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# REVISUALIZING: FILM AND TELEVISION INSTITUTE OF INDIA

By

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# A REPORT

Submitted in partial fulfillment of the requirements for the degree of Bachelor of Architecture.



University of Mumbai

2017

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#### 1. ABSTRACT

Film and entertainment industry has become one of the important factors of day-to-day life of people. Hollywood films represent more than half, and sometimes more than two-thirds of total box-office receipts in major markets. Films that succeed in the US market also tend to succeed in foreign markets. This suggests that a convergence of popular taste may be coming about, though in many countries this phenomenon also occurs against a backdrop of cultural contestation. Hollywood has been a success partly because of the unmatched competitive advantages concentrated in its home base, partly because of its extensive distribution network and US government efforts to push open foreign doors. Despite its status as the preeminent world center of the film industry, globalization is also confronting Hollywood with many new challenges. The worldwide theatrical market had a box office of US\$38.6 billion in 2016. The top three continents/regions by box office gross were: Asia-Pacific with US\$14.9 billion, the U.S. and Canada with US\$11.4 billion, and Europe, the Middle East and North Africa with US\$9.5 billion. As of 2016, the largest markets by box office were, in decreasing order, the United States, China, Japan, India, and the United Kingdom. As of 2011, the countries with the largest number of film productions were India, Nigeria, and the United States. In Europe, significant centers of movie production are France, Germany, Italy, Spain, and the United Kingdom.

India is one of the most famous film and media making industries in the world and is becoming increasingly well received in various nations around the globe. Film has emerged as one of the most impactful art forms of our age. The country is home to the dynamic metropolitan city, Mumbai, previously known as Bombay. Bombay gave birth to the term Bollywood. Mumbai is the centre and birthplace of multi-million dollar Indian film industry. Film making is a complete team effort which involves many aspects. Good film is a perfect blend of aesthetics and technology. Film industry is one of the biggest industries in India. Many people having caliber in film making are found, in present context of film industry in India. However, due to lack of facilities, several people willing to learn art of film making have to struggle.

The 'REVISUALIZING OF FILM AND TELEVISION INSTITUTE OF INDIA, PUNE' is a project that can bring all the facilities necessary in the campus. The development of an architectural thesis project has much in common with the film-making and film-viewing process. By emphasizing the commonalities between architecture and film, specifically in reference to the frame and the fourth wall, the relationship between the two mediums is revealed. The Indian Media and Entertainment (M&E) industry is a dawn sector for the nation economically and is making high growth march. Proving its flexibility to the world, the Indian M&E industry is on the edge of a strong phase of growth, followed by increasing consumer demand and refining advertising yields.

Therefore, it is of prime importance to encourage art, artists, technicians, directors and producers to give them the opportunity to showcase their talent. In doing so, they will reflect cultures, propose novel and sometimes path-breaking ideas, capture situations and reproduce history. The media and entertainment industry therefore needs all the possible help to realize its rich potential and make the impact it so richly deserves to make.

#### 2. INTRODUCTION

Film and entertainment industry has become one of the important aspects globally. The Film and Media industry of India consists of films produced across India. Cinema is being made in various languages whereas Hindi, Tamil, Telugu, Malayalam, Guajarati, Marathi, Bengali are some of the well-known film languages. In FY 2014-15 the Indian film industry made 1827 movies in over 39 languages with Hindi (297), Tamil (297), and Telugu (284), being the 3 largest filmmaking languages. Cinema as a medium has gained immense popularity in the country and as many as 1,600 films in various languages of India are produced annually. Indian films have also come to be followed throughout, the Greater Middle East, South Asia, Southeast Asia and other countries. Dadasaheb Phalke is known as the "father of Indian cinema". India has been the largest film producer worldwide for the last few years, releasing more than a thousand movies each year. Mumbai is the centre and birthplace of multi-million dollar Indian film industry. Indian cinema history can be traced back to 1896, when famous Lumiere brothers of France demonstrated six soundless short films in Mumbai. Three major film centers were developed in Mumbai, Kolkata, and Chennai. First full length Indian feature film was directed and produced by Dadasaheb Phalke in 1913. The film had an all-male star cast, as no woman was ready to play female lead role.

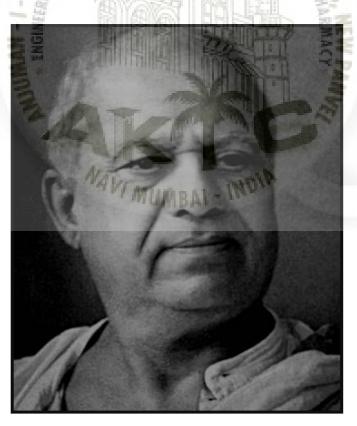


Figure 1. Dadasaheb Phalke- Father of Indian cinema



Figure 2. Poster of first motion picture -Raja Harishchandra

Indian cinema and culture is a prominent aspect of South Asian programs and one of the primary sources to display Indian culture, and we have witnessed that there has been increasing interest in the scholarly study of Bollywood and Indian cinema among South Asian bodies. In recent years movies produced in India have received international attention. Most recently, there have been successful efforts in the coproduction of Hindi as well as English movies by Hollywood and Bollywood producers and directors. Many Indian actors are working in Hollywood films and similarly a number of American and British actors are also appearing in Bollywood movies. The majority of Indian films are now produced with English subtitles, and thus many people around the globe love to watch and get acquainted with Indian history, culture and society through the movies. Filmmaking and media related personalities, and students have developed keen interest in the study and research on different aspects of cinema. This film and media Institution can greatly educate youngsters, and will serve as an exhaustive and most up to-date source of knowledge and wisdom on Indian cinema for students. These institutions assist not only students but also emerging actors, technicians and other researchers in locating knowledge on various aspects of films across the nation.

#### I. TOPIC JUSTIFICATION

Bollywood is a powerful medium that provides useful and entertaining information on history, civilization, variety of cultures, religions, socio-economics and politics in various regional languages. More and more people, irrespective of their culture and tradition, watch Bollywood films in many parts of the world. During the last two decades there has been gush in publications on Indian cinema. For teaching and learning films, several institutes have developed across India. In recent years, we have witnessed a huge expansion of digital and web resources, and information is now accessible on Indian cinema more easily and rapidly through the Internet. India has been the vastest movie producer worldwide for the last few years, releasing more than thousand films each year.

