Communications of the IIMA

Volume 11 | Issue 3 Article 2

2011

An Analysis of Historical Transformation of an IT Giant Based on Sound Strategic Vision

Sabina Gesmin Prairie View A&M University

Bernard Henderson Prairie View A&M University

Syed Irtiza Prairie View A&M University

Ahmed Y. Mahfouz Prairie View A&M University

Follow this and additional works at: http://scholarworks.lib.csusb.edu/ciima

Recommended Citation

Gesmin, Sabina; Henderson, Bernard; Irtiza, Syed; and Mahfouz, Ahmed Y. (2011) "An Analysis of Historical Transformation of an IT Giant Based on Sound Strategic Vision," *Communications of the IIMA*: Vol. 11: Iss. 3, Article 2. Available at: http://scholarworks.lib.csusb.edu/ciima/vol11/iss3/2

This Article is brought to you for free and open access by CSUSB ScholarWorks. It has been accepted for inclusion in Communications of the IIMA by an authorized administrator of CSUSB ScholarWorks. For more information, please contact scholarworks@csusb.edu.

An Analysis of Historical Transformation of an IT Giant Based on Sound Strategic Vision

Sabina Gesmin
Prairie View A&M University, USA
snepts@hotmail.com

Bernard Henderson Prairie View A&M University, USA bernardhenderson@rocketmail.com

Syed Irtiza
Prairie View A&M University, USA
imtiaz_dna@hotmail.com

Ahmed Y. Mahfouz Prairie View A&M University, USA aymahfouz@pvamu.edu Emmanuel U. Opara Prairie View A&M University, USA euopara@pvamu.edu

D'Andrea Polk Prairie View A&M University, USA dpolk09@gmail.com

Uzma Siddiqui Prairie View A&M University, USA uzmasohailsiddiqui@hotmail.com

Baba Tembely Prairie View A&M University,USA tembelyben@yahoo.fr

ABSTRACT

International Business Machines Corporation (IBM) is a dominant player in the growing information technology industry. IBM went through a rough patch in the initial part of the '90s when sales were declining. In a span of two year, IBM lost a staggering \$16 billion. This case investigates the problems that IBM was facing during the time, and the strategic decisions it took to help it transform this position. Through the change of leadership, IBM started giving importance to customer-relationship management to better cater to the need of its clients. It also realized the need to have a strategic vision and reorganized as "One IBM". Reengineering Global Functions and Processes across different departments improved IBM's cost structures. The management unified strategic vision served as a platform to reignite growth and industry leadership. The case details this transformation and concludes with lessons learnt that would benefit companies in a similar dilemma in today's competitive IT market.

INTRODUCTION

Company Background and IT Industry

IBM is short for International Business Machines. It is also known as "Big Blue." IBM is considered one of the world's biggest Information Technology Company. In the 2009 Fortune 500 list, the company is ranked 14th best company in the world. It also ranks as the 28th best of global companies on the 2009 Forbes Global 400 list. IBM manufactures and sells computer hardware and software, and offers infrastructure services, hosting services, and consulting services in areas ranging from mainframe computers to nanotechnology. It is difficult to find a company that deals in so many areas. IBM faces intense competition from other major players in the industry such as Microsoft for desktop productivity application, Oracle for database products, and Cisco for cloud computing ("IBM at 100," 2010).

Even though being the second most profitable company in the world in 1990, IBM began posting considerable losses between 1991 and 1993. IBM lost a staggering \$16 billion. Mainframe computers were the cornerstone of IBM till the '90s, which was the source of almost half of IBM's revenues. But at the time other companies such as Compaq and Dell gave priorities to interconnect mainframe, midrange and increasingly mobile personal computers with distributed data sources and applications that led to fewer sales of IBM's mainframe computers.

