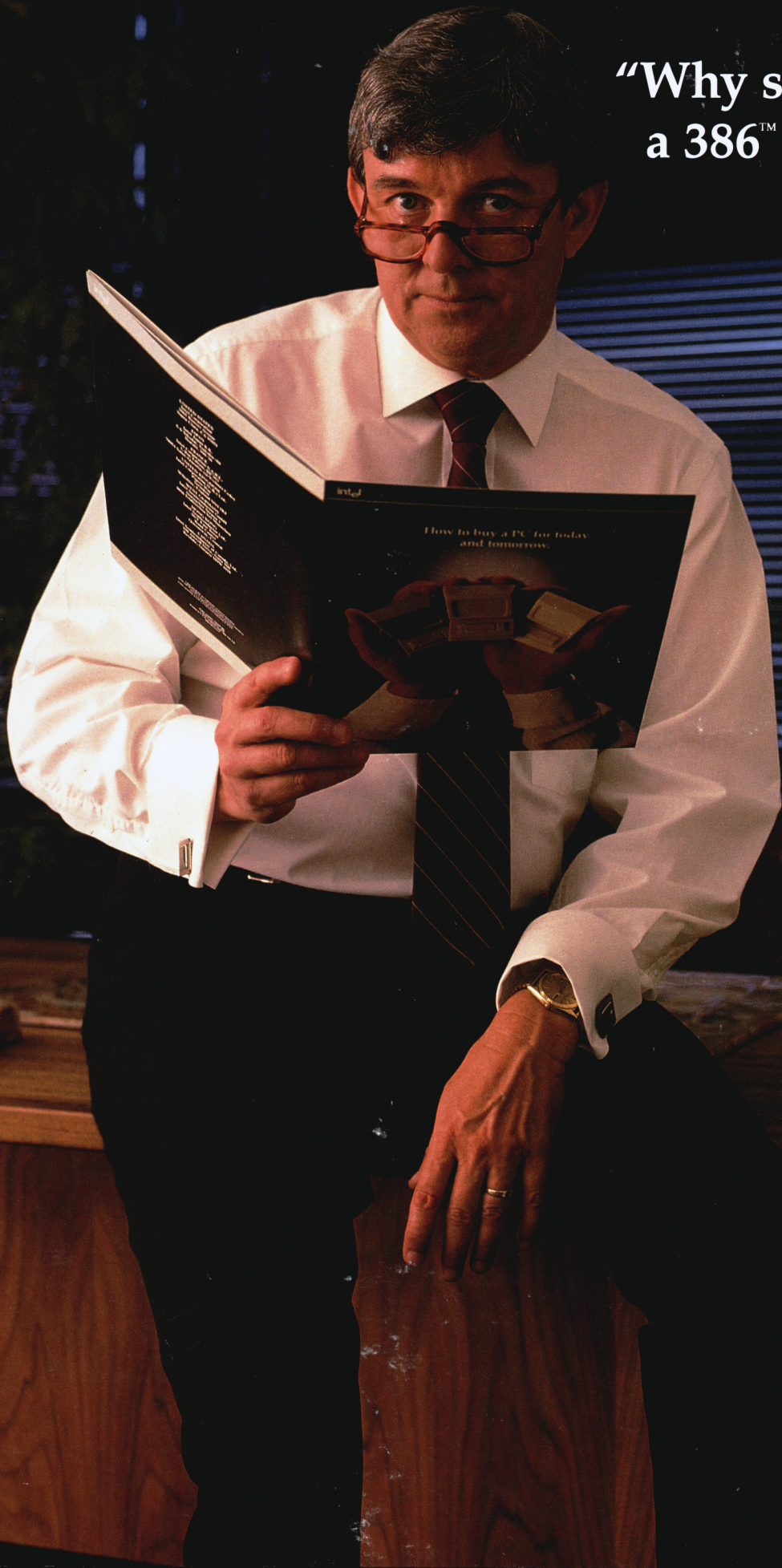
