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The Art of Winning an Unfair Game: Cybage & India's IT Industry

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Abstract:

In this teaching case, we consider the challenges and opportunities faced by Cybage, one of the many players in the Indian software and information technology (IT) services sector, as it co-evolved with India's knowledge economy. Despite its small size and a last-mover disadvantage, since its founding in 1994, Cybage had enjoyed growth rates higher than rest of the industry. Had Cybage developed a set of capabilities that differentiated the company from its peers and enabled it to expand from a handful of IT practitioners to a company with nearly 4,000 professionals and a global footprint? Or did Cybage's growth merely reflect the general expansion of India's knowledge economy? In this case, we overview the Indian IT industry's evolution and highlight the concepts of entry timing, IT capabilities, service-dominant logic, and value co-creation by considering questions regarding Cybage's key differentiators and capabilities, avenues of future growth, and the applicability of Cybage's current capabilities to other domains of IT service provisioning.

Keywords: India, Outsourcing, Offshoring, Resource-based View, IT Capabilities, IT-enabled Capabilities, Service Dominant Logic, First-Second-Last Mover, Timing of Entry, Value Co-Creation.

Editor's Note: A teaching note for this case can be obtained from kathuria@hku.hk.

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The problem we are trying to solve is that there are rich teams and there are poor teams.

Then there is 50 feet of crap and then there is us.

It's an unfair game.

—Billy Beane, Oakland Athletics 2001 baseball team GM¹

1 Introduction²

Arun Nathani, the CEO of Cybage, felt the roar of the aircraft's engines and its acceleration as it gathered speed on the runway. As the plane left the ground, he closed his eyes and let his mind wander back to the question that had been bothering him for the past few weeks—the question that was to form the agenda of the strategy meeting he was going to chair on reaching his office in Pune, India, at the end of the flight. The question of whether Cybage's current capabilities and strategy could enable it to continue excelling in the art of winning an unfair game as it entered its third decade of existence.

The art of winning an unfair game had been a key concern for Arun Nathani (Founder and CEO of Cybage) when he launched Cybage, an information technology (IT) services vendor, in 1995:

We can never reach the scale the big companies have because we don't have first-mover advantage like the other large Indian IT service players. We came to existence when they were already big players. Compared to TCS, even if we grow twice the rate, it will still take us 30 years to catch up. (Nathani, 2013)³

To address this strategic question, in 2005, Cybage launched ExcelShore, its flagship proprietary and patent-pending business management software system. For almost a decade, ExcelShore had enabled the company to leverage and manifest its thought leadership in the global IT service industry and, thereby, compete against the large, established Indian IT services firms:

Leveraging ExcelShore imbibes operational excellence into the DNA of our IT service offerings, i.e. how efficient our services can be provided so that per unit price, we can deliver better quality, better consistency, and peak performance. (Nathani, 2013)

Headquartered in Pune, India, Cybage was one of the plethora of players in the Indian IT software and services sector. Despite the intense competition in this industry, over the past two decades, Cybage has expanded from a handful of IT practitioners to a company with a global footprint of nearly 4,000 professionals. Cybage enjoyed a compound annual growth rate (CAGR) greater than 15 percent in the past five years, which compares favorably both to the industry's top five providers' average growth rate of 13.3 percent between 2011 and 2012 (Shetty, 2013) and to the growth of the IT industry as a whole (see Figure 1). However, Nathani questioned whether Cybage's growth was attributed to the general expansion of India's knowledge economy or whether Cybage had developed a set of capabilities that differentiated the company from its peers. What were these capabilities and was ExcelShore responsible for some of these? Were these capabilities and the ExcelShore-based strategy the key to the art of winning an unfair game?

¹ Billy Beane's speech from *Moneyball*, a biographical sports drama adopted from *Moneyball: The Art of Winning an Unfair Game* by Michael Lewis.

² We have prepared this case as the basis for class discussion rather than to illustrate either effective or ineffective handling of an administrative situation. We do not intend that statements herein be excerpted as fact outside of the class discussion.

³ We source all quotes attributed to Arun Nathani from personal communication and teleconferences held in 2013 unless otherwise specified. We thank him for his cooperation and willingness to examine his management perspectives and practices.