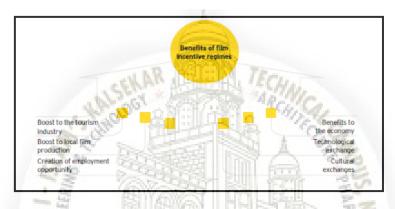


Figure 3. Benefits of film incentive regimes

Boost to the tourism industry	Films shot at local locations introduce the audience to the host country's diversity and exotic locations, which they can explore. This can boost the host country's tourism industry.	
Boost to local film productions	Opportunities for local film productions for co-production with foreign filmmakers. For example, the success of <i>Slumdog Millionaire</i> , which was shot in India and was collaboration between Hollywood and Indian film technicians, helped the Indian film production houses secure more business. Indian production house Take One Productions securing business from major production companies, including Fox and Columbia TriStar Motion Pictures	
Creation of employment opportunities	Employment opportunities created for the local technicians hired by foreign film crew shooting films in a country	
Benefits to the economy	Benefits linked to expenses in the host country leading to inflow of foreign exchange	
Cultural/Technology exchanges	Enables host country to experience and learn about diverse cultures and nationalities. Creates opportunities to market high-tech production facilities and equipment. Encourages knowledge-sharing of latest filmmaking techniques	

#### II. PROBLEM STATEMENT

#### Availability of low-cost facilities and skilled talent

India can offer talented crew to assist in film-making at a comparatively low cost.

The country has world-class post-production capabilities including VFX, 3D and animation, which has led to an increase in outsourcing of post-production services to it.

India has well-developed post production facilities available at a low cost. A foreign producer, who comes to shoot a film in India, can complete his entire movie in the country, from shooting to post-production, to cut costs substantially.

For example, Indian post-production company Prime Focus has worked on 200 visual effects for James Cameron's *Avatar*, one of Hollywood's largest "grosser" ever.

All of the above could be a significant advantage to India if incentives are provided to producers.

#### Re-visualizing film and television institute of India (Pune)

The Film Institute of India, Pune was established by the Government of India in the Ministry of Information and Broadcasting on the recommendation of the Film Enquiry Committee for imparting training in the art and techniques of film making and started functioning on 20th March 1961.

Later, in 1974 the television wing was introduced and the institute was renamed as the Film and Television Institute of India. The institute has trained many of the present day luminaries of the film industry and has made its mark all over the world.

With the fast paced growth in Film, TV and Media industry, there is a need felt for up gradation of FTII to enable it to play a pivotal role in facilitating the Indian Film, TV and

Media industry manages the growth.

Additionally, in the last few years the number of students studying at FTII has been increased by more than 50% due to starting of new courses as well as due to introduction of OBC reservation policy. This increase in number of seats has caused immense pressure on the existing resources and faculty.

More importantly, a premier institution like FTII can serve as a Cultural Brand Ambassador showcasing Indian talent, culture and ethos to the world at large. Also, there is a strong need to keep up with the latest changes in the world of film and television.

With this background Hewitt Associates was mandated by Director FTII, Pune on behalf of the Ministry of I&B to prepare a Detailed Project Report (DPR) on "Upgrading FTII to International Standards" Hewitt approached the DPR in a phased manner primarily building upon the previous reports (such as Khosla Committee report) as well as feedback from stakeholders of FTII, which helped understand the broader aims and objectives of FTII.

This was followed by an As-Is Assessment, To- Be Design and Gap analysis, based on this analysis Hewitt has recommended specific steps for up gradation. In this process Hewitt Associates also partnered with an Architect for detailed planning, costing and developing of blueprints for infrastructure development on the new and old land. As part of the process, Hewitt has conducted primary interviews with various internal and external stakeholders including the students, faculty, and senior officials from the Ministry of Information & Broadcast, alumnus and industry.

Hewitt has also conducted an intensive secondary research and benchmarked FTII with internationally acclaimed Film schools from across the world. This was further supplemented by an in-depth research of existing policy documents to understand the background and prior work done on this subject.

#### Need for up gradation and achieving international standards

FTII ever since its inception in the early sixties, has been one of the premier institutions for Film and TV education in South Asia, several Indian as well as Foreign students passed out from FTII and are today eminent Industry leaders in their respective domains.

The need for FTII to play a larger role and a more global role in the field of Film and Television education has been felt for a long time.

This is reflected in several previous concept notes and committee reports like (Satish Chandra Reports, Estimates Committee Report etc.).

Many film school, even in Asia which have come up after FTII have gone on to acquire more impressive international credentials in the last couple of decades, especially, Beijing Film Academy and Korean Academy of Film Arts can be cited as only some of such examples.

Today when Indian Film, Television and Media industry is poised for registering a global presence there is also a need to enable a premier educational institution like FTII to educate and train human resource to international standards to sustain this growth.

Additionally, due to a fast paced change of technology / trends / practices / industry needs in the Films, TV and media domain there has been a need realized to upgrade and re-establish FTII as a film school up to International standards.

#### New age film and television industry

The Indian film and media industry is growing at a rate of more than 10 % and is expected to further grow at a compounded annual growth rate of 13% and reach INR 1.1 Trillion by 20141.In the year 2009 the sector has had to face rough times with the box office and subsequently its bottom lines. The sector is evolving with new innovations, players and technology. The television industry is growing at a faster rate than the film industry a number of new players, channel, innovative program themes etc. are some of the drivers supporting this growth. Apart from the traditional media sectors such as films, radio, televisions print etc. new age media such as internet, gaming and animation are growing and providing revenue earning as well as creative opportunities. Some of the current drivers of changes are in this sector are:-

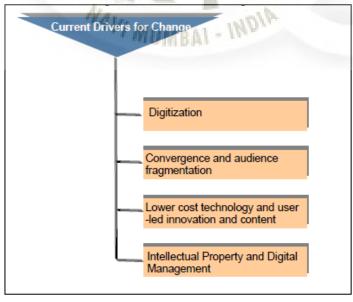


Figure 4. Current drivers for change

#### III. BACKGROUND STUDY



Figure 5. Education (Graphical)

## Overall scenario of film education in India

Given India's billion-plus population, the country has one of the largest education systems in the world. The system comprises multiple levels, starting from elementary education. It does not teach any specific skills that will enable students to progress to higher levels at which vocational education is provided. However, the country's higher education system has demonstrated an impressive growth over the last decade to take its place among the world's largest systems of higher education. The number of institutions imparting higher education has grown at a CAGR of 11% and student enrolment at a CAGR of 6%.