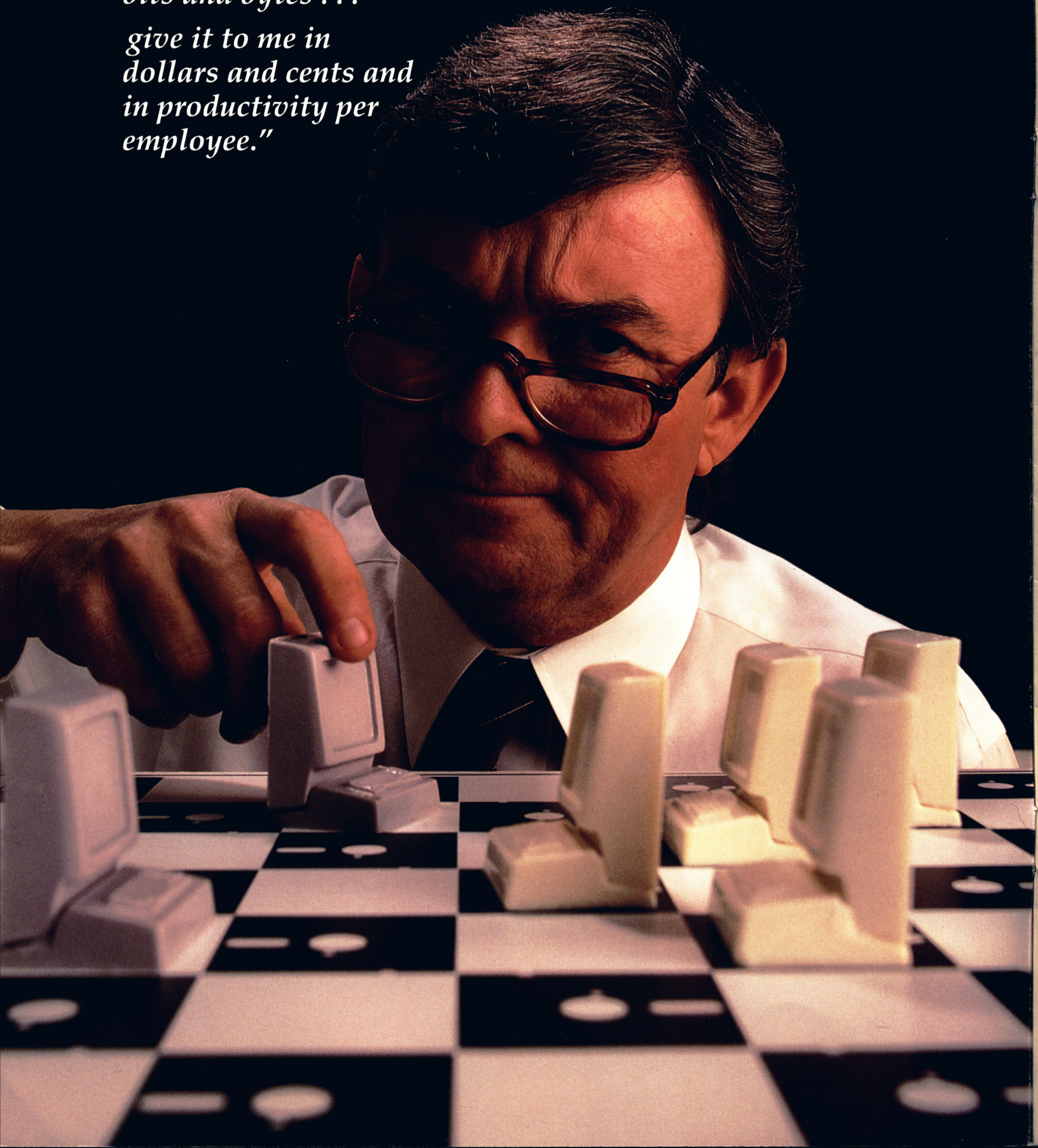