The company was originally founded as the Tabulating Machine Company by Herman Hollerith; it was renamed and incorporated by Thomas J. Watson as IBM when Tabulating Machine Company was merged with International Time Recording Company and the Computing Scale Corporation in 1911. Presently, it is known as International Business Machine Corporation. IBM has operations in more than 170 countries; it has customer /client relationships with more than 219 companies such as 3Com, VMware, NVidia, and the like. IBM develops and manufactures information technology related products and services that help its clients to deliver business values and be more innovative. The company maintains its operations through its five key segments: Global Technology Services (GTS) unit, Global Business Services (GBS) unit, Systems and Technology unit, Software unit and Global Financing unit. Through the Global Technology Services unit, IBM provides critical information technology infrastructure services and business process services that help clients to integrate resources for continuous innovation. The Global Business Services unit provides professional consulting services and application outsourcing services which is intended to deliver business value for its clients. The System and Technology unit provides solutions for business clients that need advanced computing power and storage management. The Software unit provides middleware such as Web Sphere, Tivoli and operating systems that can be used to enhance the capabilities of a business's IT infrastructure. Additionally, the company assists its internal and external clients with financing through its Global Financing unit. IBM encourages people from diverse background to work for the company. It has employed 399,409 employees worldwide and five of its researchers have received Nobel Prizes. IBM reported revenue of \$95.757 billion and total asset of \$109.0 billion for full-year 2009. Samuel J. Palmisano now serves as the current President and Chief Executive Officer of IBM. The company is trading in New York Stock Exchange under the name of IBM (Bryan, 1990).

Motivating Factors

Under the leadership of Thomas Watson Jr., IBM became the leading player in the growing field of Information technology. IBM products such as its mainframe computers were universally considered as the best solutions to a variety of problems. The Company became so successful that it became the target of US Government's antitrust suits by the mid 1960s. IBM's domination started to dwindle from the early 1990s. IBM reported its first loss in 1990; its earnings fell 74.8% at the end of the year. IBM quickly dropped to 45th rank in the Forbes lists. Though the early signs of trouble such as decline of return of sales appeared before, the company management was very much in denial about these problems or signs. The company faced stiff competition from other new information technology companies, such as Microsoft Corporation and Intel Corporation. The Internet boom created a demand for client-server/network technologies, but the company failed to acknowledge consumer demands. In addition, IBM faced

problems with its size and organizational culture; the company had 20 separate business units, 125 data centers, and 128 CIOs were working to manage all these business units and data centers. The company also had 31 private and separate networks; hundreds of different configurations techniques were used for installation processes. IBM was experiencing three times higher data processing costs than the market average and the company had difficulties offering continuous streams of new products, or services. IBM also faced trouble with its asset management. Its asset structure of \$77.7 billion was too big, and with each dollar spent in assets brought only 81 cents in revenue. The company needed to acquire 17 percent after-tax return -on –assets to stay profitable, but the company was able to earn 6 percent after tax income in 1989.

IBM was facing strong pressure from investors to improve its profitability. In order to improve the situation, IBM Board of Directors appointed Lou Gersnter as a Chief Operating Officer. He was given responsibilities to re-organize the organizational culture, re-engineer global functions and processes, and use the latest technologies for continuous innovation to add value, both for stake holders and the organization. In this case, we are going to explain the answers for the following questions regarding IBM's transformation from the brink of bankruptcy ("Louis V. Gerstner, Jr.," 2011).

- How was IBM able to re-organize its organizational structure in order to create a unified "One IBM"?
- How was IBM able to re-engineer its global functions and processes in order to gain sustained cost competitiveness and best-in-class operations?
- How did the firm define and approach innovation? How did innovation help the firm to identify opportunities to facilitate growth and evolution?

During the 1980s and early 1990s, IBM was thrown into turmoil by one after the other revolutions. Their revenues flattened and then declined. Their stock price was reduced to half and company had to lay off half of its workforce. There are many factors that contributed to company's fall such as:

- PC explosion and increasing power of microprocessors.
- New competitors such as HP, SUN, and the like.
- Maturing demand for hardware and the arrival of new technologies such as client-server computing.
- Large organization with minimal coordination.

The purpose of this study is to examine how IBM was able to implement its transformation strategies in order to regain profitability and achieve competitive advantage over its competitors.

SOLUTION

Strategy

The business approaches and solution for IBM was aimed to stop loss, regain profitability and status that the company once enjoyed as one of the dominant player in the information technology industry. The company took following steps in order to fulfill its objective.

Change of Management

The previous management led by Mr. Ackers was unable to formulate right courses to save the company from its decline. The investors were growing impatient with IBM's lack of performance. Investors and the Board of Directors felt the need for a new visionary management who could lead the company in that tough time. The IBM board of directors appointed Lou Gerstner as a new Chairman and CEO to oversee the transformation activities. Gerstner managed RJR Nabisco as a Chairman for four years, and had previously spent 11 years as one of the top executives at American Express (Applegate, Austin, & Soule, 2009).

