

Project Number: ED-0006-45

STRATEGIC REORIENTATION AT LEXMARK

An Interactive Qualifying Project Report

submitted to the Faculty

of the

WORCESTER POLYTECHNIC INSTITUTE

in partial fulfillment of the requirements for the

Degree of Bachelor of Science

by



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Date: April 27, 2006



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1. history of Lexmark

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ABSTRACT

Lexmark started off as a company when it was spun off from IBM in the early 1990's. This project gives a detailed overview about how Lexmark became a successful company by reorganizing its way of thinking, developing new products, and expanding internationally. Today, Lexmark contributes its success to the changes it has made over the last 15 years.

INTRODUCTION

During the 1990s, IBM the computer giant began to downsize to become more competitive. IBM cut its workforce of 383,000 by 10,000 and decided to sell off its peripheral businesses. One of these was Lexmark, and in early 1991, IBM sold Lexmark to an investment firm Clayton & Dubilier & Rice for \$1.5 billion. The leveraged buyout was financed primarily with bank loans, and the company was left with a debt of over \$1 billion. Despite its debt, Lexmark reorganized its way of thinking, developed new products, went overseas and those changes made the company to become successful.

Marvin Mann who previously worked for IBM was named Lexmark's chairman. He decided to change the corporate culture and made the employees an important part of the change. Mann applied the empowerment system in its company and even though its employees had a difficult time in adjusting to it, it was well implemented at the end. Also, Mann's priority was the customer, and Lexmark's main goal was pleasing the customer. Lexmark wanted to get to markets where IBM never went, and its list of customer grew larger every year.

Lexmark was a company that manufactured its own printers, and also implemented its own technology. Lexmark had a huge R & D department and all the engineers worked hard to develop new products in a short period of time. Lexmark was up to the point to introduce a new product to the industry every six weeks. Lexmark invested millions of dollars in its research program and that created high quality products. Lexmark was moving away from IBM, and the company became independent in 1992.

Lexmark had an incredible amount of cash flow, and that money was used to reduce its debt. The debt was reduced ahead of schedule to about \$750 million.

Lexmark's business was expanding and it decided to go overseas. The company bought an Australian printer market named Gestetner Lasers, and that increased the presence of the company in the Pacific region. Also, Lexmark was building more manufacturing facilities outside the United States. For example, there were new manufacturing facilities in Mexico, Scotland, Philippines, China, and UK. Lexmark brand name was being recognized in more than 150 countries around the world. Lexmark manufactured its critical parts for its printers here in the United States, and the assembly of the printers was outside of the country.

Lexmark was starting to remove the IBM logo from its printers and started the retail distribution of its own brand of ink jet printers and low end laser printer. Lexmark gained recognition worldwide with its products and its low price. Lexmark wanted to be a supplier, and this would increase its revenues. Lexmark was selling its printer for such a low price that it was considered a loss, but they knew that the replacement of the ink cartridges would give the company high earnings. Hewlett-Packard was the number one in the printer industry, and Lexmark was in second place.

Lexmark was working in partnership with Dell, Polaroid, Kodak, and these alliances made the company grow stronger even more. Lexmark was manufacturing printers for Dell and they were proud to be selected by Dell to do that. Lexmark was manufacturing printers adaptable to digital cameras, and the partnership between Polaroid and Kodak was a success. The printers manufactured by Lexmark were high quality and the printing output was almost the photographic quality.

Lexmark was manufacturing printers for networking environments. The printers developed by Lexmark were efficient, versatile with an affordable. Lexmark was trying to developed printers for small, medium, and large business. The printers developed by Lexmark were easily upgradeable, with features of a large business printer with a low price.

These major moves by Lexmark allowed the company to reorient itself and became a well recognized name brand around the world. In only six years, Lexmark became a very strong company with record revenues. It started off with a debt of a billion dollars, and with its dedicated workforce Lexmark became a company that was admired by the New York Stock Exchange.

History of Lexmark

1. IBM Decided to Dump its Low Tech Business

The application of computers for personal use created a decline in the typewriter industry. The Word processing was very helpful when typing because any text was easily manipulated, and it allowed creating, editing, storing, retrieving and printing a document. The first personal computer appeared in the late 1970s. In 1981 IBM introduced its first personal computer, known as the IBM PC.¹

IBM was a manufacturer of typewriters, keyboards, low-end-printers and electronic typewriters, and these were considered to be a low technology business. In July 1990, IBM wanted to dump its low technology business. IBM wanted to negotiate the sale of its peripheral business and wanted to concentrate in more profitable business such as computers and software. The market of the typewriters was declining, and IBM's profit was declining as well. The low prices from the manufacturers from Far East had cut into IBM's sales in recent years. By selling its low technology business, IBM had to close many of its factories, and many people were going to lose their jobs.²

1.1 Declining of the Typewriter Industry

The industry of the typewriters was shrinking fast, and some of the companies would go out of business. Some companies thought they were going to survive; others just took the option of closing their business.

¹ IBM Archives. IBM Typewriters Milestone.

² (2005). IBM to Pull Out of Typewriters Production. *Dow Jones Reuters Interactive LLC*.

Xerox left the typewriter business completely. Xerox announced that they were not going to manufacture electronic typewriters, not even its high end 62 series which was introduced a few years ago. David Gallant, a spokesperson from Xerox informed dealers that they won't introduce any new models nor take orders for any current models after December 1991. He also said that Xerox could not longer sustain the manufacturing of electronic typewriters.

Some companies hoped that the electronic typewriter market would survive at least in the form of very low end units and very high end units. With that philosophy in mind, Xerox introduced a new typewriter, its 62 Series Electronic typewriter Systems. This typewriter introduced by Xerox was a breakthrough in technology, and had a patented impact print mechanism 15 decibels quieter than the standard office typewriters. Even with all the advantages that the new typewriter presented, it couldn't compete with the impact of personal computers.

Lexmark International Inc., reaffirmed its commitment to the typewriter marketplace, according to Ann E. Bolten. She also said that the office typewriter market place was between \$300 and \$400 million, and that she saw a significant opportunity for Lexmark and its expansion market share of IBM typewriter products. The future direction of the typewriter market was based on aggressive efforts to strengthen Lexmark's commitment to typewriter dealers. Lexmark International Inc. was a company formed through the sale of IBM's low tech business typewriters, computer printers, and equipment parts to Clayton & Dubilier, the New York private investment firm.

Lexmark's profits were based in the Laser Printer market and not based on the electronic typewriters. In the United States, several suppliers had moved production out of the U.S. For instance, Xerox had been manufacturing in France, for more than two

years, and was working in partnership with a European manufacturer of Xerox ETs. Some Japanese companies had moved production to the U.S. and were trying to avoid onslaught of antidumping fees.

One of the recent dumping charges was that Smith Corona suit against Brother and other Japanese manufacturers which resulted in the ITC slapping heavy fees on the importers. At the National Office Machine Dealers Association show held in New Orleans, the dealers had said that although they were selling more electronic typewriters than personal computers, because of low PC inventories, the dealers were stocking more PCs for the higher profit margin. Several of the dealers would keep a couple of the electronic typewriters on the shelves for the satisfaction of a few customers looking for a single typewriter.

According to several dealers and manufacturers, they saw that there was always going to be a market for typewriters. The problem was that the profit was so small that there were no advantages on focusing in this product for a long time. Unfortunately, the typewriter suppliers were continually shrinking. IBM and Xerox were out of the business of typewriters, and an analyst said that Smith Corona, Panasonic, Sharp, Olivetti and other would fight in the electronic typewriter market.³

1.2 Private Firm from New York Bought Low Tech Business from IBM from IBM

In August 1990, IBM officially declared it wanted to sell its low technology business and an investing firm called Clayton and Dubilier from New York was negotiating to buy it. IBM wanted to create an alliance with this firm and they also wanted to acquire some of the low technology factories from IBM. The low technology

³ Evans-Correia, Kate. (2005). Where have all the typewriters gone? (Shrinking demand for electronic typewriters) (Office products & Business Systems). *Dow Jones Reuters Business Interactive LLC*

business from IBM represented \$2 billion in annual sales, and that was less than 3 percent of IBM's \$65 billion in total sales.

Clayton & Dubilier Inc. and the IBM Corporation announced that the transaction to buy IBM's low technology business would be completed at the end of March, 1991. The new company would manufacture personal printers, typewriters, keyboards, and supplies worldwide. The name for the new company was Lexmark International Inc. Lexmark International Inc's. estimated annual revenue would be approximately \$2 billion. Lexmark was licensed to use certain IBM trademarks and also to use the IBM logo on many its manufactured products and markets. ⁴

There were specific terms indicated in the contract for the alliance formed between Clayton & Dubilier and IBM. One of the terms was that "...the terms of the transaction call for a company formed by Clayton & Dubilier to acquire 100 percent of the common stock of the new subsidiary which holds most of the assets of the former IBM Information Product Business, and IBM would retain only 10 percent."⁵

The main goal of Clayton & Dubilier was to improve the operating performance of the companies in which this private firm had invested. This private firm had bought 15 business and their combined sales exceeded \$7.5 billion since their establishment in 1978. ⁶

It took several months to complete the sale of the peripheral operation in Lexington, and that led to some changes to the structure and price of the transaction. Initially, the peripheral business of IBM was planned to be sold for \$3 billion, then it

⁴ Wise, Deborah.(2005) IBM Pland to Sell Off Stake in Low-Tech for \$2.5m. *Dow Jones Reuters Business LLC*.

⁵ (2005). Clayton & Dubilier and IBM Advance Toward Purchase of IBM's Information Products Business. *Dow Jones Reuters Business LLC*.

⁶ (2005) Clayton & Dubilier Completes Purchase of IBM's Information Products Business. *Dow Jones Reuters Business LLC*.

went down to \$2.5 billion, and finally it was sold for \$1.5 billion. The initial price exceeded the \$2 billion, and it included the IBM's laser printer lines. There were some financing problems and it was difficult for Lexmark to obtain these, and they were excluded from the final transaction. That explained the big difference between the initially stated price and the final price to close this deal.⁷

1.3 IBM Closed Factories and Laid Off Employees

When IBM introduced the Selectric in 1961, new factories were constructed in Lexington, Kentucky for the manufacture of this typewriter.

IBM was losing money by having its low tech business and decided to sell it. Because that part of the business was going to be sold to another firm, IBM lost the money invested in the new factories, but by selling its low technology business, it was going to break even. If IBM was selling what was considered to be a secondary type of business the result was going to be a massive loss of employees around the world.

IBM was the world's largest computer company and was making a big move that required the reorganization of the company. IBM was going to cut its worldwide staff of 383,000 by 10,000. In the United States, IBM laid off 1,200 employees in August, 1990. John Akers, chairman of IBM said that the deal would have a positive impact on earnings.

IBM reduced its worldwide workforce by another 10,000 employees and when the peripheral operation ended, 4,000 more workers would be taken off the payroll. IBM was expecting to reduce their 10,000 employees through voluntary incentive programs, and was trying to avoid layoffs. By selling its peripheral business to Lexmark, IBM was

⁷ 2005 IBM to Cut Workforce by 14,000 in 1991; completes sale of unit, (Peripherals Operation in Lexington, Ky). *Dow Jones Reuters Business LLC*.

going to have before tax savings of about \$200 million this year, \$600 million in 1992, and \$800 million in future years.

With all the employees that IBM eliminated, the company was saving money in payroll. IBM had an after cut charge of \$2.3 billion in recognizing accumulated obligations with active employees, but that did not affect the financial results in this year (1991) due to the saving in payroll.⁸

2. Lexmark International, the New Company

Lexmark International was a company created by the spin-off of IBM. Lexmark started off as a new company, and they were going to have business around the world. IBM supported Lexmark by allowing the use of their brand name. In addition, the new company was going to use the existing resellers for their new line of products such as laser printers, typewriters and keyboards. By using the same resellers and the IBM logo in several products, Lexmark was warranting a great deal of success in their business.

A new production facility for Lexmark was going to be located in Lexington, Ky, and the annual sales were planned to be nearly \$1.8 billion. The new presidents and staff in charge of Lexmark had moved to Lexington to reside there. A new staff of executives was selected for the new organization of the company worldwide. Donald Shrosphire was the vice president of sales for the America – Asia area. Shari Johnston was selected as the director of marketing and support.⁹

Lexmark International headquarters was in Greenwich, Conn., and some of the manufacturing facilities were located in Lexington, Ky, Boulder, Colo, and Boigny,

⁸ (2005). IBM to cut workforce by 14,00 in 1991; completes sale of unit, (peripheral operation in Lexington, Ky). *Dow Jones Reuters Business Interactive LLC*.

⁹ Graziose, Michelle. (2005). IBM marketing changes in full swing – Vendor’s printer group close to final sale; key strategy is to still through dealers. *Dow Jones Reuters Business Interactive LLC*.

France. In the United States, the sales headquarters were located in New York, Atlanta, Chicago, Dallas, and San Francisco. The name of Lexmark was created by combining “Lex” which was an abbreviation of Lexicon “pertaining to words” and “mark” which made reference to “marks on paper”, and that was the end result of all of the company’s products.¹⁰

2.1 Lexmark’s New Board of Directors

Lexmark needed to start as a new company and it needed to organize its new board of directors. Some of the new directors included: B. Charles Ames, Principal, Clayton & Dubilier Inc., Frank T. Cary, former Chairman and Chief Executive Officer, IBM, Martin H. Dubilier, Chairman, Clayton & Dubilier Inc., James J. Forsee, Vice President Finance, IBM, Donald J. Gomery, former Senior Vice President for Science and Technology, IBM, and currently was the President of the Alfred P. Sloan Foundation, Marvin L. Mann, Chairman and Chief Executive Officer, Lexmark International, Inc., Andrall E. Pearson, former President and Chief Operating Officer, PepsiCo, Inc., and he was also a professor of Business Administration, Harvard Business School. The General Manager in United Kingdom was Tom Lloyd and he was previously IBM UK Information Products Business Unit Manager. The new board of directors included members with tremendous amounts of experience in managing business and that was an advantage for Lexmark.¹¹

¹⁰(2005) Clayton & Dubilier Completes purchase of IBM’s information product business. *Dow Jones Reuters Business Interactive LLC*.

¹¹ (2005) Clayton & Dubilier forms Lexmark to buy IBM information product business for \$1.5M (2 of 2). *Dow Jones Reuters Business Interactive LLC*.

2.2 Lexmark's Products

In July 1992, Lexmark released two new typewriters, the Wheelwriter 35 and 25. These two types of Wheelwriter offered enhanced performance and lower price than the other models previously introduced. The IBM Wheelwriter had twice the correction memory and document storage capacity than its predecessor. Another feature was the incorporation of a 3.5 inch diskette drive allowing the storage of many texts.

Lexmark combined the small footprint and the text editing functions of preceding models. The combination of these two features allowed the creation of a compact office typewriter that was able to store and recall multiple documents and display concurrently typed text on a two line LCD readout. The retail price for the IBM Wheelwriter 35 was \$1,230, and the IBM Personal typewriter 25, was priced at \$1,095. They both contained a 90 day warranty and they available at the Lexmark authorized typewriter dealers in the United States.¹²

2.3 Lexmark's Marketing Agency

Meridian Communications was awarded contracts for marketing related functions for two key Lexmark International Inc. divisions: Typing Workstations and Supplies. Meridian Communications would be the agency responsible for marketing the line of typewriter products for the Typing Workstation group. This agency would develop the group's national advertising and public relations, and was going to produce all collateral materials. The agency was also going to be working on the Supplies division. This agency would create and produce an extensive portfolio of collateral materials such as sales brochures, catalogues, product sheets and dealer aids.

¹² (2005). New IBM Wheelwriters announced by Lexmark. *Dow Jones Reuters Business Interactive LLC*

The agency would also help with the coordination in some of the division's special marketing assignments. MER Advertising was founded in 1975 and was the original name before Meridian Communications. This agency provided full service marketing and advertising and was also a public relation firm. This agency had a regional, national and international client list and its work force was around 40 employees.¹³

2.4 The Truth behind Low Tech

IBM was not having reason to celebrate anything, because its earnings were going down, its stock prices were slipping away, and it was also going to eliminate 20,000 more jobs. The new company down in the south, that was a spin off from IBM was Lexmark International, was having success in the printer business. Rob Auster, the director of printer product analyst for BIS Strategic Decision Inc., a research and consulting firm in Norwell, Mass said:” Lexmark was a great move for both IBM and Lexmark. They had a factory that was state of the art, to make commodity products like keyboards and typewriters and other low end stuff. The problem they had was similar to any big company, that the parent was busy and neglects the kids.”¹⁴

¹³ (2005). Meridian named as Lexmark International Inc. communications agency. *Dow Jones Reuters Business Interactive LLC*

¹⁴ Lewis, H. Peter. (2005). The Executive Computer; Can IBM learn from a Unit it Freed? *Dow Jones Reuters Business Interactive LLC*

2.5 Contention System Dumped

Louis V. Gerstner Jr., was the new IBM chief executive and he said that he planned to spend time talking to his managers, workers, and customers worldwide to come up with a plan to make the troubled giant more competitive. Lexmark was a good example to Mr. Gerstner because it was a company created by the spin off by the International Business Machines Corporation. Lexmark International had made changes in its management, marketing, and corporate culture, and analyst including IBM managers agree that the giant IBM must make.

One of the impressive things about Lexmark was that it had doubled the number of products under development and did not increase its design staff. Lexmark was a new company and several of the managers that used to work for IBM began to be part of the new company's board of directors. One of the things that they definitely changed the management at Lexmark was that: "They dumped the 'contention' system, and it was a tradition of insuring sound decisions by letting staff managers from different departments challenge one another's proposals and that often took several months."¹⁵

Another big changed in the way Lexmark was managed was the bottom up decisions. The way that worked was that a worker would submit a suggestion in a sealed envelop, and if the idea was implemented, the employee got a payment of small percentage due to the savings suggestion. Lexmark did not want to apply the same system, and they wanted to listen to new ideas in an open meeting. If employees were willing to talk about their ideas in an open meeting, the ideas were able to be refined and improved. Marvin Mann said that getting rid of the individual suggestion program was

¹⁵ Lorch, Steve. (2005). For New IBM Chief, Spinoff May Be a Model. *Dow Jones Reuters Business Interactive LLC*

one of the smartest things they did. Lexmark believed in working in a team environment, and that was the philosophy implemented behind every new product.

Lexmark made its own laser printer engines, which is the main component in desktop printers. Hewlett-Packard and Apple bought their engines from Canon Inc., of Japan which was the world industry leader. Mr. Mann said: “IBM had outstanding people and excellent technology. But the single biggest issue that the company and Mr. Gerstner were facing was how IBM was organized to serve the customer.”²⁹

3. Success of Lexmark

Lexmark was working in alliance with IBM, and this system was making IBM shadow the success of the new company in the printer market. Five years have passed until Lexmark started to emerge from obscurity by itself and wanted to be an important player in the printer business. The profit for this peripheral business at IBM accounted for less than 3 percent of IBM revenue and it did not get the management attention necessary to be competitive in the industry.

Lexmark management staff had new ideas and they wanted the company to become larger and stronger. The board of directors was formed from several members that once belonged to IBM, and the new staff at Lexmark, wanted them to change their way of thinking. Lexmark wanted the staff that worked for IBM to shake off the IBM corporate culture of progressing in a very measured and structured fashion. Lexmark wanted to become more aggressive in pricing their products and expanding their product lines.

Lexmark wanted to improve different areas in within their company, but

B. Charles Ames who was a partner with Clayton & Dubilier, said that there was going to be a change in the corporate culture, but a corporate culture was not going to be changed overnight. Investors wanted to make changes to help the company, and one of the changes included the motivation of employees by giving them an ownership position in the company. This change had a positive impact in sales representatives and it enabled the lower level employees to make more decisions on their own.

IBM was the largest customer and reseller of Lexmark, and now that the company was going to be on its own, Lexmark was going to increase indirect sales from about 70 percent to 85 percent. The director of peripheral products for Merisel Inc., Allan Schroeder said that there was a much greater opportunity for Lexmark to be more aggressive because they did not need the approval of so many levels of managers. Lexmark was going to improve their product line and also wanted to get into areas where IBM never entered before, such as superstores. All these changes allowed Lexmark to become the number 3 in the laser printer market, with 4.4 percent of the U.S. market.¹⁶

3.1 Changes to Management Systems

In March 1993, Louis V. Gerstner Jr., was named the new IBM chief executive and he said that he planned to spend time talking to his managers, workers, and customers worldwide to come up with a plan to make the troubled giant more competitive. Lexmark was a good example to Mr. Gerstner because it was a company created by the spin off by the International Business Machines Corporation. Lexmark International had made changes in its management, marketing, and corporate culture, and analyst including IBM managers agree that the giant IBM must make.

¹⁶ Gilloly, Brian. (2005). Lexmark emerged from the shadows in printer market. *Dow Jones Reuters Business Interactive LLC*

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Marvin Mann said that getting rid of the individual suggestion program was one of the smartest things they did. Lexmark believed in working in a team environment, and that was the philosophy implemented behind every new product. Lexmark made its own laser printer engines, which is the main component in desktop printers.

Hewlett-Packard and Apple bought their engines from Canon Inc. of Japan which was the world industry leader. Mr. Mann said: "IBM had outstanding people and excellent technology. But the single biggest issue that the company and Mr. Gerstner were facing was how IBM was organized to serve the customer."¹⁷

¹⁷ Lorch, Steve. (2005). For New IBM Chief, Spinoff May Be a Model. *Dow Jones Reuters Business Interactive LLC*

3.2 Lexmark's Workforce; Motivated and Happy

When IBM sold its low technology business a few people were interested in knowing the details of this deal. And a few years later, IBM was looking at the new corporate culture inside Lexmark International. The 5,000 workforce at Lexmark was 90 percent employees that once belonged to IBM. Half of that number was working for IBM for more than 20 years. All the people at Lexmark were happy to be working there, because the employee's ideas were taken into consideration. Some of those ideas were approved and that made people at Lexmark a happy place to work.

Whenever an employee from IBM had an idea it had to get so many approvals to accomplish something. Another IBM-lifer said that at Lexmark, there were three people between the chairman and me. At IBM, the number was so large, that I couldn't count them all. Lexmark had a team dedicated specifically to sales. This dedicated team ranged from 175 to 200 people dedicated solely to selling printers and typewriters. This change of strategy brought an increase of 12 percent share of the personal printer market in 1990. Lexmark appeared to be a company willing to take challenges in the printer and typewriter industry, and this attitude was going to make Lexmark succeed in the near future.¹⁸

3.3 Lexmark Main Goal: Pleasing the Customer

The success of Lexmark in the printer market was due to the dedication of their representatives and their main goal was to please the customer. Lexmark developed different studies and they focused on laser printer users and they wanted to determine

¹⁸ Flynn, K. Mary. (2005). Inside Lexmark: A Taste of the new IBM? (Lexmark International Inc.) Dow Jones Reuters Business Interactive LLC

what they needed. All the results from the studies were used and implemented in the new IBM Laser Printer.

The results for the studies showed the necessity to improve certain aspects of the Laser Printers. Some of these results included: Requirements for improved print quality, price/performance, speed, easy of use, paper handling, compatibility, and network capabilities. The main goal for Lexmark was to listen to the needs of the customers and the results was high quality products and services in the personal printer market.

One interesting feature of the IBM Laser Printer 6, 10 and 10L was the achievement of true 600 X 600 dots per inch resolution when printing in the PostScript mode with four megabyte of additional memory. It was important to describe that the PostScript was a page demonstration language that software programs used to describe text fonts and graphics images. The Adobe Type Manager (ATM) software was being used for the first time in the IBM 4029 Laser Printer series and it offered users 16 Type 1 outline fonts as a standard feature.¹⁹

3.4 Technology implemented in laser printers

Lexmark was an independent company and it was making many improvements in the products they manufactured. Lexmark was trying to update the Laser Printer machines, a network printer to compete with HP Laser Printer IIIsi and also four new Proprinter dot-matrix printers. Lexmark was going to produce enhanced versions of its laser printer capable of printing 5 or 10 pages per minute and the models were Laser Printer Model 4019.