intel

**"Why should I buy
a 386™ computer?"**



*"Don't tell me about
bits and bytes . . .
give it to me in
dollars and cents and
in productivity per
employee."*



About This Workbook

Your job—managing your company's computer system. You know your bits and bytes, software and hardware. It's your job to make the right recommendations. And, your company depends on you.

Ten years ago business went through a major transition when it adopted the personal computer. Remember trying to get PCs accepted? Imagine trying to take them away now! But those old PCs have reached their limit. Today's computer users are calling for more speed, more memory, more connectivity and greater flexibility.

Today, business is in the midst of another big transition. Desktop computing is moving from 8088 and 286 systems to those based on the Intel386™ family: 386™ SX, 386™ DX, and i486™ chips. But is the timing right for you? Where is the software, and what about the price? Why should you buy a 386 SX system when a 286 appears to cost less? This brochure is a workbook designed to assist you in understanding the issues so you can answer these questions for yourself.

Use this Cost Analysis to determine how much time per day a 386 SX system must save you in order to offset the difference in price between a 386 SX and a 286. You will be astounded to discover how quickly a 386 SX system will cost-justify itself!

Complete Your Own 386™ SX Cost Analysis

System Depreciation Cost Per Day

	Total Cost \$		4 Yrs /Days		Cost Per Day	
386 SX System Cost	<input style="width: 80px;" type="text"/>	÷	1040	=	<input style="width: 80px;" type="text"/>	(A)
286 System Cost	<input style="width: 80px;" type="text"/>	÷	1040	=	<input style="width: 80px;" type="text"/>	(B)
Difference in 386 SX Cost/Day versus 286 System Cost/Day					<input style="width: 80px;" type="text"/>	(C) = (A) - (B)

Employee Salary Cost

	Payroll \$		Cost/Day		Cost/Minute	
Yearly Salary (No Benefits)	<input style="width: 80px;" type="text"/>	+ 260 Days =	<input style="width: 80px;" type="text"/>	+ 480 Min. =	<input style="width: 80px;" type="text"/>	(D)
OR Hourly Salary		<input style="width: 80px;" type="text"/>		+ 60 Min. =	<input style="width: 80px;" type="text"/>	(D)

Minutes of Employee Time Saved Required to Pay for Incremental System Cost

System Cost/Day Difference (C)		Employee Salary Per Minute (D)		Minutes Saved to Pay For 386 SX Incremental Cost	
<input style="width: 80px;" type="text"/>	÷	<input style="width: 80px;" type="text"/>	=	<input style="width: 80px;" type="text"/>	Per Day

The Real Costs

You've heard all of the arguments about technical benefits: 386 technology allows larger, more powerful applications; systems run at faster speeds; and multiple applications run simultaneously.

But when it comes to purchasing a new computer, what management really wants to hear about is dollars and cents and productivity. How is it going to increase revenue per employee today and over time?

Let's first look at the "dollars and cents" by comparing average purchase costs of 286 and 386 SX based systems — brand name, office-class systems. Sure, you can always find a stripped down system—no hard disk, minimum memory, no service or support—for less. However, "office-class" assumes both systems have a couple of megabytes of memory, the same hard disks, color monitors and VGA cards. Roughly, we can establish an average street price of \$2300 for a 286 system and \$2800 for a 386 SX system.

Every company's accountant will use his own timetable, but four years is fairly standard with the IRS for depreciation. Over four years the 386 SX system will cost \$1.91 per day compared to \$1.57 for the 286 system. The 286 system provides an apparent savings of 34 cents a day until it's compared to the daily cost of the employee who uses the system.

At \$25,000 a year (before benefits), an employee costs \$96.15 a day (without vacations) — that's 20 cents a minute. If the 386 SX system boosts an employee's daily productivity by just 10 minutes more than the 286, you'll not only make back the daily difference, you'll also make back the entire 386 SX investment.

"We only recommend 386s. In terms of price points, future direction for the industry and memory requirements, it is the platform of the future."

Pat Condon, Consultant
Arthur Andersen & Company

Productivity Increases

Where will these savings come from? Ten minutes or twenty minutes, how does 386 technology deliver such an increase in productivity? Just using the same old software faster is good, but not good enough. You want a clearer benefit if you are going to sell the company on a new computing standard. Connectivity and multitasking are two major ways 386 technology dramatically boosts productivity.

If you have mainframes or minicomputers, you have already experienced the productivity of networking. Teams of employees can work on the same project simultaneously. Even if employees reside at distant sites they can stay on the job. This speeds up a project's completion and avoids costly delays. Vital statistics and decisions can be shared instantaneously around the office, around the world. Imagine having to wait a week for the mail to deliver a report from New York to Houston (if it even got there at all).

With 386 technology you now have the power to base the company's entire network on standard PCs. For example, by taking advantage of the 386 architecture, Novell's new NetWare-386 boasts two or three times the performance over its 286 version. Its added features are equal to or better than many traditional networks, and can support up to 250 PCs.

Networking may be a familiar benefit of modern computing but who needs multitasking? What is it really and how can it save time and boost productivity?