Restructure the Organization

After assuming leadership position, Gerstner focused on restructuring and reorganizing the company. All the businesses within the company were categorized to three major groups: H1 for short term mature business, H2 for rapidly growing business, H3 for long term emerging businesses. H1 consists of short term mature businesses. 155 data center were reduced to 3 regional data center. He also reduced the number of CIO to one CIO who was responsible to make direct report to the CEO. The system development process was also reengineered, the number of in-house applications decreased from 16000 to 5200. It also integrated new technologies to meet the client demands. As part of restructuring efforts, company also focused on cost reduction process. The company had cut its workforce from 215000 to 86000 and reduced budget for its R&D activities (Applegate et al., 2009).

Re-organizing the Organization's Culture

Gerstner was aware of the need to change organizational culture within the company to facilitate the smooth transformation. The centerpiece of the new e-business strategy for organization culture was a document called "One Voice." Put out in 1996, "It was a very simple booklet; first time explained the business strategy to employees. It didn't try to describe the ideal company. It said: 'This is the mark of opportunity; this is what we have to do." And because it predated the e-business marketing campaign by about a year, it helped our workforce understand where we were trying to go. "IBM's salespeople were giving it to clients. HR used it for recruiting and it became must reading for managers. "'One Voice' did not change IBM. But it reoriented the strategy and changed their culture" (Gazis, 2010).

"Mv News"

To help employees manage the flow of information that they needed to do their jobs, they created a personalized news service on the Intranet called "My News." Each employee created a profile of work-related interests and based on that profile, "My News" filtered news feeds from both inside and outside the company. Several times a day, it created a news page for the

employee with the information they specifically wanted (Lindquist, Madduri, Paul, & Rajaraman, 2007).

"The Matrix"

IBM also realized that it couldn't allow the structure of the company to get in the way of their business model, which required cross-organizational teamwork. So it created another Intranet based model which was called as "The Matrix". This new model was aimed to help employees to communicate information easily and quickly. The company also designed a series of Intranet tutorials called the 'How To' series. It covered some very basic things such as how to hold a meeting, how to use e-mail, and how to make decisions (Lindquist et al., 2007).

Technology's Role

After analyzing company performances, Gerstner concluded that the mainframe computer business would offer diminishing returns. "Client-server" networks which use desktop computer technology would increasingly replace mainframes, he believed. While the company's financial performance has improved, IBM was still struggling to improve competitiveness in high growth market segments such as personal computers. It remained slow in bringing new technologies to market. Thus, Gerstner reduced mainframe development spending and cut manufacturing capacity by 40 percent. He also invested heavily in software based products which proved to be a bold move for the company. In order to increase its stake in software industry, IBM has acquired several high profile companies. The company acquired Lotus Development Corp; acquiring Lotus Software helped the company to attract clients who were interested in user friendly and reliable desktop publishing software. The increasing sells of these software helped the company to offset the diminishing demands of mainframe computers (Moreau, 1995).

Implementation and Execution

IBM implemented various strategies to address the issues that withheld the company's success. Lou Gerstner as a Chief Operating Officer was given responsibilities to re-organize the organization. Lou Gerstner stated, "I start with the view that the customer drives everything the enterprise does. A lot of people say, "We put clients first, "but it's a slogan for many companies. In my view, it is the absolute thing you live by every day in a successful enterprise". In April 1993, IBM's senior executives, employees and clients quickly realized that" putting the customer first" was not just a mere slogan for Gerstner.

By late 1993, Gerstner realized that rather than break up the company; he could turn it around by going to markets as "one IBM". To prevent clients from leaving in droves before he completed the turnaround, Gerstner called on each senior executive to go out to a group of clients and "bear-hug" them. He made the executives' personally responsible for their assigned customer accounts. This action was to prevent "brain-dead" to competitors. Gerstner sought to "bear-hug" key employees as well; for example, he went to the board to change key employee options, enabling them to exchange those that were "under water" for a smaller number that were not. In early 1994, Gerstner, writing at his kitchen table, set out eight operating principals for doing

business as one company. The break with the past was apparent to all the people within the organization and contributed to the improvement to the corporate culture (Greenberg, 1993).

