

3.1 CASE STUDY- 1

Project Name : Tidel Park Limited
Inaugurated on 4th July 2000

Location : Chennai

Client : Tamil Nadu Government

The potential for IT growth lies in India. The land is known for its cultural heritage, historical monuments, myriad art forms and of late, the best brains in IT. Not surprising, that information technology is the fastest growing industry on India, with growth rates exceeding 50% per annum. The demand is always scoring over the growth rate.

When demand beats supply, the simplest, logical wise decision is to increase supply. That's exactly what India has decided to do. And the process is on at an unimaginable pace. In the same pace IT came into our lives. And the southern end of Indian Peninsula seems to have woken up to the challenge, earlier than the others. Last two years have seen blueprints of their mega IT and software Parks emerging as reality.



3.1.1 Objectives

Tamilnadu's advantages such as good infrastructure facilities, excellent corporate culture, highly skilled affordable manpower and cordial industrial relations make. This is an important destination for information technology industries.

It is precisely such new ways of seeing the new Information Technology Park coming up in Chennai the "Tidel Park Limited" is building one of the finest instigated infrastructures for the IT industry, matching global standard. While today's "cyber space" reflects the three dimensions of electronics, telecommunications and computers, the fourth dimension is the human resource- which is available in Tamilnadu.

IT companies would benefit an overall cost of 30%-40% if their operations are located in Chennai, Vis-à-vis other international cities.

Chennai has scored a highest rating of 3.20 on 0-4 scale and emerged as preferred IT location.

Realizing the importance of Information Technology as key to rapid industrialization of the State, the government has come up with the “Tidel Park” stepping stone to rapid industrialization.

3.1.2 Support

Since most small software developers may find it hard to invest in high end communication and networking computer hardware, Tidel Park will provide all high end hardware infrastructures with “central computing facilities”.

Going about project construction in a very scientific way, Tidel Park has also engaged M/s Tata Consulting Engineers (TCE), who will not only optimize the engineer package and advise the client, but will also supervise the project construction phase.

Apart from this, the Tata Consulting Services (TCS) has done a comprehensive study for the demand for software space and recommended the construction layout suitable for any software business.

Tidel Park being constructed to meet all targets of software business needs. The project will provide all high end infrastructures at a very nominal cost at bare minimum with the maximum. Thus all the requirements for making the projects successful have been tied up.

Thus the project will help all those who can not invest that kind of money for high end infrastructure can now just occupy the space, plug-in and start doing business with international class infrastructure.

3.1.3 Site Potentiality of Chennai

Following features considered Chennai “The house for complete IT solution and home for best talents”

The features are:

Availability of Software Manpower	3.50
Data Communication availability	3.00
Education Facilities	3.00
International and Domestic Airport	3.40
Transportation within the City	3.00
Cost of Living	2.80
Cost of Setting up a Software Unit	2.95
Quality of Life	3.00
Climate	2.50
Market Proximity	3.30
Overall The highest score among the state	3.20

Chennai has scored a highest rating of 3.20 on 0-4 scale and emerged as preferred IT location.

Not only is that Chennai also considered a booming industrial city of international standard.

The only city which can proudly claim to have the following features:

- One International and one domestic airport.
- One all-weather seaport and one shaping up just 25 km away.
- 100% reliable and efficient telecom network.
- Guaranteed adequate power supply by state Electricity Board.
- Three Electrical and Electronics Estates.
- Well connected Air road and Rail network that includes MRTS, providing more connectivity from and to the city.
- Around ten Engineering Colleges, One exclusive engineering University and other renowned Indian Institute of Technology.
- Schools which have produced the Ramanujams and Abdul Kamal, apart

from special schools like American Schools and the Japanese School.

- *Cosmopolitan life-style the private beach house and numerous beach resorts along the coast of the Bay of Bengal including a five star resort, stand as a testimony.*
- *Hundreds of restaurant and host of three and five star hotels offer multiple cuisines, including Chinese, Japanese, Mexican, Continental, western fast food and varied Indian treats.*
- *Some of the best medical facilities in Asia - The Madras Medical Mission, Apollo, Vijaya and Malar Hospital to name a few.*
- *Foreign and Nationalized Banks at almost all the nooks and corners- American Express, Standard Chartered, Citibank, Bank of America, Hong Kong Bank, ANZ Grind lays, State Bank of India, Bank of Board etc.*
- *Financial Institution like ICICI, IDBI and HDFC to accelerate industrial and economic growth.*
- *An environment which had attached investments from Ford, Hyundai and Alcatel.*
- *An array of plush Shopping Malls displaying everything under the sun.*
- *Exclusive clubs, Golf courses, Tennis courts, Billiards, Snooker rooms and a host of other recreational facilities available for the exclusive to wind off after a hard days of work.*