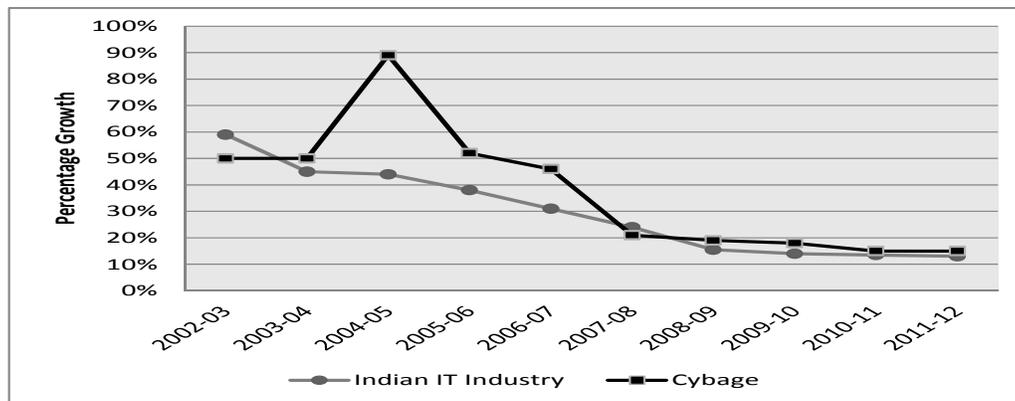


Figure 1. Comparative Growth Rates (Cybage)⁴

2 India's Knowledge Economy

India had long been an agrarian economy with a nascent service sector. In the mid-1980s, the Indian Government began to encourage foreign investment in technology by removing tariff and quota barriers. Over the following decades, the Indian knowledge economy consisting primarily of information technology (IT) services, information technology-enabled services (ITeS), and business process outsourcing (BPO) services witnessed a high rate of growth and wide reaching transformation (Kathuria, Porth, Kathuria, & Kohli, 2011). The Indian technology workforce outcompeted peers elsewhere in Asia and Eastern Europe in attracting technology-savvy Western firms for performing activities related to technologies and information production and dissemination due to three main reasons: the inherent cost arbitrage advantage granted by virtue of global foreign exchange rates, high educational standards of young Indian programmers, and these programmers' command of English (Khuntia, Saldanha, & Kathuria, 2014). This phenomenon became well known as offshore outsourcing or simply offshoring.

The year 2000 computer date problem (a.k.a. "Y2K" projects) was a crucial trigger leading to an unprecedented wave of outsourcing demand in India to supplement the inadequate supply of programming work in developed markets. Y2K work gave Indian companies the resources, international credibility, and project management skills to progress to more-complex and higher-value contracts. Between 1990 and 1999, the annual growth rate of the Indian IT industry was more than 50 percent, which gave rise to star performers such as Infosys, Wipro, NIIT, Satyam, Tata Infotech, Pentafour, and Tata Consultancy Services (Guha & Taylor, 1999). These companies were grouped in what was then known as the tier 1 league⁵. To take advantage of these trends, by the late 1990s, several U.S.-based firms had also set up their own development facilities in India (e.g., Perot Systems, Cognizant, and Mphasis). However, rapid growth was accompanied by sceptics who questioned whether the growth could be sustained once Y2K projects were completed. Several factors validated sceptics' viewpoints at the time: the low-quality state-owned telecommunications infrastructure, the 25 to 30 percent rise in wages of the talented pool of programmers, and inevitable increase in competition due to an increasing number of IT firms who were all betting high on the growth brought by the technological advancement of the Internet and e-commerce businesses.

Despite these concerns, over the next two decades, some market participants grew ever bigger while others disappeared due to the consolidation process. In 2004, Nasscom, the association for the Indian IT & BPO industry reported that the industry had matured because a large number of mergers and acquisitions were documented and India's knowledge economy was hailed as the world's back-office. By 2012, major Indian IT companies had started reporting significant decline in the enterprise value/earnings before interest, tax, and amortization measures and declining growth in sales and profit (Newsfactor, 2012). Market analysts saw these results as reflecting the fact that Indian IT companies were at an

⁴ More information on the ExcelShore model can be found on the Cybage website at <http://www.cybage.com/pages/excelshore/excelshore.aspx>

⁵ Nasscom, the Association for Indian IT & BPO Industry, provides a ranking of Indian IT companies at <http://www.nasscom.in/industry-ranking>. In 2014, Tier 1 included 11 companies, which together accounted for 40 percent of industry revenue.

“inflection point, from which they would continue to grow by working harder but receive nothing or little enterprise value in return.