¹⁹ (2005). New IBM Laser Printers Offer 600 X 600 DPI Resolution. *Dow Jones Reuters Business Interactive LLC*

Both of these models currently used the Motorola 68000-based controller and include 512K bytes of memory. Lexmark wanted to compete with HP's LaserJet IIIP printer, and what Lexmark is trying to do is to add to the printers a technology similar to HP's Resolution Enhancement Technology. Lexmark was planning a second challenge to HP's printer domination by readying a 1992 release of a 16 to 18 pages per minute network printer to compete with HP's LaserJet IIISi.

The new printer from Lexmark will work with IBM's AS/400 line of minicomputers and offer direct Ethernet and Token-Ring connections. This new type of printer will be offering a large duty cycle and paper handling capabilities that exceeds 500 sheets. Lexmark was trying to be better than HP in the laser printer market, and that was a gigantic challenge that Lexmark was willing to take.

At the end of the month of July, 1991, Lexmark was expected to present to the market four new versions of the Proprinter. The low end of this company will be offering a wide carriage version of a nine wire printer that will offer enhance paper handling capabilities, including top rear and front feed paper paths. The 360 dot per inch printers will offer a jam detection feature and a several improvements in the front panel. Also, Lexmark will release nine and 24 wire narrow carriage models for use with the AS/400. These kinds of machines will offer a printing speed of 500 characters per second. All the printers are expected to be priced with Lexmark's existing Proprinter line, which ranges in price from \$449 and \$799 for nine wire printers and \$499 to \$1,765 for 24 wire machines.²⁰

²⁰ Damore, Kelly. (2005) IBM spin off to launch comeback with 7 printers; Lexmark tackles HP's laser jet IIISI. (Lexmark International Inc.). *Dow Jones Reuters Business Interactive LLC*.

3.4.1. Motorola Microprocessor added to Lexmark laser printers

Lexmark was the manufacturer and marketer of IBM Laser Printers, and in October 1991, Lexmark unveiled the technology added in their Laser Printers. The microprocessor and Memory Technologies Group of Motorola Inc. revealed that its 68000 and 68020 microprocessors provided the processing power for the IBM Laser Printer 4029 Series. The new IBM Laser Printer 4029 Series included four models, and all of them offer a minimum of 300 dots per inch resolution, and could also operate in IBM Token Ring, Ethernet and Net Ware networked environments.

The other two models of IBM Laser Printer, the 5E and IBM Laser Printer 6 allow 5 page per minute and six pages per minute output and it was being powered by the Motorola 10 MHz 68000 microprocessor. The IBM Laser Printer 10 and IBM Laser Printer 10L had the ability to print 10 pages per minute and it was being powered by the Motorola 16 MHz 68020 microprocessor. Jim Reinhart, Motorola's manager of the 68000 marketing and applications said that the 68000 and 68020 provided the IBM Laser Printer 4029 Series with the power they needed to keep up with the demands of networked printing environments.

The two kinds of Motorola microprocessors were built on a 32 bit architecture. Some of the features of the 68000 included a 17 32-bit general purpose data and address registers, also a synchronous bus structure, a bit manipulation and it also had 16 megabytes of linear address space. The other model of microprocessor, the 68020 was the first 32-bit microprocessor implementation. Some of its features included a 32-bit internal and external symmetrical architecture and four gigabytes of linear address. Also, it offered an incredibly integrated instruction cache, a 3-clock bus cycle and increased

parallelism in the integer unit, all of these features were combined to deliver four times the performance of the 68000.

Lexmark had developed a Print Quality Enhancement Technology and was adding its IBM Laser Printers 4029 series. This system provided a sharper resolution and smoother edges of graphics and text printing. The retail price for the IBM Laser Printer models 5E and 6 ranged from \$1,595 to \$ 1,895 respectively. The cost of the IBM Laser Printer 10 was \$2,395 and the cost of the IBM Laser Printer model 10L was \$2,995. All the four models of the IBM Laser Printer 4029 Series were available at Lexmark authorized dealers, and wholesalers nationwide. One of the world's leading suppliers of electronic equipment, systems, components and services for worldwide market was Motorola.

The products that Motorola included the two-way radios, pagers, cellular telephone systems, semiconductors, defense and aerospace electronics, automotive and industrial electronic equipment, computers, data communications, information processing and handling equipment. The integration of the Motorola microprocessors in the IBM Laser Printers was making the printer market to be more efficient and more competent.²¹

3.4.2. PhoenixPage FIVE/PLI Software Incorporation to Laser Printers

Lexmark included microprocessors from Motorola in their Laser Printers, and it was also incorporating the PhoenixPage - FIVE/PLI, Phoenix PCL 5 emulation software. The company providing the software was called Phoenix Technologies Ltd. The software offered by this company was the PhoenixPage FIVE/PLI and was a complete emulation of the Hewlett Packard PCL 5 language implemented in the HP LaserJet III printer.

²¹ (2005). Motorola's 68000 and 68020 Microprocessors Power New IBM Laser Printer Series. *Dow Jones Reuters Business Interactive*

The announcement about the incorporation of the new software was made at the Seybold Computer Publishing Exposition. The PhoenixPage FIVE/PLI had an optional plug in feature card and was going to be an essential component in the IBM Laser Printer products from now on.

Dr. Paul Curlander, Lexmark's general manager printer business said that they had evaluated a number of imaging suppliers and found that Phoenix Technologies offered the level of emulation quality and compatibility that would make Lexmark's products winners in the marketplace. Phoenix Technologies Ltd and Lexmark were going to become partners and the key vendor was going to be Lexmark.

Both companies worked together and with the development team, they implemented a very high quality and high performance PCL 5 product. The new software used in the IBM Laser Printers was design as a total imaging solution with Phoenix's printer operating system, the PhoenixPage FIVE/PLI. This system supported all of the advanced imaging capabilities of the PCL 5 language, and it also included Agfa Corp.'s Intellifont scaling technology and Intellifont Scalable Typefaces for complete 100 percent font compatibility with the Laser Jet III.

The objectives for Phoenix Technologies Ltd. were to design, develop and market system software products for manufacturers of personal computers that were compatible with industry standards. There were more than 200 major personal computers and printers manufacturers that rely on Phoenix because of its system-level software and hardware compatibility.²²

²² (2005). Lexmark Offers Phoenix Technologies' PCL 5 Emulation Software. *Dow Jones Reuters Business Interactive LLC*

3.4.3. Pointing Devices Implementation

Lexmark was a company that emerged from the shadows of IBM and they worked as partners for several years. Lexmark was now an independent printer operation of IBM Corp. and also manufactured keyboards for IBM PS/2 personal computers (PCs). A new announcement was made on October 10, 1991, about the integration of a series of integrated pointing devices as resident features on its personal system keyboards.

The new keyboard developed by Lexmark had a resident pointing device, located in proximity to the home row of keys and it would control the movement of the cursor on the system's display screen which performed the same basic function as a mouse. Most of the desktop and laptop keyboards allow the incorporation of a mouse, but it had to be attached as an accessory.

This adaptation requires extra operating space, accessory cables and greater arm motion than the new Lexmark's keyboard resident device. One of the advantages of this kind of keyboard was that for the first time users had the opportunity of having mouse functions from the keyboard. At the same time users were taking advantage of the incorporated mouse in the keyboard and they were able to use the standard keyboard layout. This type of keyboard allowed users an ergonomic design and takes less workspace to operate than conventional mouse accessories.

Raymond H. Reichenbach was the person in charge of the Lexmark's keyboard and input technologies operations and he said that Lexmark was working hard to anticipate and respond to the need for a pointing device resident in the keyboard but at the same time it was trying to preserve the layout people were accustomed to. The purpose of Lexmark with the new keyboard was that it wanted to offer variety including a small or large trackball placed in two different locations. This keyboard also offered a

touch key or trackball version based on Lexmark's rubber dome technology, designed and manufactured for the IBM PS/2 L40SX laptop keyboard. The new feature of resident pointing devices created for the Lexmark keyboards would be market directly to other original equipment manufacturers for sale under their own logos.

The keyboards products manufactured from Lexmark had 200 or fewer repair actions per million machine months and were available in around 30 different languages. Two of the Lexmark's basic keyboards had been incorporated with the new resident devices: Model G2 "Quiet Touch" and it included a touch key or a mini-trackball resident pointing device; and the Model G "Enhanced" 101 (with regular size or mini-trackball resident pointing device).²³

3.4.4 Adobe Software Used in Laser Printer

Lexmark decided to sign a licensing agreement with Adobe Systems Inc., and gave Lexmark the rights to Adobe's PostScript language interpreter which was going to be implemented in their information products division of International Business Machines Corp. The laser printers from IBM used PostScript software from Adobe, and were designed, manufactured and sold by Lexmark, under its licensing from IBM. Many of the new products to be developed by Lexmark would incorporate Adobe's PostScript software. Marvin L. Mann, Chairman and Chief Executive Officer at Lexmark International had said that Adobe and Lexmark share the same high standards for quality and innovation.

The partnership between Adobe and Lexmark had promised to produce leading-edge products for electronic printing and publishing that combined the latest in

²³ (2005). Lexmark International Offers Keyboard-resident pointing device. *Dow Jones Reuters Business Interactive LLC*

technology with widely accepted standards. The company of Adobe Systems Inc. was founded in 1982 by Dr. John Warnock and Geschke, and its headquarters were located in Mountain View.

The company Adobe had developed the PostScript, which is the industry standard page description language for electronic printing and publishing. Adobe had developed also the Display PostScript which is a device independent graphics software component for computer displays. The relationship between Adobe, Lexmark and IBM allowed them to build a stronger business in the computer area by using the new developed software in the home and office equipment that Lexmark and IBM had already created.²⁴

3.5 Lexmark Released Laser Printer for General Business.

Lexmark have been able to improve a lot of their products and also they have included more technology to be competent in the market. Lexmark have introduced a new and unique printer design that will offer forms handling and general business users many advantages in reliability, versatility and ease of use. This new design is specifically straight paper path that the jamming of the paper was minimum and at the same time it maximized the number of pages that could be printed at the same time.

The biggest advantage of this new printer was that it could be used in PC and midrange line of affordable for matrix printers such as the IBM Personal Printer Series (PPS) II and IBM 4226 Model 302. The retail price for the straight paper path IBM PPS II ranged from \$499 to \$699. This type of printer could be easily attached to IBM compatible personal computers, and was available in 9 wire narrow or wide carriage models with a complete warranty for two years.

²⁴ (2005). Adobe and Lexmark International announce licensing agreement.). *Dow Jones Reuters Business Interactive LLC*

Another printer was the IBM 4226, a midrange printer designed for heavy workstation, shared printing or system environments. Its retail price was \$2,295 and had a complete one year warranty. This model allowed the connection to the IBM PS/2, IBM RISC System/600, IBM AS/400 and IBM System/370 with an ASCII attachment. The model of the IBM PPS II was developed between Lexmark and IBM Japan, and it had many advantages over the competing models.

One of the advantages was the reliability, because the IBM PPS II offered a specific straight paper path that significantly improved paper handling reliability. This feature attracted customer such as insurance, banking, healthcare because they spent considerable time handling and printing multipart forms.

Another advantage of this model was the versatility. It had the choice of five different paper paths, and it also contained a push and pull tractor, and exceptional paper handling. This feature made the IBM PPS II highly versatile. An extra feature to this model was the easy of change from automatic sheet feed to continuous forms printing. The third advantage of this model was the easy-to-use feature.

This model had an operator panel and allowed the user to easily set up and operated the printer, cleaned-hands ribbon changing, document tear off, and front slots for cut sheets and envelopes were many of the features that made the IBM PPS II a convenient and easy-to-use personal printer.

The IBM 4226 model was a midrange, and heavy duty dot matrix that shared many of the advantages of the IBM PPS II. It had the straight paper path, was an excellent paper handling for multipart forms and it had an exceptional reliability and easy of use. The IBM 4226 had many features allowing the users to quickly tear off completed

forms while the printer automatically continued printing at the top of the next document, with no wasted forms and no wasted time.

The system of feeding the paper was very helpful because the paper was feeding in a straight line and there were no jams, allowing the user to left the printer unattended with no worries. The IBM Personal Printer Series II Models 2380 (narrow-carriage) and 2381 (wide-carriage) and the IBM 4226 Model 302 were generally available now through Lexmark authorized dealers and resellers, and IBM direct sales force nationwide.²⁵

3.5.1. Lexmark Competing with Hewlett Packard.

Lexmark was an independent company and it was making many improvements in its manufacturing products. In July, 1991, Lexmark was trying to update the Laser Printer machines, a network printer to compete with HP Laser Printer IIIsi and also four new Proprinter dot-matrix printers. Lexmark was going to produce enhanced versions of its laser printer capable of printing 5 or 10 pages per minute and the models were Laser Printer Model 4019. Both of these models currently used the Motorola 68000-based controller and included 512K bytes of memory.

Lexmark wanted to compete with HP's LaserJet IIIP printer, and they were trying to add to their printers a technology similar to HP's Resolution Enhancement Technology. Lexmark was planning a second challenge to HP's printer domination by readying a 1992 release of a 16 to 18 pages per minute network printer to compete with HP's LaserJet IIISi.

The new printer from Lexmark would work with IBM's AS/400 line of minicomputers and offered direct Ethernet and Token-Ring connections. This new type

²⁵ (2005). Straight paper path PC and Midrange IBM printers; Lexmark introduces new IBM printer design for forms-handling. *Dow Jones Reuters Business Interactive LLC*

of printer would be offering a large duty cycle and paper handling capabilities that exceeded 500 sheets. Lexmark was trying to be better than HP in the laser printer market, and that was a gigantic challenge that Lexmark was willing to take.

At the end of July, 1991 Lexmark was expected to introduce to the market four new versions of the Proprinter. On the low end, the company would be offering a wide carriage version of a nine wire printer that would offer enhanced paper handling capabilities, including top rear and front feed paper paths.

The 360 dot per inch printers would offer a jam detection feature and several improvements in the front panel. Also, Lexmark would release nine and 24 wire narrow carriage models to be used with the AS/400. These machines would offer a printing speed of 500 characters per second. All the printers were expected to be priced with Lexmark's existing Proprinter line, which ranged from \$449 and \$799 for nine wire printers and \$499 to \$1,765 for 24 wire machines.²⁶

3.6 New Recycling Program for Laser Print Cartridges

Lexmark was a new company with new ideas, and one of its newest ideas was the creation of a program for recycling used toner cartridges. Lexmark announced its commitment to reducing the environmental waste and its recycling program will definitely decreased the landfills waste. This recycling program would be known as the Operation ReSource, and would allow the customers to return used cartridges to Lexmark in special prepaid postage mailers.

Once the used cartridges get to Lexmark, they would be disassembled and each of its parts would be send to any of the different recycling centers such as plastics or metals.

²⁶ Damore, Kelly. (2005). IBM spin-off to launch comeback with 7 printers; Lexmark tackles HP's LaserJet IIIISI (Lexmark International Inc.). *Dow Jones Reuters Business Interactive*

All the products that Lexmark was producing were going to be sold in over 100 countries around the world. The objective of the Operations ReSource was to minimize the quantity of cartridges disposed in landfills. The number of laser printer cartridges to be used in one year in the United States was going to be approximately 11.5 million.

The customers were able to send back a card they had previously received and they were able to request a recycling kit. Each of the recycling kit would have a prepaid shipping materials and instructions on how to return the used toner cartridge for recycling. Also, there were a single cartridge, and a volume cartridge program, and each program offered special assistance via a toll free number.²⁷

3.7 Future of Lexmark after Losing its President.

In September 5, 1991, Lexmark had to deal with something very unpleasant, and that was the loss of the Chairman Martin Dubilier. He was the co-founder of the company in 1978, and he was 65 years old, and fought against cancer for a while. The new president was going to be Joseph L. Rice III, he was 59 years old and took an increasingly active role at Clayton & Dubilier in the past year. The board of directors at Lexmark said that they did not expect major changes in the company's activities or style.

In recent years, Mr. Dubilier concentrated on the operations of companies in which Clayton & Dubilier invested, and Mr. Rice focused more on financial issues. Mr. Dubilier was known for a nonstop flow of business suggestions, and incredibly he got a patent when he was 12 for inventing rust-proof track for toy railroads.

²⁷(2005). Lexmark Announces Recycling Program for Laser Print Cartridges. *Dow Jones Reuters Business Interactive LLC*.

At Clayton & Dubilier, Mr. Dubilier pushed for everything from inventory cutbacks at a lawn fertilizer company to sales force expansions at Lexmark. Scott Sperling, an investment manager at Harvard University which participated in Clayton & Dubilier buy out funds said that Marty was an extraordinarily capable operator of companies, and he would be hard to replace.

The members of the board of director at Clayton & Dubilier had many years of experience in business operations. The position for the presidency occupied by Mr. Dubilier will be left vacant, Mr. Rice said that Clayton & Dubilier executive B. Charles Ames would become the firm's lead manager on the operations side.²⁸

4. Lexmark Celebrating 1st Anniversary

In March 1992, Lexmark International Inc., was celebrating its first anniversary with a headline appearing in national ads and with the announcements of new products. Lexmark made significant products announcement in each of the products they manufactured. For example, the four new models of its award winning 4029 Series IBM Laser Printer family, and two models for direct attachment to Macintosh computers.

Also, one of the first products from Lexmark with the Lexmark logo included six models of an IBM PC compatible keyboard to be sold by catalogs. The addition of software preloaded on the IBM PTS 386Sx typing workstation. Another of its products was the IBM 4683/4684 Auto-inking ribbon for point of sale terminals. And a self inking device that was prolonging the ribbon's life by two times longer than the older ribbons.

The Chairman of Lexmark Marvin Mann was excited about the successful start of its new company. Mann said: "We substantially exceeded our profit plan and exceed our

²⁸ (2005). Clayton & Dubilier Chairman Dies; Rice Takes Top Job. *Dow Jones Reuters Business Interactive LLC*

gross profit and operating margins by reducing costs and expenses significantly. Strong cash flow from operations and effective asset management made it possible to prepay some debt and also cancel 20 percent of our credit line because we won't need it, and today we have approximately \$300 million less debt than we anticipated.”²⁹

4.1 Lexmark Used its Own Logo

The alliance between IBM and Lexmark International allowed Lexmark to use the IBM brand name in their manufacturing products. The IBM logo was a good opportunity for Lexmark to be selling its products in the printer market. As time passed, Lexmark wanted to use its own brand name. In July 1992, Lexmark released new products and the IBM logo was slipping away as Lexmark's took precedence.

The shareholding of the company was altered slightly, with Clayton holding 55 percent, staff and management holding 15 percent, and the rest was split between IBM and two major US pension funds. Marvin Mann, had restructured the bureaucracy into a system that consisted of four layers of management between a salesperson in Australia and Mr. Mann.

Every six weeks, Lexmark International was releasing new printers. When Mr. Mann was working for IBM he said that he never knew the profits and revenues around the world. Lexmark was getting ready to use its logo name and accompanied with there was going to be a statement saying 'manufactured under licence from IBM' in its marketing.³⁰

²⁹(2005). Former IBM unit off to “Great Start”; Lexmark announces new products, celebrates 1st anniversary as independent \$2 billion company. Net income exceeds plan; portion of debt retired early. *Dow Jones Reuters Business Interactive*

³⁰ Head, Beverly.(2005). Lexmark Flourishes Away from its Parent. *Dow Jones Reuters Business Interactive LLC*

5. Lexmark Supplied Superstores

By March 1992, Lexmark had significantly expanded the reseller network to more than 3,500 in the U. S. alone and added new types of outlets for selected products such as office and electronic superstores and distributors. The sales force in the U.S. had increased by 60 percent this year, and they worked directly with end users in large accounts. IBM is still the largest customer, but Lexmark had expanded their customer base.

Lexmark was fortunate because they got large customer orders from companies such as Wal-Mart Stores Inc., Sears Roebuck and Co., General Motors, and Allstate Insurance Companies. The customer list had increase by 10 percent and there were new customers that did not make business with Lexmark a year ago. The most important thing for Lexmark was to recognize the culture changed and the teamwork system incorporation is working well.

Lexmark was extremely proud of the IBM heritage and all the background for the foundation of a new company. The independency of Lexmark allowed the company to focus in their business, and it was a company easy to do business with. The feedback that the board of director was obtaining from the customer and retailers confirmed to them that the new systems implemented at Lexmark was a success.³¹

5.1 Lexmark's and Drug Stores

In April 1993, the operation profits doubled for Lexmark International Inc., in its second year as an independent \$2 billion company. The shipments of IBM personal printers made by Lexmark around the world grew by 20 percent. Also, the typewriters

³¹(2005). Former IBM unit off to "Great Start"; Lexmark announces new products, celebrates 1st anniversary as independent \$2 billion company. Net income exceeds plan; portion of debt retired early. *Dow Jones Reuters Business Interactive LLC*

and supplies businesses both exceeded their financial targets. In October 1992, Lexmark announced its first color printer, the IBM color jet printer PS 4079.

When that printer was compared to the competitive models, it provided better quality, it was a lot faster, had superior networking capabilities, and it was half the size and weight. The increased customer orders continued to demonstrate that people were accepting Lexmark printers.

One of the largest customers in U.S. was Payless Drug Store Chain, and they purchased over 1,100 IBM 4029 laser printers for pharmacy and other applications. Another larger customer was Target Discount Stores headquartered in Minneapolis and they purchased 500 laser printers for signage and labels.³²

6. Lexmark and Computers Connections

Lexmark was broadening its IBM personal inject product offered in July 1992. Lexmark announced its new line of portable printer, a desktop inject and an IBM 4029 Laser printer connection for Novell personal computer network. In addition to the new products, it also announced a 33 percent reduction in price in its entry level desktop laser printer from \$1,495 to \$999. The board of directors at Lexmark was positive that the entrance in three new markets, were going to meet the personal printer needs of their customers.

One of the new products was the IBM portable printer. This was a very small printer, about the size of a cigarette carton, and it used a lightweight battery that used thermal transfer technology on plain paper. It was the best choice for the business traveler, and it was available in raven black and pearl white with a retail price of \$549.

³² Lorh, Steve. (2005). For New IBM Chief, Spinoff May Be a Model. *Dow Jones Reuters Business Interactive LLC*

Another product was the IBM 4070 IJ, and it was a letter quality and compact, about the size of a three ring notebook. This type of printer was good to be used at home office or small business who required high resolution printing of text graphics. Its retail price was of about \$ 599.

There was also the IBM 4033 LAN connection, and they were three new Novell compatible models of the IBM 4033 LAN connection. There was also an external printer adapter that allowed that IBM 4029 laser printer and other PC printer to operate in a personal computer local area network. Its retail price was going to range between \$695 and \$945.

A standard feature of the IBM 4070 IJ was the incorporation of an express service warranty for a year. With this program, the customer that was looking for assistance was able to call a toll number to talk with a Lexmark service specialist. In some cases Lexmark was going to provide a replacement printer within two business days. Lexmark really was focusing in the satisfaction of their customers and that was making the company grow larger.³³

6.1 IBM Color Jet Printer

In November 1992, Lexmark had announced its new products at Comdex. Lexmark had announced the new IBM Color Jet Printer 4079 and it featured a new RISC processor, a simultaneous connection to IBM and Apple Macintosh computers and a better high resolution color with 360 x 360 dots per inch. When compared to the leading's competitors model, it offered 44 percent higher resolution and 44 percent faster, and it was half the weight and size. Its retail suggested price was \$3,495, and it also

³³ (2005). Lexmark Broaden Product Line with New IBM Portable and Inject Printers, Novell-Compatible IBM LAN Connections. *Dow Jones Reuters Business Interactive LLC*

offered a lower price point for high quality and PostScript compatible desktop color printing.

The hallmark of Lexmark was technology and price leadership since it became independent. Lexmark had introduced more than 20 printers at a pace of about one month. Several tests done on the Lexmark's laser printers continue to equal or exceed the speed, quality and function of all the competitors. Due to the high quality of the laser printers, Lexmark had earned the exclusive 'Technical Excellence Award' from PC Magazine in November 1991, and an 'Editor's Choice' award in November 1992.

