

IBM BRASIL: CORPORATE VENTURING FOR STRATEGY SUPPORT

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INTRODUCTION

IBM, one of the largest information technology companies in the world, is a leader in IT complete solutions involving services, consulting, hardware, software and financing. In its 94 years' presence in Brazil, the company has followed – and often times guided – industry advances and changes. IBM today offers end-to-end solutions adequate to companies of all sizes and business segments. IBM is present in more than 170 countries, and operates as a globally integrated company, employing approximately 400,000 people worldwide. In 2010, IBM global sales amounted to US\$ 99.9 billion.

Along the past few years, IBM completely changed its business model. The company divested several activities already commoditized, such as the PC and Printer segments, and grew its investments in key, high-value areas, such as consulting, On Demand Information and Services.

In Brazil, the company more than doubled in size in the past few years. Today, IBM installed one of its four worldwide service provision centers in Brazil, in Hortolândia, besides units in São Paulo, Rio de Janeiro and Brasília. These four units concentrate approximately 80% of IBM Brasil's work force. The company also installed offices in more than 15 Brazilian cities.

In 2009, the company established a research laboratory in the country, the 9th in the world and first in the Southern Hemisphere. IBM currently has research laboratories in the US, China, Switzerland, Israel, India, Japan and Brazil, dedicated to the quest of innovations for IBM's strategic business.

Besides its research laboratory, IBM Brasil counts on headquarters activities that encourage entrepreneurship worldwide, including its Global Entrepreneurship Program and the Venture Capital Group. Thus, the company has developed new business aligned with the company's strategic growth initiatives.

IBM'S GLOBAL CORPORATE STRATEGY

Considering the changes in course in the information technology (IT) industry worldwide since the beginning of this century, including the emerging importance of global integration, the introduction of a new computing model and the new requirements of customer integration and innovation, IBM reformulated its business, discontinued operations in commoditized segments, and increased its footprint in higher-value areas, such as services, software and integrated solutions.

IBM's current strategy key points are:

- To deliver value to client companies via integrated business and IT innovation.
- To change the business mix towards higher-value areas.
- To be the first globally integrated company.

These priorities reflect a considerable change in customer's consumption patterns, which no longer invest in "one-off products" and began to seek integrated solutions, that is, greater business value in their IT investments.

As part of this change, the company acquired 116 companies since the end of 2000, involving net investments to the tune of \$27 billion, completing its product and offerings portfolio.

IBM's competitive repositioning meant a significant improvement of the software and services segments share of the company's profits between 2000 and 2010, concomitantly with the decrease of the hardware/financing share in IBM's business in the period (Annex 1).

MAIN GROWTH FRONTS

Within its global corporate strategy, IBM selected four major fronts to develop its growth initiatives. They are:

Growth Markets:

Emerging markets worldwide have shown a historic economic growth, with the migration of their populations into the middle class and their economies being ushered into the global market. In the largest emerging markets worldwide, as China, India and Brazil, IBM is expanding its well-established skill and competence base, nearly doubling the number of its branches. In less developed markets, such as Africa, the company is leveraging anchor-customers in the banking and communications industries. IBM's recent partnership with Bharti Airtel Africa to supply wireless telecommunications to 16 south Saharan nations is one such example.

- **Smarter planet:** this includes IBM's view that the next revolution in the IT industry will be worldwide process and infrastructure instrumentation and integration, from power grids and power ducts to supply chains, security and traffic systems. IBM seeks to capture and analyze these systems' data, to develop greater efficiency, productivity and receptiveness.

IBM has invested considerable resources to capture growth-front related opportunities. In Rio de Janeiro, the company is developing a system to integrate information and processes in real time among the different city departments, including civil defense, transportation and weather systems,

seeking a sustainable operations infrastructure in the face of its unprecedented growth.

Similar infrastructure projects are being developed in other cities around the world, such as Ho Chi Minh City, Shanghai, Seoul, Sydney, Helsinki, Amsterdam, Rotterdam, San Francisco and Washington, D.C.