This slowing growth was a result of several developments. First, there were political interventions and compulsions in developed nations to preserve jobs, which slowed the outsourcing of IT-enabled services. Second, there were new market entrants from other emerging economies. The Indian software industry had traditionally been based on the labor cost arbitrage model in juxtaposition to service providers in developed countries (Budhwar, 2006). However, this model was becoming less sustainable in India as entrants from China, Russia, the Philippines, and South Africa continued to flood the global IT market with low-cost skill services, which was the position that most Indian providers occupied in the IT services value chain. Nevertheless, the Indian IT companies responded to the pressure of global new entrants by setting up captive units or even outsourcing outside of their home country (Kathuria & Konsynski, 2012). Third, an industry shakeout triggered by excess supply and capacity had created downward pricing pressure. Finally, many potential outsourcers set up their captive units in India. These decisions were based on assessments of India remaining a low-cost center in the long run and, thereby, provided greater benefits to own than to rent, brand implications of quality, and possible loss of control over transactions and data.

Nevertheless, despite these obvious indicators of waning times, the IT sector in and by itself formed a powerful modernizing force in India which continued to drive the country's economy. According to Nasscom, the IT industry had exports of USD\$76 billion in the fiscal year 2012 and USD\$86 billion in 2014 and registered growth rates of 10 to 12 percent each year (PTI, 2013). The segment also generated net employment over the past two decades and reached nearly 11 million employed individuals as of 2012.

2.1 Service Logic and India's IT Industry

Between 2000 and 2010, the global IT outsourcing market increased from USD\$119 billion to USD\$425 billion (Teletech, 2011). India's IT industry, comprising more than 15,000 service providers, had a major share of the global market. By 2014, India's IT industry had total revenues of USD\$118 billion, which accounted for 8.1 percent of India's GDP⁶. The company had more than 50 multi-billion dollar and multinational IT companies and over 200 medium-sized to small IT software enterprises in Pune, India, where Cybage's headquarters were located⁷.

The growing importance of IT services was not accidental. Academics had long noticed the phenomenon and coined the concept of service-dominant logic (“S-D logic” or SDL) as compared to the goods-dominant logic (“G-D logic”) that was prevalent in the manufacturing-oriented thinking of prior decades. Vargo and Lusch's (2004) theoretical paradigm pointed out the important implication of “the distinction between goods and services as alternative types of products [reflecting] a central aspect of the (goods-dominant) logic orientation” (Vargo, Lusch, & Akaka, 2010; pg 141). Table 1 presents the four foundational axioms of SDL.

Table 1. Foundational Axioms of Service Dominant Logic

1. Service is the fundamental basis of exchange.
2. Value is always co-created between service providers and customers.
3. All social and economic actors are resource integrators.
4. Value is uniquely and experientially determined by the beneficiary.

At heart of the transition of the Indian IT industry was the fact that companies competed to offer greater value to customers at lower cost and strived to differentiate themselves through distinguishable technological, managerial, or operational capabilities in the form of services⁸. The manifold growth that the Indian IT industry witnessed resulted in two parallel trajectories: 1) the extant trajectory of lower knowledge-intensive activities (i.e., the operations-level activities) and 2) the growing trajectory of higher level of specificity, domain expertise, and core activities of the clients' business—the higher knowledge-intensive S-D logic businesses with ever greater reliance on intellectual capabilities.

India's IT industry included BPO, IT services (operations based), software products, ITeS, and e-business. The industry had its roots in BPO, such as low-cost call centers, software and hardware maintenance and

⁶ For details, see <http://www.nasscom.in/indian-itbpo-industry>

⁷ For details, see http://www.pune.ws/in/?list=it_software_companies&s=3

⁸ See Appendix 1 for a taxonomy of IT capabilities.

other operations-level activities (including network designing and engineering), operation and network management, help-desk operations, and datacenter management. Over time, the industry progressed to more knowledge-intensive and value-adding services because it had matured and industry players accumulated skills and experience. Software development, ITeS, and e-business belonged to the higher level of specificity trajectory and required greater domain expertise and, therefore, higher intellectual capabilities. System conversion and integration, application solution software, system/utility software, and application tools categories together were referred to as software development services. While less intellectually-intensive activities such as software support that relied on a large personnel pool witnessed steady growth, greater growth opportunities at higher levels of the intellectual pyramid, such as in the area of software development, were forming.