Geographically, the central region has witnessed the highest increase in such institutions and the southern region the highest in student enrolment. The Gross Enrolment Ratio (GER) in the country currently stands at around 13.8%, with western India having the highest GER of 25.7%. Film education in India currently has a dearth of institutes that impart formal training and education in film and creative technologies. At the grassroots level, there is a need to formally train technicians in the industry, who are largely self-trained. While we should take pride in acknowledging the aptitude and core skills of the workforce and its ability to quickly learn and adapt, we need to look ahead to what wonders these people can perform if they are formally trained.

India's technology industry is a very relevant example, especially in the effort and skills technicians expend on even low-end process-oriented work. Therefore, it is clear that with technology affecting all the spheres of film-making, technicians at the higher end of the spectrum need to be well trained in new technologies for Indian films to move to the next level. The starting point of this initiative is perhaps for film-makers and studios to recognize how the use of modern technology can transform various aspects of film-making, including the creative, production and planning functions, effective communication of messages, cost efficiencies, etc., which can trickle down to all the different levels through formal or informal processes.

#### Indian film industry at global level

India's film and fashion industries are being embraced by cultures across the globe, particularly within the West: from Lady Gaga and Uma Thurman donning Indian garments, to Oprah Winfrey making a much-publicized visit to the country where she socialized with Bollywood's royal family, the Bachchans, to Arnold Schwarzenegger claiming he wants a career in the Hindilanguage film industry.

"Bollywood has always been an influence in the West," says the BBC Asian Network entertainment reporter Shabnam Mahmood. "From the early days, its films were shot in Russia and all over Europe, so people were aware of Bollywood, but it wasn't as big as it is now."

It wasn't until the release of Danny Boyle's Oscar-winning film, *Slumdog Millionaire*, that the global audience truly took notice.

"Here was a British director taking on Indian culture. It made people aware of Bollywood music. If you ask people what song they remember from the film, it's *Jai Ho* - especially when girl band Pussycat Dolls adapted the song so well," Mahmood says, referring to AR Rahman's composition that topped international music charts.

Soon, other musicians from the West, like Akon and Kylie Minogue, expressed their interest to collaborate with Bollywood's talents.

"All of a sudden they wanted to know, what's that Bollywood all about?" says Mahmood.

India's fashion scene has also been influential, according to the freelance stylist and fashion editor Charlotte Kewley.

"If you look at the catwalk, Sarah Burton, who designed Kate Middleton's dress and is the head designer at Alexander McQueen and probably the single designer who's really influencing today's fashion, has taken a lot of inspiration from Bollywood with her jewelry collection of panjas," a type of Indian hand jewelry, Kewley says.

"I feel that more people are being influenced by India's fashion because Sarah Burton has incorporated it into her collection."

Kewley describes India's clothing and accessories as "glamorous and happy".

"I don't think you can be sad wearing them," she says, and adds that India's colorful culture inspires the creativity and imagination of international designers.

"It gives them a lot to play with, such as the different fabrics. Western fashion is very tailored and already glamorous. However, Bollywood gives it more scope," she says.

"I think it's great when people mix cultures - it can only be a positive thing."

Many celebrities have tried and tested the "Bollywood look", like Thurman, who dons a *salwaar kameez*, a traditional South Asian outfit, in her five-episode guest stint on the new television series *Smash*.

It may only be a matter of time until more Bollywood actors begin to make their mark in Hollywood.

"Anil Kapoor has done fantastic, starring with Tom Cruise in *Mission Impossible 4*," says Mahmood. "He has been adopted by the West."

Kapoor, who also starred in *Slumdog Millionaire*, could be credited for opening the door for other Indian actors to be featured in Hollywood.

Amitabh Bachchan, India's best-known actor will be starring in Baz Luhrmann's forthcoming F Scott Fitzgerald adaptation, *The Great Gatsby*, alongside the actors Leonardo DiCaprio, Tobey Maguire and Carey Mulligan. The film is set for release in December.

"It's great for our own people to see our role models making it into Hollywood, too," says Mahmood. "It globalizes. It brings people together. Bollywood is bringing everyone together."



#### Indian film industry impact on tourism industry

**New Zealand** inked a co-production treaty with India in June 2011 in an attempt to gain from the Bollywood market, after realizing the benefits derived from various Bollywood films shot in it.

Furthermore, **Spain** and India are close to signing an agreement that will facilitate and promote co-productions after the success of *Zindagi Na Milegi Dobara*, which was shot extensively in the country.

**Ireland** has been trying to attract Indian producers to shoot Bollywood movies in the country to give boost to its tourism industry, and has taken various steps to further its efforts — Ireland's Minister for Arts and Tourism led a delegation to India and met senior Bollywood executives, asking them to consider Ireland as a filming location.

The **Singapore** Tourism Board had allocated US\$10 million to Bollywood productions in 2006 for three years under its "Filming in Singapore" scheme, which subsidized up to 50% of the expenses incurred by film companies during their shoots in the country.

The **French** Government has set up Film France to attract international film shoots. It offers incentives such as refund 19 Country websites, discussions and Ernst & Young Analysis of VAT on shoots by foreign film crews. France is also offering financial incentives to attract Bollywood producers to its shores.