IBM internal IT organizing contributed to the \$7 billion cost reduction. Between 1994 and 1997, the cost of operating and running IT operations was cut in half, generating over \$2 billion in cost savings. Gerstner pulled divisions into larger business groups and formed the corporate executive committee who met every two weeks to focus in on corporate strategy and the turn around of the organization ("IBM at 100," 2010).

RESULTS

From the discussion above, we see rapid loss of sales put the firm on the verge of bankruptcy. Armed with Gerstner's visionary leadership, IBM was able to have miraculous turn around from the path of bankruptcy. His clever choice of strategies and effective implementation of those strategies helped the firm to gain its first profit in 1994 (Applegate et al., 2009).

Positive Change

While under the leadership of John Akers, IBM reduced costs by cutting nearly 200,000 jobs in the mid '80s. From these measures, IBM was saving around \$8 billion from its annual costs. It was a concern that IBM needed a new strategy and a new boss. After IBM anticipated a continuation in its losses in 1992, the board hired Louis Gerstner to lead and supervise the break up and sale of the company. The new CEO quickly enforced his concept within the company of "putting the customer first". After visiting with customer from all around, Gerstner wanted to introduce "one IBM" to the market. This was a concept of integrating the entities of IBM and using it to create solutions for its clients. He began to delegate different jobs and responsibilities to senior executives. Gerstner hired different heads to take up different challenges of IBM. First he hires Jerry York to initiate a standard analysis to establish a comparison between IBM's cost in each of its businesses and its competitors. The company also built up a \$10 billion cash cushion that Gerstner used in part to pump up research and development. As a result of these studies, IBM determined that the company was too expensive by \$7 billion. This prompted Gerstner and York to execute more layoffs and appoint managers to handle the underperforming areas of the business. He then hired Rick Thoman as the overseer of the distressed PC department. Thoman downsized the brands within IBM's PC division and exploited its successful ThinkPad brand. Doing this, IBM would still have the ability to target people who sought a high-quality and reliable productivity tool and simultaneously slim its executive teams.

The concept of "One IBM" was the force that drove the reorganization of IBM. Gerstner formed the Corporate Executive Committee, designed to meet every two weeks to concentrate on corporate strategy and the turnaround of IBM. He also formed the Worldwide Management Council that met monthly to define and implement international strategies and operations. The sales organization was also reorganized to better accommodate customer response. In the 2003, Gerstner delegated accountability of a functional reengineering project to each member of the CEC. Two priorities were set for these projects: Get cost out as quickly as possible and "clean-sheet" the process and redesign it for global use (Bryan, 1990).

16

Gerstner expressed his high expectations of members of CEC and their improvements of their delegated tasks. The executives assigned to these projects were working to find common processes. The executives were regulating and simplifying these processes so they could be used in other areas of the business. This would make it increasingly possible for IBM to enter the market as "One IBM".

Missteps

In a matter of a few years, IBM's image had been downgraded from the master of the computer world to an agonizing representation of corporate arrogance. IBM helped to create this industry that increased the popularity of the personal computer; however, the organization failed at adapting to its changes. IBM's earnings plunged 146 percent in 1991. It was felt that the company's arrogance played a part in this fall. The declining began as a result of exchanging a business in leasing mainframes with a business for selling them. This ultimately led to fewer purchases of mainframes which was the source of almost half of IBM's revenues. Product developers used mainframe thinking when considering of pricing and cost structures. Identical thinking also obstructed IBM's ability to keep up with the rapid course of the PC (Moreau, 1995).

Therefore, IBM's effort in advertising for PCs fizzled. Other retailers were accomplishing more than IBM in the area of marketing PCs. No matter how good of a quality IBM's PC was thought to be, it was not putting in the work to sell them. Departmental feuds between independent sections of IBM seemed consume more of the organization's time than its campaigning within the industry. Fixed cost continued to multiply and revenues continued to lessen. Areas of IBM were still functioning in the way of expansion, new constructions were being built, and service contract expenditures were approaching record standings (Zhu & Kraemer, 2002).

IBM was operating with twenty separate business entities. These units together sold 5,000 hardware products and 20,000 software products. There were diverse designs for components that served the identical function in different products. Dissimilar company procedures were being used in different areas of the company for the purpose of accomplishing the same goals. IBM did take advantage of the opportunities when common ground was found amongst its products and processes. Data processing cost tripled its industry's averaged data processing cost. This soar in processing cost was due to the vast amount of different arrangements of PC installments that were created within its private and separate networks, creating operational inefficiencies (Porter, 1985).