3 Cybage's Focus on Internal Capabilities and Thought Leadership

Founded in 1995 and headquartered in Pune, India, Cybage was a brainchild of current CEO Arun Nathani and his brother, Deepak Nathani. Cybage grew from a team of 19 in 1997 to over 3,700 in 2012 to occupy four development facilities in Pune, Hyderabad, and Gandhinagar in India and one in Redmond, USA. It also had five overseas business development offices in New Jersey, Georgia, Texas, California in the USA and London, UK. The company's staff size grew in a moderate pace compared to its financial growth (see Table 2), and the company received a number of industry-respected awards for its outsourcing development service for global independent software vendors.

Table 2. Cybage Staff, Projects, and Revenues

Year	Number of employees	Number projects acquired	Revenue in USD\$ (mil.) ⁹
1995	2		- Not Available -
1996	3		- Not Available -
1997	6		- Not Available -
1998	12		- Not Available -
1999	21	1	- Not Available -
2000	89	1	- Not Available -
2001	141	4	- Not Available -
2002	290	12	- Not Available -
2003	489	16	6
2004	965	21	9
2005	1192	40	17
2006	1948	59	26
2007	2428	49	38
2008	2807	69	46
2009	3016	46	55
2010	3544	45	65
2011	3835	61	- Not Available -
2012	4194	67	- Not Available -

3.1 Setting up a Differentiated IT Business Model

In 1995 when we set up, we were a product company for the Internet, not in any particular industry. We met technology companies in the Silicon Valley, and Farallon Communications who became our long-term friends and contact points. We continued partnering with technology development companies as we grew. In those days offshore development center was a very popular model of work and it usually meant part-developing the software and part-testing it. One of our earliest experiences was to work with Symantec. After we understood the nature of the

⁹ Cybage provided information on its revenues.

job required, we formed a team called ourselves the ODC, and then we worked directly with Symantec as an extension of their team here in India. In our case, they paid us on the monthly basis, a form of Time and Material relationship as we called it, which was not based on a project priced in one go. The same model has grown in scale, but not changed over the years. (Nathani, 2013)

In the first few years, the Nathani brothers worked with Symantec, Google, Microsoft, and Dell and, thereby, gained a credible status as an independent software vendor (ISV). These global technology giants outsourced product development to software vendors such as the Nathani brothers in India and, thus, helped create an upper-stream supplier in the Indian IT value chain. Payment terms for these types of projects were (and continue to be) based on input measured in person hours.

Reflecting the dual trajectory of the Indian IT industry, the Nathanis concentrated their management efforts in developing the higher-end services of Cybage's portfolio. Arun Nathani said:

We worked as ISVs with companies such as Symantec, Google, Microsoft. We do software development on their products and applications. BPO on the other hand is support work, it's operation-driven. We have 500 people for that, or about 11% of our workforce. That's why we don't position ourselves as BPO, rather we are a software development vendor.

The Nathani brothers positioned services to be Cybage's core business strategy and developed the company's competences around services that explored and solved customer's IT problems by integrating their personnel into their customer's organizational structure. By doing so, Cybage was able to gain keen insights into their client organizations' business processes. This ability not only empowered Cybage to develop software that was more closely aligned to the needs and strategy of clients but also reduced errors in judging client requirements. Such a business strategy was soon proven to be non-idiosyncratic and reflected the Nathani brothers' visionary leadership qualities. Around the same time frame, IBM was among the most notable companies to establish a corporate business strategy to transform its core business from a hardware producer to a service-oriented solutions provider. In 1993, IBM's service unit represented 27 percent of revenues and the software unit didn't exist. By 2001, the services and software combined to represent 58 percent of total revenue, and the exceptional change was attributed to Lou Gerstner who took the rein of IBM between 1993 and 2002. From a company that provided little in the way of consulting services in 1990, IBM became the largest services company with more than 190,000 employees in their global technical services and global business services units (Harreld, O'Reilly, & Tushman, 2006).

The nature of Cybage's projects gradually changed from short-term projects to long-term projects. Much of this change was due to the integration of Cybage personnel into customer organizations because it had induced a relationship-based rather than a transactional-based approach. This effort at building relationships was reflected in the increasing number of not only new but also retained customers. However, Cybage was not alone in following such an approach. Observing the transition of the industry's structural change from a short-term initiative to a long-term option and from non-core projects to core project/products development, the Nathani brothers identified an industry idiosyncrasy. Based on their experiences of working with several overseas clients, they observed that, given the growth of general offshore service providers between 2000 and 2005, the billing rates of the services had neither seen significant reduction nor an increasing margin as expected due to increasing economies of scale.

