A Publication from INPUT's U.S. Information Services Market Analysis Program

IBM: Here Today ... Here Tomorrow An INPUT Commentary

1993-Not a Good Year

By almost any measurement, 1993 has not been a good year for IBM.

- It announced the largest quarterly loss in its history.
- Its business strategy has come under question.
- Employee security has been challenged as massive job cuts either have occurred or been planned.
- The marketing organization, a traditional IBM strength, will undergo yet another major restructuring.
- Software revenues will probably fall as new pricing schemes are implemented. These are designed to ease the software expense burden for mainframe users.
- A new chairman and CEO sits at the helm of IBM, and he is an outsider, not the usual IBM executive steeped in IBM traditions and methodologies who has finally risen to the top of the company.

 The price of IBM common stock, the traditional measure of IBM's success, has fallen to as little as \$ 41 1/8, the lowest it has reached in almost half a century, while the dividend has been cut for the second time in less than a year.

It's obviously been a difficult year for IBM, and there are those who think it will get worse. Some market analysts have predicted that IBM's stock will fall to the mid 30's, that the company's recovery (from a stock market viewpoint) will be slow and painful, and that IBM will never regain its former position of total industry dominance. But IBM has always had its critics and doomsayers, and all other considerations aside, IBM is still the world's dominant manufacturer of mainframe computers and a major supplier of minicomputers, computer peripheral equipment, personal computers, networking products and systems software. In fact, IBM's worldwide revenues in 1992 were better than \$64 billion-more than any other computer company.

These 1993 events can be viewed negatively as the inevitable result of IBM's failure to respond to obvious market needs and economic realities. However, as anyone knows who has been

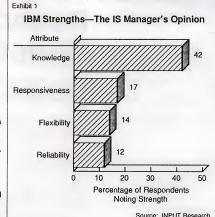
exposed to IBM's marketing training philosophy, every problem can also be considered an opportunity in disguise.

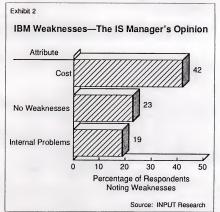
What Do IS Professionals

INPUT has many ongoing research programs that track information services and computer industry vendor performance. Combining the results of interviews from a number of these programs yields an interesting profile of IBM's strengths and weaknesses, as noted by computer industry professionals.

Exhibit 1 summarizes the IBM strengths noted by IS managers from a broad range of industries. The industry, technical, product and other knowledge demonstrated by IBM's employees is clearly a major strength-and an expected attribute in a company that has given its name to an industry. Responsiveness reflects IBM's (and American industry's) emphasis on customer service. Flexibility (14% of respondents) is somewhat of a surprise. Flexibility ranks as the third highest attribute, and few have ever considered IBM to be a flexible company. Reliability (12%), as a strength, is probably indicative of the fact that IBM has always provided aggressive support for its products.

Exhibit 2 notes the opinions of IBM weaknesses. Not unexpectedly, cost, noted by 42% of the respondents, was the major concern—but then IBM has never priced its products at the low end of the cost spectrum. IBM's highly visible internal problems (19%) ranked third. The surprising





2

response, given all of IBM's recent difficulties, is that almost one-quarter of the respondents (23%) stated that, in their opinion, IBM had no significant weaknesses!

IBM—The Ocean Liner

IBM and most companies at the top end of the Fortune 500 are similar to ocean liners. They are large, complex organizations with a great deal of momentum, and major course corrections, while easy to make, can take some time before measurable effects can be seen. Consider the problems noted in the first section of this research bulletin:

· Quarterly Loss/Dividend Reduction - As a result of IBM's pretax charge of \$8.9 billion, \$6 billion of which was for work-force reductions, IBM posted an \$8 billion loss in the second quarter of 1993 and reduced the quarterly dividend from 54 cents per share to 25 cents. A hard decision, especially given the staffing implications, but necessary if IBM is to reduce its cost-base to make itself more competitive. The charges are expected to cover the costs of an expanded workforce reduction program-from the 25,000 planned for 1993 to 115,000 (total) by year-end 1994-and ultimately will save IBM \$4 billion a year. Some analysts estimate that an additional \$2 billion dollars must be shaved from costs if IBM is to become truly cost competitive.

The dividend reduction is indicative of the need to preserve earnings to invest in other areas if IBM's restructuring plans are to succeed. In general, the market seems to have viewed this as a positive step, and the price of the stock has not been materially affected.