Lexmark was trying to increase the development activity and was trying to introduce new products to improve its competitiveness in the printer market. The U.S. sales force was increased by more than 100 people and they were selling directly to large accounts in cooperation with Lexmark dealers. Lexmark also hired approximately 150 engineers, programmers and other professionals at its manufacturing facilities in Lexington, Ky., and Boulder, Colo. Lexmark was also able to reduce the company's debt to approximately \$750 million from an original plan of \$1.2 billion when the company was initially formed. This showed the significant amount of cash flowing into the business.³⁴

7. Lexmark Overseas.

Lexmark wanted to accelerate its growth, and it decided to acquire a business in Australia, in April 1993. Lexmark Australia Pty Limited purchased Gestetner Lasers and it was an Australian manufacturer and distributor of printer laser. The acquired business was going to place Lexmark in the second place in the Australian printer market.

³⁴(2005). Lexmark Technology and Price Leadership Showcased at Comdex. *Dow Jones Reuters Business Interactive LLC*

At the same time it was going to improve its presence in the Asia and the Pacific area. Lexmark was promoting its products with the help of the IBM sponsorship group, and it was going to be the official supplier for personal printers for the 1996 Summer Olympic Games in Atlanta. Lexmark was also going to be the supplier at the Victoria Commonwealth Games in Canada in 1994.³⁵

8. Lexmark's New Manufacturing Facility

Lexmark was having success in the printer market. In June 1993, Lexmark announced its new 40,000 square foot facility at 6555 Monarch Road. This facility was located near the Lexmark Boulder's manufacturing facilities and would house the company's development engineering labs for printer supplies including toners, fuser rolls, photoconductors and developers. The Lexmark Boulder's facility employed 285 persons.

The joy of the celebration was reflected in the faces of Howard Anderson which was the Boulder operations manager and also in Marvin Mann. At the grand opening ribbon cutting ceremony, Leslie Durgin, Boulder Mayor and Denis Nock, President of the Boulder Chamber of Commerce were present. Also, Joseph Rice the president of Clayton & Dubilier & Rice Inc., was present at the celebration. The Vice president of Lexmark, Bill Vennes, called the new facility the cornerstone of Lexmark and it confirmed the continued leadership in electrophotographic technology. Mr. Vennes said: "This facility reflects Lexmark's long term commitment to Boulder and our dependence on our Boulder team."³⁶

³⁵ (2005) Lexmark profits double in second year as IBM spin off; printer shipments increase by 20 percent. *Dow Jones Reuters Business Interactive LLC*

³⁶(2005). Lexmark Boulder Celebrates Opening of New Laboratory. *Dow Jones Reuters Business Interactive LLC*

9. Introduction of New Wheelwriter Models

In July 1993, Lexmark introduced eight new IBM typewriters, and they were designed to meet the needs of the growing market for typewriters used with personal computers. The models were the IBM wheelwriter 1000 typewriter for home or small business use, the IBM wheelwriter 3500 that featured advance text editing and long term storage. The top of the line was the IBM wheelwriter 7000 with advance word processing capabilities. There were eight different models of IBM wheelwriter, and their retail prices ranged from \$695 to \$ 1845.

All the different models of typewriters were created to be used alongside personal computers for accomplishing jobs such as envelop addressing, and label typing. These activities were difficult to perform with a PC. The IBM wheelwriter 2000 typewriter was designed specifically to be an ideal personal computer. Its features included a space saving footprint, 32K of memory for storing repetitive work such as form letters and common phrases.

All the designed wheelwriter had the availability to be connected directly to a personal computer's parallel printer port with the printer option which converted the typewriter into a letter quality PC impact printer. The new series of typewriters were designed in honor of the 60th anniversary of IBM typewriters. Since 1933, 22 million of typewriters had been sold. The typewriters were available in 26 languages and were distributed in 175 countries worldwide. Another important product was the IBM wheelwriter 1500 typewriter and it had numerous function (improvements, and it remained with the same price that its predecessor.³⁷

³⁷ (2005). Lexmark Announces New IBM Typewriter Family Design to Complement PC Office Environment. *Dow Jones Reuters Business Interactive LLC*

9.1 Enhancement of the Electronic Typewriter

The mission of Lexmark was to strengthen the electronic typewriter with specialized tasks. In July 1995, Lexmark announced certain enhancements made to some models of its IBM Wheelwriter typewriter family. One of the new features was the PowerWise energy saving mode that automatically powers down the typewriter when it was not being used. Another feature was the incorporation of the 43 pre-defined industry standard forms templates and a new Index CardFile for the storage of names, addresses and telephone numbers.

The potential buyers of typewriters doubted that there was any room for innovation said Linda Della Volpe, an analyst with Venture Development Corporation which was a market research firm in Natick, Mass. Lexmark controlled 50 percent of the office electronic typewriter market, but despite that, Lexmark had found a way to evolve with new features for the typewriter user.

The PowerWise mode reduced electricity consumption by 23 percent when was activated. This feature allowed the typewriter to power down after the user had selected the period of inactivity between one and 90 minutes. There was an indicator that blinked every time the PowerWise mode was activated. The PowerWise was easily deactivated by touching any key. The PowerWise was incorporated into the IBM personal Wheelwriter 2 and Wheelwriter model 15, 1000, 1500, 2000, 2500, 3000 and 3500. Five of the typewriter models had the 43 retrievable forms template, the IBM Wheelwriter 1500, 2000, 2500, 3000 and 3500.³⁸

³⁸ (2005). Lexmark Enhances IBM Wheelwriter Typewriters; Upgrades Include PowerWise Mode, Forms Templates and CardFile Features. *Dow Jones Reuters Business Interactive LLC*

10. Introduction of New Peripheral Devices

In August 4, 1994, Lexmark introduced a new generation of peripheral printing devices that made easy the fill in the blanks areas on forms and easy to address envelopes. The new device was a perfect companion for personal computers. Another feature of the peripheral printing device was that it was able to print multipart forms, and it included overnight courier labels, packing slips and insurance forms.

All of these tasks were impossible to perform by using a laser printer. Also, these peripheral printers were able to withstand coffee spills, sprinklings and eraser detritus. The typewriter market was declining about 17 percent a year in revenue, and that market was about \$350 million, and Lexmark continued to be the only player in the industry and wanted to increase revenues from year to year.³⁹

11. New Executive in Charge of Printer Expansion

Lexmark International Inc. was focusing in retail merchandising channels and wanted to expand the printer market share more aggressively. In June 14, 1994, Charles A. McNulty was named vice president of worldwide marketing and U.S. sales for the Personal Printer Division. M. McNulty was the vice president of sales for Packard Bell Electronics Inc., and he would bring 20 years of computer retail sales experience. Paul J. Curlander, vice president and general manager of printing system business said that the presence of Charles McNulty would bring the expertise and experience to take Lexmark retail merchandising to the next level.

Lexmark was the only printer manufacturer that made all of its components in the United States. Lexmark had total control over the configuration of the various lines they

³⁹ Lewis, H. Peter. (2005). Lexmark Still Key Player in Typewriter Market. *Dow Jones Reuters Business Interactive LLC*

would introduce into the retail channel. Mr. McNulty said that they were planning comprehensive merchandising programs that cover all the bases, from in store sales training for our retailers, to point of purchase strategies that capture and engage the customer. He also said that winning at retail is a complex dynamic that required dedicated focus, attention to detail and persistence, and Lexmark's Personal Printer Division had all three elements. Mr. McNulty also worked for the executive sales positions at Epson America Inc., North American Philips Corp., and Magnavox Consumer Electronics. His expertise was in the area of retail and consumer electronics. He graduated from the Arizona State University and he was also a member of the American Management Association.⁴⁰

12. Lexmark's Strengthens Retail Position with Inkjet Printers

In August 1994, Lexmark introduced two new products as part of its retail channel strategy. The ExecJet III was an entry level color Inkjet printer with an anticipated price of \$350. The ValueWriter 600 was able to print 6 pages per minute, it had 600 dots per inch, and its retail price was \$849. The two personal printers were the first products developed, introduced and positioned to strengthen the presence of Lexmark in retail sales channel. Lexmark wanted to offer more functions and less value than the available competitive products.

The ExecJet IIIc delivered performance, versatility, reliability and easy of use for home and office users who needed to add color to documents. The ExecJet IIIc had the ability to print 2.5 to seven minutes per page in quality color mode and up to three pages

⁴⁰ (2005). Lexmark Appoints Seasoned Retail Executive to Lead Printer Channel Expansion Initiative. *Dow Jones Reuters Business Interactive LLC*.

per minute using only black ink. The ExecJet IIIc offered versatility and its price was considered low in comparison with the competitors. The Value Writer 600 was the ideal printer for corporate users, who needed a high quality, and high volume output personal printer.

Charles McNulty, the vice president of marketing and sales for personal printers said that Lexmark would continue to introduce top notch products that gave users more function for the dollars they were spending and they would have the availability to purchase through retailers near home and the office.⁴¹

13. Lexmark's Financial Report in 1994

The worldwide revenues from Lexmark's desktop printers resulted in 25 percent growth in 1994. Lexmark's printer business had a significant improvement in profitability. Also, in the U.S. the market share doubled to almost 11 percent for the 15-20 page-per-minute laser printer segment. Lexmark's worldwide revenues were expected to be in excess of \$1.8 billion, and that was about 10 percent ahead of 1993 and would be an operating income of more than 12 percent ahead, said Marvin Mann.

The company's debt was decreased \$280 million or 40 percent in the past 12 months. The company had reduced its debt to \$370 million as it continued to prepay debt from its original plan \$1.5 billion at the time when the company was formed. Mr. Mann said that they had a terrific year and that they were looking ahead for the year 1995.

Lexmark wanted to double the digit for the growth in the printer revenue profits.

The forecast for the next five years estimated that the growth was going to be 25% in color inkjet shipments, and 7 percent in laser printers. Lexmark was the only

⁴¹ (2005). Lexmark Ignites New Retail Price/ Performance Standards in Color Inkjet and Page Printer Markets; ExecJet IIIc and ValueWriter 600 Strengthen Company's Retail Channel Position. *Dow Jones Reuters Business Interactive LLC*

company in the United States that manufactured laser and inkjet printers, and they were positive in reaching its goals. In 1994, Lexmark had introduced 12 new printer, and eight of them were laser printers, plus the ExecJet IIC, that was the first color inkjet printer and used Lexmark's inkjet technology.

In October 1994, Lexmark announced the Optra Laser printer family which was a breakthrough in desktop printing with the introduction of the industry's first family of 1,200 x 1,200 dots-per-inch laser printers. The advantage of this printer was that could produce photographic-like images and text that are four times sharper than current 600 dots-per-inch laser printer. The Optra announcement marked the first time that Lexmark used its logo to identify its printer products.

Previously, Lexmark had incorporated the IBM logo as well as its own name under a license with IBM that was going to expire in 1996. The positive image worldwide of the Lexmark name and products convinced the company that right there was the time to rely solely on the Lexmark brand. The keyboard business continued under tremendous pricing pressure and the plans for 1995 included new lower cost keyboards design to improve its competitiveness in this business. Lexmark doubled its keyboards business this year and planned to triple it in 1995 in business environment in which keyboard prices in some segments have decline by 20 percent.

Chairman Mann said: "By creating network printer and personal printer divisions with separate sales and marketing organizations, we sharpened our marketplace focus. Additions to the direct sales force for network printers and concentration on industry segments such as banking, retail, pharmacy, and healthcare contributed to hardware sales. In 1995, we would continue to increase the large account sales force as well as expand

the vertical industry teams. In the personal printer business we would introduce enhanced printer products through the retail and dealer channel.”⁴²

14. Assembly Line Basic Changes

In January 1994, Lexmark implemented basic changes to its manufacturing operations areas. For example, on the laser printer assembly line, subassemblies were completed at one end of the mammoth plant, final assembly was in the middle and packaging was in the basement. Each of the operation areas had its own supervisor. Roger Hopwood, who was the plain speaking production center manager for laser printer and he said that it did not take a lot of genius to realize that the approach implemented created massive inefficiencies. The challenge was to empowering the assembly line workers with the authority to recommend not only the obvious, but also the small changes that the managers missed by not being on the line eight hours a day.

At first, the workers did not want to get involve in decision making. Later, a team of assembly workers totally redesigned the laser printer production process and constructed a cardboard model. All the recommendations were presented to Mr. Hopwood and other managers. When the team asked Mr. Hopwood to get the design approved, he refused to sign it and explained that each of the members should sign it first. Mr. Hopwood remembered that there was a total silence in the room. He kept talking and he said that the members of the team were the owners of the design and each of them should put its signature in the paper or otherwise Mr. Hopwood would not sign it. The teams were realizing that empowerment also meant pushing down responsibilities for decision taking.

⁴² (2005) Financial: Lexmark International Reports Best Year Ever since Independent of IBM. *Dow Jones Reuters Business Interactive LLC*.

It took another month as the assembly line team worked nights and weekends and still produced printers on the old assembly line to propose a redesign that they could back with their signatures. Mr. Hopwood thought that there were two significant lessons that workers learned with this process. First, empowerment did not work until employees believe that they can truly take ownership of what empowerment produced. Second, empowerment took time and training. The CEO, Mr. Mann realized that this effort symbolized a fundamental change for everyone at Lexmark.

Mr. Mann said that they were trying to get away from looking at failures and crucifying people when they took chances. Mr. Mann also said that they were helping their people realized that it was okay to learn from mistakes. Working in team was not an easy task, and it required interpersonal skills that a lot of people did not have. The manager was the only lead person, and with the new changes the workers were going to have the freedom to lead. By working in teams they were developing the ability of communicating to people.⁴³

Mr. Mann said that the workers at Lexmark had two jobs. The first one was to assure to get done the day to day work with the highest possible level of performance. The second was to improve the process by being a productive member of a team. Mr. Mann added that he was happy with the improvements with the workers attitude toward empowerment.

⁴³Flanagan, Patrick. (2005). IBM One Day, Lexmark the Next. (Lexmark International Inc.) *Dow Jones Reuters Business Interactive LLC*.

14.1 Rewards from Basic Changes

Mr. Mann wanted to emphasize that everyone was a member of a team, and he decided to scrap the classic IBM suggestion system. The IBM suggestion system was an attempt at bottom up decision making and it was also linked to cash awards based on a small percentage of savings. It was not an efficient system because a suggestion was submitted privately in a sealed envelop. The negative side of this system was that the submitted ideas did not have the chance to be refined or improved. By enforcing team work and meetings, the employees were able to suggest ideas and at the meetings and their ideas could be improved. Mr. Mann explained that getting rid of the individual suggestion program was one of the smartest things they did. It also opened the doors for worker participation and allowed Lexmark to tap into what Mr. Hopwood called the mental resources of employees.

There were financial rewards for accepting the change. The first one was the embracement of empowerment and the second was the generation of profits. Every employee at Lexmark had the opportunity to participate in an incentive plan that included stock options and bonuses. The lower level employees enjoyed the most liberal benefits, while the top 100 executives paid upfront to participate by buying stock options. The performance was rewarded for overall corporate earnings, for unit results and for team performance.

The employee stock program was announced in June 1991 and represented about 15 percent of Lexmark's equity. There was a catch 22 to employee stock ownership. Lexmark was a privately owned company with unspecified plans to go public at some time in the future, therefore, owing stock did not mean an immediate pay off. In order for

Lexmark to succeed in the highly competitive desktop printer teams were formed that ignored the conventional printer industry wisdom.

On the marketing side, this meant the streamlining of everything from international operations to product messages. A major concern arose about how much input the marketing function had in product development. Mr. Curlander welcomed the multidiscipline approach and the teams included manufacturing, finance and sometimes even customers.

Lexmark found that the concept stage took longer as much as 20 percent of the development cycle, compared with 5 percent before. The result was a reduction in the number of revisions made to a product once it moved from the working model stage to production. This saved massive amounts of money, and Mr. Mann said that Mr. Curlander had found four key points to make Lexmark's fast track development process possible. The first point was to focus in what the marketplace wanted. The second point was to drive the development process forward by not changing the corporate mind or second guessing in late developmental stages. The third point was to leverage through partnerships, which meant team work. The fourth was to reduce the risk by getting into marketplace faster.

There were two lessons that people could learn from Lexmark. The first one was Lexmark had become a profitable, not only nowadays, but for many years ahead. The second was that Lexmark needed to be moving constantly and they had to be better and better. Lexmark needed a steady stream of innovative new products. IBM always wanted to stand by as Hewlett-Packard, Apple, Cannon, Brother, Epson and others aggressively lowered prices and introduced new models IBM couldn't match.

Mr. Mann wanted to increase the introduction of new products in the printer market. They had accomplished to lower the time in half to develop a new line of laser printers and double the number of products without increasing the design staff. Mr. Mann said that it was a great turnaround due to the realization that they were all heading toward failure unless they change.

Paul Curlander was the vice president and general manager for printing system business said that empowerment in the R & D process was not easy task, but there his focus was in what the market place wanted.⁴⁴

To bring empowerment using Mr. Curlander's idea, crossfunctional teams was empowerment. Making empowerment work from the bottom up was not easy and the assembly line workers showed it was a tough change.⁴⁵

14.2 Printer/Typewriter Supplies Changes

Lexmark was running a business that shipped more than 50 million ribbons, paper wheels, laser cartridges and other items annually. Ann Lander was a syndicate advice columnist and one day complained in one of her columns that it was very hard to get ribbons for her IBM Selectric, and Lexmark decided to fire off an excellent number of supplies. The action was made by an empowered employee that read the article in the local newspaper. The goal that Lexmark wanted to achieve was the customer satisfaction, particularly shipping the right products on time.

⁴⁴ Flanagan, Patrick. (2005). IBM One Day, Lexmark the Next. (Lexmark International Inc.) *Dow Jones Reuters Business Interactive LLC*.

⁴⁵ Flanagan, Patrick. (2005). IBM One Day, Lexmark the Next. (Lexmark International Inc.) *Dow Jones Reuters Business Interactive LLC*.

Their goal was to focus on what was an acceptable percentage of properly filled orders. A suggestion of 90 percent was rejected when some of the team members pointed out that a 10 percent unacceptable rate for 50 million items per year was translated into a lot of unhappy customers. The result of those deliberations was that a 100 percent accuracy rate was the only goal that made sense. After four months of 100 percent goal achievement, the teams decided to go a step further. The teams wanted to know what happened to the box once it left Lexmark's shipping dock.

They wanted to know if the product got to the customer on time and in good condition. The teams decided to call the customers on the day the shipment was supposed to arrive, and they discovered that the trucking company was not doing a good job. After they found that the truckers were not delivering the products on time to the customers, the teams pressured Lexmark to change truckers.

A measure of how empowerment was working was that teams were self-forming. Workers voluntarily put their heads together on how to fix a problem when they encountered one. There were more than 90 teams at work in typewriter manufacturing and more teams were formed all the time. The pay off was that production cost were reduced by 25 percent, the inventory turns increased and warranty repairs dropped by 40 percent. Lexmark decided to give credit to the workers and they rewarded them with a two and a half week salary bonus after the first year of Lexmark's formal existence. It was very important to emphasize that the workers at Lexmark had the job at that time, and would have their job in the future.⁴⁶

⁴⁶Flanagan, Patrick. (2005). IBM One Day, Lexmark the Next. (Lexmark International Inc.) *Dow Jones Reuters Business Interactive LLC*.

14.3 Special Ingredient for Success

The role of the CEO in making empowerment work was the ingredient for the success at Lexmark that no other company could replicate. Mr. Mann was with people both inside and outside Lexmark. Mr. Mann said that there was an insatiable demand for communication between management and employees.

Mr. Mann had a meeting with virtually every employee in open forums at least twice a year for two to three hours, including a wide open question and answer session. Mr. Mann told the workers what was working and not working and the workers did the same.

Mr. Mann also met with customers, distributors and the sales force and a never ending line of people who have an impact on how Lexmark will stand in the future. When Mr. Mann got a lot of compliments from customers he made sure that the employees who had listen to the problem also hear about the good news. The attitude that Mr. Mann took was the key of making empowerment work. Mr. Mann was a humble person and instead of saying that he had a lot of ideas about how a business could be run, he said that he took little credit for Lexmark reinvention. Also, he described his job as helping others get their jobs done. He was just the coach and his team was on the winning streak.⁴⁷

15. New Operations /executive Vice President in 1995

In January 23, 1995, Lexmark International Inc. announced that the new executive vice president of operations was going to be Dr. Paul J. Curlander. Dr. Curlander would continue to have management responsibilities for Lexmark Network Printer and Personal

⁴⁷ Flanagan, Patrick. (2005). IBM One Day, Lexmark the Next. (Lexmark International Inc.) *Dow Jones Reuters Business Interactive LLC*.

Printer Division. He was going to assume the responsibility for the Imaging Solutions Divisions, which included the company's OEM information supplies business and its typewriter business. Each of the divisions would have responsibility for worldwide product development, manufacturing, marketing and in the United States sales. The Imaging Solutions previously had reported to Chairman Marvin L. Mann. Dr. Curlander who had been the vice president and general manager of the company's Printing Systems Business, would report to Marvin Mann and would keep his residence in Lexington Kentucky development and manufacturing facility. William T. Vennes, was going to be the vice president and general manager of the Imaging Solutions Divisions and he would be reporting to Dr. Curlander. Also, Dr. Curlander was going to name general managers this year to run the Personal Printers and Network Printers. Dr. Curlander had a B.S. degree in electrical engineering from the University of Colorado and M.S. and Ph.D. degrees in electrical engineering from the Massachusetts Institute of Technology. He had joined IBM in 1974 and had held a number of engineering and management positions before being named general manager of Lexmark's printer business. Mr. Mann said that their product technologies were becoming more interrelated and there were growing dependencies across the printer supplies and product lines. Dr. Curlander who had research, development, and manufacturing experience was going to play an important role in ensuring maximum synergy across Lexmark Divisions. Dr. Curlander's leadership, would make Lexmark printer business become strong competitor and would achieve substantial revenue and profit growth.⁴⁸

⁴⁸ (2005). Executive Suite: Lexmark International Announces New Operations, Executive Vice President. *Dow Jones Reuters Business Interactive LLC*.

16. Introduction of First Printer-Fax-Copier-Scanner

In April 1995, Lexmark announced the introduction of Medley, the market's first printer-fax-copier-scanner combination product with color printing capabilities. Lexmark announced three models of the multifunction product and it was targeted for small office-home office and home user market. Its retail price was going to be in the range of \$849 - \$ 899. Medley was expected to set a new standard for a low price and an excellent performance and printing capability in the multifunction market. Medley's announcements was expanding Lexmark's product line beyond desktop printers, typewriters, and keyboards, which it had manufactured since becoming independent of IBM four years ago. Medley offered significant advantages when compared to its competitors. One of its features was that it had 14.4 Kbps fax speed versus 9.6 Kbps, and it was also the fastest fax speed. Another features included the PC image scanning standard at 300 dpi quality, and its PC fax software standard. Also, it had the convenience copy quality and a paper capacity of 150 sheets versus 100 sheets when compared to the competitor.

- **Printer Function**

Medley had functions similar to the ExcJet IIIc color Inkjet print engine and it delivered a sharp, laser like monochrome printing and vibrant color printing for the users of Windows and DOS software. Medley printed 3 pages per minute in monochrome draft mode and 2.5 to 7 minutes per page in quality color mode. Medley provided high quality graphs reproduced through over 16 million color in color mode and 256 levels of grayscale in monochrome.

The printer had a capacity of 150 sheets and could handle paper sizes from 3" x 5" card to 8.5" x 14" legal and it also printed in many media many other printers could

not, including envelopes, index cards, transparencies, labels, and card stock. Medley had Centronics compatible parallel interface and it allow a printing job to be processed very quickly.

- **Fax Function**

The fax had different functions and one of them was that it had a 14.4 Kbps transmission speed. Another function of Medley's was the plain paper fax function and that made it the fastest in its class, printing a page in six seconds and it also saved time and long distance charges. This fax also had the ability to send and received high quality documents via standard, fine and super fine mode, and its 64 levels of gray in fax mode give photos depth and clarity. Medley's could be programmed to store up to 64 speed dial numbers, and included 14 one touch selections.

The fax also had a 60 page memory upgradeable to 258 pages, and stored incoming faxes whenever the unit run out of paper or ink or while a person printed, made copies or scan a document during the reception of the fax. The availability of the paper was standard and easy load 20 page automatic document feeder. This fax could be connected to their telephone in a shared telephone line environment. The unit was also equipped with an auto fax/telephone switch.

There were two models of Medley, the 4X and 4sx and they came with a telephone handset allowing the unit to serve as a phone out of the box. The software used in Medley was the FAXsynergy software and it was shipped with the product and allowed the user to transmit and received faxes from the PCs. The company that developed the software was Omnifax and it was a division of Danka Industries.