Being a comparatively small-scale operation in India amidst a booming economy driven by the growth of the Internet and information technology, the Nathani brothers rejected the argument for premium pricing put forth by large players. Rather, they focused on an inherent risk commonly found in offshore application services (i.e., inefficiencies in operation, management, and execution of services when customers bought IT solutions from IT vendors). They observed and analyzed that inefficiencies derived from less-than-optimal use of people, process, and technology eroded into the profits that economies of scale achieved. As a result, IT service providers' financial performance reflected neither a reduction in fees and charges nor increased margins. Furthermore, as seen in other firms, ineffective use of staff could also result in low business environment morale and inefficient work culture.

Having identified one of the key problems in the industry, the Nathani brothers established their roles as thought leaders by generating and publicizing studies and analyses that illustrated wasted time and resources, an investment risk when a customer engaged IT vendors to provide products or services. While educating potential customers, Cybage's staff were taught to develop IT solutions that not only solved initial IT problems that a customer had but also reduced inefficiencies, demonstrated and proven,

that commonly arose in the relationship between IT vendors and their customers. This approach was a key advantage that clients received if they engaged Cybage instead of its competitors.

3.2 Delivering a Unique IT Artifact – ExcelShore

*Our primary opportunity is not the servicing of the vast needs of our customers, as every industry is full of needy customers. Rather, our key opportunity is exploitation of the inefficient ways in which these customers' needs are currently being serviced by our competitors. Logically, there is no end to improve efficiency. In other words, if the goal is to improve inefficiency, there is no end to it. This is the philosophy behind our business.*¹⁰

Driven by the challenge to develop an operational model to deliver a service that could optimize the use of a company's staff, processes, and technology at every step of the resources management process, the Nathani brothers saw a need to differentiate Cybage by focusing on operational excellence and a built-in optimization of the service and products that it offered to its clients. Based on this logic and with the collaboration of a team of 20, they developed and trademarked ExcelShore in 2005.

Initially developed as a tool for Cybage's internal use, ExcelShore computed and analyzed client's data pertaining to business and managerial resources. According to Arun Nathani, they developed ExcelShore to approximate decision making of the human mind. What was done manually (i.e., analyzing spreadsheet data and making a decision) was to be electronically performed and generated. Acting like a dashboard, ExcelShore could process a wide range and multiple levels of data and generate a recommendation that had optimally considered all data combined. The artefact acted to replace decision making stages in a process and help minimize, or even eliminate, human errors and factors attributable to perceptual prejudices and norms. For example, what was the optimal number of technicians that should be maintained in a given software company to minimize their bench-time? ExcelShore could provide recommendations based on data reflecting the company's business history, current operations and prospective projects, and external factors concerning the industry as a whole.

Cybage tested and used the early versions of ExcelShore to improve how it allocated technical and managerial resources to different client projects. As multiple rounds of fine-tuning improved the software's predictive accuracy, Cybage commenced providing it to clients as a value-added offering. For clients, two teams operated ExcelShore: the business development and relationship management teams. At the beginning of a relationship with a client, the business development team collected seven categories of data (i.e., revenue, industry vertical, sub-vertical, team size, billing rate, number of locations, and points of contacts). ExcelShore provided solutions, recommendations, or indexes that helped enrich the data quality management process and improve dashboard usage effectiveness on the client's end. It also helped key stakeholders monitor their key performance indices effectively (see Figure 2). To keep ExcelShore's outputs current and up-to-date, the relationship management teams regularly updated client's data. Thus, the operation of ExcelShore leveraged and strengthened Cybage's relationships with its clients and was an embodiment of the SDL by co-creating value for customers by using customer data.

