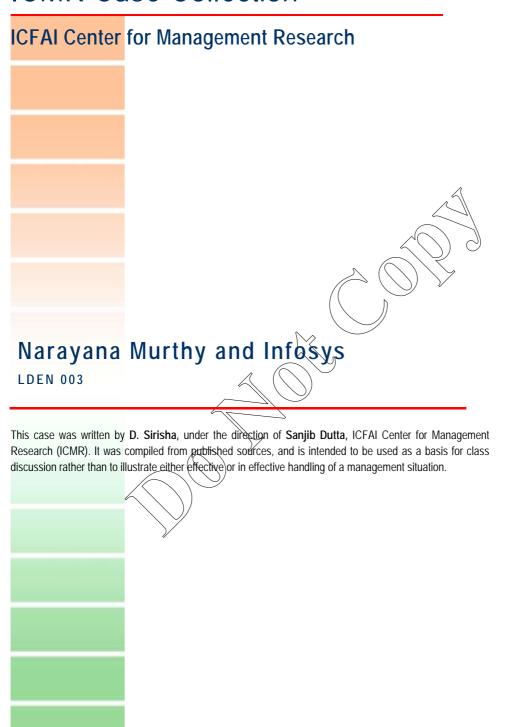
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LDEN/003



NARAYANA MURTHY AND INFOSYS

"A true leader is one who leads by example and sacrifices more than anyone else, in his or her pursuit of excellence."

- N. R. Narayana Murthy, Chairman, Infosys.

"The US. has discovered India's high-tech industry, and the credit is largely due to shy, unflappable engineer N.R. Narayana Murthy."

- Business Week, June 14, 1999

INTRODUCTION

In February 2001, Infosys Technologies Ltd. (Infosys)¹ was voted as the Best Managed Company in Asia in the Information Technology sector, in leading financial magazine Euromoney's Fifth Annual Survey of Best Managed Companies in Asia. Infosys was started in 1981, by seven² professional entrepreneurs led by Narayana Murthy, Chairman and CEO of Infosys with an equity capital of Rs.10,000. By 2000, Infosys' market capitalization reached Rs.11 billion and by 2001, Infosys was one of the biggest exporters of software from India. Narayana Murthy had built an organization that was respected across the country, with very strong systems, high ethical values and a nurturing working atmosphere. With his sound management skills, Narayana Murthy seemed to have taken Infosys to the pinnacle of success in two decades. From a turnover of Rs.1.16 million in 1981, Infosys had grown to a Rs.19 billion company in 2001. (Refer Tables I and II)

There were many firsts to Narayana Murthy's credit. Infosys was the first company to push for off-shore software development³ as against body shopping⁴ that was coming during the 1980s. He championed corporate governance in India. Infosys was the first Indian company to follow the

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¹ Infosys, based in Bangalore (Karrataka), is a publicly held, ISO-9001 certified company offering information technology consulting and software services to Fortune 1000 companies. The software services offered include application development (on a fixed-time and fixed-fee basis), E-Commerce and Internet consulting, software maintenance.

² Nandan Nilekani, S.Gopalakrishnan, K. Dinesh, S.B.Shibulal, N.S.Raghavan, Ashok Arora (left Infosys in 1983)

³ Due to low hourly rates and technically well-trained programmers, the European and American organizations have their major software development projects done in less developed countries like India.

⁴ Body shopping is contract labor of skilled workers. It refers to the practice of recruiting software professionals in India and sending them to work on projects abroad.

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US Generally Accepted Accounting Principles (GAAP) disclosure norms before going for a Nasdaq listing in 1999. Narayana Murthy was also the recipient of many awards (Refer Exhibit I).

TABLE I INFOSYS: KEY STATISTICS (1981-98)

(in Rs million)

Year	Turnover	Net Profit
1981	1.16	0.38
1987	19.00	3.84
1988	27.50	4.90
1989 (9 months)	25.40	4.50
1991	50.00	n.a.
1992	145.20	35.00

Source: Business World, November 7, 1998.

In late 2000, Infosys became a total software services company. It had set up a software development centre at Toronto as part its globalization strategy. Analysis felt that Narayana Murthy had not only managed his company well, he talked about the company at every opportunity that came his way. In the process, he had built a brand equity for his company.