- **Scanning Function**

Medley was going to make the life easier for many personal computers users by converting a hard copy graphics into soft copy .TIF, .PCX and .BMP files that could be used in desktop publishing software applications. Medley had the ability to scan a true 300 x 300 dpi resolution with 256 levels of grayscale for an excellent reproduction of high quality of photos and graphs. Medley was Windows 3.1 compatible and also the scanning function was TWAIN compliant.

- **Copying Function**

Medley was a good tool in saving time and money by providing a convenience copy function. It had a 300 x 300 dpi resolution with 64 levels of gray provided superior reproductions of halftones and photos. The users could make up to 99 copies from an original and Medley would also collate output from multiple originals. Medley 4sx was packaged standard with both color and monochrome ink cartridge, a handset and a battery backup option that saved a fax document in the memory in case of power failure. Medley 4c was packaged with both cartridges while Medley 4x was configured with a handset and was color capable with the addition of an optional color cartridge, sold separately.

The operator panel had features in a 2 line by 20character LCD display and it also had the most common command buttons like the numeric pad, speed dial, redial, and contrast control adjustments. Medley had the color and black print cartridges and they were easy to install. The black cartridge printed 100 pages at 5 percent coverage and the color cartridge printed 200 pages at 15 percent coverage.

The cost for a page with black ink was 3 cents and for the color ink was 19 cents. Medley had a warranty of a year in which Lexmark would send a replacement unit by the

next business day. Another advantage was that Medley had a toll free number for technical assistance.⁴⁹

17. Next Generation of Network Printers

In June 19, 1995, Lexmark announced the new generation of MarkVision, the company's industry leading network printer management tool. The new released network printer expanded the network support to a total of more than 30 environments. Lexmark was releasing a new MarkVision and it supported the Lexmark's Optra family, 4039 plus family and the color Jetprinter 4079 plus printers. The technological leadership of Lexmark was being strength in network printer management. The users and network administrators were going to benefit with this new network printer. There were going to be able to manage their network printers remotely, with the inclusion of paging services, Remote Operator Panel (ROP) and remote attachments to the network via TCP/IP. The enhancements made to the network printer include:

- New Environments: Besides the 30 plus network environments MarkVision support were the Microfost NT Server (NTS) and LAN manager, the IBM's OS/2 LAN Server, Novell Netware, Apple Macintosh and more than nine different UNIX host systems.
- MarkVision for Windows IP: The MarkVision supported the IP protocol from Windows and Windows for Workgroups versions 3.1 and 3.11 client workstations. That enabled MarkVision for Windows to communicate via TCP/IP directly to a Lexmark Optra, 4039 plus or Color Jetprinter 4079 plus printer with

⁴⁹ (2005). Lexmark Introduces First Printer-Fax-Xopier-Scanner with Color Printing Capability. *DowJones Reuters Business Interactive LLC*.

a MarkNet XL Internal Network Adapter (INA) or the MarkNet XLe External Network Adapter (ENA).

- **Paging Services:** Lexmark brought pager notification services to MarkVision for Windows later this year with PageNet and Fourth Wave Software, allowing users to send status alerts to LAN managers while away from their consoles.
- **MarkVision for UNIX:** The new Markvision for UNIX supported more than nine UNIX environments. MarkVision for UNIX allowed network administrators operating in a UNIX TCP/IP environment to have advance network printer management capabilities similar to those provided by the MarkVision for Windows applications.
- **Remote Operator Panel:** With the remote operator panel (ROP), MarkVision enabled network administrators to view the complete printer operator panel remotely from their workstation and configure the printer by pushing the operator panel buttons, as if they were standing at the printer.
- **OS/2 Warp and LAN Server 4.0:** The users could take advantage of the latest instrumentation and bi-directional technologies implemented in network and personal printers. The OS/2 Network PrinterPak, was available through Lexmark and IBM and included the ROP and the Lexmark Network Printer Utility for easy installation of printers on the network.
- **Automated installation driver update:** MarkVision supported an automated network installation, allowing for automatic driver updates and improved printing management. In quiet mode, MarkVision automatically could install updated printer drivers.

- MarkVision for Macintosh: It provided advance printer management capabilities for AppleTalk printers connected in an EtherTalk, TokenTalk, or LocalTalk environments. Also, for the 4079 plus, and the 4039 Optra families, MarkVision for Macintosh provided ROP and smart printer icons.
- Enhanced user Interface: The network printer smart icons in MarkVision contained the server and queue name. That made it easier to identify the specific network attached printer.
- MarkVision for Novell's NDS: It provided printer managements for Optra and 4039 plus families, and 4079 plus printer attached to Novell NetWare 4.x networks.
- MArkVision integration with ManageWise: This was a network management utility jointly developed by Novell and Intel. ManageWise provided a way of managing the entire Novell network. Network administrators could launch MarkVision directly from the ManageWise console.

Lexmark was offering a new network printing products and its broad range of compatibility had a positive impact in all operating systems environments.⁵⁰

18. Introduction of the First Color Laser Printer

In September 1995, Lexmark was launching its first color laser printer. The model of the color laser printer was the Optra C that provided photographic quality, continuous tone color and it printed 3 pages per minute. This printer was going to be sold in UK and the price was going to be 5,999 (pounds) with a one year warranty, and it also could be

⁵⁰ (2005). Printer Management: Lexmark Unveils Next Generation of Network Printer Management; MarkVision Supports Expands to More than 30 Network Environment. *Dow Jones Reuters Business Interactive LLC*.

connected to more than 30 network environments through two INA slots. The measure of the printer was 533x559x457 and its weight was of 110lb. This printer carried 8 Mb memory and it was expandable up to 64Mb. Besides its continuous tone, it supported the two other color screening techniques: color grade, designed to enhance halftone reproduction, and stochastic mode, which randomly places same size dots to eliminate recurring patterns. The 600x600dpi 2070 delivered 7 pages per minute of mono output and 1 page per minute in color, and it was the fastest in its class. The price for the 600x600 dots per inch in the United States was going to be of \$450, and the price for the 600x300dots per inch modell in UK was going to be 199(pounds). Both models were going to be available at stores by the end of October, 1995.⁵¹

19. Low Price for New Laser Printer

Lexmark was setting high industry standards with its 600 x 600 and the 1,200 x 1,200 dots per inch laser printers. In September 1995, Lexmark announced the introduction of a new model for the Optra family. The new product was called Optra plus and were designed originally from the Optra laser, and some of the features were improved. Its features included the improved processing performance, the increased media handling and outstanding value of the all 16 pages per minute. The new Optra plus models produced photographic images, graphs at true 1,200 x 1,200 dpi that were four times sharper than the current 600 dpi laser printers and for a lower price.

The four new models were the Optra R+, Optra Rt+, Optra Lx+, and Optra Lxi+, and all of them had the capability of printing 16 pages per minute. The street prices were ranging \$1,400 to \$3,200. Lexmark had increased the value of the Optra R+ from 12

⁵¹ Farndon, Ray. (2005). Lexmark Launches first colour laser. (Lexmark International's Optra C) (Product Announcement) (Brief Article). *Dow Jones Reuters Business Interactive LLC*.

pages per minute to 16 pages per minute and it was not going to have an increase in price. The majority of the competitors had their laser printer with the capability of printing 12 pages per minute. The increased amount of pages printing per minute had an outstanding value for customers who needed an affordable and high performance laser printer.

The Optra Rx and L models were replaced with the 16 pages per minute, and the Rt+ in which a second 200 sheet paper drawer standards was added, for users with multiple input requirements. The optra Lx+ also had a larger paper input and output capacity and a greater duty cycle for a high volume network printing. The Optra Lxi+ was a network ready and it was configured with an Ethernet 10BaseT/10Base2 combo adapter card and an additional 500 sheet second paper drawer. The software incorporated in all four models was the PostScript Level 2 and which was an enhanced PCL 5 emulations at no charge.

Lexmark's goal was pleasing the customer, and a number of customers indicated that they needed multiple input sources for their various media requirements. All the engineers at Lexmark worked to develop an optional dual real feeder able to fit on all four models to meet the customer needs. The dual rear feeder consisted of two input stackers holding up to 150 sheets of paper. It could also handle a range of media sizes and weights, from 3.5 inches up to 8.5 x 14 inches and up to 100 pound tag stock, transparencies, and envelopes. The addition of the dual real feeder and the optional paper drawer allowed the Optra Rt+ users to take advantage of six input sources.⁵²

⁵² (2005). Lexmark Redefines Price Performance with New 16 ppm Optra Plus Laser Printers. *Dow Jones Reuters Business Interactive LLC*.

20. New Facility in Scotland

In October 3, 1994, Lexmark International Inc., announced its plan to open a \$42 million inkjet cartridge production facility in Scotland. The new plant was part of an expansion program that would increase the company's cartridge production capacity. At the press conference there were Dr. Paul Curlander, the vice president of operations and George Kynoch, the Scottish Office Industry minister and John Stanley, who was the president of Lexmark in Europe. The new products manufactured in Scotland were going to be color and monochrome cartridges and it was going to create 500 new jobs during the next three years, the new facility had a 90,000 square foot building and would be the house for the production of cartridges in a dust free environment. The creation of the new facility was in response to the needs of the European customers said Dr. Curlander. The Office Industry Minister Kynoch welcomed the event and said that that was an excellent opportunity for Fife and Scotland. Fife was going to have a boost in the area by the creations of the 500 new jobs. The cartridges that Lexmark produced were the fastest growing part of the company. Lexmark had expanded its retail outlets from a handful to more than 2,400. Lexmark printers were available at more than 500 outlets in the United Kingdom alone. The facility was going to be located in Rosyth, which was located near Edinburg, the capital of Scotland, and it was going to supply European owners of Lexmark's past, present and future inkjet printers.⁵³

21. Two New Models of Inkjet Printer

In October 1995, Lexmark announced the expansion of its inkjet printer line by the introduction of two new color inkjet printers for family or home use. One of the

⁵³ (2005). Lexmark Increases Manufacturing Capacity with New Production Facility in Scotland; up to 500 new jobs to be created. *Dow Jones Reuters Business Interactive LLC*.

models was the Color Jetprinter 1020, offered superior print quality at a good price and it was a challenge for any other color inkjet printer on the market. A second model was the Color Jetprinter 2070 and it was going to have the highest speed and print quality in Lexmark's line of color inkjet personal printers. The new printers would have a CD ROM version s of Corel's CorelDRAW providing home and business users with a popular graphic application not available in the customized software that came with some other printers. The ColorFine Windows driver for the printers was developed jointly with Software 2000, which was located in Oxford. ColorFine would have a palette of millions of color from Lexmark's patented inks for remarkably rich color graphics and photo images. Both models had a two year warranty in the United States and guarantee next day express exchange or customer carry in and repair.⁵⁴

22. Expansion of Lexington's Facility

Lexmark was developing a capital expansion program to increase the production of its inkjet printer cartridges. The existing company had 1,500 square foot building and would be renovated to have five free dust clean rooms. This facility would be manufacturing the color monochrome cartridges in the first quarter of 1996. With this new facility Lexmark was creating between 1,200 to 1,500 new manufacturing jobs involved in the inkjet production. More than 1,000 jobs were going to be created in Lexington. Lexmark had built sales and marketing organization that was generating a demand for its products all over the world, and especially the inkjet market. The expansion program was going to help Lexmark meet that demand. The time needed to produce a cartridge was going to be decreased by an 80 percent. The revenue for

⁵⁴ (2005). Lexmark expands retail offering with two new inkjet printer. *Dow Jones Reuters Business Interactive LLC*.

Lexmark in 1994 was derived from sales outside the United States. Lexmark's products were sold in more than 100 countries in North and South America, Europe, the Middle East, Africa, Asia, the Pacific Rim, and the Caribbean. The main goal of Lexmark was to compete in the market for laser and color inkjet printers. Lexmark's total printer and associated supplies revenue in 1994 for sales of laser printers were 73 percent and for color printer was 79 percent.⁵⁵

23. Lexmark and IBM Agreement Expiration.

Lexmark was formed in March 1991, by a group led by Clayton & Dubilier Inc., acquiring the printer and related products business of IBM. Since then, the company had been able to reduce the debt significantly. Lexmark focus was in the color inkjet printer market for the home, the medium and high speed laser printer market for the office and the after market supplies for its own and other OEM printers. The estimated revenue in 1994 for the sale of printer hardware was about \$19 billion, and the market for non impact supplies was about \$20 billion. Also, Lexmark was going to supply all the users of IBM typewriters no longer in production with supplies. The agreement of IBM was going to expire March 28, 1996 under which IBM purchased printers from the company and Lexmark sold certain IBM branded typewriters, printers and supplies. IBM was expecting to begin the competition against Lexmark in the printer market. Lexmark's long term debt as of September 30, 1995, was 40% of total capital, and no dividends were planned. Clayton & Dubilier would own 29% of the stock after the offering an employee benefit and pension trust of AT&T and GM would own 11% each, and IBM would own 5.4%. The company had lowered its cost structure since being separated from IBM, but

⁵⁵ Kerfoot, Kevin. (2005). Lexmark International Expanding in Lexington. *Dow Jones Reuters Business Interactive LLC*.

the process would not be complete until March 28, 1996. The complete break with IBM would cause the growth to be depressed in 1996, but 1997 would position the company strong with the growth of the color inkjet and high speed laser printer. Hewlett Packard dominated the laser printer market and Lexmark wanted to compete with them, but the fight was not going to be easy.⁵⁶

24. Public Offering of Class A Common Stocks

Lexmark International Inc. announced in November 16, 1995 that 17,123,575 shares of its Class A Common Stock had been priced at \$20.00 per share and they were going to be offered to the public. The shares would begin trading on the New York Stock Exchange and its symbol was going to be LXX. The stockholders at Lexmark were offering the shares, including a fund managed by Clayton & Dubilier & Rice Inc, and other investors who had the shares of Class A Common Stock since the acquisition of Lexmark from IBM in 1991. Lexmark was not going to receive money from the sale of shares sold by selling stockholders. The shares of Class A Common Stock offered in the United States were going to be 13,698,860, and the shares offered internationally were going to be 3,424,715. All the selling stockholders had a 30 day option to purchase up to 2,568,535 additional shares of Lexmark Class A Common Stock only to cover over-allotments.⁵⁷

25. Lexmark Status after Five Years

In Spring 1996, Lexmark was going to celebrate its fifth anniversary, and in the course of reaching the milestone, the company was successful in different areas.

⁵⁶ (2005). New Issues – Lexmark International Avoid. *Dow Jones Reuters Business Interactive LLC*.

⁵⁷ (2005). Lexmark: Lexmark Announces \$340,000,000 Initial Public Offering. *Dow Jones Reuters Business Interactive LLC*.

Lexmark's inkjet and laser printer technologies had introduced very specialized products such as Medley, a multifunctional machine. Lexmark had also added 1,000 new jobs in Lexington as the company was trying to ramp up its inkjet cartridge production. Also the announcement of the 17.1 million shares at \$20 each caught the attention of financial and computer industry. Lexmark wanted to do more than manufacturing and selling printers, and Lexmark wanted to be a supplier to operate those products.

Lexmark wanted to supply the market with typewriter ribbons, inkjet cartridges, and toner cartridges. Lexmark knew that being a supplier was a big business and by selling one inkjet printer, the user would have to buy at least three cartridges annually. When Clayton & Dubilier Rice bought IBM's Information Products business, IBM brand was recognized and it also had a dealer network. Lexmark was a newcomer in the printer market, and it only five years had implemented many changes. Some computers analysts still questioned why IBM sold off what could have been the most lucrative division of the whole company.

When Lexmark decided to enter the printer market it faced the mission of quickly proving itself. In 1991, the laser printer 4029 series was setting standards for price and performance, speed, print quality, ease of use and paper handling. A few months later, Lexmark added four new models to the 4029 series, and was entering a new ground with two models designed for direct attachment to Apple Macintosh machines, when the compatibility between PC and Macintosh was not well developed. Lexmark's strategy was to increase its brand awareness and wanted to penetrate markets by focusing on certain industry segments.

Lexmark's technology allowed the company to enter the business of banking, retail pharmacy, and healthcare. Flash memory was enabling end users to store entire

forms in the printer's memory. Flash memory and networking capability with the Opra family of printers had made the major items in steady demand for Lexmark. Also, the Medley product was the most aggressive product from Lexmark in an attempt to achieve a unique product. The majority of the sales have been made to large customers and Lexmark was trying to pursue the home user growth area as well.

Lexmark wanted to cut the umbilical cord with IBM and it was going to be cut in 1996. At the time of the buy, Lexmark realized that they needed to keep the IBM logo and that was going to maintain the revenue of the company while transitioning to the Lexmark brand over the years. Lexmark was very surprised because they successfully made the transition to use its brand name in its products. Over the last several years, their average revenue was of 10 to 15 percent and earnings were around 20 percent. Lexmark had been able to pay its debt very far ahead of schedule, from around \$1 billion to less than \$300 million.

The vision's theme that Lexmark apply to its company was Customers for Life. This theme represented the commitment and dedication to customer needs, support and service. The atmosphere at Lexmark was full of employee satisfaction, mutual respect and integrity as values that would make Lexmark vision a reality. The vision statement Customers for Life was taken literally and the way Lexmark implemented made it a unique company.⁵⁸

26. Lexmark's Sales Growing Stronger

Lexmark was the developer, manufacturer and supplier of printers and its sales were growing stronger. The printer business was going to make up for the loss in revenue

⁵⁸ Walter, Grady. (2005). *Medleying with Success. Dow Jones Reuters Business Interactive LLC.*

when its agreement with International Business Machines ended in March 27, 1996. Lexmark growth was going to be from its high speed monochrome network printer laser, color laser printers, and color inkjet printers. The reported revenue for Lexmark in 1995 was of \$2.16 billion and the net profit was \$32 million. Lexmark had projected its revenue at 15 percent per year and operating income profit at 20 percent up to 2000, after making provisions for the end of its printer agreement with IBM. D.C. Shropshire, the vice president and general manager of Lexmark said that: “Lexmark from a zero base had garnered about a 10 percent market share in term of units for laser printers and a six percent market share in inkjet printer in the last few years. Also he said that the sales from Asia Pacific would be higher than the projected 15 percent for the group and possible faster than the industry projected rate of 27 percent in 1996.”⁵⁹

27. Polaroid and Lexmark

In September 6, 1996, Lexmark International signed a deal with the Cambridge imaging giant, hoping to increase its penetration into the home and office markets. The firm would collaborate to develop high definition color printers for use with personal computers. The details of the deal were not disclosed by any of the two companies. From the technological point of view, this deal made a lot of sense. The long term future of Polaroid was going to be electronic imaging. Polaroid was known for its well defined images, but no firm was producing photographic quality inkjet printers. Polaroid was going to be supplying the coating paper for the printers, software and expertise in the imaging business. The alliance between Polaroid and Lexmark was going to bring a

⁵⁹ Ng, Josephine. (2005). Interview: Lexmark Says Sales Growth Strong. *Dow Reuters Business Interactive LLC*.

steady stream of products, but the Polaroid name was unclear whether it was going to be used or not.⁶⁰

27.1. Special Ink

Lexmark announced the expansion of its line of enhanced specialty paper designed for inkjet printers and it was going to offer users different applications for home and office in July 29, 1996. The new applications were an advantage for printing photos, greeting cards, labels, stickers and transfers for T-shirts. In addition to this, Lexmark unveiled its new Super Sharp Waterproof Black Ink cartridge that contained Lexmark's patented pigmented ink that dried quickly on both plain paper and special media. It also produced clearer, sharper text because of the high precision dot placement on the page. The new developed ink was able to preserve the printed image when it was exposed to water and it also resisted fading caused by sunlight. This revolutionary technology spread less than dye based inks when the droplets hit the paper and the result was a crisper image. This new cartridge can be used in the new Lexmark Color Jetprinter 2050, the Lexmark Color Jetprinter 1020, the WinWriter 150c, the ExecJet IIc and all three models of the Medley multifunction product. The price of a single cartridge was about \$35.95, but some retail outlets could sell them at a lower price. The new Color Jetprinter 2050 would have an included package with the specialty papers and the new waterproof ink black cartridge. The Lexmark Workshop included as standard a CD-ROM that provided the user an array of applications for business and family. The users would have the ability to print with almost a photographic quality documents such as professional looking certificates, greeting cards, labels, and even T-shirts.

⁶⁰ Convery, Eric. (2005). Polaroid Corp. inks pact with Lexmark. *Dow Jones Reuters Business Interactive LLC*.

- The Lexmark Inkjet Photo Paper could be used in either side of the paper, but users could select the brighter side of it if they wanted. The printer images were almost like photographs, and it was ideal for digital photography, scanned images and illustrations. The retail price for this type of paper was of about \$ 17.99.
- The Lexmark's greeting cards provided a blank and high quality card material with a single score across the width for easy folding. The user would have the option to print unique personalized greeting cards, holiday cards, weddings and party announcement invitations. The retail price was of about \$ 20 cards for \$7.99.
- The Lexmark's Inkjet Iron-on transfers would print colorful images that would be iron onto cotton and cotton/poly blend fabrics. The users would have the ability to create T-shirts, sweatshirts, aprons, tote bags, caps and other garments. Its retail price was of about 10 cards for \$16.99.
- The Lexmark Inkjet Labels in two sizes were specially coated labels in both address and shipping sizes, utilizing Lexmark's own high resolution premium inkjet paper for sharp color printing. These labels were used for addressing envelopes, producing colorful stickers for marking the household items. The retail price of the package was 20 pages for \$ 10.99.

In addition to the new papers developed, a single package of the imaging media shipped with the Lexmark 2050 included samples of Inkjet and Laser Printer Paper and

Lexmark's High Resolution Inkjet paper. Product information and press releases would be found on the Lexmark home page at <http://www.lexmark.com>.⁶¹

28. New Vice President of Information Technology in 1996

In November 12, 1996, Alfred Traversi was named vice president of Information Technology and Operations at Lexmark International. Traversi would have to report to Dr. Paul J. Curlander, who was the executive vice president operations in the new position, and he would be responsible of the company's information systems, customer care, order fulfillment and worldwide distribution. Alfred brought its proven track record of accomplishment in logistics, information technology and process improvements. Alfred was bringing a combination of experiences that were going to be an asset to Lexmark because Lexmark was trying to achieve its aggressive growth goal.

Alfred Traversi was the vice president of Operations Services for Taco Bell Corp. When he was working at Taco Bell, he was given credit for the redesign of the operation process and systems, the reduce labor cost and the significant cutting time to market for new products. He had held several senior management positions with Digital Equipment Corp. Alfred had a Bachelor's degree in administrative science and economics from Colby College and a master's of business administration from Harvard.⁶²

29. Financial Report from Lexmark in 1997

Lexmark announced its record revenues and record net earning for both the full year and the fourth quarter of 1996. Also, a 21 percent increase was obtained in the

⁶¹ (2005). Lexmark International Unveils New Specialty Papers, Waterproof Black Ink for Inkjet Printers. *Dow Jones Reuters Business Interactive LLC*.

⁶² (2005). Lexmark International Names Traversi Vice President, Information Technology/Operations. *Dow Jones Reuters Business Interactive LLC*.

operating income before amortization of intangibles and a 1995 unusual item. Another 45 percent increase was obtained in net earnings per share for the full year before unusual items. Lexmark's revenues in 1996 were \$2.4 billion, and it had an increase of 10 percent over 1995 revenues of \$2.2 billion. The operating income before amortization was \$235 million when it was compared to \$195 million before amortization reported in 1995. The operating income after amortization was \$230 million when it was compared to \$169 million in 1995, an increase of 36 percent. The net earning for Lexmark in 1996 increased 48 percent to \$128 million when it was compared to \$87 million before unusual items in 1995. In 1995, the net earnings after unusual items were about \$32 million. The original price of a share was \$1.16 and it had a 45 percent increase making the price of a share go up to \$1.68.

The excellent performance of Lexmark's printer and associated supplies business allowed the company to achieve a strong growth. In 1995, the revenues had an increase of 69 percent, and in 1996 the increase was of 24 percent, and this increase contributed to 77 percent of the corporation's revenue in 1996. The dedication of Lexmark to develop new products in its office imaging products division contributed to an excellent performance in that division. The revenues from printers and associated supplies increased 22 percent over the fourth quarter in 1995.

