EVOLUTION OF TATA CONSULTANCY SERVICES: A CASE STUDY

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ABSTRACT
TATA Consultancy Services Limited (TCSL) is a multinational information technology (IT) service, consulting and business solutions company headquartered in India. TCS, a subsidiary of the Tata Group, operates in 46 countries and is listed on the Bombay Stock Exchange and the National Stock Exchange of India. TCS is among the largest Indian companies by market capitalization and among the largest India-based IT services company by revenues. This case charts the conceptualization and evolution of the company.

Keywords: Community building, Human resources, Market capitalization

INTRODUCTION
The period of 1960s is known to be a hard time for India. The reasons owing to this were the license raj, food shortages, regulations, red tapism, trade deficits, socialist government controls on Indian economy, the 1962 war with China, the 1965 war with Pakistan etc. This antagonistic atmosphere compelled JRD Tata to be proactive in setting up a business unit where all the data of the Tata Group could be processed. Even though India did not keenly look at computers and technology in that era, yet JRD gave a green signal for an in-house data processing unit.

Members of the Tata Administrative Service (TAS) were to be imparted training to be a part of this unit. Yash Sahni, in 1962, was chosen to be the team supervisor. He hailed from a statistical background and had worked with NCAER (National Council of Applied Economic Research). The team was then not known by any official name. Tata Sons made an investment of about Rs.50 lakhs to set up this team that would provide service to all companies of Tata Group. However, these individual companies were reluctant to share their data records with the newly formed team. It was time to seek work from the non-Tata companies and for which a mainframe computer was required. In 1964, IBM data centre began to be used for this purpose.

The team then started looking for young, innovative and aggressive people to bring in expertise in areas like computers, engineering, operations etc. Top talent from MIT was recruited.

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There was meagre work from private industries. The team’s structure was diffused with the staff being on different Tata companies’ payroll. In 1966, the entire unit came under the Tata Services.

**Origin and Development of TCS**

The unit came to be called as Tata Consultancy Services. In the next few years, TCS purchased more hardware equipment and started expanding area-wise acquiring more buildings. In 1968, the amount of banking work coming to TCS increased by huge bounds. By mid 1970s, the group’s strength grew to 500 professionals. As the government and private companies expressed no interest in data processing services at that time, TCS positioned itself as a Management Consulting company. This proved advantageous, as after the initial client-engagement process, automation and electronic data processing work was offered to the client. By that time, IIT graduates with their Master’s in computer sciences had begun to be recruited. The client base grew to big names such as HAL, DDA, Dept. of Atomic Energy. TCS came to be seen as a thought-leader and pioneer of IT industry.

In 1979, TCS became the first Indian IT software and services company which was permitted to set up a unit in New York. The key customers were IGIC, American Express etc. The concept of offshore/onshore working came into practice and the time difference was exploited to provide a 24-hours-a-day service to the clients, which was a novel idea at that time. The 1980s saw TCS as a global company. TCS was then venturing into new areas such as financial services, capital markets etc. 1990s was a period of economic and financial liberalization. The Harshad Mehta scam of 1990s brought into lime light the need of international standards. By now, the U.S. and the UK markets comprised about 75% of TCS revenue.

With the advent of 21st century, the Y2K problem surfaced throwing the entire IT industry into chaos. For India, however, it meant a pool of opportunities as the West looked towards India for help. TCS got a chance to scale up its operations. Thanks to its technical lead in automation, technologies and processes, the firm got a bulk of business. The next few years of telecommunications liberalization saw TCS doing business with Nortel, a leading telecom equipment supplier. Telecom became an area of expertise and a significant contributor to revenues.

**Human Resources at TCS**

Entry of TCS into new domains necessitated firm reorganization around industry, service lines and geographies. This helped the concept of cross-sell and up-sell flourish. Each region was doing business with multiple industries and service lines, thereby finding out what TCS could do to help the customer more. Following this, where sales people would constantly try to find out multiple ways in which they could help customers, the practice of business process outsourcing (BPO) emerged.

The period of 1997-2002 saw the TCS family double its employee numbers, to over 20,000. This underscored the importance of recruiting quality talent in sufficient numbers. As of today, TCS recruits 30,000 employees every year. Beginning 1997, TCS started the Induction Training Programme at Trivandrum. This was the first step towards formalized and integrated training. It not only imparted technical skills but also soft skills, foreign language courses, cultural awareness etc. In 2003, it was renamed as Initial Learning Programme to highlight the
shift from training to learning. In the next few years, these centres were opened up at Ahmedabad, Guwahati and Chennai. Today the new recruits have a 2.5 months long training at these ILPs.