3.1.4 Salient Features

- *High rise building of two basement, ground floor and 12 floors.*
- *Auditorium / Banquet / Exhibition: 650 seats.*
- *3 Seminar halls with video conferencing facilities.*
- *2 restaurants of 18,000 sq. ft. each and one on pool side.*
- *Business center and retail outlets.*
- *Bank with ATM.*

- *Health club.*
- *Swimming pool and outdoor recreational facility.*
- *STPI, VSNL and DOT facilities.*
- *Administration management by private agencies.*
- *O and M by International agency.*

3.1.5 Technical or Infrastructure Facilities

- *Power*
- *Lighting*
- *Telecommunication*
- *IBMS (Intelligent building management system)*
- *Air conditioning and Mechanical Ventilation*
- *Fire protection system*
- *Elevators and Escalators*
- *Facade Access System*
- *Parking*
- *Public Address System*

3.2 CASE STUDY- 2

Project Name : International Tech Park

Location : Bangalore

Client : Bangalore Government

Area : 69 Acres

The 28 hectares (280000 sq. m. or 69 acres) International Tech Park, Bangalore is located in Whitefield - 12 km from Bangalore Airport and 18 km from the City Center. It currently comprises of 5 buildings - 'Discoverer', 'Innovator', 'Creator', Explorer' and 'Inventor' totaling close to 1.9 million sq. ft. of office, production, commercial and retail space. It also has a Residential Tower of 51 apartments.



3.2.1 Site Potentiality of Bangalore

India has thrown open its door to direct foreign investment. Their taxes rates are on par with developed nations are India is seen as a preferred destination for all companies looking to expand their global operation.

Bangalore, an exciting garden city located in the south of India, also known as the Silicon Plateau of India, is the right choice for any high-tech or knowledge based industry. Bangalore teems with skilled manpower in he fields of information technology and Science. It's a city which is now considered as one of the world's top 10 IT destinations.

3.2.2 Infrastructure / other facilities

- *Power*
- *Voice & Data Communications*
- *Air-conditioning*
- *Vehicle parking facility*
- *Security & Safety*
- *Environment - Sewage & Landscaping*
- *Water Storage*

3.2.3 Value-added Services / Amenities

- *Property Maintenance and Management*
- *Project Management Team*
- *Transportation*
- *Tech Park Business Centre*
- *Tech Park Health Club*
- *Services @ Tech Park Mall: Banks/ATM Facilities, F&B outlets, Foreign exchange service, Travel agent, Courier service, Laundry service, Stationery store, Medical clinic, Supermarket, Lifestyle store, Salon for Men & Women, Hand phone service center.*

3.2.4 Fun @ Park

- *Noon Time Binge*
- *Moonlighting @Tech Park*
- *Tech Park Sports Meet*
- *Expansion Plans:*
- *In the pipeline are:*
- *Business Hotel*
- *Club House*
- *'Build-To-Suit' (BTS) - Customized building with the privilege of naming rights and flexibility in specifications.*

3.2.5 Voice and Data Communication

In this age of rapid communication, the way businesses are run around the globe has changed. To enable tenants to have an edge over competition, International Tech Park assures reliable access to voice & data communication.

Five of India's leading Telecom service providers have a physical presence in the Tech Park, and one of them has an Earth Station.

3.2.6 Wi-Fi Internet Connectivity

The International Tech Park has an in-house dedicated Telephone Exchange, providing Voice and ISDN lines. The exchange currently caters

to 3,000 lines with an upgradeable capacity of 10,000 lines.

The International Tech Park is fully equipped for Wi-Fi (wireless fidelity - Internet connectivity). With this facility, professionals working at the International Tech Park and visitors can browse at a speed of up to 384 kbps, check e-mail, and connect to their offices anywhere in the world without worrying about finding a wired network connection.

The prepaid cards for use of this facility are available online from the service provider, Sify Ltd. as well as at the Sify I-way outlet, located in the Tech Park Mall. There are branded hotspot locations in the premises, termed as 'Sify Wi Zones' - where users can avail of wireless Internet connectivity that is reliable, fast, scalable and secure.