Lexmark always continued to improve its financial position. The return on average shareholders' equity increased 27 percent from 25 percent in 1995. Also, the total debt was reduced by \$30 million to \$165 million in 1996, and this lowered the debt to capital total ratio to 23 percent from 33 in 1995. Even that the company had many capital expenditures with a record of \$145 million, the debt reduction was noticeable. Most of the money spent was used to develop new inkjet product manufacturing facilities

and to support new products. In 1996, the company was achieving the development of the international markets specially Asia and the Pacific Region, and more than 50 percent of the revenues came from products sold to customers outside the United States. The competitiveness of Lexmark was observed with the introduction to the market of different printers such as the Optra E and Optra N laser printers and the Color Jetprinter 2030 and Color Jetprinter 2050.⁶³

29.1. Accomplishments First Quarter April 1997.

Lexmark announced in April 1997, its record first quarter earning of 40 cents per share before extraordinary item, and a 39 percent increase from the 29 cents per share recorded last year. The net earning after the previously announced extraordinary charge from prepayment of subordinated notes were \$17 million, or 22 cents per share. In the first quarter of 1996, the price per share was 29 cents, and in the first quarter of 1997, the price per share was 40 cents, it had a 39 percent increase. The products introduced in the first quarter of 1997, included:

- The first Color Jetprinter 2055, and it was the first complete color inkjet printer specifically focused for small business.
- Lexmark was going to be working together with Uniden America Corporations and they were planning to offer inkjet printer solution for users of Uniden's appliances for telephone internet access.
- The U.S. Environmental Protection Agency had declared Lexmark as Energy Star 'Office Equipment Printer Partner of the Year'.

⁶³ (2005). Lexmark International Reports Record Performance for Year and Quarter. *Dow Jones Reuters Business Interactive LLC*.

Mr. Mann was happy with the growth of the company, but he said that Lexmark's revenues were going to be affected by weak currencies and the lower printer unit prices versus 1996. For the second quarter Mr. Mann was expecting a significant increase in operating expenses versus 1996, as the result of the increased investment in marketing and sales to make the company grow.⁶⁴

29.2. Accomplishments Second Quarter July 1997.

In July 1997, Lexmark had a revenue record for the second quarter with earnings of \$34 million, or 45 cents per share. The price per share had an increase of 11 percent higher than the 40 cents recorded in the second quarter of 1996. Lexmark had a record in the second quarter for its operating income of \$58 million in comparison with \$ \$55 million in 1996. The second quarter for Lexmark was marked by the extensive new line of products in its history. The new product line was in transition and even in that way, the volumes of printer grew at double digit rates. The revenues for the operating income and earning were affected by lower prices on the predecessor printers. The competitors in the printer market reacted with strength with the introduction of the new Optra S line of network laser printers with the reduction in prices of up to 20 percent on their laser printers. The products introduced in this quarter included:

- The new Optra S Prebate laser cartridge marketing program. This new cartridge was able to print 17,600 pages, and it doubled the recently announced maximum capacity cartridges on the market today. The prebate cartridges were sold with a license for a one time use and then the empty cartridge could be easily returned to Lexmark for recycling with no charges to the users.

⁶⁴ (2005). Lexmark International Reports Record First Quarter Operating Income; Earning per Share before extraordinary item up 39 percent. *Dow Jones Reuters Business Interactive LLC*.

- The Lexmark 3000 Color Jetprinter, was a personal color inkjet printer for business with Windows 3.x, Windows 95, Windows NT and OS/2 wrap environments, and a retail price of \$249 (U.S.). This printer provided high quality and low cost printer solutions for customers who look to add color to their business.
- Lexmark was planning to market a new 4 inch by 6 inch photo paper for color inkjet printers. Also, the water resistant paper was developed by Polaroid and it was expected to be available on the third quarter of 1997.
- The all new Optra S series family of laser printers had an excellent review by experts in the trade press in the United States and Europe, and the response from the customers had been very positive. The Optra S series offered three different print speeds, and the user could select between 12, 16, and 24 pages per minute.
- Another printer introduced in the second quarter was the Lexmark 7000 Color Jetprinter, and it was recognized as an exceptional printer able to produce sharp black text, as well as extraordinary color photo images.

Also, the revenues of the international business were not that high due to the lower foreign currency rates and a reduction in revenues from other imaging products. The gross profit margin of consumables and product cost reduction had an improvement of nearly 4 points over the last year, from 31.0 percent to 34.8 percent. In the second quarter, the company repurchased 1,144,100 shares of Lexmark common stock for approximately \$27 million and the prices were ranging from \$21.25 to \$24.88.

The company introduced a new printer and the model was part of the Optra S family. The products introduced by Lexmark during the second quarter, were received

well in the printer market. The all new Optra S family had a high acceptance in the United States and Europe, and the response from the customers had been very positive. The Optra S delivered to the customers the best performance, quality printing management and a lower price than the competitors. Lexmark was positive that the new products introduced in this second quarter were going to contribute to the continue growth in printer unit volumes and generate a profit growth for consumables.⁶⁵

29.3 Accomplishments Third Quarter October 1997.

Lexmark had a record for the third quarter of 1997, its net earning was of \$41 million, or 54 cents per share, and its revenue was of \$618 million. The revenues in the third quarter were 13 percent higher than the \$548 million reported a year ago. Also, the net earnings per share were 36 percent higher than the 40 cents recorded in the third quarter last year. The operating income had a record in the third quarter of \$67 million and that was a 22 percent increase over the \$55 million earned in the third quarter of 1996. Mr. Mann was very pleased with the results because the double number increased in unit volumes, revenues operating income and earning were driven by strong customer acceptance of Lexmark recent printer products introduction. The combination of the development, manufacturing, and marketing efforts gave Lexmark an advantage that allowed to delivery industry leading value solutions to customers in a cost effective way. The products that Lexmark introduced in the third quarter included:

- The Lexmark 1000 Color Jetprinter, and it was a target for home offices and student use, where the desk space was limited with a retail price of \$139. Also, the trade and general press had given a positive review about this printer.

⁶⁵ (2005). Lexmark International Reports Record Second Quarter – Earnings per Share Increases 11 percent--. *Dow Jones Reuters Business Interactive LLC*.

- Four new Lexmark MarkNet Pro print servers were introduced. This type of printer was going to deliver a performance up to three times faster than the competitive products.
- Five Lexmark SunReady laser printer solutions were specially configured for users of Sun Solaris systems.

Lexmark was continuing its progress during the third quarter with the implementation of the state of the art software applications integrating the company's manufacturing, order entry, distribution and financial data. The operating income net gain was \$180 million and that was an increase of 19 percent compared to \$152 million reported the first nine months of 1996. Lexmark's revenues were \$1.758 billion versus \$1.691 billion from last year.⁶⁶

30. China, New Inkjet Facility

Lexmark was having business all over the world, and a new facility in China was going to be constructed for the production of inkjet printers, and the announcement was made in August 26, 1997. There was a regional logistics and distribution center in Hong Kong and it was going to extend and expand the relationship for China with Stone Electronic Technology Ltd and China Great Wall Computer Group. The new manufacturing facilities were located in Shenzhen and Shanghai in mainland China, and there were some partners from Taiwan and Japan that worked together to complete this project. Lexmark's inkjet product was the growing section of the company, and the new

⁶⁶ (2005). Lexmark International Reports Record Third Quarter; Revenues Increase 13 percent, Net Earning increase 36 percent. *Dow Jones Reuters Business Interactive LLC*.

facilities in China were created in anticipation of the demand that was going to be over the next two years.

The sales for Asia and Pacific accounted for about a quarter of Lexmark's units shipments, and Mr. Mann said that he was expecting to see an increase of 30 percent over the next two years. Lexmark had said that it was expecting to have a 15 percent share of the worldwide market for inkjet and laser printers by 2000. Mr. Mann said that they were making significant progress in South Korea, Japan, Australia and New Zealand, also in Taiwan and Hong Kong. Norbert Kiss, the Lexmark Greater China general manager said that the company was aiming to have a 10 percent of China's consumer market by the next year.⁶⁷

31. High end Printing.

Lexmark had been competing against Xerox Corp. and Hewlett-Packard Co. and it was plugging ahead with new products. The NetWorld + Interop in Atlanta was going to be the place for the debut of Lexmark and its new printer servers; two single-port and two three-port. The new printer servers were going to include simultaneous support for several protocols, including TCP/IP, IPX, Data Link Control/Logical Link Control, EtherTalk and Token Talk. At the same time, Lexmark was working on a 32 page per minute Optra laser printer, and that enhancement was going to be a solid challenge to solid printer players. The retail prices for the server printers had different ranges, the single port MarkNet Pro 10BaseT Ethernet was \$ 225 and 10Base2/10BaseT Ethernet

⁶⁷ (2005). Interview – Lexmark opens China Inkjet Plants. *Dow Jones Reuters Business Interactive LLC*.

server was \$250. The triple port MarkNet Pro 3 10/100Base TX Ethernet was \$ 325 and the 4MB/16MB Token-Ring print servers was \$500.⁶⁸

32. Lexmark Capturing the Market.

Lexmark was able to make its brand name noticeable in the United States and international printer market in only six years. Lexmark had a high ranking in the competitive printer market in New Zealand, said Jim Upward, the managing director of New Zealand agent OEM distributors. OEM was a privately owned company and it had represented Lexmark since 1993. Lexmark was holding a big market share in New Zealand among the top four providers, and they had to work hard at getting its brand name recognized.

OEM also had distribution agreements with Genicom and i-data. All of the products were sold nationally by resellers including Southmark and ComputerLand. The color printer was allowing the users to learn how to add colors to a page. Users had to be careful, because they needed to select the colors for a target audience. Mr. Upward said that even though the printer market was not fully developed, the demand was going to rise for color printing solutions. Also, he said that the availability of the low price, the entry level color printers for home and school users was the driven force for the demand in the technology business and industry.

The growth of the laser printer market was being generated by the migration from large computer companies for offices to local area networks, allowing the link of different types of computers using different protocols. This changed had created a strong demand for medium speed to high speed laser printer with the availability of network

⁶⁸ (2005). Lexmark Pushes High-End Printing. *Dow Jones Reuters Business Interactive LLC*.

connectivity. The new Optra+ 16 pages per minute laser would be in the high range and this would make the company to expand quickly. Lexmark introduced its first color inkjet printer in 1994 using its own technology, and the company had experience strong sales ever since. Lexmark's Optra C laser printing systems delivered affordable photo quality color printing with its 600 x 600 dots per inch output. This printer had the availability of printing 12 pages per minute in black and white and 3 pages per minute in color. MarkVision, the network printer management software was being integrating into most of the network management applications and this was contributing to the success of Lexmark.⁶⁹

33. New Era of Printers

The new Lexmark 7200 was introduced in December 1997, and it was a revolutionary product that launched the new era in printing technology. This printer had a state of the art system and it combined six color printing capabilities with advance color science and a host of innovate design features. Lexmark had no rival in the print quality by offering users paralleled photo-realism, image quality and versatility. The technology that was used to enhance color quality for super web photo quality was the called the Lexmark EX2. The printing output had consistent colors across all media and the transition between color was smoother. The Lexmark 7200 included as standard:

- Three laser-carafsted cartridges.
- Color,
- Waterproof black ink,
- Six color photo cartridges,

⁶⁹ (2005). Lexmark Captures the Market. *Dow Jones Reuters Business Interactive LLC*.

- Lexmark's ColorFine 3 printer driver software with onscreen user's guide,
- The LivePix Photo manipulation kit,
- The Lexmark Photo Collection CD ROM images, and
- A handy cartridge storage unit.

Lexmark 7200 printer could be used for almost any project, from business presentations and Christmas cards, to banners and T-shirts. The high resolution of this printer created superb, almost images with no visibly dots, and it was not due to speed. There was a speed of 8 pages per minute in black mode, and 3 pages per minute in color mode. The compatibility of the Lexmark 7200 included Windows 95, Windows 3.1 and Windows NT with the addition that was easy to set up too. Lexmark's 7200 represented a remarkable advance in technology, and a low price of \$279, that the competitors could not beat.⁷⁰

34. Accomplishments Second Quarter of 1998.

In July 20, 1998, Lexmark International Group announced a record second quarter earning of \$54 million or 75 cents per share on a diluted basis, that was an earning per share increase of 66 percent versus the 45 cents recorded in the second quarter of last year. Lexmark's revenues were of \$697million and they went up 25 percent versus \$556 million last year. The operating income was \$85 million, and that was an increase of 48 percent compared to \$58 million earned in the same period in 1997. Dr. Paul J. Curlander was very pleased with Lexmark record financial performance in this quarter. This growth was the best achieved since the company became public in 1995. The

⁷⁰ (2005). Lexmark Printer Heralds New Era in Printing Technology. *Dow Jones Reuters Business Interactive LLC*.

revenues from printers and associated supplies increased 30 percent in this quarter versus last year and would have an increased 356 percent without the currency translation impact.

The revenues demonstrated the best place where the printer business could be, and it contributed 83 percent of total revenues during the quarter. The gross profit margins increased by 2 points versus a year ago to 36.8 percent and as a result of the combination of associated supplies versus printer hardware and improved printer margins. Lexmark's debt to total capital ratio was 28 percent compared to 25 percent at the end of the first quarter. Lexmark second quarter performance was excellent according to Dr. Curlander. Lexmark introduced a large number of industry leading printer solutions. Lexmark and Compaq were going to work together and they wanted to provide Lexmark designed and manufactured inkjet printers and associated supplies to Compaq's customers. Some of the products introduced during this quarter included:

- The Lexmark 1100 Color Jetprinter, and it features the highest color resolution in its class with a street price of \$89 (U.S.).
- The Lexmark 3200 Color Jetprinter, making Lexmark's industry leading 1,200 by 1,200 dots per inch with a street price of \$179 (U.S.).
- These three printers, the Lexmark Color Jetprinter 5700, 1100 and 3200 together represented the best in class offered to the industry at prices under \$250 (U.S.).
- Enhancements were made to the Lexmark's award winning OptraS monochrome laser printer, providing the customer with unparalleled network printer performance with four different engine speeds, 12, 16, 18, and 24 pages per minute.

- The Lexmark Optra K 1220, had the ability to print 12 pages per minute monochrome laser printer, and its performance was 50 percent faster than competitive personal laser printer with a street price of \$750 (U.S.).
- Three new business class color printers, the Lexmark Optra Color 40,45 and 1200, offering high performance color printing with broad network connectivity and the support from MarkVision, which was the Lexmark's industry leading printer management software.
- The Lexmark Optra Color 1200, included features such as the capability to print 12 pages per minute and monochrome laser printing performance with a price under \$6,000 (U.S.).
- Lexmark OptraImage solution allowed the convenience of copying to be added to Lexmark's workgroup monochrome and color laser printers.

For the six months ended in June 30, the earnings were \$103 million or \$1.44 per share on a diluted basis. The revenues for the first half were \$1.369 billion versus \$1.140 billion a year ago and this was an increase of 20 percent. The revenues for the first half from printers and associated supplies increased 26 percent versus the first half in 1997.⁷¹

34.2. Accomplishments of Third Quarter in 1998.

The end of the third quarter ended in September 30th, and Lexmark had a record in its revenue and earnings. The revenues were \$744 million, a 20 percent increase versus

⁷¹ (2005). Lexmark International Reports Highest Quarterly Revenue Growth Since Going Public in 1995 - Eleven Straight Quarters of Year on Year Earning Improvement – *Dow Jones Reuters Business Interactive LLC*.

\$ 618 million recorded in the third quarter of last year. The operating income was \$91 million, a 36 percent higher when compared to operating income of \$67 million in 1997. The net earnings were \$58 million, or 81 percent per share on a diluted basis, and the earnings per share had an increase of 50 percent versus the 54 cents earned in the third quarter in 1997. Lexmark's debt to total capital ratio was 26 percent compared to 28 percent at the end of the second quarter. During this quarter, the company repurchased 747,400 shares of Lexmark common stock for approximately \$4.5 million at prices from \$56.38 to \$66.94. Lexmark made several performance enhancements to its products of network connectivity product by:

- The introduction MarkNet Pro 1 10/10BaseTx external print server which allowed customers to attach virtually any printer to all major network operating systems.
- It announced an inventive new software product, MarkTrack, which tracks usage and inventory data across a network for most printer brands, and this allowed users to balance printer workloads and allocate printing cost by department.
- The extending MarkVision software's printer management capabilities to printers from all major manufacturers, and it permitted the network administrators to manage several printers by using one panel.

The operating income was \$255 million, and had an increase of 41 percent over the \$180 million for the first nine months of last year. Lexmark's revenues were of \$2.113 billion versus \$1.758 billion a year ago, that was an increase of 20 percent. The revenues from the first nine months from printers and associated supplies increased 26 percent versus the same period in 1997. Dr. Curlander said that they were pleased with the outstanding financial performance achieved in the third quarter and the first nine months

of this year. He also said that the success generated by customer acceptance in the printing solutions market was encouraging Lexmark and they wanted to continue to believe that they were well positioned for future growth.⁷²

35. New Printers for Cameras.

The printer developed by Lexmark International had the capability of editing, storing, and printing pictures from many different models of digital cameras and it did not need to be connected to a computers or the camera. The new photo printer was introduced into the market in October, 1998. The expected price of the printer was going to be of \$349 and it was the first model that accepted CompactFlash and SmartMedia memory cards allowing the compatibility of many digital cameras. Other companies that offered photo printers such as Epson Corp. and Olympus Optical Co.'s Olympus America Inc. subsidiary required users to obtain a camera from those companies.

The new printer that Lexmark was offering was designated to allow users to put their camera's memory card with pictures into the printer. All that the users had to do was to select a size and print directly by pushing a couple of buttons. The users were able to print a postcard-size index that showed small thumbnails of all the pictures and after that they were able to choose bigger prints.

Lexmark was also working together with computer-storage market Iomega Corp., and that was going to allow consumers to store their pictures on the Iomega Zip drives. Some consumers needed to buy the Zip drive and its cost was of \$120. Lexmark was expecting to include the Zip drive in future models such as the Photo Jetprinter 5770. The market of the digital cameras was having a slow take off probably due to its high

⁷² (2005). Lexmark International Breaks Record for Quarterly Revenues and Earnings; Twelve Consecutive Quarters of Year-On-Year Earnings Growth. *Dow Jones Reuters Business Interactive LLC*.

price that on average was of \$800. Another problem for this market was that people were putting off the need to learn new computer software to print pictures at home. Before the new printer developed by Lexmark was introduced into the printer market, users had to plug the camera into the computer with a cable or it could be that the computer needed a separate camera card reader.

InfoTrends Research Group Inc. estimated that digital cameras sales in North America would hit five million by 2002, a lot higher than the projections for 1998. The digital camera prices continued to fall, and Toshiba Corps. American decided to cut the price of its MegaPixel digital camera to \$499 from \$599. Industry analysts said that Lexmark photo printer was going to be a product for the people who liked to be ahead in technology.⁷³

36. Interview with Lexmark's CEO.

In January 25, 1999, Sydnie Kohara, was the CNBC reporter in charge of the interview. Dr. Paul Curlander was in midtown Manhattan ready for the interview. The comment that Kohara did to Dr. Curlander was in relation to the numbers that Lexmark was getting. Dr. Curlander said that he was happy because Lexmark had a strong fourth quarter and it completed a strong year for the company achieving the highest annual revenue growth in Lexmark history.

Kohara asked Dr. Curlander that the printer business was booming, and she wanted to know the reason behind that. Dr. Curlander said that it was a couple of things. The first one was that the market growth in PCs was very strong, specially in the US. and Europe, and that was the bulk where Lexmark's revenues came from. He said that 80

⁷³ Narisetti, Raju. (2005). Exmark Sets a New Printer for Cameras. *Dow Jones Reuters Business Interactive*.

percent came from US and Europe. Lexmark's main focus was the printing industry. Dr. Curlander said that Lexmark had a huge advantage because they had their own technology and that allowed us to go directly to our customers to generate demand. Kohara asked another question regarding the sub \$100, and she wanted to know how Lexmark got record revenues by selling printers under \$100. Dr. Curlander said that they did make money by selling their printers under \$100. The engineering design had gotten to a very low cost point. He said that the market place was very hot, and Lexmark was one of the pioneering companies in the printing market.

Kohara asked again and she wanted to know about how much was the internet playing a part in Lexmark's success? Dr. Curlander said that internet was providing to drive printing. They found that electronic media and printing media complemented each other. That meant that communication was going to be electronically, and that information was better to be printed out. This outlook was guaranting that the printing volumes were growing strongly.

Kohara asked Dr. Curlander about Hewlett-Packard and it was the company dominating the laser and inkjet printer markets, but Lexmark had managed to take away a little bit of that market share. She wanted to know if Lexmark was able to continue doing that. Dr. Curlander said that they were expecting to be doing well in the printer market by working some specific strategies. Lexmark focus was only in printers and they were using its own technology. He said that Lexmark had a huge advantage against a company like Hewlett-Packard.

Kohara asked another question in relation to a Compaq deal. There was a partnetship between them and she wanted to know how successful had that been, and that if he was planning something similar for the future with another big company. Dr.

Curlander said that the deal was announced last May and basically they were going to sell Lexmark's color ink jet printers to Compaq. Compaq was going to put its brand name on it. He also said that it would be inappropriate for him to talk about the Compaq business, since they were their supplier, but they were very satisfied with the relationship and it's strong acknowledgement of Lexmark's technology by a company such as Compaq.

Lexmark's future plans were to expand that beyond the US.

Kohara asked about some of Lexmark's strategies making the change over to direct sales. Dr. Curlander said that Lexmark had infactured in place and they were making products available on the internet. Lexmark's growth was depending on whether customers choose to buy as the company moved forward. Kohara asked about the global economy and how Lexmark was being affected by the downturn in the Asian Market and how much of Lexmark's business was there. Dr. Curlander said that Lexmark was very insulated from the Asia difficulties. Lexmark's major revenue which was 85% came form US and Europa, where the economy an the market growth was very strong. Less than 10% came from the affected areas of Asia and Latin America.

Kohara asked about the new products and if the company was working to satisfied the customer by introducing new products with a low price. Dr. Curlander said that they had some exciting new products. Last October, they announced the new photo printer which was the industry's first color inkjet printer that was easily connected to a digital camera. The unique feature about this printer was that there was no need to use a personal computer or complex software printing snapshot size, up to 8 ½ by 11 photographs by just pushing a button. (S. Kohara, personal interview, January 25, 1999).

The interview finished by Kohara saying that there were many exciting things about Lexmark, and she wished Dr. Paul Curlander, the CEO and president of Lexmark International, the best of the lucks. Dr. Curlander thanked Kohara for the interview.⁷⁴

37. Expectations for 1999.

Lexmark International said that it had finished the 1998 year with solid momentum and that Lexmark was in a good position to meet Wall Street expectations that it can boost earnings per share by 20 percent in 1999. The laser and inkjet unit volumes and associated supplies like ink cartridges grew substantially in 1997. Lexmark was selling laser printers specifically to large business users and it was trying to introduce its color inkjet printers at consumers and small business. Lexmark was establishing its long term goals of at least 20 percent average annual increases in earnings per share.

A report from a Wall Street analyst projected that the company would earn \$4.08 per share in 1999 that was a 22 percent above the \$3.35 estimated calculated in 1998. Lexmark reported \$3.40 per share for 1998, making it likely that analyst would adjust their 1999 estimates go up accordingly. Lexmark operating income was continually growing in excess of 20 percent a year since it went public in November 1995. The company said that their fourth quarter gross profit margins declined 0.7 of a point versus a year ago to 34.8 percent, and that was the results of stronger inkjet sales, which was carrying lower profit margins than laser printers or supplies.

