

# "When we invented the personal computer, we created a man-machine partnership"



#2 of a three-part series.

Steve Jobs and his partner, Steve Wozniak, developed the first personal computer in 1975. Today, Steve Jobs is vice chairman of Apple Computer Inc., based in Cupertino, California. Apple has grown to be a leader in personal computing.

**Apple has sold over 150,000 personal computers. What are people doing with them?**

Let's talk about two general points before we get into specific applications. First, a personal computer is more than just a small "big" computer. Let me explain that by going back to the analogy of the large horsepower motor and the fractional horsepower motor.

You see, the fractional horsepower motor was one of the breakthroughs of the industrial revolution. It was more than just a small "big" motor because it gave the people freedom to apply affordable horsepower directly where it was needed. The fractional horsepower motor created uses for horsepower that were never possible or imagined with the large horsepower motor, and made portable tools a reality. It's been less than 100 years since its invention, and the enormity of its impact surrounds us. The

of the Apple's computing power is available at your fingertips. Apple's computing power is totally dedicated to doing what you want. You can customize the Apple to work for you in ways a big computer never could.

The second point is that, unlike the camera or the stereo which are dedicated to just one function, the Apple is truly a general purpose tool. One minute the Apple can help educate elementary school students on math drills — the next minute, that same Apple does financial modeling — the next minute, it encourages artistic creativity via color graphics.

We originally underestimated the enormous creativity people would use in applying our general purpose tool. Apples are now being used for literally tens of thousands of applications that we never imagined. This general purpose, flexible nature is the reason that the personal

tion in a form he could easily understand. He finally had a chance to see how his business really worked, so he could recognize the inventory problem — what it was doing to his business — and how to solve it.

Another example: A financial analyst and consultant considers his Apple II as his business partner. He uses his Apple for

drudgery but frees people to concentrate on creative solutions is how we use Apples at Apple. *Everyone uses Apples here.* We don't even buy typewriters for our secretaries any more — they use Apple systems.

We freed our secretaries to do more sophisticated tasks by improving their productivity. They're learning skills like

**"Some of our secretaries are just as computer fluent as the people we hire right out of business school."**



everything from statistical analyses and company modeling to creating charts and graphs for his newsletter. His Apple allows him to test assumptions and ask "what if?" questions. So his Apple is the tool that gives him the opportunity to dissect a problem before committing to firm, final decisions. But the partnership with his Apple doesn't end at the office. He takes his Apple home on weekends and when he's through with his financial analyses, his kids use it.

More examples? Loyola University's emergency medical center uses Apples to process ambulance reports in one-tenth the time it usually takes. In Florida, one company actually puts Apples in the back of a van and drives around from supermarket to supermarket every day. At each supermarket, they enter the prices of certain grocery and produce items into the Apples. This information is then correlated and made available to consumers, so that they can plan the most nutritious meals at the lowest possible price. The bottom line is, that company is providing consumers with a service that never could have been possible before the advent of a portable, powerful Apple personal computer.

But a really good example of how Apple not only eliminates

departmental budgeting, sales analyses and forecasting — and those skills let them make the jump into other parts of our organization. Some of our secretaries are just as computer fluent as the people we hire right out of business school. So, not only do our secretaries have the freedom to do more rewarding, enriching tasks — they have the chance to get involved in solving important problems that can ultimately affect the success of Apple as a company. And that means I have more time to creatively explore and implement business strategies. All of us at Apple are experiencing the satisfaction of this man-machine partnership that frees people to do what they do best: think conceptually.

**What are people going to be using Apples for 10 years from now?**

The Apple isn't some futuristic dream, it's a creative tool people are relying on right now. The personal computer is changing lives today.

A personal computer isn't only a tool for people in business. There's a whole generation of kids growing up learning how to use the personal computer as a problem-solving tool — 97% of the students in Minnesota have the opportunity to solve problems with an Apple. But Apples aren't just being used to teach computer science courses. Students from Alaska to Mexico learn physics, mathematics, spelling and a slew of other subjects on their Apples. And kids who have problems learning how to read and write are actually overcoming their disabilities with the personal computer. Apple's colorful graphics make it fun to learn, so the problems these kids have are being dealt with successfully in a very innovative way.

As all these students who are now using Apples grow older, they'll integrate the personal computer into their life as a friendly tool, just like their bicycle. And those kids are the ones who will create the applications we at Apple haven't even dreamed of.

By the end of the decade, the personal computer won't be a mystery to anybody. Society will realize that the opportunity for a man-machine partnership is well within everyone's reach. Let's put it all in perspective for you: five years ago, the personal computer didn't even exist. Yet, as of this interview, personal computing has statistically reached one in every 100 American households — and there are 72 million households in America! By the end of the '80s, that figure will be one in ten.

The vast penetration of the personal computer into our society not only is inevitable, it's real. I feel privileged to be a part of it all, and to see the results in my lifetime.

*This is part two of a series where Steve Jobs talks about the personal computer, and the effect it will have on society. To find out more about the Apple family of computer products, see your authorized Apple dealer. For your nearest computer store, call (800) 538-9696. In California, call (800) 662-9238. Or write: Apple Computer, 10260 Bandley Drive, Cupertino, CA 95014.*

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average American household contains no less than 50 fractional horsepower motors.

The personal computer is more than just a small "big" computer for the same kind of reasons. It brings intelligence directly to where it's needed: at the personal level. It lets you use that intelligence in creative ways you never imagined. And it's a portable, easy-to-use tool that everyone can afford.

But most important, the Apple isn't just a window into intelligence like the big computers or the timesharing networks of the '60s and '70s. The Apple is a realization of a man-machine partnership that lets an individual interact one-on-one with a computer. 100%

computer will be a long-lasting tool with an ever-expanding number of applications.

**You still haven't answered the question, Steve. What are those 150,000 people doing with their Apples?**

Okay, now I'll give you a few specifics. There was a sewing machine repairman in England who almost went out of business because he didn't know how many different parts he had in his inventory. He'd buy more stock than he needed, and run out of parts he thought he already had in stock. That repairman couldn't afford a \$15,000 computer to help him manage his business, but the \$2,500 Apple system he could afford literally saved him. The Apple supplies him with vital informa-



 **apple computer inc.**