- **Business Analytics** and optimization: allow clients to identify data patterns not previously identified, understand their risk exposure and forecast the results of their business decisions with greater accuracy. IBM soon identified this emerging need and became a world leader in analytics, with 7800 expert consultants, the main non-academic mathematics function in the world and the acquisition of 25 companies to deepen its competences. IBM scientists were awarded in excess of 500 analytical patents. They are expanding technological frontiers through radical innovations such as the new computer called Watson, which won \$1 million in the questions and answers show called Jeopardy!, the most popular of its kind in American television.

With the application of Watson's advanced analytics, IBM is working to identify better diagnostics applications in the health area and potential interactions among medications, to improve support pages in help desk systems and to building financial scenarios.

IBM adopted an end-to-end approach to this growth front, providing solutions among companies and industries.

- **Cloud computing¹:** creating new computer models that will allow the delivery of high value-added IT services. The importance of cloud computing stems from the union of substantial underutilized technology reserves, with highly efficient virtualization and management, friendly user interfaces and an omnipresent broadband.

¹Cloud computing is a category of computing solutions in which a technology and/or service will allow users to access computer services on demand, as necessary, be they physical or virtual resources, dedicated or shared, independently of how they are accessed (by means of a direct connection, or a LAN, or WAN, or over the Internet). Normally, the cloud is characterized by self-service interfaces that will allow clients to acquire resources when and for as long as necessary.

IBM has helped thousands of customers adopt cloud computing, either through the construction of their own cloud-based infrastructures, or by providing security and integration services, or through the supply of business and infrastructure services (including advanced analytics, collaboration and IT infrastructure, with virtual servers and storage or access to tools for software testing). The company adds in the expertise of its consultants, cutting-edge technology and a cloud computing service portfolio that is focused on the company's needs.

CORPORATE VENTURING AT IBM

IBM's Corporate Venturing activities are conducted via the Venture Capital group, the Global Entrepreneurship Program and the company's research laboratory. Besides, the company develops merger & acquisition, joint venture and partnership activities that will not be approached in this paper.

IBM'S VENTURE CAPITAL GROUP

In 1999, when IBM made the decision to exit the application business, the company noted that the construction of a partner ecosystem that could work together, instead of competing against each other, would be of the essence for its market success.

As part of this strategy, IBM established its Venture Capital group in 2000. Based in the United States, it operates globally, searching for innovations; however, without equity investments in other companies. Its manner of operation is the proactive development of strategic relations with first-line VC companies, focusing on growth markets on emerging technologies that are important to IBM. The objective is the establishment of a strong ecosystem that favors innovation through the identification of new, complementary and relevant technologies designed for the industries and clients served by IBM.

IBM's VC group built a three-pillar value proposition:

1. Leading VC companies obtain insights into IBM's vision and strategy and the opportunity of yielding profits through their investments.
2. Startups gain access to IBM's technological expertise, market entry, greater credibility and validation of their solutions.
3. IBM gains the possibility of developing better technologies and potential partners for the development of innovative solutions

"This is a partnership where all stand to gain. IBM increases the number of commercial partners, while the partners improve their client portfolio and may achieve global reach", explained Claudia Fan Munce, corporate strategy vice-president and Directrice of the IBM Venture Capital Group.

IBM'S GLOBAL ENTREPRENEURSHIP PROGRAM

IBM's partner companies can benefit from the Global Entrepreneurship Program offered by the company, and developed for private companies in business for longer than three years, engaged in the development of software-based products or services. The program is an initiative that offers startups, at no cost, access to specific technologies of their target industries in a cloud-computing environment. Besides helping startups develop, promote and sell their products or services, the program facilitates the collaboration with other agents in IBM's ecosystem.

Among the benefits offered to companies are:

- Visibility because of the partnership with IBM.
 - Access to IBM's software portfolio at no cost, including technologies by industry, in order to accelerate development.
 - Possibility of working side-by-side with IBM's scientists and specialists, to develop new technologies.
 - Access to IBM's project managers for the necessary assistance in product development.