**BUSINESS GROWTH**

The years after 2000 saw inorganic growth of the firm. In 2001, TCS acquired 51% stake in CMC, its first ever acquisition. In 2003, a JV was formed with Grupo TBA in Brazil. In 2005, a local company called Comicrom was taken over in Chile and FNS in Australia. Similarly other acquisitions such as Pearl Assurance, TKS-Teknosoft, CGS etc. were made in subsequent years. In sum, about 1.2 billion dollars were spent in ten years on acquisitions.

**The Initial Public Offer of TCS (IPO)**

The TCS IPO process was successfully concluded on the 25th August, 2004, and has been described by the financial press as the biggest and the most complex IPO process in Indian history, without a precedent to guide it. It included five years of preparatory work with a special team constituted to achieve the feat, called the Tata-TCS IPO team, including members from Tata Sons, and banking giants. Early in the game, TCS (run as an independent organization under the Tata Sons) emerged as the business leader, and banking giants started approaching Ishaat Hussain (Tata Sons’ CFO in 2000) with prospects of an IPO. However, TCS was the fast growing flagship company of Tata Group. It was bringing in cash (for fuelling the growth in Tata enterprises), without much investment, and was hence, deemed unfair to the Tata shareholders (who invested in TCS) to let go of TCS; in other words, to let go of a continuous stream of cash in exchange of a pot of money upfront. By 2002, there was a general consensus in the management that TCS had grown sufficient scale and size that the amount of cash that would be realized from the IPO and the amount of cash flow foregone would fall into balance. This is when Tata Sons gave a go ahead to the TCS IPO and a team was constituted for the purpose. The process of extracting TCS from Tata was a very complex and time consuming one. TCS was engaged in software exports, and the revenue from it being offset against the tax liability of Tata Sons, as permitted by the government. However, TCS IPO also meant a huge tax bill for the Tata group, since the tax authorities did not allow carrying forward of the tax benefits in the event of restructuring. This was another reason why TCS IPO had to be stalled till a suitable tax amendment was passed, avoiding unnecessary loss to the Tata shareholders.

Even though TCS had no plans to list outside India at that time, still, the investors would include funds from the US and other overseas investors, and hence, the red herring prospectus was designed in accordance with United States Securities and Exchange Commission and accounts were compliant with the US GAAP. The issue was oversubscribed 7.7 times, and shares sold for Rs. 850 each. Another thing to add feather to the TCS cap was the fact that both the NSE and BSE who handled without glitches the biggest IPO of the country had IT infrastructures supported by TCS itself.

**COMMUNITY INVOLVEMENT**

The process of institutionalization of values at TCS was accelerated. Like all Tata companies, TCS upholds the Tata values with pride:

- Integrity – conducting business fairly and with transparency.
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- Understanding – caring, respect and compassion towards employees, customers and the community.
- Excellence – Achieve the highest quality standards in products and services.
- Unity – Working cohesively and building a strong relationship of trust with colleagues across the Tata group and clients alike.
- Responsibility – Responsibility and sensitivity towards countries, communities, and environments in which the company thrives.

Tata believes in giving back to the community, and this principle is upheld in TCS. The TCS leadership under Mr. Ramadorai believed that if the employees see their managers and superiors doing the right thing all the time, these values get institutionalized and reinforced in their minds. Living the values has been the only way to pass them on to the juniors and future leaders. There have been instances where TCS did not get a particular contract. But, instead of complaining or blaming competition for unfair means, TCS has taken a unique approach of looking inward and doing things in a better way.

TCS has contributed tremendously to community building. Tata Swach filter, which was an exceptional water purification arrangement at a very low cost was started and masterminded by TCS, and later taken up by Tata Chemicals for further development. TCS is in the knowledge industry, and, hence has an edge in the arena of imparting knowledge. TCS promotes IT-based solutions to address community issues. The computer-aided adult literacy programme and IT Training programme for the blind are unique successful examples. TCS also assigns a premium on employee advancement and learning, and provides tremendous opportunities to employees to expand their knowledge, including ten to fifteen days of mandated learning in a year. Besides this, employees go through special cultural-sensitization programmes where cross-cultural orientation is routinely provided to associates travelling overseas on business. Another unique thing about the TCS culture is the zero-tolerance level for all corrupt practices. All complaints from the lowest level employees or the clients of highest importance are dealt with in an urgent and sincere manner, and strict punishment, including lay off is administered in case found guilty or in breach of the ‘Tata way’ of doing business.

Tata has always abided by the law and the right way of doing things and not embracing corrupt practices in self-interest. Pandit Nehru’s socialist and license raj policies were strictly against the beliefs of J.R.D. Tata, and he felt that the environment was not conducive for the growth and prosperity of business. Still, he worked within the restrictive situation to bring about the sea change and help in building India’s present day industrial policy. TCS also lives to this maxim to this day.