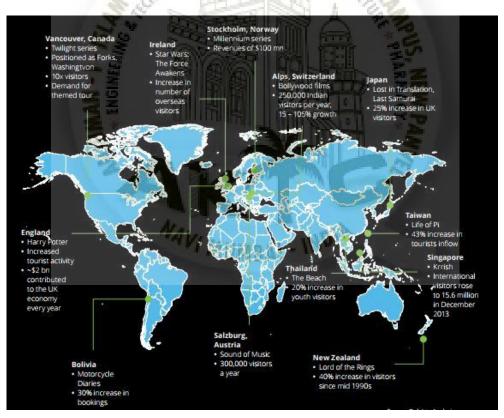


Figure 6. Map showing tourism impact because of films

**Australia** has been a popular location with Indian filmmakers for quite some time. The country expects its tourism industry to see a growth of more than 18% every year until 2016. The flow of Indian tourists to Australia increased by 20% from 2004–2006, especially after the success of Salaam Namaste. In 2006, around 45,800 Indians visited New South Wales. Their total spending amounted to US\$115 million. The production of Heyy Babyy injected around US\$2.1 million into the state's economy.

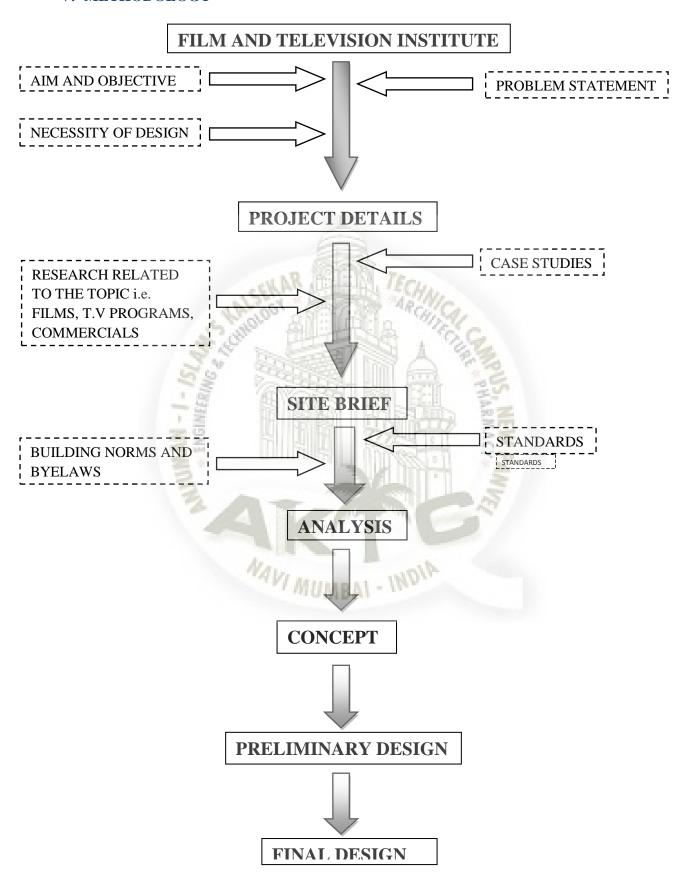
Bollywood films such as Dilwale Dulhania Le Jayenge, Kabhi Khushi Khabhi Gham and Mujhse Dosti Karoge have all presented **Switzerland** attractively to Indian tourists. Switzerland hosts around 150,000 tourists from India and large numbers of Bollywood movies are shot in the country every year. Many **US** states such as **California**, **New York**, **Michigan**, **Nevada** and **Utah** offer incentives to film and television production companies from India. Many Bollywood movies have been shot in the US including My Name is Khan, Kabhi alvida Na kehna, Kal ho na ho, to name a few. **Canada** also offers incentives to producers of film, television, animation and visual effects from India and has attracted many Bollywood producers, who have shot movies in the country.

#### IV. OBJECTIVES

- To encourage interest in and study of films as a form of art and as a medium of information and education.
- To create wealth through film making as there is growing demand for films in India.
- To create employment and encourage education through publications and training.
- To provide a place where students can seek all the necessary knowledge in film making.
- Providing good atmosphere in campus so that they get interest in study.
- To maximize interaction between technical, graphical, production, performing fields for better results.



#### V. METHODOLOGY



#### LITERATURE REVIEW

# I. ARTICLES IN NEWSPAPERS

#### II. CASE STUDIES

Updated: Jun 8, 2012, 03:17 PM IST, DNA

Gujarat Union minister of science and technology saw the dilapidated infrastructure of Film and Television Institute of India when he visited Pune recently and stated that the institute needs to be restored. DNA explores...



#### Govt has plans to revamp this heritage institution

It is a known fact that FTII is an old structure and the infrastructure needs to be upgraded. Understanding the need of the hour, a major ren-ovation of the institution

ovation of the institution is on the cards. The Central government is already planning to reamp this heritage institution. A detailed project regarding the same has been sent to the government which has been in turn forwarded to the planning commission. We are waiting for their response which we are sure will be a positive one. On our part, we have along with he alumni members sketched a design for the renovation of the institute. The civil structure wing of the government is also working on a structure plan. We have also hired an architect for the purpose. Once the hired an architect for the purpose. Once the funds arrive, we will start working on the project. DI NARAIN, DIRECTOR, FTII

#### **Funds should be** sanctioned in order

to start renovation



can be utilised in an efficient manner. However, the construction needs to be carried out keeping walue of the institution. Previously, the buildings constructed ignored the aesthetics of the institution. Also, the film studio needs to be renovated. We have given a detailed report abour the key areas that need to developed and have submitted it to the government. Funds should be sanctioned in order to start renovation and I hope it is done quickly. It is important that the institute makes a smooth transition into the digital era. However, if bett be equipment provided era. However, I feel the equipment provided to students is adequate.

#### FTII's ethical essence makes it a unique place to study



Pilace to study
Fill, which is considered one of the premier film heritage institutions of India, definitely film heritage institutions of India, definitely film heritage institutions of India, definitely film heritage in the National Heritage in benefit students.
ANKUR CHAUDHARI, STUDENT

#### Lack of equipment affects projects of students

There is a large scope for improvement as far as infrastructure is concerned at the institute.

Due to the absence of modern technology, the projects of students



projects of students sometimes get stuck and delayed. The Nair Committee report has however pointed out areas upon and the administration has swung into action to make the necessary changes. Also, the number of faculty members had dwindled in the last couple of months but now that has been taken care of Another problem is lack of equipment. The limited number of cameras and other such requirements often adds to our inconvenience. However, I hope with the committee report citing flesse problems, all these issues will be resolved at the earliest.