- Participation in networked tutorials and workshops to build business plans together with venture capital companies, government leaders, academicians and specialists in the global network of 40 IBM Innovation Centers.
- Participation in and interaction with the *developerWorks*, an IBM technological social network, to connect to other entrepreneurs and with more than eight million IT professionals worldwide.

Participation in IBM's SmartCamps, that seek to identify startups working on solutions aligned with IBM's Smarter Planet view. This type of program provides the startups with mentoring and networking. A direct contact is made with investment companies, academicians, marketing, communication and technology specialists that can help expedite the entry of solutions devised by the entrepreneurs in the marketplace.

IBM BRASIL'S RESEARCH LABORATORY

IBM Brasil inaugurated a research laboratory and a Natural Resource Solutions Center in Rio de Janeiro in 2011, focusing in oil, gas and mining.

IBM Research's laboratory in Brazil is the ninth IBM research laboratory in the world. Its mission is to develop innovation and technology for a smarter planet. Research conducted so far is focused on four areas: the discovery, exploration and logistics applied to natural resources; smart devices using advances in the semiconductor area; innovation with emphasis in large scale events, such as the World Cup in 2014 and the 2016 Olympic Games; and services sciences focusing on the understanding, modeling and simulation of systems focusing on quality, efficiency and productivity, said Dr. Robert Morris, IBM Research global laboratories vice-president.

The Brazilian laboratory's first major accomplishment was called PMAR, a weather prediction system created for the Rio Operations Center. This is a

mathematical model that can predict the incidence of rain and possible floods 48 hours ahead.

In June 2011, the research laboratory also inaugurated facilities at IBM's headquarters in São Paulo. IBM Research's laboratory is expected to have in excess of 100 highly qualified researchers over the next five years. In Brazil, scientists work in an integrated manner with the approximately 3,000 researchers that IBM has today, in laboratories installed in five countries.

The Brazilian research laboratory works in an integrated manner with the Natural Resource Solutions Center (NRSC). The Center's objective is to assist companies operating in the oil & gas and mining industries to speed up the adoption of innovative business technologies and strategies.

NRSC is the third IBM Excellence Center to focus on oil & gas, and the second dedicated to mining. The company pools the knowledge contained in other centers worldwide to develop a collaborative effort with clients and business partners.

The new space enables executive workshops, architecture seminars, concept demonstrations to clients, real time technological solution research and demonstrations. Among the Center's intelligence areas are asset management, sustainability and logistics.

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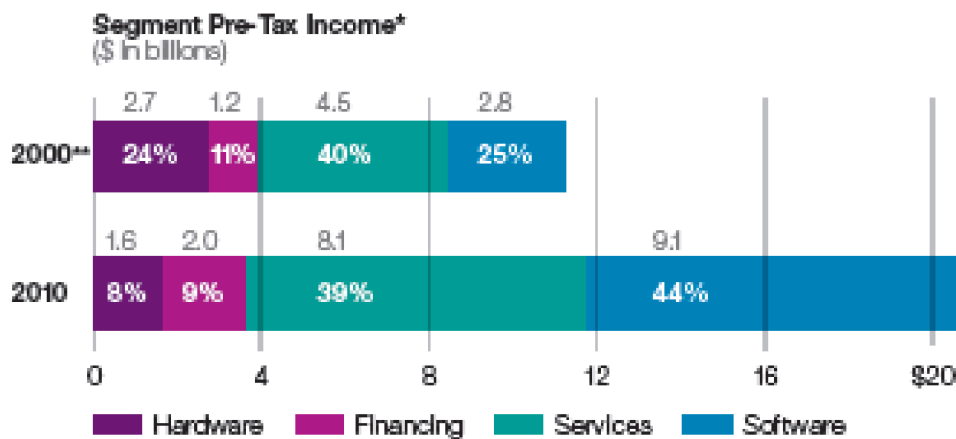
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ANNEX 1

IBM SALES BY BUSINESS SEGMENT (2000/2010)



*Sum of external segment pre-tax income not equal to IBM pre-tax income.

**Excludes Enterprise Investments and not restated for stock-based compensation.

Source: IBM Annual Report, 2010.