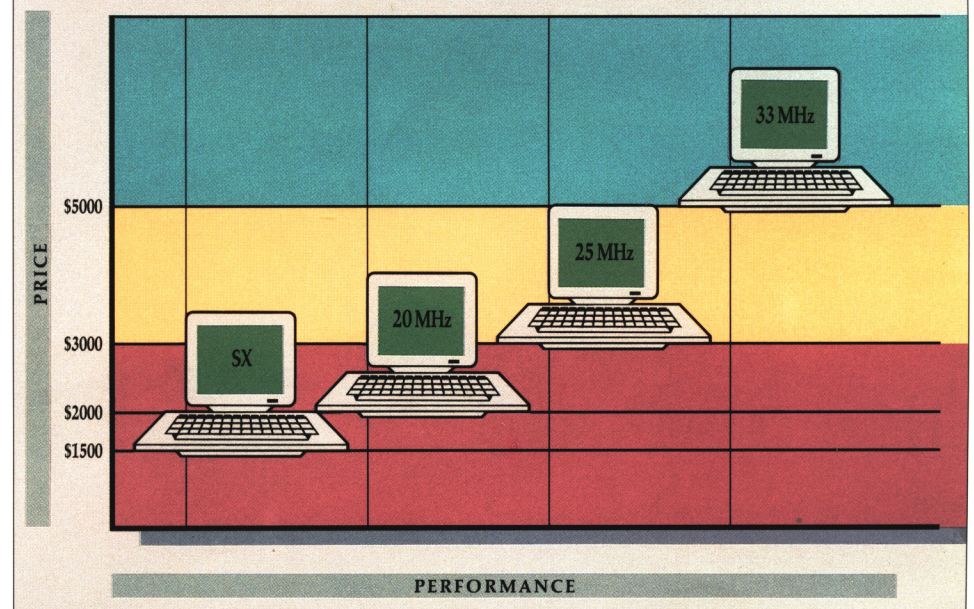
Take a close look at your workforce. Each project is a series of tasks and subtasks. Real people work with more than one thing at a time. They open three folders, compare reports, answer the phone while glancing over a spreadsheet. Using 286 systems limits workers by constraining the number and size of tasks they can work on to one. Multitasking on a computer with the 386 chip allows people to work more naturally. Employees can work on several tasks at once, accomplishing more in a shorter period of time.

People Costs—Your Single Largest Expense

You waste money when employees can't get at their tools, when they have to use them one-at-a-time. Secretaries do more than just use word processors and analysts use more than spreadsheets. Most of them have 3270 emulators, prepare reports that need graphics, use electronic-mail, exchange data and need to look at several files simultaneously.

With multitasking operating environments such as Windows/386 and

The i386 Family Computing power to fit any budget!



DESQView-386, employees are not confined to running single applications. They don't waste time loading and unloading applications or "Hot" keying back and forth between the mainframe and their PC. They can open multiple DOS windows on the screen in separate, live sessions.

With Windows, they work in word processing while switching back and forth easily among database files; view graphics and text files simultaneously. They can open up electronic mail (without shutting down or stalling other programs), copy a message off the mainframe and drop it into a PC application.

With multitasking, employees save more than just time. Employees save ideas and enthusiasm, because 386 computers respond immediately to their commands. The tools, the applications, are ready to go when they are.

Companies save in training and service time, too. Standardizing on an easy-to-use windowing interface means no matter where an employee sits he will work on a computer screen he is familiar with. The problems with multi-vendor maintenance are reduced because the Intel386 architecture supports a broad range of systems, from entry-level PCs up to servers and minicomputers. This means that maintenance, diagnostic programs and programming are all on the same architecture.

Software Harmony

When the 386 chip was introduced, Intel added several key features missing on the 286 that software developers wanted. This meant that while the 386 chip could run all the 286's software, the 286 couldn't use the more advanced 386 software. The best part about the new i486 chip is what Intel didn't do; didn't change the software. The 386 and i486 chips each run the same 32-bit software.

The new i486 chip is a faster version of the Intel386 architecture with a math coprocessor and more, all on one chip. To end-users this compatibility between the 386 and i486 chips means a new era of software harmony.

The 386 and i486 chips can run all the software written for the 286. The 286, however, is unable to take advantage of the new and more powerful applications available for the 386 and i486 family of

Testimonial

Coca-Cola Foods—"We wanted connectivity and a high-performance platform..."

"Our users are finally up on a platform where they can get the job done," says Cheryl Currid, Director of Applied Information Technologies for Coca-Cola Foods. The company has networked several hundred 386 chip-based personal computers in its Houston office, where the workers take advantage of the technology's multi-tasking feature to produce complex reports and documents.