Source Committee Type of the Committee of the Com

#### Many rooms in the institute don't have ceiling fans

There are basic things that need to be taken care of as far as the infrastructure of FTII is concerned. For



example, many room in the institute don't

champier. Timing on the champier of the champi

Figure 7. DNA newspaper Article

#### **CASE STUDIES**

#### 1. LIVE CASE STUDIES:

- i. FTII, PUNE, INDIA
- ii. WHISTLING WOODS INSTITUTE, MUMBAI, INDIA
- iii. NATIONAL INSTITUTE OF DESIGN (NID), AHMEDABAD, INDIA
- iv. CEPT UNIVERSITY, AHMEDABAD, INDIA

#### 2. INTERNET CASE STUDIES

- i. KANTANA FILM INSTITUTE, THAILAND
- ii. STUDIO 4, BHAINSEPATI, LALITPUR



#### **CASE STUDIES**

#### **LIVE CASE STUDIES:**

# **CASE STUDY 1**

# FILM AND TELEVISION INSTITUTE OF INDIA (FTII), PUNE

Name: Film and television institute of India

Location: In the premises of the Prabhat studios, pune.

**Area:** Presently 22 acres in use and 34 acres for future expansion.

Date of commencement: year 1961

Client: Ministry of Information and broadcasting. Foreign collaboration:

Member of international Liaison Centre for cinema & Television Schools (CILECT)



Figure 8. Site location

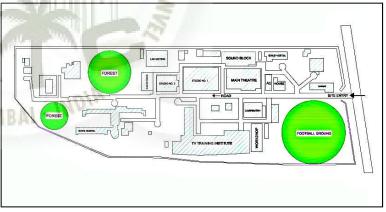


Figure 9.Site plan-FTII, Pune

A wide symmetrical road divides the whole campus of the FTII into two parts:

#### One part has:

- 1. TV building
- 2. Director's Office
- 3. Canteen
- 4. Boys Hostel
- 5. Play Ground

## Other part is has

- 1. Studios
- 2. Main theatre
- 3. Girls Hostel
- 4. Director's Bungalow and Security check Point.

The symmetry is further marked by the Tree lined avenue. It consists of sound Recording & Editing department and Audio Department. This is new building exclusively for sound recording & sound editing purpose.

The microphone used on the location is very sensitive & catch the desired as well as undesired sounds on site. Thus all the sounds that are involved in the scene need to be dubbed or rerecorded. Also the desired background music is recorded after the shoot.

- 1. The department includes
- 2. Studios for re-recording
- 3. Effects recording
- 4. Sync & non-sync dubbing
- 5. Background music

The site is divided along the lateral axis and forms 3 zones.

The zones at the extreme ends consist of residential buildings and huge open spaces in the front. The remaining zone, which forms the center, consists of the administration and academic departments. This is the main institutional area of the campus. The residential buildings have the maximum advantage of the open spaces. Since all the institutional buildings are part of the same zone, the movement during working hours gets convenient. As the vehicular access cuts through the pedestrian zones, the pedestrian movement gets disturbed, thus making it uncomfortable.

The institutional zone is further divided into

- 1. Film wing and
- 2. television wing

The film wing lies on the northern part of the campus, while the T.V. wing is no the south side.





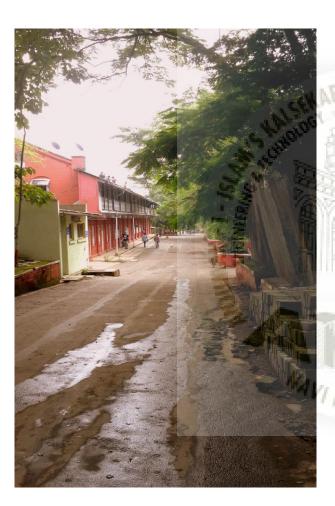






Figure 10. Images showing condition of structure

## **Building system**

It is a RCC frame structure with cavity walls all around for better sound insulation. All the studios, laboratories and class rooms are air conditioned, which is a centralized system. The A.C plant for the building is placed adjacent to the building.





Figure 11. Building system

## **Recording studios**

A recording studio is totally sound & dirt proof. Cut off lobbies are provided at the entrance of every studio, where footwear is removed. The recording studio includes a projection screen along with recording machines. The studios are attached with a control room which is completely sound isolated and can hear only the sounds recorded by the recording machines. A projector room is placed just above the control room from where the edited film is projected & viewed while recording. The projection of the film can also be controlled from the control room making it convenient.



Figure 12. Studio Interior view



Figure 13.Studio exterior

#### **Acoustic treatment**

All studios are air conditioned and acoustically treated. Reverberation time should not be more than 1 sec and ideally it should be 0.8 sec. Studio has a false ceiling of depth 700 mm accommodating all electrical services. It consists of perforated acoustic panels which absorb sound. Flooring is of soft carpet which and does not allow echo in studio I the flooring is wooden but causes problem as it creates noise when one walks on it.





Figure 14.Studio- Interior view

Figure 15.Studio-Interior view

# **Building system**

Both the studios are very old. It's a long span structure with brick piers 600X600mm. The roof is pitched with a roofing of fibrecrete sheets 1.50.75m in size and corrugated A.C sheets on top. The roof is supported by a steel truss with steel rafters and purlins.



Figure 16. Art direction department

# Film processing laboratory

The building is located in the north campus and consists of both, the film processing laboratory and the film editing department. The laboratory is operational for the processing of the black and white films only. This is only institute in the country which has a laboratory of its own. The laboratory is equipped with two developing machines, one for 35mm film and the other for 16mm film.

The film processing consists of the following spaces:

SPACE	SUB-SPACES	NUMBER
Dark rooms with developing machines		2
Developing room		2
Chilling plant		1
Recovery unit		1
Maintenance room and store room	AUTHORITY I CHAIN	1
Painting room	ARC/C	1
Film grading room		1
Indoor shooting studio	a) Shooting space b) Storage	
3	37,111	2

#### The structure consists of 3 BAYS

- 1 bay consists with all the staff rooms and guest rooms.
- Central bay is the **shooting space**.
- Last bay is storage and the museum.

Ground floor consists of 12 staff rooms of 3X6 m each. Above these rooms there are

- a) Guest rooms
- b) Rest rooms,
- c) Make-up rooms and
- d) Toilets for the shooting unit and actors

On the other side of the studio there is storage for the set material and the **Prabhat museum**.

