By Jonathan Greer Mercury News Business Writer

James L. Patterson needed a long vacation, but could Quantum Corp. afford to lose its president for three months?

The answer turned out to be yes. Patterson decided he could trust his senior managers to keep the 5-year-old Milpitas disk-drive maker on course while he toured Europe with his family. Actually, he said, "I had no reservations whatsoever about taking off."

With Patterson away, Quantum continued to develop a new drive. It even unwrapped a new product, Hardcard, a personal computer add-on memory product and one being heralded as a breakthrough. This sort of high-quality management has allowed Quantum to survive the bloody battles that have racked the disk-drive business during the past two years.

It's significant because it's rare. Only a handful of Silicon Valley firms can say they've survived the high-tech slump intact. Some of the other winners include Software Publishing Corp. and Sun Microsystems Inc., both of Mountain View, and chip makers LSI Logic Corp. of Milpitas, Siliconix Inc. and Integrated Device Technology, both of Santa Clara.

To continue to succeed, all have relied on a combination of solid management practices and top-quality products. They've also maintained a lead time over competitors and displayed a willingness to take calculated risks. And their relatively small size — most do less than \$100 million in annual sales — has helped them stay flexible in the face of changing market conditions.

The winners also have avoided

dealing with International Business Machines Corp. Some industry observers say a contract from Big Blue is more of a liability than an asset. IBM is famous for consuming most of a supplier's manufacturing capacity, then turning around and cutting back its orders.

Some struggling Silicon Valley companies are considered to have some of the attributes required to remain successful amid hard times. But it seems to take a combination of all these factors to stay on top in the marketing battles in today's high-tech world. Experts say companies must be well-managed from the start, expect the worst and hope for the best.

"Almost every one of these companies is known for good management, even before times got tough," said Michael Murphy, editor of the California Technology Stock Letter.

In agreement is Richard Matlack, president of InfoCorp, a Cupertino market research firm. "In this kind of environment, the companies most likely to get through unscathed are the ones that really manage things tightly

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Who bucked the trends

Company	Annual sales¹	Percent change ²
Integrated Device Technology	\$ 38.4 million	+171
LSI Logic Corp.	84.5 million	+143
Quantum Corp.	120.3 million	+79
Siliconix Inc.	98.3 million	+38
Software Publishing Corp.	35 million ³	+ 52

Annual sales in most recent fiscal year.

Source: Company annual reports, except Software Publishing, which is an estimate from Bateman Eichler, Hill Richards

^{*} From previous fiscal year.

Estimate for fiscal year ending Sept. 30, 1985.

How some succeed despite slump

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from the start," he said.
Success is demonstrated by consistent sales growth, stable or growing profits and a stock price that has held up in the face of more than a year of investor frus-tration over high-tech stocks. Quantum, for example, saw its annual revenues grow to \$120.3 million in its fiscal year ended March 31, a 79 percent increase over sales the year before. In the same period, the firm's profits nearly doubled, to \$21 million, or \$2.19 a share, from \$10.7 million,

Sales already had grown 61 per-cent the year before and 206 per-cent the year before that. Profits showed a steady climb, too, soaring from 3 cents a share in 1982 to 86 cents a share in 1983.

Meanwhile, the ups and downs of Quantum's market — high-ca-pacity Winchester disk drives shook competitors such as Atasi Corp. of San Jose. Atasi eventually filed for Chapter 11 bankruptcy protection in August. Other com-petitors, such as Priam Corp. and Vertex Peripherals, chose to com-

bine operations to assure survival.

The slowdown eventually affected Quantum, but not severely. This summer, Digital Equipment Corp., an account Quantum had won from Atasi, cut back its orders. As a result, Quantum had to announce that its revenues for the quarter that ended Friday would be 10 percent to 20 percent lower than sales posted in the quarter that ended in June.

Low stock price

Such uncertainty has kept Quantum's stock price low in spite of its track record. The stock, which first was offered in late 1982 at 201/2, closed Friday at 21. It has been as high as 34%, but has dipped as low

Quantum doesn't expect contin-ued tough times, though. The Hard-card, which was unveiled in July, begins shipping today, the first day of Quantum's new fiscal quarter. Because of Hardcard shipments, "revenues will be up substantially from the September quarter," pre-dicted Joseph T. Rodgers, Quan-

tum's vice president of finance. The Hardcard, a 10-megabyte disk drive that can be slipped into an IBM Personal Computer or PC-compatible machine, is an example of "intrapreneurship," said InfoCorp's Matlack. By that, he meant that a group of Quantum employees were shifted out of their normal assignments to form the team that developed the product.

Price for Hardcard

sidiary that produced Hardcard, Patterson said. In particular, he said, the company "gave up a product generation" in its line of disk drives that are sold directly to computer manufacturers.

