HP Tries to Create Printers That Love the Web

By Damon Darlin

© NYT April 9, 2007   Vyomesh I. Joshi, the senior vice president in charge of Hewlett-Packard's printing division, bounded up to the stage to congratulate his employees on their performance. He was ebullient, and with good reason: revenue, profit, margins and market share were all up, he told them at a quarterly "coffee talk" in late February.

He followed that up with a less-heartening tale. He said one of his daughters, a college student, had told him, "I don't need a printer." Like many people of her generation, she lives online and finds it unnecessary or too difficult to put bits onto paper.

"The intent of this is not to scare you, though I am scared," Mr. Joshi said.

The Internet era has been good to makers of printers so far. HP's numbers show that half the printing done in homes is material from the Internet, like e-mail and Web pages, while software like Microsoft Word accounts for just under 20 percent of printouts.

But looking ahead, Mr. Joshi is concerned that if people find printing Web pages too hard and start printing less, he will have fewer coffee talks where he crows about record revenue, profit, margins and market share.

So Mr. Joshi is beginning to introduce a strategy that could be as important as his previous strategic shifts. Those led the company to sell copiers and commercial printers, along with photo prints via the online service Snapfish.com and blue photo-printing kiosks in stores. Now he wants H.P. to figure out a way to get people to print more Web pages.

"It's an indication of a broader strategy to leverage the Internet," said Charlie Corr, group director of InfoTrends, a market consulting firm. Mr. Joshi sees Internet material, in particular blogs and personal photo galleries, as a driver of demand for printing, Mr. Corr said. "He has a vision that transforms how and when things are printed."

Worrying about a trend that has yet to materialize may seem odd for someone running a unit that last year brought in 30 percent of HP's $91.7 billion in revenue and more than half its operating profit.

Through good times and bad, H.P. has counted on the imaging and printing group and its version of the classic razor-and-blade business model: sell inexpensive printers and make the money on the ink.

The company fiddles with that model as if it were tuning a perpetual motion machine. If H.P. wants to see higher profit in several months to compensate for slower growth in another area, Mr. Joshi's unit will cut printer prices. More printers are sold, and new customers are soon buying high-margin replacement ink or toner cartridges.

The company, based in Palo Alto, Calif., is dominant in printers — half the printers sold in the world carry the H.P. logo. New entrants to the market like Dell, Samsung and more recently Kodak pose little threat. Mr. Joshi's concern is a shifting market.

He spotted a change in consumer habits from printing digital photos at home to printing them at stores, so he pushed the photo kiosk strategy. He keeps looking for ways to spur faster growth and stave off

complacency. "Companies don't transform at the top, they transform when they are at the bottom," Mr. Joshi said.

Which brings Mr. Joshi back to his concern about his daughter. It isn't her fault that she finds printing annoying. It is difficult to print the content on many Web sites, whether they are blogs, MySpace pages, lists from comparison shopping sites or even directions from Google Maps. Printouts often look haphazard, with large bands of white space or images chopped in two.

Last month, in a small step toward making sure that home printers keep churning, H.P. bought a small company, Tabblo, a privately held developer of Web-based software in Cambridge, Mass.

Tabblo's software creates templates that reorganize the photos and text blocks on a Web page to fit standard sizes of paper. H.P. wants to make the software a standard by making it ubiquitous, like Adobe's Flash and Reader or Sun Microsystems' Java.

"We'd make printing as much a nonevent in the online world as it is in the desktop world," said Pradeep Jotwani, the unit's senior vice president in charge of the supplies business.

If it creates the printing engine of the Web, H.P. will help all printer companies — but as the industry leader, it will benefit more than its rivals. It is only the first step, analysts said, as the company tries to stay at the center of a system of consumers and businesses generating and printing Internet content, whether it is for homemade books or custom marketing materials.

A director of Yahoo since 2005, Mr. Joshi is well aware of how a new technology can shake up well-established companies. He is just as fascinated by how companies transform, reading several books a week on the subject when he is not reading novels or watching movies. That interest might seem unusual for an executive who has spent his career with one company.

After graduating from engineering school in India, where he grew up, Mr. Joshi went to Ohio State on a scholarship and received his master's degree in electrical engineering in 1980. H.P. hired him as an inkjet printer engineer. For his first six months on the job, he walked from his apartment up a long hill to the company's factory and research center near San Diego.

"I didn't have any money," he said. Though company filings show that he made $12.2 million last year in salary, bonuses and stock awards, he lives in a home that is modest by local standards and is located less than a mile from the same factory.

One of Mr. Joshi's first assignments was to increase the reliability of the inkjet printer heads that shoot bubbles of ink onto the page. Cartridges were failing after firing only 600,000 drops. He figured out a way to make them fire 45 million drops. That meant a cartridge would run out of ink long before failing, which, he jokes, opened the door for the cartridge refilling industry, the bane of HP's business model.

Mr. Joshi was given the top job at the unit in 2002 by Carleton S. Fiorina, then the chief executive. After she was forced to resign in 2005, he was briefly mentioned in news reports as a possible candidate to replace her. His interest in transforming companies is shared by Mark V. Hurd, who won the chief executive job.

Mr. Hurd recognized Mr. Joshi's ability to expand the business, and the two worked out an arrangement so that the imaging and printing group got to keep a greater percentage of its profits to invest in its own growth.

Mr. Joshi's goal is growth of at least 6 percent a year, which means adding $1.6 billion to as much as $2 billion in revenue annually. The company is looking for more things to print, from museum-quality art to the advertisements wrapped around buses.

On the imaging side, the company has digitized 10,000 movies owned by Sony and signed an agreement with Warner Brothers to do the same with its archives, creating "digital vaults" of films that can then be distributed online.

H.P. signed up Wal-Mart Stores as the first customer for the digital vault. That was a coup because the chain sells 40 percent of all DVDs, putting it in a good position to promote movie downloads. "It's hard to make bold moves with the studios without their very biggest customer," said Willem de Zoete, vice president and general manager of the digital entertainment services business at H.P.

About eight months ago, Mr. Joshi began sharing his thoughts about his latest strategy with members of the staff. "He's not afraid of sharing half-baked stuff," said Hatem Mostafa, senior vice president of the inkjet business. "It wasn't smooth. It was bits and pieces. But it's an effective way for us to own it before we set off on it," he said.

"He trawls the halls at 6 o'clock looking for people to talk to, and he's been doing that for 20 years," said Francis McMahon, North American marketing director for the company's commercial printing efforts.

One of Mr. Joshi's favorite tactics is to think in opposites: for instance, to lose weight one should think about how one gains it. Mr. Joshi has been pushing the idea that the focus on printers has meant that the company was looking at the means and not the ends. In fact, he said, H.P. may not really be in the printing business. "We are in the content consumption business," he said.

The hardest part for Mr. Joshi? "Reluctantly, I am doing blogs," he told the employees at the companywide coffee talk. He said he needed to understand how they work. "Otherwise, we will be irrelevant."