**Main Building**: The main building is on the south side of the campus. It is an L-shaped building, of which one arm consists of the TV wing and the other arm consists of all the administration and also academic departments.



Figure 17. Main building

The TV wing consists of the following:

SPACE	NUMBER
T.V studios	2
Control rooms	2
Master control room	1
Make up room	2
Costume & Property store	1
Video library	1
Conference room	1
Preview theatre	1
Video library	1
Video editing rooms	6
Classrooms	3

**TV Studios:** Both the studios are of size 9X12mm, attached with a lights control room each 3X6m. The control room is located on the first floor level, which is of size 6X9m. Rubber mat flooring is provided. Walls are also treated acoustically using perforated panels.

**TV Editing Room:** The total number of students for the course is 10, but the number of rooms provided is only 6 which are inadequate. The students use these rooms in batches. The size of each room is 2X3 m.

Master Control Room: All the videos cameras in the studio are controlled from the master control room. Size of the room is 6X6m. Other spaces associated with master control are, video tape recording (VTR), maintenance room and store.

Main Theatre: The auditorium is situated in one of the old studios of Prabhat time, so it has got no defined elevation. It is used for performing as well as screening. Presently the capacity of the auditorium is 250 which would be insufficient for an increased number of students. Also the space is found to be inadequate to accommodate a large number of people on special events like drama or movie program which are usually kept open for outsiders & ex-students. A camera department is attached to the theatre which consists of stores and maintenance rooms for different types of cameras.

Residential Facilities: The campus includes girls and boys hostel and the director's residence. The intention of having the director's residence in the campus itself is that the students and TV trainees can have free access and informal discussion with his in various aspects of film making/TV production. The boy's hostel is located very near to the canteen. All the rooms are placed along singly loaded corridor overlooking into an open space. The toilets and the staircase are provided at the two ends of the buildings. It also houses a common mess for boys and girls at the junction of the two arms of the building, which is very inconvenient. The girls' hostel is located near the entrance, near the director's residence. The rooms are placed along a doubly loaded corridor. And only the south facing rooms overlook into an open space. Both the hostel includes common rooms and game rooms and also place for warden to stay.

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	ADVANTAGES		DISADVANTAGES
i.	Workshop building is near to TV studios thus providing a	i.	The vehicular and pedestrian movement should be separated properly.
	better service.	ii.	There is a lack of recreational spaces.
ii.	It is the only film institute all over India to have its own film processing laboratory.		Administration departments, staff rooms are distinctly located thus causing less interaction between them.
		iii.	The auditorium is partly isolated from the main activity area thus gets apart from the integrity of the campus.
		iv.	The main studios have no direct contact with the outdoor shooting area. Also the workshop & property store are placed on opposite sides of the
		. D 1	road.
	MISEN	V.	Covered parking can only take four cars which is very inadequate.
	ale dinata	vi.	No provision for covered parking for visitors thus very inconvenient for them.
	32 3	vii.	The visitors have to park their vehicles beneath the tree shadow in front of the gate office.
* ENGINEERING	viii.	Auditorium is not having special provisions of parking hence all the vehicles get parked on the road next to it during the time of shows, causing traffic congestion problems.	
	WIN	ix.	The sports ground is not much used by the
	A A	X.	Lack of proper future planning has led to lot of redundant spaces and also the available spaces are insufficient.
	THE WAY		students for any event and not even for spo Lack of proper future planning has led to lo redundant spaces and also the available spa

# **CASE STUDY 2**

# **WHISTLING WOODS**

- Whistling woods international is a film and media and arts institution, located in Mumbai,
   India.
- The institute is promoted by Indian filmmaker subhash ghai, film city Mumbai, and mukta arts limited. In July 2014, the Hollywood reporter named whistling woods on the list of "the best film schools in the world".

# LOCATION: FILM CITY, GOREGAON, MUMBAI

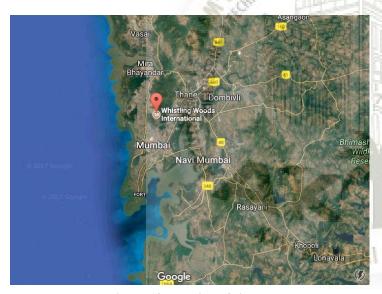


Figure 18.Location of site



Figure 19.Site plan, Whistling Woods, Mumbai



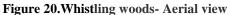




Figure 21. Whistling woods-Block A

**SITEDEMOGRAPHIES**: 5.5 acres

SITEAPPROACH: 13.5km from Goregaon Station 18m &12m wide Road

SITESURROUNDINGS: Reliance Media Works Maya Digital Studio Lots of Studios

Conservation Education Centre

**ARCHITECT**: IAG Consultants

**COURSES**: 1. Filmmaking

2. Animation

3. Acting

4. Media & Communication

5. Fashion

6. Music

7. Short Course Unit 8. Virtual Academy

**CAPACITY**: 750 Students

**CLIMATE**: moderately hot & high humidity

TOPOGRAPHY: Contoured

PROJECT FORM: Curvilinear

#### **INFRASTRUCTURE:**

- Classrooms and foundation halls are acoustically treated with projection and audio system
- Acting, dance, yoga studios
- ➤ Music rooms

- Fashion pattern-making and grooming and draping
- > Prop and costume storage
- Film, text, and periodically library
- Cafeteria
- > ATM



Figure 22.Block C and D

# **SITE APPROACH:**

Isolated place from the main city which causes inconvenience in transportation. Institute approach is difficult as it is 13.5 Km away from the nearest railway station (goregaon).

#### SITE CIRCULATION:

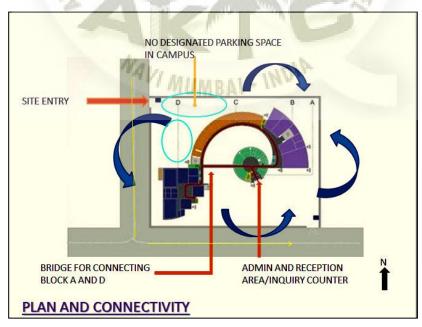


Figure 23.Plan and connectivity

#### **SPACE OPTIMISATION**

- ➤ Ground floor stilt space is used as an interaction space between students of all courses for rehearsal, dance, shows, etc. also used this as a parking space as there is no designated place for parking in the campus which causes congestion.
- Courtyard is spacious and well maintained.