TABLE II
INFOSYS NET SALES: 1998-2001

		(in Rs billion)
	Year	Net Sales
	1998	2 .58
	1999	5.09
	2000	8.82
\langle	2001	19.00

Source: www.indiainfoline.com

BACKGROUND NOTE

Narayana Murthy obtained his Bachelor's degree in Electrical Engineering from University of Mysore in 1967 and his Master's degree in Technology from Indian Institute of Technology, Kanpur in 1969. He started his career as head of the computer centre at IIM, Ahmedabad. In 1972, he went to Paris where he was part of the team that designed a 400-terminal, real-time operating system for handling air cargo for Charles De Gaulle airport. Narayana Murthy was a left-wing activist and mingled with French communists during his stay in Paris but his outlook changed while traveling around Europe. He believed that the only way to pull India out of poverty was to create more jobs, by setting up new companies. In 1975, he returned to India and joined Systems Research Institute, Pune, (Maharashtra). He then headed Patni Computer Systems Pvt. Ltd., Mumbai, (Maharashtra) before founding Infosys in 1981, along with six other professionals.

THE STRATEGIST

From the beginning, Narayana Murthy focused on the world's most challenging market - the US. He had two reasons for this. First, there was no market for software in India at the time. He believed that Indian software companies should export products in which they had a competitive advantage. In 1987, Infosys entered into a joint venture with Kurt Salmon Associates (KSA), a leading global management consultancy firm. KSA-Infosys was the first Indo-American joint venture in the US.



In 1988-89, Infosys set up its first office in the US. Reebok of France was looking for a software system to handle its distribution management at the same time. Infosys bagged the contract and developed the Distribution Management Application Package (DMAP)⁵ for Reebok's French operations. Infosys decided to use this package to create a standard application package for similar operations of any company. In 1989, Infosys bagged another major contract from Digital Equipment.

In the early 1990s, with the opening up of the Indian economy, many export-oriented software companies were set up in India that created the momentum: Infosys leveraged this very successfully. By mid-1990s, Infosys was competing not only with Indian software majors like Tata Consultancy Services⁶, and Wipro⁷, but also with overseas players like Cambridge Technology Partners and Sapinet, which offered software solutions. Narayana Murthy believed that Indian software professionals had the ability to deal with complex projects. Analysts felt that unlike elsewhere, India's sharpest minds were heading for a career in software, and the best of these aspired to be at Infosys. Infosys also competed with consultancies as Anderson Consulting and Ernst & Young, which positioned themselves as information management specialists.

In 1994, the joint venture with KSA was dissolved. In 1995, Narayana Murthy created Yantra Corp.⁸ in Acton, Mass. US. Around the same time, Infosys entered into a joint venture with Satyam Computers⁹ and DCM.¹⁰

During 1998-99, Narayana Murthy planned to position Infosys as a true global company – global clients, global operations, global staff and a global brand image. In 1998, to support his global ambition, Narayana Murthy listed the shares of Infosys on Nasdaq through American Depository Receipts (ADR) issue worth US\$75 million. With this, he took the Indian software industry global.

Narayana Murthy's global strategy comprised three features. The first one was the "global delivery model." The model emphasized on "producing where it is most cost effective to produce and selling where it is most profitable to sell." Cost effective production meant doing as much of the software development work in India and profitable selling meant focusing almost exclusively on foreign markets, particularly the US.

⁵ DMAP integrated databases and data-crunching tools in forecasting, purchasing, warehousing, sales management, credit control, customer services, sales ledger, claims and disputes, operations and security, apart from finance and decision support systems.

⁶ Tata Consultancy Services offers strategy consulting and system integration services to help organizations plan and build their businesses in the eEconomy.

Wipro Technologies, based in Bangalore, India, is the global technology services division of Wipro Limited. Established about two decades back, the company offers services for business transformation and product realization and also solutions for the service provider market.

⁸ Yantra helps companies to unlock value from multi-enterprise trading networks. Yantra solutions enable companies to sell complementary products and services, reduce inventory, coordinate outsourcing partners etc.

⁹ Satyam Computer Services Ltd., based in Hyderabad (Andhra Pradesh), is an end-to-end IT solutions provider and offers a range of expertise aimed at helping customers re-engineer and re-invent their businesses.

¹⁰ DCM provides design services in the areas of ASIC & FPGA, Communication Software and Web Applications.