3.2.7 Building Management System

The entire Air Conditioning & Mechanical Ventilation (ACMV) system is centrally monitored and controlled. This ensures that the comfort level in the premises is maintained at all times.

Lifts, fire protection system, water level status and common area lighting are monitored and controlled centrally.

3.2.8 Safety and Security

Security in a large complex like the International Tech Park is a crucial factor. The International Tech Park ensures the safety of its occupants with well planned systems and measures, in accordance with safety norms set down by the National Building Code of India.

The International Tech Park has 24-hour security systems with a reliable and committed security force backed by state-of-the-art surveillance systems.

All security personnel at the International Tech Park are trained to handle fire emergencies.

Fire drills are also held at regular intervals for the occupants of the Park.

3.2.9 Vehicle Parking Facilities

Extensive parking facilities are provided for the tenants and visitors at the Park.

- *Open Vehicle Park: Around 250 Cars & 400 Two Wheelers*
- *Basement Car Park: Around 450*
- *Multi-Level Car Park: Around 200*

3.2.10 Water Storage

Water supply is through a dedicated 600 mm pipeline from the Bangalore Water Supply & Sewerage Board, easily catering to a monthly consumption of 10, 500 kilo liters.

The main water storage tank holds a capacity equal to a week's consumption at the Park.

3.2.11 Sewage Treatment Plant

The Park has a Sewage Treatment Plant that meets relevant pollution control norms. This also facilitates the Park's concept of 'green culture' by using the recycled water for landscaping.

3.2.12 Amenities and Services

The International Tech Park provides tenants with truly world-class amenities and services. This includes a well-equipped Health Club, a professionally managed Business Centre and other value-added services at the Tech Park Mall.

The Park also has a round-the-clock Property Management Team maintaining the premises. The Project Management Team is ready to undertake interior renovation works for tenants. In addition, transport facilities to city center are also provided.

3.2.13 Tech Park and Business Center

The Tech Park Business Centre is an ideal incubation facility for start-up companies, prior to commencement of their full-scale operations.

The Tech Park Business Centre has 5 cabins and 2 large suites with 8 workstations each. It also comprises of a Discussion Room and a Conference Room.

3.2.14 Besides the good ambience, the Tech Park Business Centre includes

- *Secretarial Services*
- *Video Conferencing facility*
- *Logistics services*
- *This facility is open to all.*

3.2.15 Tech Park Health Club

Fitness and well-being is increasingly being recognized as a factor impacting employee efficiency at the work place. Many companies now recommend a regular fitness programmer. Tech Park Health Club is equipped with a 1,115 sq. m (12, 000 sq. ft.) state-of-the-art Health Club.

3.2.16 This facility includes

- *Gymnasium equipped with the best workout apparatus*
- *An aerobics studio*
- *A steam room*
- *Karaoke area*
- *Reading lounge*
- *Electronic massage area*

3.2.17 Infrastructure

The International Tech Park is built on the plug-and-play concept, providing tenants with all necessary amenities, such as reliable and adequate power, ample car parking, a state-of-the-art Building Management System and more, making business a pleasure at International Tech Park.

Infrastructure



Tech Park, Bangalore



Night View of Tech Park



North View Tech Park



Residential Tower



Dedicated Power Plant



Satellite Dish



AC Plant



Security



Discover Building Lobby



Explorer Building Lobby



Tech Park Plaza

Value Added Services / Amenities



Business Center



Health Club



Coffee Shop



Supermarket @ the Mall



Restaurant



Aerobics Studio



Snooker Parlor



Transportation

Exterior



Exterior View 1



Exterior View 2



Exterior View 3



Exterior View 4

Events



Jazz Performance



Lucky Ali Show



Usha Uthup Live Concert



Shaan Night



Nagmani Night with Shibani



Jamaican Dancers



Bhangra Troupe



Rock Band Performance



Noon Time Binge



Festival Celebration



Par Kite's Sports Meet



Sports Football



World Environment Day



Starz of the Park



Rock Concert



Twilight Zone

3.3 CASE STUDY- 3

Project Name : Hi Tech City

Location : Hyderabad

Client : Hyderabad Government

Area : 151 acres

Hitech City offers multi-tenanted ultra modern corporate complexes which are tailored to meet the requirements of IT and IT enabled services companies. These facilities are totally self-contained with the state-of-the-art infrastructure and amenities, for hassle free performance.