LESSONS

Various elements can be learned from IBM's rigorous journey through success, in which companies should be aware off. The elements include but are not limited to the importance of innovation management, leadership, and an organization's culture.

Innovation management is the managing processes of innovation. In the early 1980's and 1990's IBM was said to be driven by a passion that says "never again." Without the continuous

consideration of new ideas and technologies it is easy for a company to get caught in a common phrase called "sleeping at the switch," or even tagged as a "dinosaur" company. A company must fluctuate with customers' demand to remain successful. IBM learned the hard way. During the mid to late 1980's, IBM was considered to be very much in denial around client/server and networked computing. IBM customers developed an increasing demand to interconnect mainframe, midrange, and increasingly mobile personal computers with distributed data sources and applications. With IBM's lack of Innovation Management the company suffered fewer purchases of mainframes, which was the detrimental source of almost half of IBM's revenues and 70 to 80 percent of its profits.

As a company's upper management continuously makes decisions that do not redirect a company's decline, it may indicate the lack of proper decision making. A very valuable lesson learned from IBM in this situation is that a restructure of company executive may prove to be the solution. The IBM board of directors appointed Lou Gerstner as a new Chairman and CEO to oversee the transformation activities. Gerstner managed RJR Nabisco as a Chairman Nabisco for four years, and had previously spent 11 years as one of the top executives at American Express. He also worked as a senior executive in other companies such as McKinsey & Company. Under his leadership, the company was able to make its first profit of \$3 billion in 1994.

A company's organizational culture is often called the "belief of goals the members of an organization should pursue". By definition it is a company's idea in the field of organizational studies and management which describes the psychology, attitudes, experiences, beliefs and the personal/cultural values of an organization.

CONCLUSION

Under the leadership of Gerstner, IBM was transformed from a company that primarily manufactured mainframes to a company that offered complete IT solutions. The company was able to change its focus from being product centric to being customer centric. IBM realized the need to continuously reinvent the business model of a company amidst rising competition and changes in the business environment. Unnecessary costs were cut down in the process and many new relevant technological innovations led the way for a successful turnaround for IBM. Other companies can greatly benefit by reviewing IBM's strategic and operational planning and in their use of technology. Such lessons would help any company in IBM's position thwart competitive forces in today's IT market, facilitating better management techniques, inventory control, efficient operations, and implementation of technology.

REFERENCES

- Applegate, L. M., Austin, R. D., & Soule, D. L. (2009). Case I-1: IBM's decade of transformation: Turnaround to growth (pp.5-38). *Corporate information strategy and management: Text and Cases* (8th ed.). New York, NY: McGraw Hill.
- Bryan, E. F. (1990). The world turned upside down? IBM in the 1990s. Retrieved from http://findarticles.com/p/articles/mi_m1038/is_n6_v33/ai_9325740/pg_3/?tag= content;col
- Gazis, D. C. (2010). The rise and fall of IBM in technological leadership. Retrieved from http://www.pasha.net/ibmbook/book.html
- Greenberg, A. (1993). *Akers away: IBM tags Gerstner new chairman/CEO*. Retrieved from http://findarticles.com/p/articles/mi_m0EKF/is_n1956_v39/ai_13720647/
- IBM at 100. (2010). Retrieved from http://www.ibm.com/
- Lindquist, D., Madduri, H., Paul, C. J., & Rajaraman, B. (2007). IBM service management architecture. *IBM Systems Journal*, 46(3), 423-440.
- Gerstner, L. V. (2011). In *Wikipedia*. Retrieved from http://en.wikipedia.org/wiki/Louis_Gerstner
- Moreau, D. (1995). From big bust to big blue: IBM and its vigorous rebirth. *Kiplinger's Personal Finance Magazine*. Retrieved from http://www.highbeam.com/doc/1G1-17108752.html
- Porter, M. E. (1985). *Competitive advantage: Creating and sustaining superior performance*. New York, NY: The Free Press.
- Zhu, K., & Kraemer, K. L. (2002). Ecommerce metrics for net-enabled organizations: assessing the value of ecommerce to firm performance in the manufacturing sector. *Information Systems Research* 13(3), 275-295.

This Page Was Left Blank Intentionally.