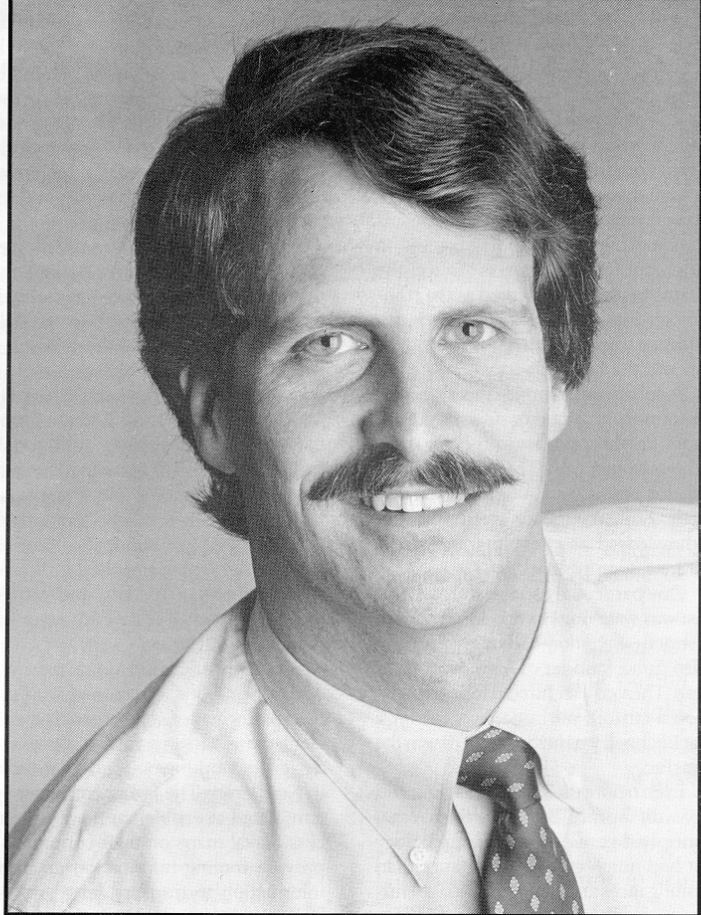


INTERVIEW



Stanley K. Honey

President and CEO of ETAK, Inc.

There is a curious phenomenon that occurs soon after a new technology is launched.

Inventors of all kinds have probably grappled with it since the inception of tools and the discovery of the wheel: *at some point the technology begins to mushroom into applications and products dreamt up by the end users that go far beyond those envisioned by the original inventors.* Such is the case of the digital roadmap developed by engineer Stan Honey of Etak, Inc., the world's leading supplier of digital road maps for the evolving new multi-billion dollar Geographic Information Systems industry.

Electronic navigation systems were initially pursued more intensely on the high seas for use in yacht races than on land. It was as navigator aboard some of the fastest racing yachts in the western hemisphere that Honey began developing the concepts and electronic technology underlying all of Etak's products today.

Navigating his first ocean race between Los Angeles and Mazatlan when he was only fourteen, Honey's passion for sailing continued during his undergrad years at Yale, where he also taught celestial navigation. Upon entering a Masters program in Electrical Engineering at Stanford, sponsored by SRI International, where Honey worked as a research engineer, he quietly began his own small business, building navigation equipment for ocean racers. To test the systems firsthand, he served as the navigator on the boats in worldclass races, including the TransPac, the Admiral's Cup and the Bermuda Race.

People began to notice that the boats navigating with Honey's systems almost always finished at least in the top three and more often won. The boats, the sails and the crews were of course all top notch. Still, navigation systems were acknowledged as providing an important new edge in sailing.

One particularly successful technologist was watching Honey closely, Nolan Bushnell—inventor of Pong[®] the first video game, founder of Atari[®] and Pizza Time Theater. He hired Honey to develop a custom navigation system for a boat Bushnell was having built to win the TransPac.

Even before the system was built and they won the race, Bushnell realized that Honey had come up with a technology that had much greater importance than winning races and navigating boats. During a race down the Pacific coast, Honey scribbled a design on the back of an envelope that showed why his concept for vehicle navigation and digital mapping was technically feasible and affordable.

Bushnell understood the significance immediately and responded by investing \$500,000 to launch Etak.

By mid 1985 the company's first product for land vehicles—the Navigator—was on the market. Several thousand units were sold, but the Navigator proved very expensive to market. Because the product and concepts were so new, customers wanted to see the technology in action and always requested a test drive, both time and money intensive.

So a new business strategy was formulated. Etak management decided to target the company's products to the commercial marketplace, where strong

interest was building. Etak installed commercial applications for scheduling and routing of emergency response vehicles such as ambulances. They also provided data for the GIS systems used by many companies to control their field operations. Such applications included food and beverage distribution, newspaper circulation and county and city planning.

Next, the company licensed the navigation technology to three of the largest manufacturers of automotive audio equipment in the world (General Motors/Delco /U.S., Clarion/Japan Robert Bosch & Blaupunkt/Europe). Etak also took on contract mapping projects in the U.S., Middle and Far East and Western Europe for various applications. Additionally, Etak marketing staff set to work creating what was to become the first systems reseller program for digital maps in the GIS industry. The Explorer Program—for VARs, system integrators and dealers—is making Etak's map data and retrieval technology available to end users in a myriad of industries.

In 1988, Etak's unique map data coverage and quality, coupled with their high performance software tools for efficient retrieval, came to the attention of designers working on the Jaguar Project in New Jersey. The Jaguar computer system, slated to enable travel agents to access digital maps on their computers to provide routing information and hotel information to travelers, was launched by Rupert Murdoch's News Corporation. It was one of Murdoch's lieutenants, John Evans, who saw unrealized potential in Etak's digital maps in a wide variety of other applications, from travel planning to market research and analysis and direct marketing.

Murdoch agreed, and News Corp acquired Etak in 1989.

Since then, industry prognosticators have included Etak's products in a new category dubbed "enabling technologies"—products that are easily integrated into and enhance the functionality of existing systems applications and reduce the dependence of end users on data processing departments.* As graphical interfaces representing data geographically, Etak's technologies will enable end users from a myriad of industries and professions to better visualize, plan, route, schedule and navigate, to make better and more efficient use of data.

What initially convinced you that map data should be Etak's primary focus?

Our customers! People began asking if they could use the map data on their computers in fixed applications, to keep track of their employees, facilities, customers or field operations, things we hadn't originally imagined. So we saw both the greater uses of electronic map data and all of the new GIS applications coming to the fore at the same time.

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Today, one reseller agreement we have with Software AG, for example, greatly enhances the functionality of their ADABAS/NATURAL family of mainframe database management products. By incorporating Etak's technology, Software AG is able to put database tools capable of supporting geographic queries into the hands of end users working with business data in single or multi-user integrated commercial database environments.

What makes Etak's digital maps unique?

Most digital maps are digital only in that they are stored as a set of plotter commands or as pixels on a screen or as a video, but they can't be used by a computer to answer questions such as "Where is this address?" or "How do I get from here to there?" EtakMaps are databases that let the user call up this information, and even allow for the use of a unique map-matching scheme that can find the position of a moving vehicle on a map.

*"Software Products—Key to the Online Enterprise," research report by Alex Brown & Sons, Inc. Computer Services Group, March 1990.