3.3.1 Hitech City has two complexes

- **Cyber towers:** with 580000 sq. ft. of office space spread across 6 acres of land.
- **Cyber Gateway:** A trapezoidal structure with 866000 sq. ft. of office space, spread across 8 acres of land.

3.3.2 Objectives

To provide world class infrastructure facilities for the IT industry is under one roof.

3.3.3 Highlights

- Spread over 151 acres- 5 million sq. ft. of office space and world-class infrastructure.
- Built in a phased manner at a cost of US \$ 375 million.
- 50% on built up space
- 50% as independent campuses to customer specification.
- Seamless data and voice communication- through multiple services providers.

- *Uninterrupted power- high quality and dedicated power through redundant feeders.*
- *A home next door - Residential Township of independent bungalows and apartments complexes proposed to be laid out across the adjacent 87 acres.*
- *Single- Window clearance - Dedicated cell for accelerated software exports and streamlined hardware imports.*
- *Host of incentives- by state and central governments.*

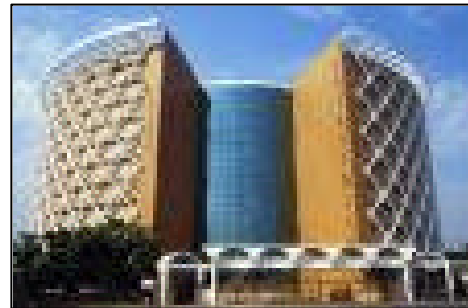
3.3.4 Supports

3.3.3.1 Videsh Sanchar Nigam Limited

VSNL communication center is located in the 6th floor of Cyber towers. Hitech city, provide satellite connectivity. Via roof top standard “F3” earth station for direct international access.

VSNL’s gateway building for Hyderabad region is located just opposite to Cyber Gateway building. VSNL also provides dedicated OFC leased lines up to VSNL Mumbai and further links to International destinations via submarine optical fiber links.

Service: Point to point leased line circuits, Internet leased lines, Video Conferencing facilities etc.



3.3.3.2 Software Technology Parks of India

Hyderabad, STPI provides high speed data communication links. They are connected with USA, Europe and Asia.

It provides internet services through the international gateway (IBS Satellite Station) and point to multipoint radio system (for local loops) located at Jubilee Hills, near to Hitech city.

Services: Point to point leased line circuits, Internet leased lines, Video conferencing facilities etc.



3.3.3.3 Bharat Sanchar Nigam Limited

BSNL has a 4000 lines exchange in Hitech City.

Services: Basic telephony (on demand), ISDN, Data Services, Point to point lines, Dial up internet services, Centrex etc.



3.3.3.4 Tata Tele Servicing Limited

TTL has 1000 lines lucent exchange in Hitech City (unplugged to 3000 lines)

Services: Basic telephony (on demand), ISDN, Data Services, Leased lines etc.



3.3.5 Facilities

Hitech City spread across 151 acres of land for commercial development has the best facilities and amenities, enabling a hassle free working environment.



3.3.6 Salient Features

- *Rental Office Space*
- *Training*
- *Administration*
- *Club House*
- *Star Hotel*
- *Shopping Complex*
- *Fuel Station*
- *Medical Center*
- *Banks*
- *Travel and Foreign Services*
- *Courier Services*
- *Restaurant and Food Courts*

3.3.7 Technical Infrastructure

- *Dedicated 132 KV substations for entire project. Incoming redundant feeders to ensure uninterrupted supply. Adequate capacity.*

- *Diesel Generator back up in all multi-tenanted buildings for 100% backup.*
- *Whole Hitech City networked through underground power cables.*
- *Hitech City exempted from all stationary power cuts.*
- *24 hours maintenances services*
- *Communication: Seamless connectivity.*
- *Whole Hitech city networked through Fiber backbone.*
- *Multiple service providers.*

3.3.8 Civil Infrastructure:

- *Four and two lane roads widths ranging from 12m to 30m.*
- *Street lighting with photo sensor controls.*
- *Municipal water reservoir and water supply network.*
- *Sewerage System.*
- *RCC storm water drain network.*
- *Bus stop, Fire Station etc.*

3.3.9 Ambience

- *Landscaped gardens and parks.*
- *Pollution free environment.*
- *To preserve natural rock sculpture.*

3.4 CASE STUDY- 4

Project Name : Cyberjaya

Location : Putrajaya, Malaysia.