**TECHNOLOGY MOVEMENT IN INDIA**

TCS spearheaded the technology movement in India. From the very beginning TCS had to fight and innovate for survival. TCS became a software solutions giant, but software always has to depend upon hardware for its execution, and, hence, TCS was hugely dependent on the hardware options provided by IBM, Burroughs. Due to this limitation, thrust was always to learn the hardware in great depth to be able to customize the software solutions according to the operational capabilities. To fuel innovation, in 1980s, TCS set up the Tata Research and Development
Centre at Pune. Great research was done on adapting assembly manufacturing techniques to software manufacturing, resulting in creating reusable components. Data dictionary called ADDICT (Advanced Data Dictionary), MasterCraft, a high level software language generator, and Cobol or C-language (language to write codes in easy english) were some of the earliest innovations guided by the necessity of the times. Some of the commendable innovations were:

- Low cost diagnostic kits for tuberculosis patients as follows:
- Providing unique systems integration to NSE, all NSE brokers in India were connected in real time to the NSE computer.
- Knowledge exchange programmes – alliances with MIT, IITs, IISc, University of California etc. for joint research programmes, faculty exchange programmes. This was one of a kind alliance of world-class academician and industry and fuelled innovation and growth.

According to the TCS leaders, India is fully equipped to succeed with the strength in the web of academia, start-ups, venture capitalists and the government. Europe, on the other hand, faces a commercialization gap in the ecosystem.

TCS sees tremendous opportunities in the growth age of India. TCS intends to benefit as well as provide wings and feather to this rapid growth. Currently about 40% of India’s population is unbanked. This lack of access to financial resources is a constraint in the growth of this hidden India. Technology is clearly the tool which can bring banks to the homes of these people. As an example, TCS had developed mKrishi, an agro-advisory system for farmers, which can be accessed on a simple mobile handset. The farmers can access information regarding weather, fertilizers, crop health through SMS and IVR systems, and also video help. TCS has also launched a subscription based cloud service for Small and Medium businesses (SMBs). SMBs can access services like accounting and payroll on a pay-per-use basis. This empowers them with technology, without having to make huge investments in technology infrastructure. TCS is also engaged in developing innovative and simpler user interface devices. In partnership with IIIT Hyderabad, TCS has developed SILKy (speech, image, language, knowledge based user interface), which is being used successfully in computer based literacy programmes, which rely on individual’s cognitive capabilities to associate with complex visual patterns, and phonetic utterances. TCS is also spearheading research in medical applications, like the use of nanotechnology to fight cancer. Tata supercomputer, Eka has already simulated the behavior of gold nanoparticles. Simulation packages are being developed to help simulate the behavior and nature of any nanostructure.

**NATION BUILDING**

TCS aimed to play a role in a bigger perspective of nation building:

- **Contribution to healthcare:** TCS has a major role to play in the development of the earliest ‘Hospital Management Systems’ providing implementation for the Burroughs system. TCS also developed India’s first Hospital Information System in the 1980s. They also became the sole marketing partner of ‘Smart Clinic’ in India (developed in New Jersey). Smart Clinic was customized to the Indian market and enabled quick documentation of a physical examination, medication, admission, discharge etc.
- **Contribution to the field of bioinformatics**: TCS engaged in the PPP model with the New Millennium Indian Technology Leadership Initiative. As a part of this TCS’s ‘Advanced Technology Centre’ was set up in Hyderabad with a core bioinformatics group in Hyderabad. TCS undertook a thorough study of what a biologist would look for in a software package to facilitate himself and proceeded with the development accordingly.

- **Emergence of IT at Sankara Nethralaya**: Since 1990s, TCS was committed to the cause of increasing efficiency and quality of healthcare delivery through the use of information technology. The focus was on data capture to assist administrative activities within healthcare institutions. TCS was chosen in 1995 by Sankara Nethralaya to implement ‘electronic medical records and hospital management systems’. Sankara Nethralaya of India has been ranked as one of the best centres of ophthalmic care in Asia. TCS delivered them the ‘state-of-art’, world class technology solution.

- **Gram-Maitra**: This is a TCS effort to education inclusion. Gram-Maitra is focused on providing high quality education to rural and underprivileged areas. MAITRA stands for Multimedia based Asynchronous Interactive Remote Teaching. True to its name, it is a tele-education initiative. Gram-MAITRA combines the benefits of DTH satellite, and internet technologies to achieve a large geographic footprint and provide interaction between students and high quality remote teachers at a very low cost. The idea is to use uninterrupted DTH broadcast technology to deliver multilingual video lessons and a wired/wireless telecom link to provide internet connectivity for interactivity, for student-teacher Q&A sessions. The novelty of the approach lies in effectively combining the two.

The entirety of TCS has been shaped by the challenges and initiatives discussed above, which will be constantly influencing the Indian business giant’s roadmap in future.

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