 Employee Security - The numbers are there for all to see. In 1986 IBM employment reached a high of 407,000. In 1994 employment is expected to be at 225,000—a 45% reduction in eight years. IBM has tended to reduce staff through attrition, and strong retirement and separation incentives, and the employee reaction has generally been positive. The fact remains, however, that IBM's job security, full-employment practice, is no more, and the company has shown that it will adjust its work force to meet business needs—a hard, but necessary, decision in a highly competitive market and slowed economy, and it's a good sign that IBM can make such decisions.

· Marketing Changes - Historically, marketing was king at IBM. Most top executives came from the sales and marketing ranks, and marketing practices (and IBM products) were so effective that IBM dominated all aspects of its marketplace from the 1960s through most of the 1980s. But hard times brought reduced sales, and as IBM sought an organizational answer to product marketing difficulties, the company tried different structures. In the wake of the trading area philosophy, where newly established trading areas sold all IBM products, has come the recently announced industry specialist/ product specialist program. IBM's 40,000 member U.S. marketing force will retain its geographic orientation, but will rely more on specialists familiar with specific industries and IBM product experts. Although hailed as a break from IBM tradition, the fact is that this marketing structure is similar to that used by IBM in the 1960s and 1970s, when IBM identified specific Data Processing (DP) Division branch offices by titles such as Oakland Manufacturing and Distribution or San Francisco Banking and Finance.

The use of industry specialist and product experts is also compatible with the results of a number of separate INPUT studies that have shown that industry and product knowledge are among the most important criteria used by customers and prospects in the selection of vendors and vendor products. By returning to proven marketing techniques that also meet current user needs, IBM is clearly moving its marketing strategy in the right direction.

IBM watchers also believe that the specialist move has been carefully structured by Louis Gestner, IBM's new chairman, to avoid imposing radical changes on the sales force, while repositioning IBM as a supplier of industry-oriented information management solutions, as opposed to products.

 New Software Pricing Scheme - In late May, IBM announced a new pricing arrangement for large system software. IBM will now charge customers on the basis of the level of usage and number of users, rather than on the power of the processor, as was the case in the past. In addition, IBM has stated that it will not increase software prices in 1994.

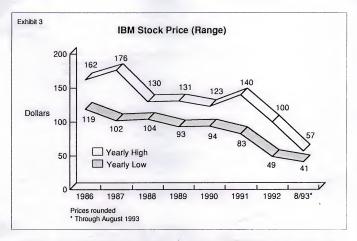
It remains to be seen what effect the new usage-sensitive pricing scheme will have on IBM revenues. Pragmatically, it will probably cause a short-term dip in software income. But the alternative is to lose large systems customers to either Amdahl or Hitachi, IBM's two major rivals for the mainframe market. By reducing software price levels and promising to hold them down through 1994, IBM is making it easier for mainframe users to buy or retain IBM systems. This is a sensible decision that supports IBM's mainframe business, its largest and most profitable, that generated almost \$20 billion of IBM's \$64 billion in revenues in 1992.

• IBM's New Chairman and CEO - The unthinkable happened: IBM's stream of internally grown chief executives ended with John F. Akers. In March 1993, IBM announced that Louis V. Gerstner, chairman of RJR Nabisco, had been named chairman and CEO of IBM. Many observers cheered, in the belief that a fresh viewpoint was required if IBM was to return to strong, steady growth. IBM employees were not so certain. There was some concern that a non-IBM CEO would not have the same feeling as IBMers for IBM practices, policies, and traditions.

It is true that some traditions are in jeopardy—Gerstner wears a blue shirt to work. But it is not true that the fundamental integrity of IBM's business structure will be altered without thought or concern for IBM's traditional internal synergy. Gerstner, in fact, reversed John Akers' plan to sell interests in large parts of IBM, stating that "the whole of IBM is greater than the sum of the parts."

What is also true is that the time has come for IBM to consider whether personnel and business policies and practices established under the Watsons, such as full employment, are realistic in today's competitive economy. Louis Gerstner has already taken some sensitive but pragmatic first steps to address these issues—and, as someone coming from outside IBM, he is in a better position to do so than someone steeped in IBM tradition.