Figure 25. Courtyard of Whistling Woods

Figure 24.Block A

#### **LIGHT AND VENTILATION:**

- ➤ Bridge (which connects block A and block C) is nicely ventilated due to installation of glass ventilators.
- There is natural light and ventilation in the surrounding block lobbies.
- ➤ Block A is a circular form building with an atrium in between and admin blocks are along the periphery which results in lack of fresh air and causes suffocation.
- There is natural light and ventilation in the surrounding block lobbies.

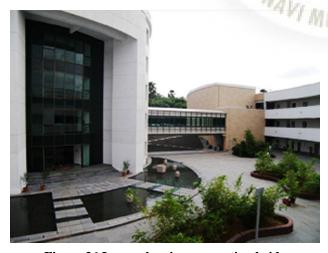


Figure 26.Image showing connecting bridge



Figure 27.Image showing skylight in block A

#### HORIZONTAL AND VERTICAL CIRCULATION OF BUILDING

- There are in total 6 staircase in the building and two emergency staircases in the building and two emergency staircases in the building etc.
- ➤ There is absence of ramps, escalators, hence not a barrier free design.
- ➤ Lobbies play vital role in circulation within all four blocks. They are about 2.5 m wide with enough sunlight and natural air.

#### FORM AND FUNCTION OF THE BUILDING

- Circulation form of the admin block segregates itself from other blocks which makes easy for the user to determine
- ➤ Block 'C' has curvilinear form with artifacts and poster of films. Hence its curve form helps the viewer from different angles to see and read the artifacts.
- All the blocks are functional enough with good connectivity between them.
- As per site functionality, admin/enquiry (Block A) is too far from the site entry, without any signage, which confuses the user.



Figure 28.Image showing building's curvilinear form

## **CLIMATIC CONDITIONS:**

- ➤ Hot and humid climatic region, high temperatures are accompanied by very high humidity levels leading to immense discomfort.
- Adequate shading measures are also necessary to protect the building from direct solar radiation.
- Can be best described as moderately hot with high level of humidity.

#### **BUILDING SERVICES:**

- > Fire fighters are being installed everywhere.
- > There is no fire alarm system installed in order to prevent fire.
- > There are five washrooms on each floor including staff with suitable zoning and ample area.

#### **OTHER:**

- ➤ There is no segregated pedestrian and vehicular pathway.
- Lobbies are made interesting by exhibiting posters and facts of a popular film of that respective year.
- > Graffiti and wall paintings outside fashion section make the lobbies lively.



Figure 29.Image showing wall posters

#### SUSTAINABILITY AND STRUCTURAL TECHNOLOGY AND MATERIALS

- Absence of rain water harvesting plant could have installed solar panel for power saving, compound walls as green walls.
- ➤ Reinforced cement concrete (RCC) framed structure
- > Building block 'D' has granite as cladding.

## **BLOCK A**

#### **GROUND FLOOR**

**ADMISSIONS** 

REGISTRAR

**OFFICES** 

#### 1ST FLOOR

**RECEPTION** 

**OFFICES** 

## 2ND FLOOR

CYBER CAFÉ

#### **3RD FLOOR**

**FACULTY OFFICES** 

#### **4TH FLOOR**

LIBRARY

DEAN/PRESIDENT/MANAGEMENT OFFICES

#### **5TH FLOOR**

**CHAIRMAN'S OFFICE** 

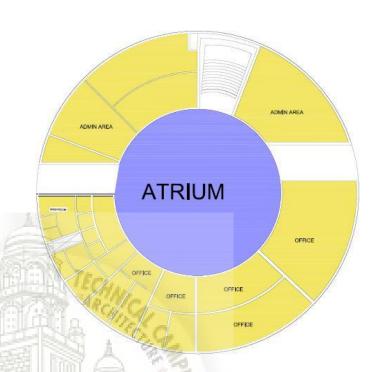


Figure 30.Block A-Plan

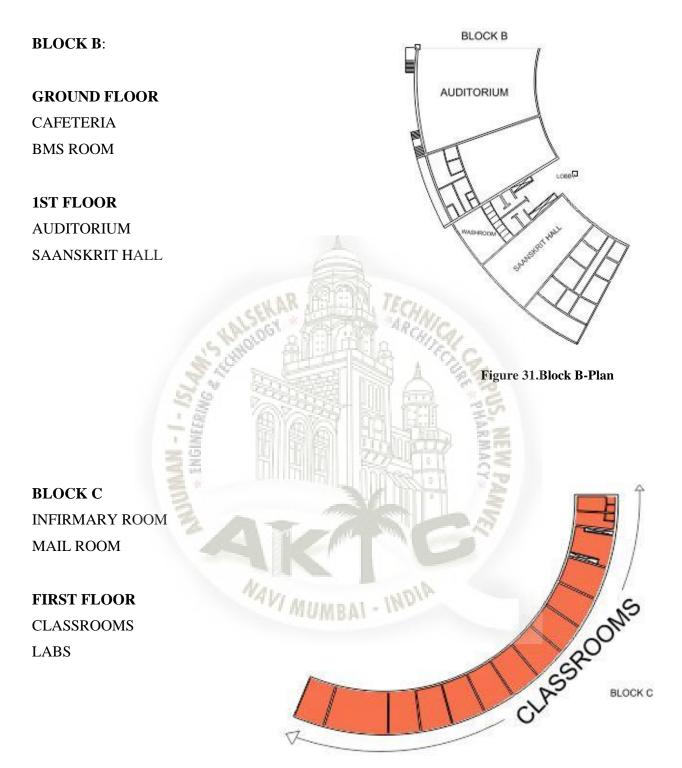


Figure 32.Block C-Plan

# **BLOCK D:**

# FIRST FLOOR

**GYM/SHOWERS** 

STUDENTS LOUNGE

**RECREATION** 

ATM

CAFÉ STATIONARY

**CAREER RESOURCE** 

**STUDIOS** 

2ND FLOOR

FOUNDATION HALL

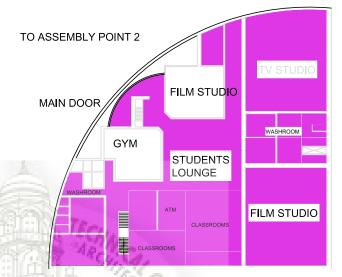


Figure 33.Block D-Plan D

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# **CASE STUDY 3:**

# NATIONAL INSTITUTE OF DESIGN, AHMEDABAD

National institute of design was established in Ahmedabad in 1961 by the government of as an autonomous national institution for advanced training, research and service in product design, visual communication, architecture, structural planning and allied fields.