Dr. Curlander said that the gross profit margins were rising as the combination of products that the company was making. Lexmark was trying to shifts in favor of higher margin printer supplies instead of the printer hardware itself. He also said that Lexmark

⁷⁴ Kohara, Sydnie. (2005). Today's Business – Lexmark Interantional – CEO – Interview. *Dow Jones Reuters Business Interactive LLC*.

was facing a price pressure in all of its products. The market share statistics were hard to come by for the desktop printer market, and Dr. Curlander said that he believed that the company had moved into a tie for a number 2 rank in the inkjet printer market with Canon Inc., here in the United States. The number one supplier for inkjet and laser desktop personal computer printers was Hewlett-Packard Co. Lexmark had established itself firmly as one of the top three players in the U.S. printer market, with approximately 10 percent to 20 percent of the market in each of the products that the company was competing.⁷⁵

37.1. Accomplishments First Quarter 1999.

Lexmark International announced its record revenue, operating income and earnings per shares for the quarter ended March 31, 1999. Lexmark's net earnings were \$68 million, or 96 cents per shares on a diluted basis, and the earnings increased 40 percent versus the 69 cents earned in the first quarter of 1998. The revenues were \$787 million, and that was an increase of 17 percent over the same period in 1998 revenues of \$672. The printer market and the associated supplies revenues increased and were up 21 percent from the same period last year. The operating income obtained was of \$104 and it increased a 33 percent over the \$78 million reported in 1998.

The net earnings were \$68 million and it went up 37 percent from \$50 million in 1998. The gross profit margins in 1999 were 36.2 percent a little down from 36.7 percent in 198 due to a combination between products. The operating expenses were 23.1 percent of revenues in the first quarter and that was an improvement of 2.0 points from last year, resulting from low sales, administrative expenses, and a percentage of sales. The debt to

⁷⁵ (2005). Focus – Lexmark Net Beats Consensus, Sees 1999 on Track. *Dow Jones Reuters Business Interactive LLC*.

capital ratio at March 31, 1999, was 24 percent when compared to 22 percent at the end of last year. The company bought back 1,587,600 shares of its common stock in this quarter for approximately \$155 million and the prices were in the range from \$85 to \$111.69. Lexmark's introduced new products, including:

- A new inkjet model, the Lexmark Z51 Color Jetprinter and its price was \$229. This printer was going to deliver the world's highest inkjet resolution at 1,200 x 1,200 dots per inch and it was going to be the fastest print speeds in its class with the capability to print up to 10 pages per minute in black text and 5 pages per minute in color.
- Lexmark's exclusive Accu-Feed paper handling providing a virtually jam-proof feeding across the highest range of media types and a new microscopy ink drop technology achieving a remarkable printing output of a photo quality even when using plain paper.
- The Optra E310 was a compact 8 pages per minute laser printer, and its price was \$399. This printer offered true 600 x 600 dots per inch resolution and 1,200 Image Quality mode for crisp text and images, with the capability of printing 10,000 pages per month.
- The enhancement of its digital color print and copy solutions with the introduction of the OptraImage SC 1275c with a price of \$3,599, the OptraImage Color 1200 with a price of \$8,699, and the OptraImage 10 for \$1,359, which was the new copy option for Lexmark monochrome and color network printers.
- OptraImage provided business to place reliable digital print and copy stations anywhere on their network, besides being close to the users who needed the printer, and it helped to reduce the costs and improved productivity.

Dr. Curlander said that he felt comfortable with the current consensus of analysts estimated for revenues and earnings per shares for the second quarter and also for the rest of the year.⁷⁶

37.2. Accomplishments Second Quarter 1999.

The quarter ended June 10, 1999, had a record revenues, operating income and earnings per share at Lexmark. The net earnings were \$75 million or 55 cents per share on diluted basis, and the price per share had an increase of 45 percent versus the 38 cents earned in the same period last year. Lexmark's second quarter revenues were \$817 million, an increase of 17 percent over 1998 revenues of \$697 million. The printer hardware and associated supplies revenues increased in all major geographies and were up to 22 percent from the same period in 1998.

The gross profit margin in 199 were 36.2 went down from 36.8 percent last year due to a mix shift among products. The operating income of \$112 million increased 31 percent over the \$85 million reported in 1998. The net earnings were \$75 million, and they went up 39 percent from \$54 million in 1998. The debt to total capital ration at June 30, 1999 was 21 percent compared to 24 percent at the end of the first quarter.

The International Data Corp. released a study and their conclusions were that the network laser printers were up to 50 percent less expensive to buy and operate than leading digital copiers. The printers from Lexmark were credited with the lowest total operating cost for business users when a comparison was made with between the leading competitive products. Lexmark was continuing the development of its online web site.

⁷⁶ (2005). Lexmark International Reports Record First Quarter Results – Fourteen Straight Quarters of Year-On-Year Earnings Improvements. *Dow Jones Reuters Business Interactive LLC*.

Lexmark's web site was going to be accessible for the customers any time they wanted to get more information about a specific product, buy printer and supplies from the company's electronic catalog.

For the first six months ended in June 30, the revenues were of \$1.604 billion, and that was an increase of 17 percent versus the revenues of \$1.369 billion in the same period last year. The revenues from printer hardware and associated supplies increased 22 percent versus the same period last year. The operating income was \$216 million, and that was an increase of 32 percent over the \$163 million reported in the first half of 1998. The net earnings for the first six months were \$142 million or \$1.03 per share on a diluted basis, and the earnings per share increase were of 43 percent versus earnings of \$103 million or 72 cents per share in the first half of 1998.⁷⁷

37.3. Accomplishments Third Quarter 1999

Lexmark announced record revenues, operating income and earning per share for the third quarter ended in September 30, 1999. The net earnings were \$77 million or 56 cents per share on diluted basis. The earnings per share increased 38 percent versus the 41 cents earned in the third quarter of 1998. The revenues for Lexmark in the third quarter were \$ 845 and that was an increase of 14 percent over the revenues obtained in the third quarter in 1998 of \$744 million. The revenues for the printer hardware and associated supplies increased in all major geographies and they went up to 17 percent from the same period in 1998.

The gross profit margins in 1999 were 35.9 percent and they went down slightly from 36.0 percent last year. The operating income was of \$116 million and increased 27

⁷⁷ (2005). Lexmark International Reports Record Second Quarter Results – Fifteen Consecutive Quarters of Year-On-Year Earnings Growth. *Dow Jones Reuters Business Interactive LLC*.

percent over the \$91 million reported in 1998. The net earnings were \$77 million and that went up a 32 percent from \$58 million a year ago. Lexmark's debt to total capital ratio at September 30, 1999 was 20 percent when compared to 21 percent at the end of September 30 1998. The inkjet capacity expansion and the introduction of more products \$68 million were spent in the third quarter in capital..

The revenues for the first nine months were \$2.449 billion and that was an increase of 16 percent versus revenues of \$2.113 billion in the first nine months of 1998. The revenues from the printer hardware and associated supplies increased 20 percent versus last year. The gross profit margins in 1999 were 36.1 percent and it went down from 36.5 percent the last year. The operating expenses decreased 1.8 points due to 22.6 percent of revenues, compared to last year. The operating income was \$332 million and that was an increase of 30 percent over the \$225 million reported for the third quarter in 1998. The net earning for this period were \$219 million or \$1.58 per share on a diluted basis, and that was an earnings per share increase of 41 percent versus earnings of \$161 million or \$1.13 per share last year.⁷⁸

38. Declining in Dot Matrix.

The dot matrix market was rapidly declining and Lexmark said that as a result, there was going to be an influx of the more expensive inkjet technology for future decades. The president of the consumer, printer division of Lexmark, Bernard V. Masson said that the dot matrix was declining 10 percent on the average annually, and it was allowing the introduction of the thermal inkjet technology. The thermal inkjet technology provided for a 1200 dots per inch photo quality print capability, and it was exclusively

⁷⁸ (2005). Lexmark International Reports Record Third Quarter Results; Sixteen Consecutive Quarters of Year-On-Year Earnings Growth. *Dow Jones Reuters Business Interactive LLC*.

patented to Lexmark. Lexmark R & D department received a lot of money about 56% of the firm's annual revenue. In this year, the company had invested \$180 million and the purpose was to improve its supports and service operations for all of its manufactured products.

The technology apply to the inkjet printers was expensive and that was the main reason why R & D was the priority at Lexmark. R & D kept finding new methods, used less parts, did alterations, and was trying to reduce cost. Lexmark was introducing new products into the market printer very fast, almost every nine to ten months a new product was develop. John H. Boughton, the president for South Asia, Lexmark Asia Pacific Corp. Inc., said that the Asia Pacific regions were going to provide a solid base for Lexmark's operations around the world. Lexmark was trying to focus its business in the Philippines and Malaysia, where the majority of its inkjet products were sold last year.

Lexmark had reported that it sold between \$150,000 to \$200,000 inkjet printers in the country and Malaysia in 1998. Also, between Singapore, Indonesia and Thailand the number of inkjet printers sold were close to 100,000 in the last year. The new Asia Pacific Data Center was a commitment to the region, because they provided technical supports, network maintenance, and audit services. A new manufacturing plant for inkjet products was going to be constructed in Mactan Export Processing Zone II, and a new facility was being constructed in Asia at the same time.⁷⁹

39. Inexpensive PC Printers.

In 1999, Lexmark International was classified as No. 8 spot in the Barron's 500 ranking of best performing public companies for 1998. The firm's success was its low

⁷⁹ Buscato, N. Patricia. (2005). Dot Matrix Market Declining. *Dow Jones Reuters Business Interactive LLC*.

price because the company was selling color printers under \$100. When the company started off in 1995, the introductory price of Lexmark's color printer was as low as \$20. Lexmark caused admiration in Wall Street with a \$7.8 billion stock market capitalization at recent share prices, and that was 26 times Street estimates for 1999 year's ending. The heavy weight Hewlett-Packard jumped into the \$ 100 ring price and it was going to fill the stocking retails with its own \$79 printer with the introduction of the Apollo brand name.

Lexmark had being able to hold itself against HP and Canon, by combining good technology and low prices. Lexmark was going to enjoy a business model that PC makers dream about. Every printer they sold was a razor, assuring Lexmark annual stream of ink cartridge sales, and Lexmark was going to be the razor blades of the printer business. In 1991, IBM did not think in Lexington printer business as an unpolished diamond that needed some work to increase their sales. Lexmark had paid down its long term debt to a comfortable level of about \$150 million at the end of 1998.

Dr. Curlander had a Ph. D, and he was the one who developed IBM's first laser printer, and he was proud about how Lexmark developed its own laser marking engines, while HP used the ones made by Canon. In 1991, Lexmark introduced the first 600 dots per inch laser, when HP offered only 300 dots per inch. Moat of the organizations printed one original of the report, and then made copies. The network printer was speeding up and the world was starting to distribute many documents using the network for printing locally. The printers from HP and Lexmark were trying to get the volume of copies away from Xerox copiers.

Lexmark had a great strategy, and they sent a direct sales force into specific markets, such as drug stores and mass merchandisers. The results of this sales effort was

well engineered printers that did not jam up when printing labels. Lexmark's was able to keep the top 10 drug chains as customers, and big retailers such as Walt-Mart. According to a February survey of corporations by Salomon Smith Barney, Lexmark had established itself as a strong second to HP. The survey showed HP with a 55% as the primary supplier of network printers, 21% for Lexmark, and 14% for Xerox. For the printers attached to PC's, HP in first place with 46%, and Lexmark in second place with 19%.

The market for laser printers was mature, but the inkjets were a wide market open for innovation. Lexmark greatest contribution to the technology was the invention of a color printer with a price under \$100. The color Jetprinter 1100 was able to print 600 dots per inch, and the price was \$89. Lexmark's fastest growing business was the low end printers.

Lexmark's sales force was able to stand in front of corporate buyers and tell their story Lexmark was having trouble in getting in front of the customers because an important retailer such as CompUSA did not want to stock its products. Lexmark was supplying its inkjets in a private label deal to Compaq. All these Compaq brand name printers were sold well, and that was expanding the inkjets supplies because those printers were going to need a \$30 ink cartridge from Lexmark. Finally, in March 1999, Lexmark got its own inkjets into shelves of CompUSA, Staples and Office Depot.⁸⁰

⁸⁰ Alpert, Bill. (2005). *Printing Money: Replacement Parts Power Profits from Lexmark's Cheap PC printers*. *Dow Jones Reuters Business Interactive LLC*.

39.1 New Strategy to Dominate Printer Market under \$100.

Lexmark was inviting the people to join executives from the Customer Printer Division on Wednesday, April 28, 1999 to talk about the company's strategy for the inkjet printer market during a national conference call. Over the last year, the low price in PC's caused an explosive growth in the printer market. The fastest growing market was the inkjet printers and in 1998, 21 percent of all inkjet printer sold were entry level printer. There was a big opportunity for competing manufacturers in the market of the entry level inkjet printer, and they have moved aggressively into that area.

During the conference call, Mr. Bernard Masson, president of Lexmark's Consumer Printer Division (CPD) and Mr. Paul Johns, vice president of U.S. sales and marketing for CPD were going to introduce the latest addition to Lexmark new "Z" line of color inkjet printer. This new product was a reinvention of the entry level segments by bringing the high end features and functionality to the \$100 inkjet printer market for the first time.⁸¹

40. Enhancement Features to Multifunction Solutions.

Lexmark announced significant enhancements to its OptraImage line of multifunction solutions. The enhancements included the new built in fax capabilities, three new digital multifunction solutions at a lower price, and three new OptraImage. By having a fax, copy, scanner, and printer equipment in the same area, the worker productivity went up. OptraImage was providing an affordable, centrally managed and

⁸¹ (2005). Lexmark International to Announce Strategy to Dominate Sub\$100 Inkjet Printer Market During National Conference Call. *Dow Jones Reuters Business Interactive LLC*.

distributed hard copy output solutions. The enhancements made to the OptraImage were the following:

- The OptraImage 10m, with a price of \$ 1,299 an option to add copy and fax machine to the Lexmark Optra S or SC printers.
- The OptraImage 15m , with a price of \$1,799 had an option to add a copy and fax machine to the Lexmark Optra S and Optra Color 1200 laser printers.
- The OptraImage 24m with a price of \$3,899 had also the option to add a copy and fax machine.

The enhancements made to the Fax were the following:

- The send and received capabilities made faxing easier with the new integrated modem of OptraImage's printer server. Lexmark was providing the user to have more flexibility with a fax from glass and fax from driver capabilities.
- The go button allowed the faxing a document to be an easy task because all the pages to be faxed were placed in the auto document feeder, the user had to enter the receiver's fax number and with a simple press of the green "Go" button, the machine started to send the fax documents.
- The new OptraImage multifunction solution was utilizing the new fax support feature found in Lexmark's printer driver.
- There was a feature installed in the printer called the Optra S/Se Plus SIMM, customers were able to send faxes from their workstation using the printer driver. The fax installed in the driver had the capability of transforming the OptraImage multifunction solution into a fax server for any workstation on the network.

The copying and printing enhancements were:

- The first version of the OptraImage products offered features like an electronic collation and multi-up printing to lower cost and increase productivity. The second version of the OptraImage included a book copy model and transparency separator sheet capability.
- The book copy mode allowed the user to print two pages of a book, and electronically separated them and the printing output was two pages at full size.

The printing and holding features were:

- The advantage of the printer driver was that it offered custom capabilities to access customer defined features available in the Lexmark printing solutions.
- It also offered confidentiality by allowing users to assign a personal identification number when sending a document to the printer. When the user entered the PIN number in the screen panel the document started to print. This feature allowed security and protection for confidential documents.
- The Reserve Print option allowed the user to save it in the memory of the printer and print it from the control panel of the printer. This feature was good for printing jobs that were pre-printed such as forms or letterheads or for document on demand printing such as policy manuals.
- The Repeat Print was a good way of getting copies of the last printing job, right from the printer control screen.
- The Verify Print was a feature that allowed to print only the first copy of a document and waited for an OK to keep printing the documents. This feature allowed the reduction of waste supplies because the users could make a trial

impression and from there they could decide if they needed the rest of the copies or not.

The OptraImage Solutions could be attached to the network and included a resident web page with a remote operator panel that allowed the viewing and changing printer options from a browser without additional software. MarkVision helped to reduce cost and improved the effectiveness of end user support were challenges that faced LAN administrators and IS/IT professionals. The hardcopy output devices were manageable with Lexmark's MarkVision software. The customers were able to view printer status, collect, view and analyze printing, copying and faxing statistics, and download new firmware from the Lexmark website. The MarkTrack was a software used for creating financial and administrative reports from a web browser with data collected from SNMP-compliant hardcopy output devices. Companies were able to control workload, balanced output volumes, and allocate cost by departments.⁸²

41. Printing Digital Photos

Eastman Kodak Company and Lexmark had teamed up to deliver an affordable and easy to use photo printer for digital camera owners. Lexmark and Kodak were introducing a new product in September 1999, and it was called the Kodak Personal Picture Maker. The Kodak Personal Picture Maker by Lexmark allowed the digital picture takers to personalized, printed or stored their digital images without the connection of cables to a computer or digital camera. The retail price for this printer was \$149 after a \$50 mail in rebate.

⁸² (2005). Lexmark's New Multifunction Solutions Anchor Company's Vision for Office of the Future. *Dow Jones Reuters Business Interactive LLC*.

Philip Gerskovich, who was the chief operating officer and vice president of Digital & Applied Imaging at Kodak, said that they were providing ways for people who enjoy taking pictures to create digital photos at home without using a PC was a key point to fulfill their strategy for the deliver of digital pictures. He also said that pictures were people's heritage and future, and the Kodak Personal Picture Maker was a way of helping people take pictures weather at home, online or anywhere else. Lexmark was the first company that introduced the Photo Jetprinter 5770, a PC free photo printer to consumers with an interest in digital photography.

There was a digital camera card reader that loaded, manipulated and printed digital photos incorporated in the Kodak Personal Picture Maker by Lexmark. Also, there was no need to connect cables to a computer or digital camera. The user had to insert the camera card in the printer, and print any picture the user wanted to print. This card reader was able to accept both the CompactFlash cards and Smart Media. The users had the availability to personalize the picture by adding creative borders and text. There was also a Kodak template option built into the printer software. The Kodak Inkjet Photo Paper was available in perforated sheets and their sizes were 5 x 7-, 4x 6-, and 3.5 x 5-inch prints per page, and users could create borderless pictures and stickers by using this type of paper. The memory card could be erased and reused by storing the photos in an external storage device such as an Iomega Zip drive. The external storage device allowed the user to print saved pictures from the Kodak Personal Picture Maker by Lexmark.⁸³

⁸³ (2005). New Personal Picture Maker from Kodak and Lexmark Provides Easy, Computer-Less Solutions for Printing Digital Photos. *Dow Jones Reuters Business Interactive LLC*.

42. New Generation of Optra Laser Printers.

In September 21, 1999 Lexmark introduced six new monochrome laser printers offering complete technologically advance printing solutions satisfying the needs of end users from individual desktop to high volume printing. Lexmark also introduced several new multifunction products, enhancements to MarkVision which was its industry leading printer management software. The new line of products included the Optra M410, the Optra T610, T612, T614, T616 and the Optra W810. All of the models introduced had new features and functionally delivering superior performance and outstanding print quality.

The Optra M410 had the ability to print 12 pages per minute and its estimated price was \$699. This was an affordable network laser printer for desktops or small workgroups. This printer received the award winning Optra S technology and its features included a high print quality, easy of use, and networkability, at a very low price. The Optra T610 was an economical printer with the capability of printing 15 pages per minute, and its price was \$999. This printer was a good choice for desktop and workgroups with moderated print volumes.

The Optra T612 was a printer capable of printing 20 pages per minute and its price was \$ 1,149 and its advantage was to optimize productivity. This printer was able to print the first page as fast as 9 seconds. The Optra T614 was a high volume printer with the capability of printing 25 pages per minute, and its estimated price was \$ 1,729 with the flexibility of performing a variety of printing uses. The Optra T616 was a high volume with the capability of printing 35 pages per minute laser printer, and its street price was \$2,299, designed for high performance in network environments.

All the Optra T models of laser printers were faster, smarter, and yielded better print quality than the award winning Optra S products from Lexmark. The advantage of the new printers was that they could be easily upgraded as the business was evolving, due to a wide variety of configurations. The options for the new printers included a 5 bin mailbox and a 1,850 sheet, high capacity output stacker.

The Optra W810 had an estimated street price of \$2,529 was a high volume and wide format 35 pages per minute network laser printer with the finish option of stapling, hole punching and offset stacking, and they were easy to use. The Optra W810 was capable of printing at high speed using paper sizes up to 11" x 17" to multi-user workgroups at a low price. This printer had the finish options of stapling, hole punching and high capacity offset stacking, or a 10 bin mailbox for the majority of types of documents finishing that departments and workgroups needed. The Optra T models had the included the feature of onboard Ethernet 10BaseT/100BaseTX adapters. The Optra T line and Optra W printers could be upgraded to include copy/ scan/fax functions with OptraImage options. All the Optra models were compatible with all major software applications. One of the greatest advantages of the Optra models was that it provided users the latest in technology and at the same time it reduced the need to purchase additional hardware or software. Another feature of the Optra printers like the toner saver and print darkness settings, power saver modes, printing multiple pages on a single sheet, and two sided printing helped the business reduce operating cost.⁸⁴

⁸⁴ (2005). Lexmark's New Generation of Optra Laser Printers Offer Unmatched Combination of Price Performance and Versatility. *Dow Jones Reuters Business Interactive LLC*.

43. New Multifunction for Digital Office.

Lexmark was designing new products to help companies reduce document production and improve productivity in a fast changing environment. In September 1999, Lexmark announced three new complete multifunction solutions and four new options that add copy, fax and scanning capabilities to Lexmark printers. Lexmark had received the award winning network printer technology, and it this technology was applying to the new multifunction solutions products. Lexmark was strengthens its commitment to provide superior multifunction solutions for business customers with the new feature of print/copy/scan/fax solutions. Some of the features included in the multifunction solutions were mailbox bins, hole punching, stapling, offset stacking, faxing and scanning and they were available for customers to send, store and manage documents.

The new products included in the Optra Solutions were:

- The OptraImage Color 1200r (\$7,979 US) was a complete modular network multifunction solution based on the award winning 12 pages per minute, OptraColor 1200 color page printer.
- The OptraImage T612s (\$4,749 US) was a complete modular network multifunction solution based on the 20 pages per minute Optra T612 monochrome laser printer.
- The OptraImage W810 (\$10,799 US) was a complete modular network ready multifunction solution based on the 25 pages per minute Optra W810 laser printer.

The OptraImage options were:

- The OptraImage 222 (\$1,499 US) was a color capable multifunction with the option to add copy, fax, and scanning adaptability to the Lexmark Optra T610, Optra SC 1275 or Optra S 1255.
- The OptraImage 322 (\$2,199 US) was a mid level color multifunction with the option of adding a copy, fax, and scanning to the Lexmark Optra T612, Optra Color 1200, Optra S 1625 and Optra S 1855.
- The OptraImage 524 was a high end multifunction with the option to add copy, fax, and scanning capabilities to the Lexmark Optra T614, Ootra T616, Optra S 2455 or Optra Se 3455.
- The OptraImage 725 (\$6,679 US) was a high speed and wide format, duplex multifunction with the option to add copy, fax, and scanning capabilities to the Lexmark Optra W810.

Every OptraImage printer had a standard 10BaseT/100Base TX Ethernet adapter for high speed connection to the network. Lexmark's laser printers provided centrally managed and distributed hard copy output solutions. The OptraImage printers provided an easy to use customer solution choosing between color and monochrome multifunction features were desired. Lexmark's OptraImage products were easily upgradeable by using software downloads to allow for compatibility with future enhancement features.⁸⁵

⁸⁵ (2005) Lexmark Announces New Multifunction Solution for the Digital Office that Help Increase Productivity and Reduce Cost. *Dow Jones Reuters Business Interactive LLC*.

44. New Facility in Philippines

A new facility was constructed in Philippines, on the island of Cebu, and Lexmark International made this announcement in January 2000. The operations of the new plant would start in the fourth quarter of 1999. The new facility was going to be Lexmark's first inkjet manufacturing site in Asia and was going to be the primary source and an important distribution point for the rapidly growing business of the Asia Pacific market and many other regions around the world. The new plant was expected to create hundreds of new jobs by the end of 2000. The new state of the art facility was located in the Mactan Export Processing Zone II in Basak, Lapu-Lapu City. The new plant was located in a strategic area reaching throughout Asia, and the Cebu site was known for its international airport access to the most known ports nearby. Lexmark decided to build the new plant in the Philippines because of its dedicated, and highly motivated workforce, and the economic stability. Also, the fact that the government understood the potential of this investment facilitated the construction of the new plant.⁸⁶

45. Interview, Theme: The Euro.

In October 2000, Lexmark's CEO said that the weak euro and the low sales in high end monochrome laser printers were going to affect the computer printer market. The net income from Lexmark posted last year was \$318 on sales of \$3.45 billion, and the 2000 forecast showed earning of 20 percent. Dr. Curlander told Tanner who was the person doing the interview that the sales in Europe are huge and that Lexington, Kentucky based company had a little low earnings in dollar terms because of the rapid fall of the euro this year. Dr. Curlander also said that Lexmark was growing in the 10 to

⁸⁶ (2005). Press Release: Lexmark International Opens Plant in Philippines. *Dow Jones Reuters Business Interactive LLC*.