- Mainframes A major business issue is the fate of IBM's mainframe business. In a mainframe market that is shrinking demonstrably, Gerstner has stated that predictions of the mainframe's death are exaggerated. John Sculley of Apple, once considered a candidate for the top IBM post, had taken the opposite approach, supposedly proposing that IBM sell its mainframe business and merge Apple and IBM. Gerstner's philosophy, for the moment, is more in line with traditional IBM thinking, Mainframes, perhaps cast in new roles, will remain a key component of IBM's product line.
- IBM Stock In the 1960's IBM common stock traded in the \$600+ per share range. As shown in Exhibit 3, from January 1986, when it was at about \$160 per share (after numerous splits) to August 1993, when it is trading in the mid-\$40's, the drop has been dramatic and alarming. Long the darling of institutional investors and the bluest of the blue chips, the stock has always had high visibility, and many IBMers remember Tom Watson Sr.'s admonition, "Whatever you do, don't sell your IBM stock." Times have



changed. For a while, when the price was well below \$100 and the quarterly dividends were \$1.10, many bought the stock for current income! After dividend reductions to 54 cents and now 25 cents a share, many investors question both the short term and long-term viability of the stock.

There are as many opinions on IBM's market potential as there are stock analysts willing to offer them. However, one thing is notable: the latest dividend reduction, not clearly anticipated by many investors, caused a slight rise in the value of IBM stock. One could conclude that Gerstner's concern for IBM's culture plus his aggressive approach to restructuring the business has apparently halted IBM's stock slump in the mid-40s. As the company's long-term strategies are redefined (or clarified), and positive steps are taken to achieve these strategies-with tangible and measurable results-the stock should begin a slow, steady climb back to \$100 or more.

Gerstner obviously has some concern with the stock's price, due to the fact that he reportedly has options on 500,000 shares. But a good business strategy also dictates that if major losses are planned for a year, take all the other losses that you can in that same year, so that the next year will show better performance. In fact, a good IBM common stock performance in 1994 would be beneficial for Louis Gerstner, IBM employees, IBM stockholders, and the computer industry in general.

IBM clearly has needed to make changes course corrections—in many areas. Now the developing results of these changes will be monitored to assure that they have the desired effect.

Other Considerations

Alliances and Subsidiaries - In the past few years, IBM has entered into a number of alliances, such as the Apple-IBM joint ventures,

Kaleida Labs (software for multimedia computing) and Taligent (operating systems). Some have worked, some have not, and some are still awaiting judgment. IBM has also spun off a number of subsidiaries such as Adstar (disk drives), Ambra (a new wholly owned subsidiary to make and market custom PCs for "enhanced users" in North America), and ISSC, IBM's rapidly growing supplier of systems operations services to both internal and external customers. These risk-sharing alliances and standalone performance-measurable subsidiaries demonstrate IBM's willingness to implement new channels for product development and marketing and also to pursue new business opportunities. They also follow a recent U.S. business trend of redefining separable divisions as subsidiaries, so that performance and profits can be more easily measured.

PCs - IBM is still a significant player in the PC market. Last year, its IBM Personal Computer Company may have lost as much as \$1 billion, but in mid-1993 it is hovering around the breakeven point and is forecasting a profit for the full year. Some view it as a logical candidate for a spin-off, possibly as a separate publicly traded company.

IBM has been successful with some products, such as the *Thinkpad 700* color notebook computer, which many feel defines the genre, but other products have only sold though heavy discounting—a current industry syndrome that reflects the commodity market state of the PC industry. IBM's plans for the PC, and its related operating system, OS/2, remain to be seen

Consulting - IBM has announced that its consulting group will become part of IBM North America, its marketing force. The move is viewed as an attempt to accelerate the growth of IBM's services business, while at the same time enriching the pool of talent available to the marketing group. The move will affect about 500 consultants and may help IBM to return to the executive consultant relationship of years past, when IBM advised senior client staff on virtually all information system matters.

Bill Gates on IBM - Bill Gates, Microsoft CEO and America's richest man, recently met with Louis Gerstner. Few details of the meeting are known, but Gates has publicly stated his support for IBM, noting that "with all IBM's technical assets, which are considerable, the company should be worth twice as much as it is today." At that time, IBM was trading in the mid-40s. Gates and others have speculated. however, that a full-service computer company engaged in all aspects of computing activity may no longer make sense in today's business world, with its fast pace and highly competitive climate. As noted earlier, Gerstner currently appears to reject changing IBM's full-service posture by breaking up the company or selling interests in various parts of IBM. However, if future business needs dictate, when IBM's long-term strategy is more clearly defined, this decision may be revisited.

R & D - IBM, like Bell Labs, is one of the last bastions of broad-ranging, well-funded, wellstaffed technical research. The list of inventions, discoveries and patents flowing from IBM's research labs, staffed by full timescientists and IBM Fellows (allowed to pursue whatever research they wish), reads like a roll call of technological innovation in the late twentieth century. IBM, however, is scaling back R&D budget dollars as fiscal realities tighten corporate budgets. Although the precise amount of the budget reductions at IBM's four main labs are not known, an inevitable shift to practical/pragmatic research, as opposed to theoretical studies, will probably reduce IBM's steady series of "breakthrough" announcements by at least half. Although basic research will continue, there will be fewer leading-edge announcements-a regretable, but sound business decision.