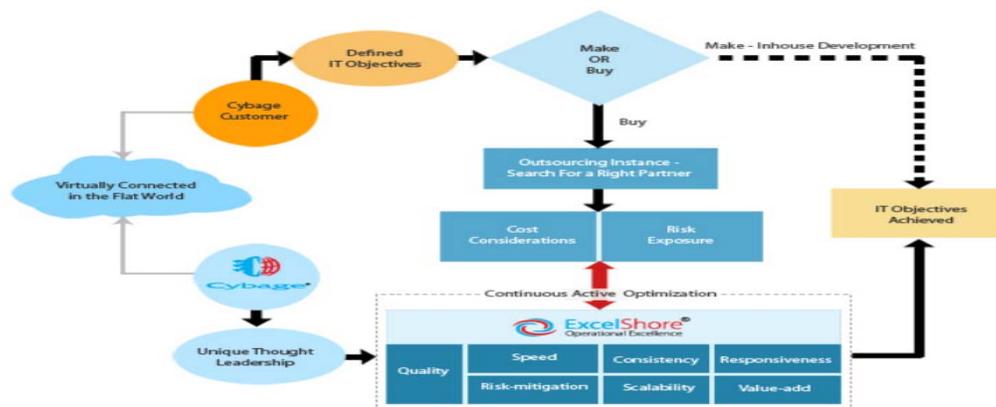


Figure 2. Cybage ExcelShore Model (Cybage)¹¹

¹⁰ Chairman's speech, Cybage Corporate Presentation (September 2012).

¹¹ More information on the ExcelShore model can be found on the Cybage website at <http://www.cybage.com/pages/excelshore/excelshore.aspx>

ExcelShore attempted to approximate the most objective reality possible to greatly improve operational excellence in an organization. Furthermore, it was also a self-renewing model. The more data it had access to, the more acute the model could become and the more accurate the final output could be. Therefore, if provided with large quantities of accurate industry-specific data, ExcelShore could specialize in a specific industry.

ExcelShore was a forerunner of the trend of next-generation dashboards that leveraged big data analytics to provide predictive and prescriptive insights. According to *Information Week*:

Next-generation dashboards keep workers focused on the right metrics and inform in a way that lets employees take preemptive action. Key features enabling such dashboards include in-memory processing, the ability for users to mash data together and to assemble their own dashboards, key performance indexes, faceted search, mobile, and the ability to link insight to action. With big BI platform vendors IBM, Microsoft, and SAP generally lagging the dashboard capabilities provided by specialty vendors, customers will continue to mix and match systems from different providers.... (Howson, 2013)

3.3 Cybage Cost-setting Strategy

In terms of pricing, the large-size providers generally set the industry norm. They reasoned their premium charges based on their size, service/product complexity, and greater consistency of service/product deliveries. For example, Tata Consulting Services (TCS), which was the first Indian software exporting company from when it exported software solutions to Iran in 1968, was, and remains till date, the industry leader and role model for other Indian IT companies. For a long time, TCS was able to command a price of its own liking. Similarly, Infosys Technologies, a darling of the stock markets and industry bell weather, was able to maintain a 30 percent operating margin after tax through premium pricing that was predicated on the ability to deliver consistently high-quality IT services.

Cybage's formula of service fees considered the kind of work to be executed, the kind of skill sets required, complexity of the work, duration, the domain vertical (such as healthcare, manufacturing, banking, etc.), and the horizontal piece of software product the clients wanted to outsource (such as development, maintenance, testing, quality assurance, documentation, user interface, etc.) (Cybage, 2013). The fee structure realized a cost-reduction strategy for Cybage that enabled it to break the pricing monopoly of tier 1 firms without compromising its company image. By considering a combination of factors listed above, concurrent with a fundamental focus on improving efficiency per unit price enabled by using ExcelShore, Cybage could offer prices that were generally 20-25 percent lower than its larger-scaled competitors without having to compromise its service quality and consistency.

Cybage's value creation formula was increased efficiency = higher productivity = greater output per unit time. Based on this logical flow, Cybage invented its own logic-driven pricing strategy that also posed as a market differentiator, which was an important formula for their customers because most organizations focused on implementing technology rather than on realizing the expected business benefits (Peppard, Ward, & Daniel, 2007). Cybage not only delivered but also empowered clients to realize the value of Cybage's IT services by assisting the client's IT and non-IT executives to understand return-on-investment calculations and true benefits that IT investments generated. Thus, the transferal in the relationship went beyond a simple exchange of a product and payment; rather, it was founded on knowledge exchange and value co-creation.

3.4 Expanding Domain Segments

The Nathani brothers started with offering IT productivity tools and software applications but quickly shifted to providing and supplying offshore (software) development services to global IT vendors. Through partnerships based on the offshore development center (ODC) model, Cybage had co-developed and co-engineered products for more than 170 software firms, many of them, including Symantec, Google, Microsoft and Dell, listed on the NASDAQ¹².