11 percent range but in constant currency it's more in the 14 to 15 percent range. He was having this interview in Berlin where he attended a company sponsored conference by saying that they would expect estimates for 2000 to be around \$2.30 to \$2.35 in this range. A sharp fall in share price was noticed since a September announcement that second half profits were less than hoped. Lexmark's shares were 5.4 percent lower at \$35-1/8 by 1530 GMT from a year high of more than \$135.

In the United States the growth in demand for computers and printers was less as Christmas was approaching, and it used to be the busiest season of the year. The stock market was affecting the economy, and probably people felt that they wanted to spend less money, and that could be a reason why the sales were so slow. Dr. Curlander said that the company had a big hit by a weaker demand for high end and monochrome laser printers. On the other side, the company was doing well in other areas of the business. Lexmark was buying back shares and they would be reporting their share activity when the earning report was done in October 23, the executive said. If the shares had a low price, then it created opportunity for the company to buy back some of its shares, which helped boost the prices of the share.⁸⁷

46. Accomplishments First Quarter 2001.

In January 2001, Lexmark announced its revenues record for all the four quarters in 2000. The revenue for the fourth quarter was of \$ 1.906 billion and it went up 9 percent, a 17 percent in constant currency from 1999. The revenue for the whole year increased 10 percent to a record \$3.807 billion, and diluted neat earnings per share before the nonrecurring charges were also a record \$ 2.35.

⁸⁷Tanner, Adam. (2005). Interview – Euro, High End Laser Printers Slow Lexmark Growth. *Dow Jones Reuters Business Interactive LLC*.

The revenue of the fourth quarter ended in December 21, was a record of \$ 1.906, an increase of 9 percent versus revenue of \$1.003 billion in the same quarter in 1999. The revenues for printer and associated supplies increased in all areas and went up 13 percent from a year earlier. The gross profit margin was 30.8 percent for the fourth quarter versus the 34.4 percent a year ago due to lower hardware margins, the cost of airfreight, and unfavorable foreign currency impact.

The operating expense increased 7 percent in this quarter compared to 25 percent at the end of the third quarter. To support the new products and capacity extension there were \$104 million spent in capital. The company repurchased 225,000 shares of its common stock during the quarter for \$9 million and the prices were ranging from \$38.25 to \$ 42.00. The revenue of Lexmark for the complete year of 2000 was a record \$3.807 billion with an increase of 10 percent over 1999 revenue which was \$3.452 billion.⁸⁸

46.1 Accomplishments Third Quarter 2001.

The revenues for the third quarter were \$ 1.004 billion and that was an increase of 8 percent from the same period in 2000. Lexmark, announced that was doing a restructuring plan was being developed to reduce its global workforce of up to 12 percent. This plan was going to result in fourth quarter 2001 pre-tax charges of \$100 – 120 million, impacting the net earning per share of 54 to 65 cents. The revenues for the period ended in September 30, was \$1.004 billion and that was an increase of 8 percent versus \$927 million in the same period last year. The revenues of printers and associated supplies went up to 12 percent from a year earlier.

⁸⁸ (2005). Lexmark International Reports Constant Currency Revenue Growth of 17 Percent for Fourth Quarter; Earnings per Share Reach New High in 2000. *Dow Jones Reuters Business Interactive LLC*.

The gross profit margin was 30.9 percent for the third quarter and it went down 1.0 point from 3.19 percent a year earlier due to lower margins on printer hardware. The operating expense was \$209 million versus \$197 for the third quarter in 2000. The operating income went up 3 percent to \$101 million when compared to \$98 million reported last year. The net earnings for the third quarter were \$70 million or 52 cents per share on a diluted basis. The earnings per share increased 5 percent versus the net earnings of \$66 million or 50 cents per share in the third quarter of 2000.

The operating expense was \$209 million, versus \$197 million for the third quarter in 2000. The Lexmark debt to total capital ratio at September 20, 2001 was 21 percent, a little higher from June 30, 2001. The capital expenditures were \$53 million for this quarter. Lexmark introduced a new product in this quarter, the X63 All-In-One Office Center, rounding out its recently new line of multifunction products which included the X83 and X73. The price for this new product was going to be under \$200 and it had the capability of printing black text faster than any other machine from the same class. Its features included high quality color scanning and a stand alone fax and copy capabilities. Lexmark restructuring plan included a reduction in infrastructure and overhead expenses, a reduction in capacity for certain inkjet printers, and the closure of an electronic card facility in Reynosa, Mexico.⁸⁹

47. New Inkjet Printers

The introduction of the new inkjet printers were going to have low prices to be able to compete in the printer market in an announcement made in March 2001. Lexmark introduced two new color laser and inkjet printers that were going to outperform the price

⁸⁹ (2005). Lexmark International Reports Third Quarter Financial Results; Intends to Restructure in the Fourth Quarter to Improve Position as Low Cost Provider. *Dow Jones Reuters Business Interactive LLC*.

offered for the heavy weight Hewlett-Packard. The new model introduced by Lexmark was the J110 inkjet that was a good choice for small business who couldn't afford color laser printer, and were looking for more speed than the average inkjet printer.

The J110 had a retail price of \$899 and it was able to print 7.5 black and white pages per minute and 10 color pages per minute. The price for the HP's 2250 business inkjet printer was \$699 and was able to print 7.5 pages per minute. The new feature in this printer was that it had the new Liquidlaser technology that allowed laser quality copies using normal paper. Another model introduced was the color laser printer C720, and it doubled the speed of a color printer that Lexmark introduced 10 months ago and its price was 5 percent more.

According to a testing firm Quality Logic of Moorpark, Calif., the retail price of the C720 was \$1,999 and it was 36 percent faster than the Color LaserJet 4550 offered by HP. Another HP offer was the LaserJet 1200 and its price was 57 percent less than Lexmark's comparable printer. These two printers had the capability of printing 15 pages per minute, but the only difference was that the HP printer was \$530 cheaper.

According to Pete Enderling, a financial analyst with Ryan Beck & Co. said that the printer industry was going to be in intense competition and the prices were going to be getting lower for some time. He also said that Lexmark and its competitors were not going to be able to keep the price war for a long time because the components that made up a printer were getting to be cheaper and the low cost of over seas labor was driving down production costs. According to a market research firm IDC in 2000, the average

price of a Lexmark laser printer decreased by 15 percent to \$899 from its original price of \$1,042 in 1999.⁹⁰

48. 10 Year Anniversary in Lexington

IBM decided to sell its low technology business to a New York investment firm for \$1.5 billion in March 1991, and allowed Lexmark to be the largest private employer 10 years later. The low technology business that Lexmark bought included typewriters and they were traded in for inkjet and laser printers, having annual profits 780 percent since 1995, where the company went public. Worldwide Lexmark occupied the fourth place, and in the United States, occupied the second in the printer market, retaining over \$1 billion earnings.

When Lexmark bought the low technology from IBM there was a reason to celebrate, and a band was playing Happy Days are Here Again. In 2001, there was no reason to celebrate because the results obtained from last year were no satisfactory. The bottom line for Lexmark did not grow in 2000, and that turned happy days into breaky hearts. In 2000, the company saw a 1 percent decline, and that excluded a \$41.3 million of restructuring charge. The stock market was waiting, and Lexmark stock dropped 62 percent in 2000 at the same time the entire market was struggling. Lexmark shared closed March 26, 2001 at \$45.75, down \$2.45 or 5.08 percent. The highest price for Lexmark shares in the past 52 weeks was \$126.06.

Bad news were coming up, and Lexmark had to let go 300 manufacturing employees from its Lexington facility in 2001 as the production was shifting to another countries. Also, there were 225 people that accepted an early retirement buyout package.

⁹⁰ Stamper, John. (2005). Lexington, Ky, Based Firm Introduces New Inkjet Printers. *Dow Jones Reuters Business Interactive LLC*.

The personal computer sales had slowdown and many other techs companies were being affected, then raising questions about Lexmark's 2001 forecast of 15 to 20 percent earnings growth arose. Executives from Lexmark and Dr. Curlander declined to be interviewed for this story.

Carly Fiorina, CEO from Hewlett-Packard said that the expected revenue growth for the whole year was going to be a minuscule 2 percent. Lexmark's revenues or all the money brought in by Lexmark grew by 10 percent to \$3.8 billion, and recent filings with the Securities and Exchange Commission reported that the number of printers it sold grew by double digits. Lexmark made printers and they included the Compaq branded printers, accounting for 29.4 percent of all printers sold in the United States during the fourth quarter last year up to 16.5 percent in 1998.

According to a market research firm IDC, Lexmark's share of the global printer market jumped 5 points to 13 percent last year. Claudio Checchia, a senior analyst at IDC said that out of all the top vendors, Lexmark was the one that had the most growth at expense of their competitors. The growth that Lexmark obtained was because of reducing prices and that hurt the profit margins. Some analyst believed that the Lexmark's printers were being sold at loss. Lexmark could afford that because they were going to be selling the ink and toner replacement cartridges to customers through the life of the printer. The price that Lexmark was given at the retail stores was very low, and then the customers had to buy two cartridges a year for four years, and that was a healthy way of doing business, said John B. Jones Jr., an analyst from Salomon Smith Barney.

The replacements of the cartridges and toners were the most lucrative business for Lexmark, and more and more printers were being sold for home and business worldwide. In the United States, the average price for an ink cartridge was \$35 last year, \$ 4 above

Hewlett-Packard and Canon, according to research firm PC Data. The revenues for the replacing cartridges were 40 percent of Lexmark's 2000 revenues and this percentage was expected to have an increase of 50 percent by 2002.

Lexmark had offset falling prices by moving almost all of its manufacturing out of the United States, and that would bring cheap labor and low taxes. Lexmark was giving lay off to its employees in the Lexington facility, and the same amount of employees was being replaced in Mexico. Mexico was a country where the average hourly wage was less than half of the minimum wage in the United States. The company employed more people abroad than in the United States last year. The company had 13,035 employees in 2000, and only 5,700 were in the United States. The number of employees was going to be stable, and the average wage probably would grow.

Lexmark was planning to hire 700 research and development employees by the end of 2002. All the employees hired would work in the new \$70 million R&D complex scheduled to open soon. The company decided to move manufacturing abroad, this move allowed Lexmark to shave 6 points off its tax rate since 1998, and also had saved the company tens of millions of dollars. The expansion of Lexmark around the globe had brought some problems because the currency exchange rates dropped 6 percent of the company's revenues in 2000. According to Lehman Brothers analysts George Elling, Lexmark expected the currency adjustments to erase 3 percent of revenue in the first quarter of this year. The short term outlook was looking tough for Lexmark, but the long term outlook was appearing to be in its favor.⁹¹

⁹¹ Stamper, John. (2005). Lexmark Marks 10-Year Anniversary in Lexington, Ky. *Dow Jones Reuters Business Interactive LLC*.

49. 1,600 Jobs Eliminated.

In October 2001, 1,600 jobs were going to be eliminated, 12 percent of Lexmark's workforce, while the company was trying to solidify its position in the printer market. Even that the profits for the third quarter were higher than expected, the cutbacks came as the company predicted a weaker market. The price of its stock sank 12 percent.

Dr. Curlander said that the cutbacks were necessary in order for the company to remain competitive costs. He also said that these difficult decisions were necessary to intensity their focus on being the low cost producer in the printer market. Also, they were going to invest a lot more money in research and development because they wanted to increase their price per share in both laser and inkjet markets.

A spokeswoman Jennifer Richard, said that the company intended to cut 600 jobs at the Lexington plant and another 600 jobs at a plant in Reynosa, Mexico. The company said that the elimination of those jobs would result in pretax charges of \$100 million to \$120 million in the fourth quarter. Also, the restructuring plan was going to save the company about \$50 million to \$60 million.

The jobs that Lexmark wanted to eliminate were not determined yet and it was going to take some time, but they knew that it was going to affect a variety of positions. The employees that wanted to leave voluntarily were going to receive benefits based on length of employment, said Richard.⁹²

⁹² (2005). Lexmark to Cut 1,600 Jobs. *Dow Jones Reuters Business Interactive LLC*.

50. New Processing Information Products.

In October 2001, Lexmark introduced a new line of products that were going to change the way business printed, moved, and managed information with the advantage of reducing costs. The models introduced were the Lexmark C750 and C910 color printers, the powerhouse E320 and E322 monochrome laser printers offering an affordable price with the advantage of bringing high printing closer to users.

The Lexmark X820e was a multifunction device that converted the slow managements of information into a streamlined workflow process by just pressing a button. Paul Rooke, Lexmark vice president and president of its Printing Solutions and Services Division said that the hardcopy and digital form had continued to explode the office environment. Lexmark's customers told them that they needed better ways of moving and managing this information. According to Rooke, Lexmark had a focus on printing and related documents workflow processes, and it was well position to offer solutions to small and large enterprises that were looking to improve their business activities.

Businesses were able to afford to have the impact of color with the speed and the ease of use of a monochrome workgroup printer with Lexmark's C750 and C910 color printer. The Lexmark's C750 was specifically designed for workgroups and it had the capability of filing through jobs at a stunning 20 pages per minute in monochrome and color. The resolution of this printer was 1,200 x 1,200 dots per inch. Lexmark's technology allowed the development of new products and the Lexmark C750 was the fastest letter sized color printer in the world.

The Lexmark C910 was able to print letter sized 11" x 17" and offered speeds of 28 pages per minute in color and monochrome. This printer produced a unique color

quality by using 2400 Image Quality. In order for a company to buy a printer with a color output rated at more than 28 pages per minute, the company would have to spend over \$80,000 that was 20 times more than the sub \$4,000 retail price of Lexmark C910. Both printers had features such as toner saver mode and it could be equipped with expanded paper handling capabilities such as stapling and hole punching. Mr. Rooke said that what companies wanted was to have color and speed with reliability at the price that small offices were able to afford.

The new X820e had a network centric printer foundation and color touch screen interface with the capability of printing 45 pages per minute and reduced hardcopy outputs and improved the flow of the documents. This printer could be integrated into enterprise's directory and allowed users to securely fax or email a hardcopy documents with different destinations. The introduction of the new monochrome laser printers provided higher performance at a low price and it was the best choice for business, students, and home users. The new Lexmark E320 and E322 had a printing speed of 16 pages per minute, were the highest performance monochrome laser printers with a price below the \$400.⁹³

51. New Multifunction Devices.

The new product introduced by Lexmark in April, 2002, was going to accelerate the company's expansion beyond printing to an area of hardcopy solutions. Two multifunctional printers were introduced by Lexmark, the X620e and X750e which grouped of high performance printing, copying, faxing and scanning capabilities into a single unit saving a lot of space. Two products that Lexmark had introduced before were

⁹³ (2005). Lexmark Introduces Groundbreaking New Color, Multifunction and Monochrome Solutions; New Products Made Processing Information Faster, Easier and More Affordable. *Dow Jones Reuters Business Interactive LLC*

the Lexmark T620 monochrome laser printer and the Lexmark C750 and they were the foundation for the new models introduced. The features for the new models had the innovation, single pass color laser technology developed by Lexmark.

The Lexmark X620e provided a great functionality and it also had smaller footprint at a price that enabled it to be better distributed through large and small enterprises, and small business. The Lexmark C750e was a color networked ready multifunctional printer with 4-in-1 functionality that addressed the documents that any company required. The main objective for the development of these new multifunctional printers was to change the workplace by streamlining communications and by reducing expenses.

The family of products ranged from the Lexmark X520, was a durable monochrome multifunction device capable of printing 20 pages per minute, with a street price of \$2,200, to the Lexmark X820e, was a workhorse capable of printing 45 pages per minute and its street price was \$12,999. The market was changing the way for managing its printing sources, and they wanted to get away from the centralized print sources and had a more distributed model, where the printer was located closer to the end user.

Lexmark was focusing in providing its customers the printing and services solutions within this distributed model, and with the introduction of these new models, Lexmark was reaffirming its commitment to meet the customer needs. The company worked closely to customers to tailor high quality documents solution, and at the same time help them with the integration of these solutions into the work environment using Lexmark's software and services.⁹⁴

⁹⁴ (2002). Powerful New Multifunction Devices Expand Lexmark's Opportunity in the Office. *Dow Jones Reuters Business Interactive LLC*.

52. Accomplishments Second Quarter 2001.

In July 2002, Lexmark announced a record revenue and earning per share for the second quarter of 2002 and that included an increase of 8 percent in revenue to \$ 1.058 billion and an also the price of the shares had increase of 67 cents, higher than 65 cents in 2001. The revenues for the laser and inkjet supplies were \$566 million that was an 18 percent increase over \$482 million a year ago. In 2001, the laser and inkjet printer revenue was \$361 million versus \$394 in 2001, having a growth rate of 9 percent.

The gross profit margin was 32.0 percent for the quarter versus 34.2 percent in 2001 due to a lower printer margins, and an increase in the product mix. The operating income was \$123 million in the second quarter of 2002 versus \$122 million in 2001. The debt to total capital ratio of Lexmark at June 30, 2002 was 14 percent compared to 13 percent in March 2001. The capital expenditures were \$24 million in the second quarter in which most of the money spend was used for infrastructure support and new product development.

The company bought back 5.0 million shares of its common stock and the price was \$279 million. A new product announced in the second quarter was the Lexmark X125 All-In-One Office Center and the Lexmark X75 PrinTrio, expanding the company's successful family of inkjet products that printer, scanned, copied, and faxed. The retail price was \$179 for the Lexmark X125 and \$149 for the Lexmark X75 PrinTrio. These two devices were capable of delivering 2400 dots per inch resolution with speeds up to 16 pages per minute.

The revenues in the fist half of 2002 for the laser and inkjet supplies were \$ 1.112 billion, an increase of 17 percent from \$952 million in 2001. The operating income was

\$227 million versus \$240 million in 2001. The net earnings for the first half were \$161 million or \$1.20 per share on a diluted basis versus the earnings of \$167 million last year.⁹⁵

53. Dell & Lexmark Reached an Agreement.

In September 2002, Dell Computer Cop., announced that it had reached an agreement with Lexmark International to produce Dell-branded printers and supplies. There were not details about the financial terms of the partnership or when the first Dell branded printers would be introduced in the printer market. The agreement between Dell and Lexmark indicated that Lexmark was solicited as the preferred printing supplier during the upcoming holiday season, when the combination of PC's and printing packages sales were are theirs best season.

Dell had previously said that it was expecting its printer business to make a profit in its first year, but computers analyst expected those sales would have an impact within the next two years. Andrew Neff, an analyst for Bear Stearns & Co., in New York said that the announcement was positive for Dell, and that the new product would arrive faster than expected. Customers from Dell were asking to improve their experience for printers, said Tim Peters vice president and General Manager for Imaging and Printing at Dell, who was paying closely attention to the development of the company's new branded products. Dell executives were confident that their printer and toner cartridge replacement experience would be nothing different from what the customers expected.

At the beginning of the year, Dell was disclosing their interest in getting involved in the printer market. Later in the year, rumors surfaced that Dell wanted to buy a printing

⁹⁵ (2005). Lexmark International Reports Second-Quarter Financial Results. *Dow Jones Reuters Business Interactive LLC*.

company, specifically Lexmark, which surprised Lexmark executives. In July, Hewlett-Packard Co. decided to cancel a reseller agreement with Dell because Dell's intention was to market its own branded printers, and that meant more competition for Hewlett-Packard, which was the world's top printing company. Even that a reseller agreement was canceled between Hewlett-Packard and Dell, Dell continued to sell HP printers obtained from resellers.⁹⁶

54. Dell Join Lucrative Printing Supply Market.

In September 25, 2002, the deal between Dell Computer Corp., and Lexmark International was closed and making them partners in the printing market. Lexmark would manufacture printers with the Dell name on them, probably in the first half of 2003. Dell sold approximately 2 million printers in 2001, but what they really wanted was to get into the profitable business of selling replacement inkjet and toner cartridges. Many of the printers were sold at a price that was considered a loss for the company, said Charles Wolf, an analyst at Needham & Co. The gross profit margins in printing supplies was 60 percent, and it was calculated by using the sales price minus the manufacturing costs, making it higher than almost any computer hardware product.

One advantage for Dell was that they sold their products directly and did not use retailers, and according to Wolf, Dell could discount cartridges by 30 percent to 40 percent and even with this type of discounts, the company would enjoy strong profits margins. The low prices offered by Dell could help overcome customer resistance to buying printing supplies online or over the phone. Dell wanted to get involved in the

⁹⁶ (2005). Dell, Lexmark Ink Printer Deal; Ending Months of Speculation, Dell Confirmed Tuesday that it has Reached an Agreement with Lexmark. *Dow Jones Reuters Business Interactive LLC*.

printer market, and if it was successful, it would encroach on Hewlett-Packard's Co.'s biggest profit center.

Mr. Wolf said that Dell would have positive benefits in the printer market, but Hewlett-Packard would have negative benefits. Mr. Wolf estimated that Dell could obtain as much as 25 percent of H-P's \$2 billion in profits and cut into H-P's industry leading market share. Spokeswoman Diane Roncal said that Dell was going to face unique challenges that were not easily overcome. For example; Dell was lacking the research expertise in new printer technologies, especially in areas such as digital imaging and publishing.

The research team of H-P's was small than the rest of the industry, analyst said. Spokesman Tim King said that Lexmark's plant in Lexington had about 4,000 workers and many of them were engineers working to develop new products. Lexmark was designing its critical parts inside its printers, but it used offshore manufacturers to assemble the finished products. Hewlett-Packard stepped up its personal computers sales in 1999, right after IBM Corp., left the U.S. retail market Dell had viewed H-P as its competition and wanted to stop selling its products. The uncertainty became more apparent in 2001 when H-P decided to buy Compaq Computer Corp., supplanting Dell as the No. 1 seller of PC's worldwide. In July 2001, H-P said that it would no longer provide printer for Dell to sell.⁹⁷

55. CEO Interview October 2002.

In October 21, 2002, Mark Haines, CNBC Anchor was interviewing CEO Lexmark Paul Curlander. Haines started the interview by saying that the shares in the

⁹⁷ Pletz, John. (2005). Dell, Lexmark Join Forces on Printers; Move Allows Dell to Enter Lucrative Printer Supply Market, Challenge Rival H-P. *Dow Jones Reuters Business Interactive LLC*.

third quarter had a profit of 79 cents. He also said that the company was seeing the fourth quarter earning to be between \$70 and \$80. Then, he introduced Dr. Paul Curlander, CEO of Lexmark International. Haines asked the first question about the uncertainty about the market on a relative basis. Dr. Curlander said that the market was pretty weak. Lexmark's earning per share went up 33 percent year to year. He was expecting food earnings per share growth in the fourth quarter.

Haines asked about how much of Lexmark sales depended on the sale of a new computer. For example, I have a Lexmark printer and it came with a Dell computer. Dr. Curlander said that was correct and they had two pieces of their business. Lexmark had hardware sales which would track computers. The second piece of their business was people who had Lexmark equipment, continued to buy after market supplies. That's almost 50 percent of Lexmark's revenue and it grew 19 percent year over year in the third quarter, Dr. Curlander said.

Haines asked how does this help with the competition with H-P at this point, the new relationship with Dell? Dr. Curlander said that they had a relationship with Dell and the movement into the OEM market with them was an evolution of their relationship. Lexmark was the number two player, and fundamentally, more volume helped their battle against H-P. Haines asked about the new products and referred to them as the all in one, he apologized because he did not remember the name of it. Dr. Curlander responded that it was the X85 all in one.