IBM Strategies - INPUT was invited to a consultant's meeting held by IBM in Orlando, Florida in March 1993. At that meeting a series of IBM executives shared their near-term strategies with the attendees. These strategies are noted in Exhibit 4.

The emphasis on RISC (reduced instruction set computing), client/server architecture, and scalable systems indicates that IBM is aggressively supporting current technology and architectural trends and is hedging its bets on mainframe viability by creating software that can migrate to other platforms. Mainframes used as superservers also provide a tie-in for PC and workstation sales as client platforms. Object-oriented programming will encourage rapid applications development and shorter product delivery cycles. IBM's emphasis on consulting is both a strategy to regain its prior close customer relationships and also a recognition that services, in general, are becoming more valuable than hardware. Hardware, in many markets-such as PCs-has become a commodity. The value added lies in the skills (services) that can structure and enhance the computer assets to do the job effectively at lowest cost. In selecting these specific strategies, among others, IBM is right on target.

Other Issues - With a company as large and diverse as IBM, it is impossible to address all significant issues in a short space. For instance, what is the future of the AS/400, the definitive minicomputer, which some claim has the lowest cost of ownership of any platform of its size? What about open systems and UNIX? Will IBM really change its structure and ways of doing business, or are the current plans just lip service to appease the financial community and customer base while the company pursues other, unstated agendas? Issues such as these are important, but are not considered in this document.

If You Want to Bet Against IBM—Don't!

Many years ago, Tom Watson Sr. said, "Show me someone who hasn't made a mistake, and I'll show you someone who isn't doing anything!" The message was clear—aggressiveness and innovation, the hallmarks of the successful IBM of the 60s, 70s and early 80s, occasionally produced errors—learn from

Exhibit 4

Selected IBM Strategies

- Move quickly to embrace client/server architecture across all product lines
- Emphasize RISC architecture and scalable systems
- Emphasize object-oriented software
- Emphasize services and especially consulting

them and go on. The unstated corollary, however, was "Don't make the same mistake twice."

IBM has made mistakes over the years, but rarely the same one twice, and the price they've paid for their latest series of decisions is reflected in the value of their stock, employee layoffs, and the appointment of a new, non-IBM CEO.

One could argue that IBM's days as a major industry powerhouse are over, because the industry has become fragmented, technology is moving at a rapid pace, and IBM's bread and butter product, mainframes, is a dying breed. One could also argue that IBM is inbred and will not be able to change enough to compete effectively in the late 1990s and the next millennium.

The final resolution of each of the considerations identified earlier has yet to be determined, but many indicators can already be seen. IBM is proactively addressing each of the problems and considerations noted in this document. INPUT believes that they will be successful in enough key business areas that the company will return to a pattern of steady growth and strong industry influence. This will not happen overnight or over the next year. Some of the measures proposed or currently being applied may not be successful, and others

RESEARCH BULLETIN

will need to be identified and implemented. But IBM will be successful and will return to profitability and growth.

It's too easy to predict the death of mainframes and forget that there are many applications with enterprise characteristics, MIPS requirements, or data-access data-manipulation characteristics that simply will not run efficiently (or at all) in a downsized mode using the current (and probably next) generation of technology.

When labeling IBM as inbred, it is easy to forget who gave their name to the data processing industry ("Let me show you my IBM department!"), trained most of the top executives of the Fortune 500 high-technology firms, and seeded American industry with computer-literate managers long before anyone knew what computer literacy meant.

IBM is serious about their future. They are a proud firm with a strong tradition of success. They've already done the unthinkable and brought in a non-IBMer to lead the firm out of difficulty. Louis Gestner, the man who was named to head the firm, has also done the unthinkable. He hasn't taken the easy path and held a fire sale of IBM divisions and subsidiaries to restore earnings and drive up the price of the stock. He has made hard decisions in some areas and appropriately deferred decisions in others.

It will be some time before the effectiveness of these decisions is known. As noted in the Business Week August 9th article on IBM, "IBM [is] a Work in Progress." But from any viewpoint, IBM is still the complete computer company, with a wealth of management, technical, and marketing talent. They've just come through some hard times, and Tom Sr.

would expect them to learn from the lessons of the past few years. So does INPUT.

Don't bet against IBM. They're here today, and they most assuredly will be here, and stronger, tomorrow.

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