Nevertheless, the hi-tech domain was not the only area of specialty for Cybage because the company found new growth avenues in other domains such as media and entertainment, travel and hospitality,

¹² For more information on Cybage clients, see the Company Profile in the Cybage Corporate Brochure at http://www.cybage.com/_layouts/cybage/images/expoimages/cybage_introduction_document.pdf

retail and distribution, and healthcare and life sciences. The choice of domains was another successful strategic decision that Cybage's leadership team took. Arun Nathani said:

A lot of Cybage growth has been a result of not just picking the right vertical focus areas, but also not pursuing the wrong industry verticals. For example, BFSI [banking, financial services and insurance] and manufacturing verticals which form the chunk of conventional Indian IT industry were segments not pursued by Cybage because that space was already crowded by service providers. Instead, Cybage chose verticals which got more influenced by the advent of Internet, such as travel because of online influence, retail because of e-commerce influence, and media because of online advertising and marketing. This kind of organic focus on verticals which are more influenced by emerging technologies have resulted in phenomenal success for Cybage.

The company entered these new domains by exploiting referrals from close contacts that resulted from successful relationships and leveraging its successful track record. Cybage was able to leverage ExcelShore to develop deeper relationships and achieve increased follow-on sales in these new domains as well, which showcased ExcelShore's applicability across multiple industries because it optimized the common input parameters that go into software development.

3.5 Internal Value-Adding Capabilities of ExcelShore

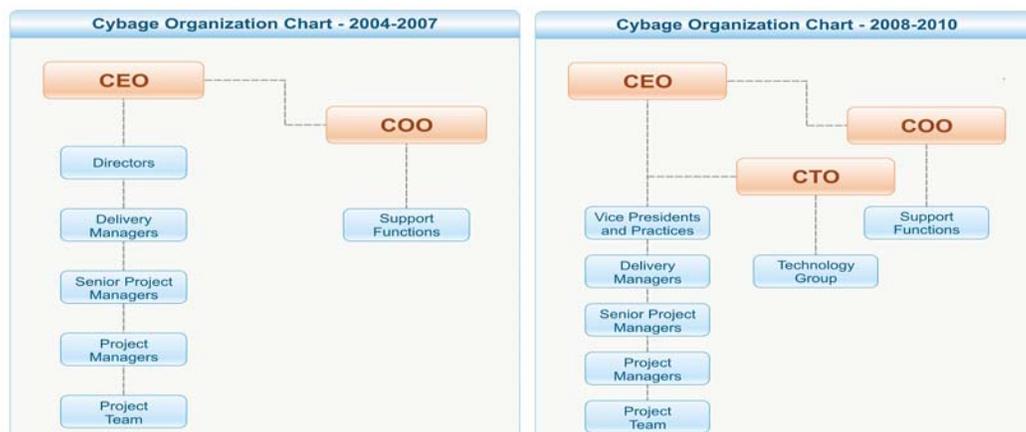


Figure 3. Cybage Organization Charts 2004-2010 (Cybage)

Between its inception in 1995, to two years after ExcelShore was launched in 2005, the number of Cybage staff increased at a rate of more than 100 percent year-on-year from one to almost 2,000. However, the rate of employee growth tapered off sharply after 2007 and expanded at a moderate and steady pace of 10 percent (see Table 2). This lower employee growth was due in part to the greater efficiencies in operations and resource management that ExcelShore supported. From a wider perspective, ExcelShore was a "convergence" of business intelligence and business performance management (Eckerson, 2005). Between 2004 and 2005, the year when ExcelShore was launched, the number of staff almost doubled. From the original 20 staff working on ExcelShore, the software division nowadays requires 200 professionals to maintain, improve, and expand businesses (see the evolution of Cybage's organizational charts in Figures 3 and 4). The change of the company's organizational structure corresponded to the greater use and application of ExcelShore beyond the IT industry.

Because ExcelShore worked as a performance dashboard, the Cybage's senior officers and managers could use the IT system to help them to clearly and concisely communicate key strategies and goals to all employees on a personal basis. Cybage's management understood that a performance dashboard could be a powerful agent of organizational management and change, and, when deployed properly, it helped the organization to focus much more sharply and precisely on its resources distributions, allocations, and operations to achieve targeted goals¹³. Overall, the internal use of ExcelShore permitted a leaner

¹³ According to Eckerson's 2005 book (Eckerson 2005), the majority of organizations already used or were developing a performance dashboard that adhered to a specific methodology for aligning organizations with corporate strategy. Performance

organizational structure, more efficient resource use, and the ability to meet delivery quality, delivery timeline, and sales growth targets.