"We made our decision back in 1987. We looked around, and besides 286s, we had a large installed base of 8088-based PCs, 56 percent of our inventory. Systems that couldn't run OS/2 (or shouldn't), couldn't multitask or take us into the future. I went to management with a plan. I told them, 'We're never going to get out of this rut if we continuously throw new money away on old technology.'

"I proposed that all new money buy 386 technology and that we move the other systems downstream in the organization. We looked at the numbers back then and figured 386 technology would only cost us \$1.67 a day versus \$1.00 a day for 286 systems. The benefits just outweigh the difference.

"The results have been great. We're about 85 percent networked and we've

built some very quick applications. In fact, we've seen our first in-house "killer app,"—it's a way for our database program to get data directly off the mainframe on its own. We jumped right into Windows 386 and combined all of our applications together so we were able to multitask almost overnight.

"I've got to tell you, people work differently at our company now. When I walk around I see a lot more systems on, systems in use, with

not just one but several applications running. A lot of folks didn't really think they needed the power at first, and now you can't take those 386s off their desks.

"We wanted connectivity and a high performance platform we wouldn't have to continuously swap out as users' needs grew. Generally, we give executives SX systems, which is the entry level system at our company. And, twenty megahertz is standard for everyone else while secretaries get 20- or 25-MHz machines, depending on how many principals they support.

"As far as migrating down, nobody is really getting the old ones. They are turning into communication servers, print servers off the network."



Cheryl Currid,
Coca Cola Foods

"We're mothballing the 286s. With 386s we're better positioned to take advantage of the future ..."

Richard McGeary,
CFO Information Systems
CM Alliance

chips and never will. Companies trying to support both the 286 and the 386 will uncover the hidden costs of having to buy both outmoded and advanced versions of the same applications.

386 Software

You've been told there's no 32-bit 386 application software. Wrong, because for systems based on the 386 family, there are products like Borland's Paradox/386 delivering three to five times the performance of its 286 version.

The vitality of the Intel386 architecture is already allowing workstation and minicomputer class applications—such as Mathematica (math), Oracle (database), and IBM's Interleaf (desktop publishing)—to migrate to personal computers.

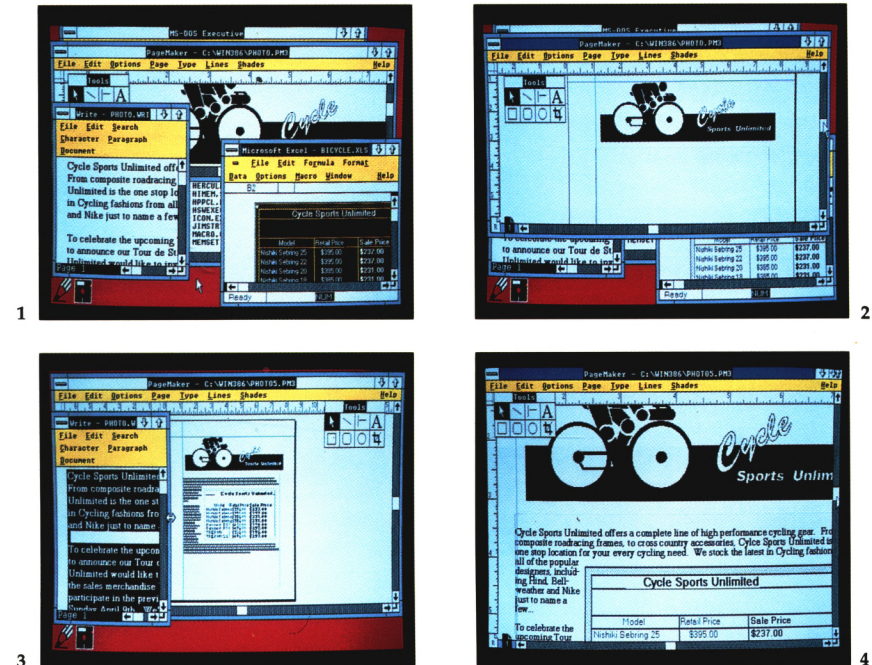
Meanwhile, traditional PC applications are taking advantage of 386 chips to compete with workstations. Autodesk offers a powerful suite of 386 software including AutoCAD (design), AutoShade/386 (shading) and AutoSolid (for 3-D graphics).

But this is just the beginning. There are many more applications on the way. Software developers are devoting the lion's share of their R&D resources into developing applications that take advantage of the 386 chip. No one knows today which of these applications will be the big hits of the 1990s, but companies are already writing their own "Killer Apps." These are in-house applications customized to give them a competitive edge by taking advantage of 386 technology.