The second feature of the strategy was "moving up the value chain" – which meant getting involved in a software development project at the earliest stage of its life cycle¹¹. However, analysts felt that for this, Infosys would have to compete with big companies like Cambridge Technology Partners or even Andersen Consulting, and that could be tough. Agreed Narayana Murthy, "Yes, it is not going to be easy. But we don't have to be unduly concerned about unmitigated success. We may succeed in some and not in others – which is not to say that we will not succeed as consultants."

The third feature of the was the PSPD. According to Narayana Murthy, there are four fundamental tenets of any well-run business. One: predictability of revenues; two: sustainability of the predictions; three: profitability of revenues; and four: a good de-risking model. 'De-risking' meant that Infosys had put limits on its exposure to businesses of various kinds. For instance, it limited its exposure to Y2K projects to less than 25% of its total revenues because this was a business that could disappear overnight and Infosys didn't want to take the risk.

PEOPLE MANAGEMENT

Analysts felt that one factor which helped Infosys to grow at a faster pace than others was the low employee turnover. The turnover rate at Infosys was around 11% as opposed to industry average for software companies' of over 25% during the 1990s. Infosys' retention capability was a function both of its rigorous selection procedures as well as proactive HRD practices. About 80% of the middle and senior level executives were promoted from within the organization.

Infosys provided many facilities to its employees, which were intended to take care of both the professional and personal needs such as ticketing, credit eards or house loan applications, crèche facilities for kids, a gymnasium to work out etc.

Infosys was one of the first companies to adopt an employee stock option plan (ESOP) and create additional wealth for its employees. Narayana Murthy believed that employees created wealth and unless Infosys had a mechanism to make them principal shareholders, it was unlikely to grow. By 1997, 500 employees were awarded stock under the ESOP. By 2001, Infosys had about 2000 rupee millionaires on its staff and more than 213-dollar millionaires.

Analysts felt that Infosys had one of the best reward systems in the industry. Most employees in Infosys were paid high salaries by industry average for software companies. Narayana Murthy said, "My employees seek challenging opportunities, respect, dignity and the opportunities to learn new things. I keep telling them that my assets are not this building, the business or foreign contact. My assets – all 8000 of them – walk out of the gate every evening and I wait for them to come back to me the next morning." ¹²

Employees were encouraged to communicate with each other and with the higher management about interesting ideas and ways of solving problems through the electronic bulletin boards. To improve communication, the managing director sent mails every fortnight. There was also a concept called the Chairman's List¹³ and an annual excellence award. However, groupism was not encouraged. Narayana Murthy explained, "Everything is judged on merit. Ego doesn't come into

.

¹¹A typical software development project's life cycle comprised designing, coding, conversion and maintenance.

¹² Business Standard – Strategist, December 2000.

¹³ An annual list comprising outstanding performers who received employee stock options.



the picture. Our transactions are zero-based so there is no history sheet. Different people compete, then they have a discussion, one solution is accepted, one person wins, they smile and go out to lunch. Because the group of people is very smart, there has to be a uniform distribution of wins. There are no overt or covert prejudices."¹⁴

CORPORATE GOVERNANCE AND INFOSYS

Analysts felt that Infosys became one of the most respected companies in India, through its corporate governance practices, which were better than those of many other companies in India. Narayana Murthy's move to adhere to the best global practices was driven by his vision to become a global player. Infosys adopted the stringent US Generally Accepted Accounting Practices (GAAP) many years before other companies in India did. Infosys' corporate governance practices conformed to the recommendations of the Confederation of Indian Industries (CII) committee and the Cadbury committee on corporate governance with a few exceptions. To maintain transparency, Infosys provided details on high and low monthly averages of share prices in all the stock exchanges on which the company's shares were listed. It was one of the few companies in India to provide segment wise breakup of revenues.

Narayana Murthy believed in commitment to values, and ethical conduct of business. He said, "Investors, customers, employees and vendors have all become more discerning, and are demanding greater transparency and fairness in all dealings." He also made a clear distinction between personal and corporate funds. Founding members took only salaries and dividends and did not have other benefits from the company.

Infosys received was the recipient of awards for its good governance practices. In 2001, Infosys was rated India's most respected company by Business World¹⁷. Infosys was also ranked second in corporate governance among 495 emerging companies, in a survey conducted by Credit Lyonnais Securities Asia (CLSA) Emerging Markets. In 2000, Infosys was awarded the "National Award for Excellence in Corporate Governance" by the Government of India.