Area : 7000 acres

3.4.1 Project

A city; where man, nature and technology live together in harmony. That is the premise which Cyberjaya is built on - a city featuring a unique blend of lush tropical eco-friendly environment with the latest technology in IT infrastructure and facilities.

Cyberjaya, Malaysia's first truly intelligent city, was officially launched by the prime Minister, Datuk Seri Dr Mahathir Mohammad on 8 July 1999. The landmark event was witnessed by 25 of the world's top personalities in the IT world.

Spanning area 2,894 hectares (7,000 acres) the city is the nucleus of the country's vision for the next millennium, the Multimedia Super Corridor (MSC). Promising to be the city of the future, Cyberjaya will soon be the home ground for many IT & technology companies.

3.4.2 Quick Facts

3.4.2.1 Distance:

- *To KL city centre 35 mins*
- *To Subang Jaya 20 mins*
- *To international airport 20 mins*
- *To Port Klang 45 mins*
- *To Putrajaya 5 mins*
- *Climate : tropical*

The Flagship Zone of Cyberjaya is being developed as a self contained intelligent city, offering the ideal business and living condition for all. The Flagship Zone covers three main zone areas:

- Enterprise Zone
- Commercial Zone
- Residential Zone

The rest of the Flagship Zone (at more than 50% of its total area) is designated for public facilities, green areas and zone for recreational purposes.

3.4.3 The development of Cyberjaya is divided into two major phases:

- Phase 1: comprising approximately 3,600 acres
- Phase 2: comprising approximately 3,500 acres

By the year 2011, it will be a city supporting a working population of approximately 50,000 and a living population of over 120,000.



3.4.4 Land

Cyberjaya offers excellent investment opportunities for investors who are interested to purchase land for investment purposes. Look at the characteristic of the development below and you can make an easy conclusion of its long term investment values.

- Strategic location at the heart of the south klang valley area.
- Above average level of infrastructure.
- Freehold land.
- Multi national company's headquarters in the area.
- Low density development.
- Fully planned city.
- High emphasize on landscaping.
- Fiber optic network.



NTT Research Center



Telecom Multimedia HQ

3.4.5 Office Space

Companies that wish to establish their operations in Cyberjaya will be pleased to find

that they are a variety of options available to them.

3.4.6 Build own building

- Foreign owned MSC company can own land 100%
- Freehold land.
- Your own choice of contractors and consultants.
- Your own design and specification.
- Fast approval process.



DHL Global Data Center

3.4.7 Lease building built to specification

- Long term lease contract
- Built to specification
- Fast construction period
- Choice of locations



Ericsson Regional HQ

3.4.8 Lease space in office building

- Lease period from one year to ten years available.
- Class “A” intelligent building.
- CCTV, guarded parking, IBMS, fiber optic, PABX, broadband.
- Prime location
- 1,000,000 square feet of total office area.



Enterprise Building

3.4.9 Incubator

- For start up IT companies.
- 60,000 square feet of offices.
- HQ of nationwide MSC Incubator Network.
- Fully managed services.
- Highly competitive rates.



Cyber View Garden Complex

3.4.10 Residential

The residential zone of Cyberjaya is designed to offer a world-class green living environment, consisting of up to 28,000 units of intelligent homes and 120,000 living population. This zone will enjoy a low density living in a comfortable environment comprising bungalows, link houses and condominiums.

Residents have the option to link up with the community Cyberjaya Network to enjoy a number of benefits and services, such as on-line shopping, entertainment, information requests, emergency aid and security check.



3.4.11 Cyberjaya Garden

Cyber view Garden is located across the street from Cyber view Lodge Resort & Spa. It has 60 serviced apartment units that are available for short and medium term lease

3.4.12 The Street Mall

This award winning boutique mall promotes the concept of creating a garden within the shopping arcade. It provides a pleasant shopping and recreational environment through the creation of a cool microclimate and beautiful landscape. With water fountain, gazebos, garden paths and courtyards with a cooling effect from the built-in water mist spray — the Street Mall provides a conducive and relaxing environment to both picnickers and the lunchtime crowd.

As a self sustained city, boutique shopping malls, specialty stores as well as general retail shops and mini markets will be made available to the local community.