Haines said that for those who did not know what the X85, it was an inkjet printer with a flat bed scanner, PC free color copying and a scan to PC fax capabilities. With an incredible price of \$179, and he asked Dr. Curlander how he maintained their margins? Dr. Curlander said that the main business id fundamentally the supplies, the

prices and profit help subsidize the hardware. He also said that what they had seen was that with all in one's had been a very strong growth market. The sales had grown very strongly and they had gain a lot of market share over the last 12 months in all in ones. Haines thanked Dr. Curlander and told him that he appreciated his time. Dr. Curlander said that he was pleased and that was the end of the personal interview with CEO of Lexmark Dr. Paul Curlander.⁹⁸

56. Leading Edge Technologies.

In October 28, 2002, Lexmark extended its technology leadership with the introduction of two new business products. The first one was going to protect sensitive information as it is printer and the second was going to leveraged wireless technology to provide printing flexibility. The new product introduced was the Lexmark PrintCryption™ card delivering encryption capabilities for secure printing to the network printers from Lexmark.

The printer was going to be an asset for many industries, including financial institutions, government agencies and healthcare organizations, which handled sensitive or personal information. Another product introduced was the Lexmark 802.11b Wireless Print Adapter, an easy to use enhancement that was freeing printing from the limitations of the wired network. Both of the products introduced provided convenient and secure wireless printing.

The Lexmark PrintCryption Card provided all corporate environments the security of printing. A survey conducted by CIO Magazine in May 2002, underscored the importance of information technology. There was a recommendation made by the

⁹⁸ Haines, Mark. (2005). Lexmark International : CEO – Interview. *Dow Jones Reuters Business Interactive LLC*.

survey respondents and that was to have an increase of 77 percent in security spending in 2003 compared to current levels. The Lexmark PrintCryptio was compatible with software like Levi, Ray & Shoup Inc., (LRS) and provided encrypted end to end print job security between common systems and wired or wireless network printers. Also, Unix software compatible with the Lexmark PrintCryption.

There was an extra feature included in the Lexmark PrintCryption, it was offering that only the specified printer could decrypt and print the data. If for some reason the information was intercepted, it remained encrypted. The Lexmark T family of laser printers was easily adaptable to the PrintCryption Card, to receive the encrypted data stream, decrypted and print a confidential document. The price of the Lexamrk PrintCryption had an estimated street price of \$ 218. The Lexmark 82.11b Wireless Print Adapter had an estimated street price of \$199. Both products were available through Lexmark solution providers and at www.lexmark.com.⁹⁹

57. Facing a Slow Tech Market.

Lexmark was being set as an example because of its historical performance: its projected growth of the distributed printing market, the company's supplies driven business model and its unique position and strategies. These messages were delivered as part of Lexmark annual Analyst Day Conference which was held in New York Stock Exchange. The exchange bell rang to open the day's trading on the floor before beginning the four hour conference in the NYSE boardroom.

By performing its Analyst Day in such a historic facility, Dr. Paul Curlander said that it was an honor for him to be there and it represented so much to the corporate world

⁹⁹ (2005). Lexmark Introduces Leading –Edge Technologies to Address Emerging Corporate IT Needs for Secure and Wireless Printing. *Dow Jones Reuters Business Interactive LLC*.

and the free enterprise system. The executive team praised the work Lexmark and its 12,000 employees had done and also the achieving of several objectives in 2002 making the company growth stronger and resulted in a record earnings per share in the most recent quarter.

Dr. Curlander emphasized 3 key points that investors needed to understand:

- The first one was the market, and Lexmark believed that the number of pages of information that were printed closer to the end user was growing rapidly. Lexmark created products that were near the user and also the inkjets all in ones, the projected growth in demand for color printing in the office, and the changing role of output devices, as several functions could be performed by one product versus several devices.
- The second key point was the business model: The model that Lexmark used was a stable, and had revenues from aftermarket supplies. The aftermarket supplies revenue grew at a rate of 33 percent per year from 1998 to 2001. The laser and inkjet supplies grew from 28 percent of Lexmark's total revenue to 48 percent in 2001. The laser and inkjet supplies represented 55 percent of total revenue in the third quarter of 2002.
- The third point was the strategic focus: Lexmark was the only company focused exclusively on printers. This single focus allowed Lexmark to have a number of strategic advantages such as ownership of its technologies. This allowed the company to save money and they were able to develop and meet specific customers needs.

Lexmark was established the world's second largest laser printer company, according to the broad technology capabilities offered by the Printing Solutions and Services Division (PS&SD). Lexmark believed that there significant opportunities to get a greater share of office output pages as a result of the internet, technology convergence, and the rise of color output in papers.

The sales force from Lexmark approached large accounts and the company differentiated itself with solutions and services. The multifunction device that the company had developed, were easily combined with software such as its document portal solution, serve as electronic on ramps for digitized information and could help companies to print smarter and moved the information faster. In 2000 Lexmark introduced its inkjet AIOs at sub \$200 price points, and it had also transformed the all in one into a consumer category driving the growth of inkjet products around the world. The revenues from the laser and inkjet printer and associated supplies increased at a rate of 15 percent per year from 1998 to 2001.¹⁰⁰

58. Lexmark Focused on Printers.

Dr. Paul Curlander was the best tech chief executive you never head of and he was the CEO of Lexmark International. For almost six years, Dr. Curlander had run Lexmark's day to day operations. In all these years the company had a transformation from manufacturing typewriters for IBM into the world's No.2 printing and imaging company, right behind of Hewlett-Packard.

Lexmark had a 16 percent compound annual revenue growth increasing the per share earnings to a projected \$1.75 in 2002 from an adjusted 58 cents. Dr. Curlander said

¹⁰⁰ (2005). In the Face of a Slow Tech Market, Lexmark Continues to Grow and Set Earnings Records. *Dow Jones Reuters Business Interactive LLC*.

that he was totally focused on printers. Typewriters accounted for 41 percent of Lexmark's revenue and its computer printer sales were very weak, in 1991 when Lexmark became independent. Since then it worked hard to be the leader and was ahead at Epson and Cannon in the lower end printer inkjet market, and today was No. 2 right behind H-P. Both companies affirmed that most of their earnings relied on ink cartridges.

The replacement of the cartridges was the driving force for big profits. In the fall of 2002, Lexmark's stock jumped from the low 40 to a recent 65. Toni Sacconaghi, an analyst for Sanford Bernstein's Hardware, said that the per-share profit of Lexmark could rise 18 percent in 2003, to \$3.28.¹⁰¹

59. Lexmark's 2003 Inkjet Line.

In April 2003, Lexmark unveiled its powerful inkjet line of products, including industry's first sub \$100 photo printer with camera card slots. The new line of products from Lexmark offered two photo printers, with camera card readers included, and a feature easy to use entry inkjet printer for new users. Also, there were three newly designed all in one inkjets, the PrinTrio™ X1150, x6150, and x6170. The introduction of these new products allowed Lexmark legacy to continue in relation with its quality excellence with a maximum 4800 x 1200 dots per inch resolution on photo paper that could be used in any of the products in this line.

The Photo Center Software helped users to perform sophisticated photo editing features to enhance and simplify the digital printing experience. The software had features such as red eye reduction, color manipulation and photo sizing, and these features were user friendly for any new user. Lexmark Z600 Color Jetprinter with a price

¹⁰¹ Veverka, Mark. (2005). In Tech Wasteland, Lexmark's a Winner. *Dow Jones Reuters Business Interactive LLC*.

of \$49 provided new users that were looking for high quality, with 4800 x 1200 dots per inch print resolution and printer up to 14 pages per minute in black and up to 8 pages per minute in color.

These printers were ideal for students when printing school reports and web pages and pages with simple color graphic images. For people looking for a photo quality output, the Z700 Photo Jetprinter was capable of borderless printing, and allowed the users to get a desire output for framing and display. The price was only \$79 and it offered six color photo print capability, and used an optional photo cartridge, for pictures with brilliant colors. Also, users were able to edit photos like red eye reduction, and they could create scrapbook pages, developed an online photo album, and even create a slide show from the PC monitor.

The P700 series was targeted for digital photographers and they could create prints that could compete with photo lab quality. The P700 had an onboard camera card reader to simplify the digital photo printing experience. This printer had a color and photo cartridge for a brilliant six color printing. The P700 series supported virtually all digital cameras, including CompactFlash I & II, Secure Digital, SmartMedia, Memory Stick and Multi-Media Card. The price was just \$99 and it was the first sub \$100 photo printer that included the camera card readers.¹⁰²

60. Lexmark International Review

Lexmark was considered one of the few technology companies able to prosper in the industry's downturn, and things seemed to be brighter because tech was assured to recover. The former unit of IBM was known in the past for manufacturing electric

¹⁰² (2005).Lexmark Unveils Powerful 2003 Inkjet Line, Including Industry's First sub \$100 Photo Printer With... *Dow Jones Reuters Business Interactive LLC*.

typewriters, and had posted an impressive quarter and it gave the impression that its plan was to keep the competence with its rivals. A surprising double digits revenue growth to \$1.26 billion and the first quarter profits rose 28 percent from last year to \$121 million, or 91 cents a share.

Lexmark served the consumers and business, and the consumers had been carrying the load by printing school reports, letter and digital photos. The also were replacing its cartridges as often as necessary. Dr. Paul Curlander said that the business customer was straggling. A new partnership with Dell the computer giant had its name on Lexmark printers and sold them, gave results better than the expected ones, said analyst Laura Conigliaro of Goldman Sachs.

The business with Dell accounted for 6 percent of Lexmark's total revenue and it had contributed as much as 40 percent to the increase in the revenues for the first quarter. Dr. Curlander told investment community not to count on the Dell relationship for growth. As time went by, the growth from the deal was almost impossible to ignore. Hardware analyst increased their earnings estimates. Conigliaro had increased her 2004 estimate to \$405 a share from \$3.85, and she suggested that shares could hit 105. She also pointed out that the introduction of the new printers gave great expectations for the high margin inkjet supplies business while the economy recuperated its strength.¹⁰³

61. New Desktop Laser Printers.

In June 2004, Lexmark introduced the new family of desktop laser printers with an affordable price and easy to use. The new line of products included the Lexmark E232, E232t, E330, E332n, and E322tn monochrome laser printers, confirming once

¹⁰³ Veverka, Mark. (2005). Review & Preview Follow Up – A Return Visit to Earlier Stories – Printing Money: Lexmark Gets Lift from Dell. *Doe Jones Reuters Business Interactive LLC*.

again that Lexmark products were reliable and versatile for the home office, small and medium size business, and large enterprises desktop printing needs. All the printers offered a compact design and were easy to fit in any office or home setting.

Paul Rooke, Lexmark executive vice president and president of its Printing Solutions and Services Division, said that the introduction of the new family of printers allowed Lexmark to continue its tradition of offering affordable and versatile products with excellent features and functionality. He also said that if a customer was looking for a desktop printer for a home business or for a huge corporation, Lexmark offered the right product. The new sleek design included features such as integrated paper drawer for reliable paper feeding and space consolidation.

The customer would find the printer easy to use and its toner cartridge was easy to install, also it included a long-life photoconductor kit that probably would never be replaced over the life of the printer. These printers were easily upgradeable, meaning that the printer grow with the customer's changing needs with options like networking, and an optional 550 sheets paper drawer and memory expansion. The Lexmark E232 and E232t, was an excellent printer for people that needed a powerful personal or office printer with laser crisp output.

These two models were monochrome laser printers and were designed for home and business environments and could serve many functions. The E232 had a price of \$199 and it offered fast speed of up to 22 pages per minute and a quick time to first page of 8.5 seconds. The E232t had a price of \$299 and it featured a second 550 sheet tray to accommodate higher volume printing. The Lexmark E330, E332n, and E332tn were considered high performance laser printers, designed to meet the increasing demand for desktop printers in a personal or workgroup environment.

All these printers featured a fast speed of up to 27 pages per minute, a 200 MHz processor, and the highest maximum optional memory versus its competitors. The price for the Lexmark E330 was \$399. The price for the LexmarkE332n was \$ 499, and it was specifically designed for small workgroups featured a space saving internal network adapter. The price for the Lexmark E332tn was \$ 599 and it included features like a second 500 sheet drawer. The new family of laser printers was very efficient, capable of printing 15,000 pages per month, and inclusion of Lexmark MarkVision network management software to help business maximize and manage their printing investment.

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62. Business Analysis of Lexmark International.

Several areas of Lexmark were analyzed in July 2004, and presented the advantages and disadvantages of the company.

- Global Business: Lexmark was a global business and selling its products in more than 150 countries around the world. The advantage of selling its products worldwide was that it protected the company from damaging localized market conditions and also allowed its brand name to be recognized a lot more. The main focus of Lexmark was its focus in printing solutions benefiting the company in many ways. First, it enabled the company to create economies that other industry rivals may not be able to achieve because of the unique focus on their products, services and printing solutions.

¹⁰⁴ Lexmark Strengthens its Market Leadership with New Family of Powerful and Affordable Desktop Laser Printers – Broad Products Line Offers Unmatched Price Performance and Functionality Against Major Competitors. *Dow Jones Reuters Business Interactive LLC.*

- Focus on Printing Solutions: Lexmark was well positioned to create alliances or partnerships with other computer hardware or Information Technology because the company did not compete with them in any other market. The biggest industry rival was Hewlett-Packard, and they would find a partnership harder to achieve because its broad focus brought competition with many companies. The potential partnership or alliances, allowed Lexmark to have more benefits.
- Intellectual Property: Lexmark was benefiting from its intellectual property position. This gave Lexmark the advantage of achieving a sustainable and competitive position because they were experts in areas where its competitors did not.
- Product Development: Lexmark's product development activities were efficient than those of its industry rivals. The company invested between 5% and 6% of its total revenues on research and development every year. The purpose of this investment was to reduce the time to introduce a product to the market, and also to reduce its development cycle times. These factors gave Lexmark a competitive advantage over its competitors.
- Industry Growth Trends: Various industry growth trends were forecasted to occur over the coming years. Some of the predicted industry growth trends included an increase in distributed printing, an increase in the number of color pages printed in offices and the growing popularity of home digital photography. All of these trends could increase the demand for Lexmark's printing products if the company continued to meet the customer needed.

- All-in-one devices: Another trend that was going to increase popularity was the all-in-one devices. They incorporated printing, copying, scanning and fax functions into one single machine. Lexmark could have more developments in this area in order to capitalize on this expected growth.
- Supplies Business: There was a predicted increase in the printing supplies. This trend could be very lucrative for Lexmark because the biggest revenues came from its supplies business. The supplies business was around 62 percent of the company's by 2004.
- Reliance on Printing Solutions: Lexmark focus was only one, printing solutions and that was the biggest revenues for the company, but at the same time it could hurt the company because it was depending only from one industry to generate its revenues. If the printer market fluctuated in some ways, Lexmark would make Lexmark vulnerable in consumer and commercial demand for printing products. A bug fluctuation in the demand for the printing products would destroy Lexmark's revenues and profits. Hewlett-Packard was more diversified, and that was an advantage in case of a fluctuation in the printing market.
- No. 3 Market Position: Lexmark was the third largest company in the printing market. The plan for Lexmark was to break into the top two market positions in order to increase its revenues and profits. The company's market share was around 16% and there were indications that Lexmark's business strategies were successful in boosting market share.
- Dot Matrix Business: Lexmark manufactured dot matrix for commercial customers. The sales in that area were declining due to technological

advances that led to the development of new products. The developments of the new products made the dot matrix look obsolete than before.

Lexmark was planning to leave this area of business as the sales kept decreasing and they would refocus in more profitable areas of the market.

- Strong Competition: Lexmark and its competitors had lowered their prices on printers and kept on doing that. Lexmark was vulnerable to these low pricing pressure, which if it was not mitigated by cost and expense reductions it could result in lower profitability and the company's ability to maintain market share. The markets for printing and supplies were very competitive. The company that dominated the laser printer market was Hewlett-Packard, which approximately held 50 percent of the market share. There were several vendors that competed in the printing market such as Canon, Xerox, Brother and Minolta. Lexmark's primary competitor in the color inkjet printer market were Hewlett-Packard, Epson, Canon, and they accounted for approximately 80 percent of the color inkjet printer sales around the world.
- Interest and Foreign Currency Exchange Rates: Lexmark's earnings had a significant impact due to the fluctuating interest and foreign currency exchange rates because the company was selling its products in over 150 countries. Lexmark's global sales were fluctuating due to changes in the value of the US dollar in relation to other international currencies.
- Pricing Trends: In recent times, a decline in ASPs of printing products had been seen. The decline was in part to the price competition that existed in the industry. Technology had played a role in the decline in the price of

some printing products like ink jet printers. This predicted trend would affect Lexmark's profits in future years.

- Dell: Could Dell become a Lexmark's competitor in the time, despite their partnership? Many industry analysts were uncertain of the potential of Dell by entering the printing market. Analyst agreed that the entry of Dell could have a damaging effect in the printing market for the future of Lexmark.
- Market Growth Rates: The forecast for the market on the printing hardware was going to growth slightly over the coming years until in 2006. This reduction in future market growth rates could inhibit the ability of Lexmark to grow its business.¹⁰⁵

63. Increased Rise in Earnings

In October 2004, Lexmark announced the addition of 100 more jobs in Lexington in an expansion of its R & D programs. At the same time Lexmark announced that they had a 50 percent increase in earnings. The majority of the jobs were engineer positions and these were an addition of the 100 similar positions filled by Lexmark earlier this year. Lexmark was Lexington largest non-government employer and its workforce included 4,000 employees.

The earnings of the company were \$156.7 million or \$ 1.17 a share for the third quarter of 2004 compared with \$104.1 million or 79 cents a share for the same period in 2003. The company said that its earning should had been \$1.02 a share, but the company had a one time gain of \$20 million or 15 cents a share from a settlement with the Internal

¹⁰⁵ (2005). Lexmark International, Inc. – SWOT Analysis. *Dow Jones Reuters Business Interactive LLC*.

Revenue Service of some issues related to its 1997-001 audits. Dr. Curlander said that he was expecting to have a good fourth quarter. He also said that they were careful because of the uncertainty in the market and the aggressive competition for low prices. The results for the third quarter boosted Lexmark to \$413.7 million or \$3.10 a share, compared with \$300.4 million or \$2.29 a share for the same period in 2003.

Dr. Curlander told analyst that Lexmark was expecting to increase its investment in the Research and Development of new products by 15 to 20 percent in 2004. He also said that there was a significant opportunities for growth ahead, but a lot of money would be invested in R & D. Almost 6 percent of Lexmark's gross revenue was spent for research project in the first nine months of 2004, compared with \$195.3 million in the third quarter of 2003.

Gary Morin, executive vice president and CEO, said that the new federal tax credit for the money spent in research was expected to reduce Lexmark's tax rate for the fourth quarter by 1 percentage point to 26.5 percent or 5 cents a share. Lexmark's research programs allowed the creation of three new printers: The P315 Snapshot picture printer with the price of \$179, and two business printer, the X830e at \$11,999 and the X832e at \$13,999.

Dr. Curlander said that Lexmark was launching a new cable television advertising campaign on October 11, 2004. The cost was expected to reduce the earnings for the fourth quarter by 7 or 8 percent, but it was going to boost sales during the holiday season. There were more than 5,000 commercials schedules on 34 cable networks, and that included mot of those carried by Lexington's Insight cable system. Curlander and Morin said that Lexmark's plans were to continue to repurchase its stock to prevent stock options from diluting the stock value.

Also, a reduction in the production of printers in Asia, Europe and Mexico during the fourth quarter was going to reduce product inventories that cost \$540.5 million. And they were going to evaluate its cash position, which had grown to nearly \$1.5 billion and that included marketable securities. Dr. Curlander said that they had more cash than they had held historically, and he felt comfortable with the company's position.¹⁰⁶

64. Lexmark and Rivals

In July 2005, Lexmark had launched a lineup of laser printers and devices that included security features and controller interfaces that solution provider would be able to adjust them to their needs. The company started to ship five new laser printers in last June. The laser printers were available in 20 configurations, and Lexmark aims to aggressively price the top end of the line.

A new feature included in the laser printers was an operator panel that provided managements and security functions through an ATM-style system. A pin number could be assigned for each user and when that pin number was entered, the printing job was released. The operator panel had the availability to be customized with specific commands or software.

Lexmark was under a lot of pressure because of the extreme pricing decline initiated by its rivals including Dell, Round Rock, Texas, and Hewlett-Packard, Palo Alto, Calif. Floyd Eden, CEO of Ready Data, a New York based Lexmark partner and solution provider said that Lexmark was being very aggressive when it came to pricing.

The new products introduced were the T640, T642, T644 and W840 laser printers and the C920 which was a color laser printer. The features included document

¹⁰⁶ Jordan, Jim. (2005). Lexington, Ky. – Based Printer Firm Posts 50 Percent Rise in Earnings. *Dow Jones Reuters Business Interactive LLC*.

encryption, wrong pin lockout, and expiration of pin assigned documents not retrieved. There was also the addition of the USB interface to enable the user to print its documents stored on portable USB drives. Lexmark was considered the document solutions vendor and opened a new customer solution center in New York. This facility would be considered as the state of the art customer center, providing the latest of Lexmark's solutions and technology.¹⁰⁷

65. Affordable New Lasers for Small Medium Business 2005.

In October 2005, Lexmark created a new standard of value and performance for small medium business with the introduction of an affordable new color and monochrome laser printers. The new family of Lexmark printers was the C520 family and the new Lexmark E series were designed specifically to meet the needs for small business. What made those printers a good choice for small business was the big business performance, space savings design and most important at an affordable price, said Paul Rooke, Lexmark executive vice president and president of its Printing Solutions and Services Divisions.

The C520 color laser family delivered an exceptional combination of good price, performance and quality, and those features gave customers a terrific value who where looking for this features. Its printing speed was up to 20 pages per minute in color and monochrome and its price was as low as \$499. This printer was versatile and allowed the customer to expand their color printing capabilities with fast color output, while buying it at a low price.

¹⁰⁷ Moltzen, F. Eduard. (2005). Lexmark Reponds to Competition – New Printers Offer Innovation to Channel. *Dow Jones Reuters Business Interactive LLC*.

Lexmark included the Color Care Technology gave the customer the tools for saving toner, authorizing the use of color printing and estimating the color of each page printed. The Lexmark C520 family included Lexmark's advance laser technology, resulting in a unique print quality. This family of printers was capable of printing 1200 x 1200 dots per inch resolution and chemically processed toners. The Lexmark C520 family was easy to use.

The user could replace the toner cartridge easier than ever, because of the Lexmark's front door accessibility and carousel free design. The new Lexmark C520 family included five models, the C520n, C522n, C524n, C524dn and C524dtn. The Lexmark E series had a maximum speed ranging from 25 pages per minute to 30 pages per minute using letter paper. Also, its resolution was 1200 x 1200 dots per inch print quality on some models. Rooke said that the compact size of this printer was exactly what small and medium business customers have been looking for, a printer with high performance and capabilities, and priced for the desktop. It also had features such as easy toner cartridge installation and a graphics enhanced print driver.¹⁰⁸

¹⁰⁸ (2005). Lexmark Targets SMB Market with Affordable, Powerful New Lasers – Introduces Lexmark C520 Color Laser Family, New Lexmark E Series Today. *Dow Jones Reuters Business Interactive LLC*.

CONCLUSION

Lexmark was a role model for many other companies because it was able to reorient its business and it was successful at it. Lexmark started as a company by the spun off from IBM. The company had a debt of a million dollars and its persistence and dedication made them a strong company with record revenues in as short as six years. Lexmark wanted to have its own sales team, this allowed the company to send its sales people and ask the customers what they expected for a Lexmark printer. The results of this project allowed Lexmark to know in what areas the needed to improve its printers to please the customers. Lexmark goal always was pleasing the customer, and it had reaffirmed its commitment for several years.

Lexmark had changes in the way of thinking, and it also recognized its employees as an important part of the change for successful. Lexmark was introducing new products every six weeks, and that was an advantage for the company because it needed to get the recognition from any potential buyer. The introductory price offered by Lexmark was as low as \$20 and today the company sells its printers for \$79.

Lexmark went overseas and that was an advantage for the company because if the economy fluctuated in the United States, they would have a back up overseas. There were manufacturing facilities from Lexmark in over 150 countries around the world. Lexmark's products were of high quality, versatile, efficient and affordable. Lexmark's products were designed for home, office, small, medium or large business. Lexmark's future looks bright because the internet and the network connection would increase in the demand in printers for home or business. Lexmark will always try to satisfied its customers in every developed product.

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