

As Digital Alternative, Xpaper Marks the Spot

By Kim Hart
Washington Post Staff Writer
Sunday, July 9, 2006; F07

As just about every mode of communication moves to a digital format, it seems logical for paper to follow suit. That's what Talario LLC, a small firm based in Brookings, S.D., had in mind when it released Xpaper last week.

It's a concept that involves the use of special paper and a digital pen -- one that tracks the writer's scribbles and their position on the page -- tapping into a computer to eliminate the need for scanners, fax machines and sending important documents via overnight mail.



Here's how it works: Using any printer, the user prints a document, such as a spreadsheet or checklist, onto a sheet of Xpaper encoded with a pattern of tiny gray dots recognized by the digital pen as it marks up the page. The pen's contents are then uploaded into the computer by docking the pen into a special dock. By recognizing the pattern of dots the pen has stored, the computer can put the handwritten notes into the original, digital document in precisely the right place.

The page is then saved as a PDF that can be stored as a searchable computer file, uploaded into another program or transferred via e-mail.

The pen records the time and date each mark was made on the page for precise recordkeeping, and it remembers the notes made on up to 200 documents at a time. The system also allows documents to be modified after the pen's contents have been released.

Tim Aughenbaugh, president of Talario, said Xpaper eliminates endless paper trails.

"Paper will have a role if we can find a way to make it interface better with the digital world," he said. "Xpaper does that."

Maybe so -- but it's unlikely to resonate with the general public, said Paul Saffo, a technology strategist based in Silicon Valley.

"It's going to be a specialty device for businesses with special needs," he said. "It's not a general-purpose solution for people in their home office."

Over the past six months, the product has been tested by about two dozen pharmaceutical companies, medical organizations and financial firms, Aughenbaugh said.

He also points to examples of other uses, such as real estate and insurance agents getting signatures and taking notes in the field.

The standard edition is \$249 and includes 100 sheets of Xpaper and a Logitech digital pen. For \$349, the professional edition lets several pens work in a network. Individual sheets of paper sell for 15 cents each.

Saffo points to other writing systems aiming to cut out paper, such as graphic drawing tablets and pen-based handheld devices, that failed to strike a chord with mainstream users.

The cost of Xpaper could also make it a tough sell for individuals and small businesses, he said.

"It's an awfully expensive way to replace a fax machine or scanner," he said.

Although Xpaper may appeal more to niche markets, it is making an important step toward paperless, digitized communication, said Daniel Burris, a San Diego technology forecaster.

"Some people will always prefer using a pen over a keyboard" he said. "That's never going to change."