"The advantages of 386 and OS/2-386 software are so great that those 286s will become albatrosses long before they're written off."

Jim Seymour,
Consultant, Editor
PC Computing

Multitasking lets you accomplish tasks more quickly.



- (1) With Windows/386, multiple applications are immediately accessible.
- (2) For example, a bicycle distributor can quickly customize a price sheet on Aldus' Pagemaker.
- (3) Modified text and new prices are easily added from Microsoft's Word and Excel.
- (4) In seconds, the new price sheet is proofed and ready for the customer.

Testimonial

Manufacturer's Hanover—"Our environment is worldwide and it is all based on 386 technology."

"We want to be more than just good. So, we're attempting to move ourselves to the leading edge of technology," says Ivan Brass, Vice President and Director of Information Systems, at Manufacturer's Hanover Auditing department. "We're looking at artificial intelligence, knowledge-based systems, expert systems; they all require the speed and capabilities of the 386 chip."

"As our profession advances, we're finding we need to look at a multiplicity of auditing documents. An auditor starts with a flow chart that describes an operation. He then develops a narrative to help him understand what the operation does. He creates a spreadsheet to understand the transactions and accounting. Then he has to take all

of this and put it into a fourth part, the audit report. The 386 technology under Windows lets him look at all this on one screen. It is making the auditor a more efficient individual.

"Our environment is worldwide and it is all based on 386 technology. We've just added 75 PCs in our New York office. We've added a similar network in London. We're using portables based on the 386 chip. We've tied all the pieces together so you can dial from Tokyo, Paris, Singapore and be able to move data and communicate



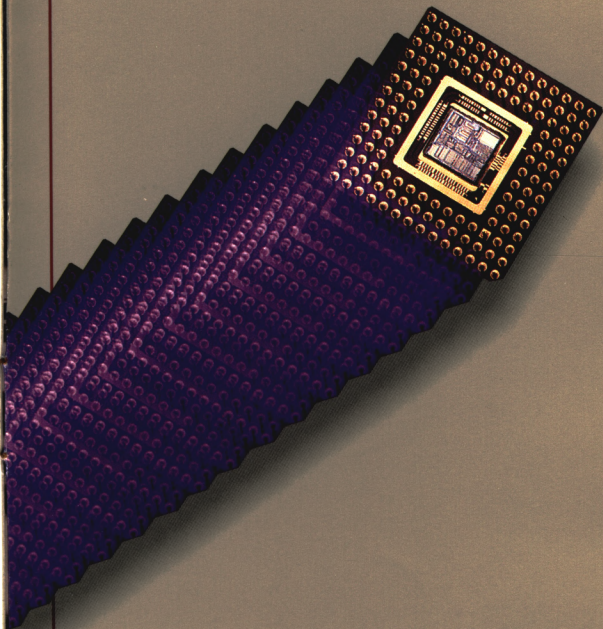
Ivan Brass,
Manufacturer's Hanover

across the networks. Wherever I go, I interface with the same screen because the technology is consistent. Taking advantage of the technology is the key."

*Tomorrow's
Vision,
Today's
Choice*

The cost of systems based on the 386 family versus those based on the 286 is a difference of only pennies a day. The savings in employee productivity, training, service and maintenance more than make up for any cost difference.

It just doesn't make sense any longer, doesn't make financial or business sense to invest today's money in yesterday's technology and expect it to do you any good tomorrow. The time has come to make the transition to 386 computing.





UNITED STATES

Intel Corporation
3065 Bowers Ave
Santa Clara, CA 95051

JAPAN

Intel Japan K. K.
5-6 Tokodai, Tsukuba-shi
Ibaraki, 300-26

FRANCE

Intel Corporation S.A.R.L.
1, Rue Edison, BP 303
78054 Saint-Quentin-en-Yvelines Cedex

UNITED KINGDOM

Intel Corporation (U.K.) Ltd.
Pipers Way
Swindon
Wiltshire, England SN3 1RJ

WEST GERMANY

Intel Semiconductor GmbH
Dornacher Strasse 1
8016 Feldkirchen bei Muenchen

HONG KONG

Intel Semiconductor Ltd.
10/F East Tower
Bond Center
Queensway, Central

CANADA

Intel Semiconductor of Canada, Ltd.
190 Attwell Drive, Suite 500
Rexdale, Ontario M9W 6H8

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