LEADERS IN THE MAKING

In August 2001, Narayana Murthy set up a Leadership Institute in Mysore, India, to manage the future growth of Infosys. The institute aimed at preparing Infosys employees to face the complexities of a rapidly changing marketplace and to bring about a change in work culture by instilling leadership qualities.

Commenting on the institute, Narayana Murthy said, "It is our vision at Infosys, to create world-class leaders who will be at the forefront of business and technology in today's competitive marketplace. ...We believe the Leadership Institute will play an instrumental role in equipping Infoscions to be leaders, contributing to the advancement of the IT industry." ¹⁸

¹⁴ Business Standard – Strategist, December 2000.

¹⁵The Cadbury Committee was set up in May 1991 in the United Kingdom. The stated objective of the committee was "to help raise the standards of corporate governance and the level of confidence in financial reporting and auditing by setting out clearly what it sees as the respective responsibilities of those involved and what it believes is expected of them." The committee had made 19 recommendations.

¹⁶ Business Today, November 7, 1999.

¹⁷ Business World, September 24, 2001.

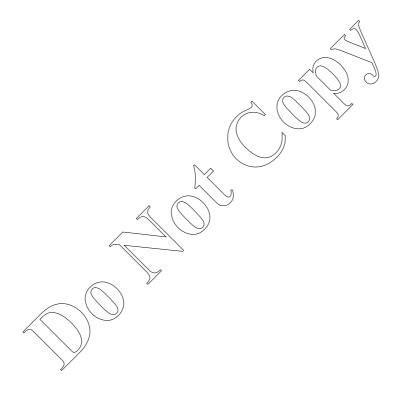
¹⁸ www.infy.com, Press, March 22, 2001.



Narayana Murthy expected Infosys revenues to touch around Rs.500 billion (US\$12 billion)¹⁹ by 2008-09. Analysts felt that the two factors responsible for the success of Infosys were Speed and Imagination. (Refer Exhibit II). Narayana Murthy agreed, "Without these, we would be wiped out as fast as dew on a sunny morning. Actually, we have a fetish for excellence."²¹

QUESTIONS FOR DISCUSSION:

- 1. "Infosys is one of the world's top providers of software consulting, from applications development to maintenance." How did Narayana Murthy build one of the biggest IT companies in India?
- 2. "Narayana Murthy has always believed that human resources are the greatest asset of a company." Briefly describe the HR policies of Infosys.



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¹⁹A&M, June 30, 1999.



EXHIBIT I

AWARDS RECEIVED BY NARAYANA MURTHY

The Distinguished Alumni Award for 1998 from IIT, Kanpur

J R D Tata Corporate Leadership Award for 1996-97

Ratnabhushan Award from the FIE Foundation for 1997

Business Leader Of The Year Award for 1997 from Business Barons.

Featured in the Asiaweek Power 50 (June 2000) - a list of Asia's Most Powerful People

Top Entrepreneurs of the Year 1999: Business Week

Businessman of the Year 1999: Business India

"The Stars of Asia" for three successive years, in 1998, 1999 and 2000: Business Week

Co-Chairman of the Indo-British Partnership

Member of the Asia Society's International Council and Board of Councilors of the University of Southern California School of Engineering.

Member of the Wharton Business School's Asian Executive Board

Source: Business Standard, July 2000

EXHIBIT IL

NARAYANA MURTHY'S SOURCE CODE BEHIND INFOSYS' SUCCESS STORY

- The PSPD model is what has worked for Infosys. Predictability of revenues, sustainability of revenues, profitability, derisking.
- Invest in well understood, proven products and not just R&D.
- The most powerful style of leadership is by example.
- When dealing with investors, always under-promise and over-deliver.
- Give stakeholders bad news proactively and early.
- Obsolete innovations before the competition does it for you.
- Have a healthy sense of paranoia and respect for the competition.
- Markets come and go but as long as the three attributes Speed, Imagination and Excellence are alive, you have a future.
- Everybody needs incentives but not just money. People want challenges, opportunity, dignity, respect intense competition, and quality time.
- For long-term success, you need to surround yourself with people who are smarter than
- Put public good ahead of private good as it leads to private good in the long term.
- Cynacism has no place in the organization. Any idea is great, deserves cheers and should be encouraged.
- Opt for higher revenues always instead of depending on controlling costs.
- Controlling costs is easier if people own stock and know the power of P the price-earnings ratio.
- Be transaction-based to avoid groupism. The organization should have one goal, one vision.

Source: Financial Express, November 17, 2000



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