But, because Quantum planned ahead, the formation of Plus didn't leave a gaping hole in Quantum's offerings, nor in its management team. The company soon will introduce its next-generation drive, one that will be half the height and an increase in capacity over the current models. As for management, "When we set up Plus, we had a level of management we felt could be promoted" to replace those pulled out, Patterson said.

Did he ever consider hiring replacements from outside the company? "I don't remember giv-ing it any thought," he said.

Now Patterson is working on



James L. Patterson, left, and Joseph T. Rodgers expect Quantum revenues to be 'up substantially' next quarter

positioning Quantum to be a company with \$500 million in sales by 1990. But he's not counting on anything in Quantum's current product line to get the firm there. So Quantum is talking to its major customers, trying to figure out what they'll want in five years.

Meanwhile, the company works hard at maintaining its edge in quality control and technological advances. If it falters in either. area, it knows that competitors will swoop in and take away busi-

"The main secret to Quantum's success is its ability to deliver what it says it's going to deliver, in the quantities it says, and it's a premium product," said James M. Meyer, an industry analyst with Janney Montgomery Scott Inc., a Philadelphia-based brokerage.

Meyer likes Quantum's conservative business style. "Quantum doesn't go out with streamers and brass bands, tooting its horn, until Quantum "gave up a lot" to start it has something to toot its horn about," he said.

By contrast, no one would call Wilfred J. Corrigan's style conservative. But the chairman and chief executive officer of LSI Logic Corp. is winning lots of praise for the way he has steered the company around the semiconductor slump.

Proprietary products

In the semiconductor industry, analysts say, the trick is to make chips that everyone needs but no one else makes. That's why LSI Logic, along with firms such as VLSI Technology Inc. of San Jose, Siliconix and Integrated Device Technology, haven't borne the worst of the industry's slump. Each has a raft of proprietary, hard-to-find products.

In LSI Logic's case, "they don't have a whole lot of competitors doing what they're doing," said

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- James M. Meyer, industry analyst

John Lazlo, an industry analyst with Morgan Stanley.

LSI Logic makes semicustom chips, which means it starts with standard building blocks and then designs chips to customer specifi-

During its first few years in business, the company concentrated on designing chips, rather than worrying about whether those designs would lead to major

Now, Corrigan said, LSI Logic has hundreds of chip designs in the works or on file, waiting for a customer to place an order. Since it can take two or three years before a customer is ready to order a special chip in quantity, LSI Logic is only now reaping the benefits of its aggressive design

As a result, LSI Logic was able to announce an operating profit for its quarter ended June 30 while others in the chip industry were posting operating losses. The company, hard hit like the rest of the industry, posted net profits lower than the same period a year ear-

Still, the tactic has helped LSI Logic's annual sales to grow to \$84.5 million, with profits of \$15.5 million, or 60 cents a share. That's quite a leap from 1981, when the 5-year-old company lost \$2 million and posted no sales at all.

To broaden the company's cus-

tomer base, LSI Logic has made two well-publicized moves. First, it set up a subsidiary in England to work closely with European customers. Then it started a Japanese affiliate and hired NEC Corp.'s Keiske Yawata to run the Tokyobased firm.

'Nice buffer'

"We're at a stage in our growth where we can add incremental markets," Corrigan said, referring to the two new subsidiaries. "If we grow a little in Japan and Europe, at's a nice buffer."

LSI's reason for going to Japan and Europe is to be closer to its customers. Software Publishing Corp. has employed the same sort of strategy in a very different business - productivity software but with similar results. And like LSI Logic, it has achieved those results in the midst of a severe downturn in its industry

'Software Publishing got into the market at the right time," first establishing a name by selling business-oriented software for the Apple II computer, said Jan Lewis, president of Palo Alto Research

But that was a long time ago. Lewis contends that the company has maintained its status as one of the handful of successful businesssoftware firms because it "understood the market it was going after. Rather than being an engi-

neering-driven company, with new products based on new features, it's a market-driven company based on customer needs."

Sales growth

The 5-year-old company, which markets its software under the "pfs" logo, has grown from sales of \$700,000 in its first year to sales of \$23 million in fiscal 1984. In fiscal 1985, which will end today, the company's sales should be about \$35 million, according to Joseph Kapka, who follows the company for Bateman Eichler, Hill Rich-

The company's revenues have slowed in recent months. But that's better than most software publishers can say. Many have suffered serious losses and sharp sales declines.

Software Publishing still has five of its products listed among the 20 best-selling business-software packages in the world, according to Softsel, a Southern California software distributor. More impressively, Software Publishing makes four of the nine business-software packages that have been on Softsel's list for more than 100 weeks.

Software Publishing's products are successful because they're easy to use and address simple user needs at a relatively low cost, the company's observers say. The company also is credited with having savvy management. Perhaps the best example of that came when the company anticipated IBM's entrance into the personal computer software business, said Fred M. Gibbons, Software Publishing president.

How did the company respond? It struck a deal with IBM to make some of Big Blue's PC software. So now, rather than fearing IBM, "we're partners" with the company, he said.