3.6 Next Stage Development

Could a change of technologies (a disruptive technology) have posed a threat to the ExcelShore model? According to Cybage founder Nathani, the answer lay in the company's position in the value-chain. Given the broad-ranged and high-ended customers that Cybage has served, Cybage has enjoyed the position of serving upstream technology companies and being able to reciprocate those forerunners' first-hand market information. By using lower prices to pass on efficiency improvements gained through ExcelShore, Cybage became a partner of choice for these clients. Furthermore, Cybage has also provided objective consultations to customers who sought offshore product engineering. According to Cybage, the guiding principle of a successful partnership between clients and an IT provider was to maximize return on investment, which stresses the importance of the software provider's role to manage cost and time, or simply, in efficiency management. ExcelShore permitted Cybage to manage efficiency and, thus, be successful in its relationships with clients. While many smaller tech start-ups aimed to find a buyer as a way to capture a return of investment, Cybage did not consider a potential buy-out an option. Nathani said:

No we don't foresee a potential buy-out. What am I going to do with all that money? I will have nothing more to do whereas now I have so much to do. There is no end to growing ExcelShore— you can always improve your efficiency.

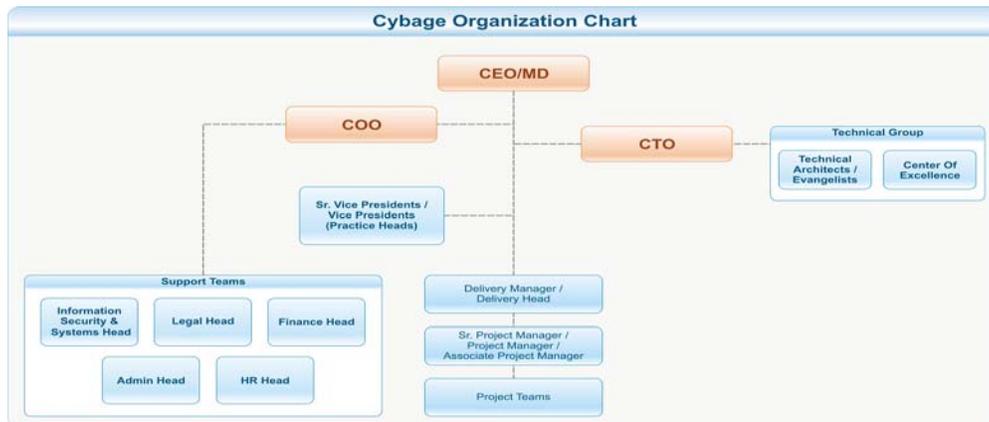


Figure 4. Cybage Organization Charts post-2010 (Cybage)

4 Epilogue

The pilot's voice over the intercom interrupted Arun Nathani's reminiscence about Cybage's journey. As the airplane banked on its landing approach, the lights of Pune twinkled in the dusk. He looked out over them and glanced over the note he planned to use at the meeting:

Guided by the fundamental objective that operational efficiency management is a key responsibility of an IT service provider, Cybage's capabilities and ExcelShore driven strategy have made the company an invincible competitor against big players of the industry. Will these capabilities continue to serve us for the next 10 years by enabling Cybage to perfect the art of winning an unfair game?

Nathani hoped that the strategy meeting would provide answers to various questions that were critical to the continued success of Cybage. What capabilities differentiated the company from its peers? Had these capabilities enabled Cybage to overcome second- or last-mover disadvantages? What was the role of

dashboards were being implemented to communicate strategy, refine strategy, increase visibility, increase coordination, increase motivation, give a consistent view of the business, reduce costs and redundancy, empower users, and deliver actionable information.

Cybage's service system and value co-creation? Most critically, could Cybage's capabilities be applied beyond IT service delivery to deliver any sort of IT-enabled services and, thus, enable Cybage to continue exceling in the art of winning an unfair game?

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Appendix A

While there are several types and taxonomies of capabilities, (Feeny & Willcocks, 1998) suggest that there are nine core IT capabilities that companies ought to focus on, instead of IT as a concept, as core to the business' future capacity to exploit IT successfully:

- 1 Leadership
- 2 Business systems thinking
- 3 Relationship building
- 4 Architecture planning
- 5 Making technology work
- 6 Informed buying
- 7 Contract facilitation
- 8 Contract monitoring, and
- 9 Vendor development.

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