Client ministry of industry, government of India stakeholders: faculty, Students' area: 63,848 sq. meters.

**ARCHITECT**: Giraben sarabhai & charles eames overview

National Institute of design (NID) is a design school in paldi, Ahmedabad, Gujarat

**AREA OF THE SITE:** 20 acres approx. The site is located along the Sabarmati River. The site measures about 20 acres. In its surrounding is the Tagore hall, the kite museum and opposite to the site is Diwan ballabhai high school. Main access of the site is from the main road.

### **SITE PLANNING**

The whole campus can be distinctively divided into two major zones – Institutional & Residential. The main block which consists of both the academic and administration departments is placed on the eastern part facing the river. Sports facilities are in between the two blocks.

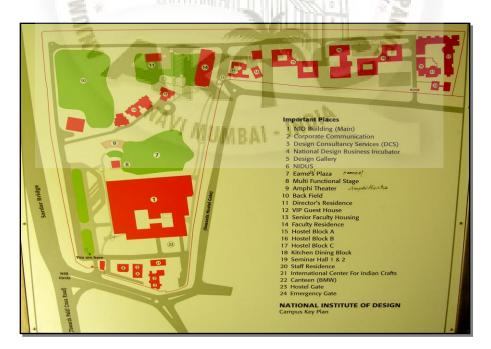


Figure 34.Site Plan-National Institute of Design

# **INTERNAL ZOINING:**

- > The courtyards, functionally conceived as open spaces to segregate between two diverse functions of 'seminar rooms' or 'classrooms' and 'workshops' or 'laboratories' due to noise and structural reasons.
- > Spatially created light wells for the dark ground spaces.

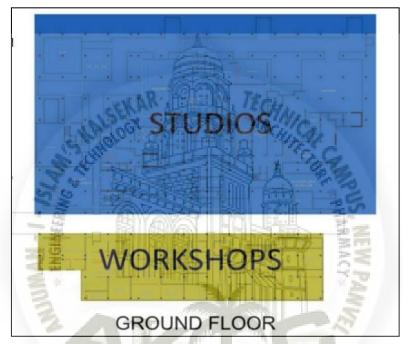


Figure 35.Internal zoning

The north-south orientation of the studios gives more light and cuts off the glare.

### **CIRCULATION:**

Emphasis has been given on the pedestrian movement of the site. Besides, service entries are provided for the various workshops.

Vehicular movement is restricted only till the entrance for the visitors.

But it is possible from residential areas to academic block and vice- versa.



Figure 36.Ground Floor plan

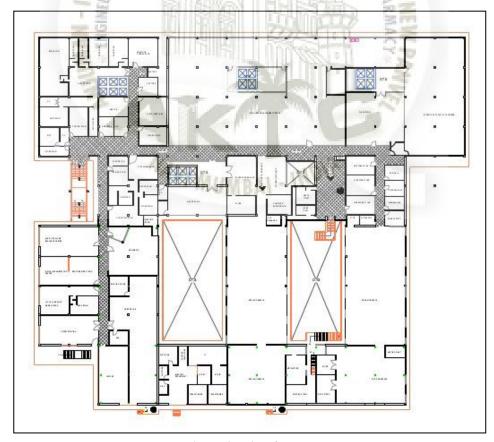


Figure 37.First floor plan

#### HORIZONTAL CIRCULATION

The movement pattern develops on the ground floor through the court like spaces that developed under the structural grid.

One is made to experience the receding columns in perspective on the way to canteen.

The main circulation on the first & second floors is through a long and narrow passage at the centre.

The passage is single height narrow linear space.

#### VERTICAL CIRCULATION







Figure 38.RCC staircase

Spiral stairs have been provided as a means of connecting workshop to the studios.

It is by triple height staircase marked with platforms at different levels which gives a very impactful experience. One of its major functions is to formalize the entry to auditorium on the second floor.

The second staircase has been placed in the rear most court, which is used as secondary preference to the triple height staircase. The semi opened space around the canopied roof of the double staircase is an excellent activity area where the students interact, relax and has some major source of exchange of ideas.

# STRUCTURE DETAILS



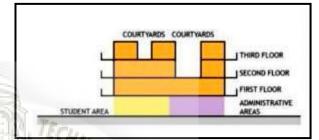


Figure 40.Image showing Structural detail

Figure 41. Section showing zoning of spaces

### **GRID PLANNING:**

The plan of NID signifies varied spatial experiences with different 'spatial types' such as the pen courtyard with thorough way, the raised platform type, the colonnade type facing the green spaces, the multiple entrances, the formal entrance court with the brick shell, and lastly the grid which holds the whole composition together. The plan displays magnificent interconnections and spatial non- hierarchy with the openness of the organization.



Figure 42.Image showing garden and amphitheatre in NID campus

The complex modulations are designed with partition walls, created maze with diverse experiences. This openness of the plan symbolizes the expression - 'free plan'. Another interesting juxtaposition is the location of an old monument, used as backdrop for amphitheatre, in close vicinity to the main building. The existence of old and the new creates dynamic compositional balance.

#### LANDSCAPE:



Figure 43.Image showing Landscape of NID

As soon as the built form is placed on site it generates its own space in and around it. Thus the outside open spaces are as much important a design criteria as inner. Lawns are used for informal gathering, cultural program, and other annual events.

The campus has been completely landscaped. Three platforms extend from the institute building in the lawn acting as built-in sit outs. There is also an ancient monument and open air amphitheatre having densely planted trees around it. Amphitheatre is also used for social functions, fashion shows, etc. Lawns are not only a feature of landscape but they act as interactive spaces.

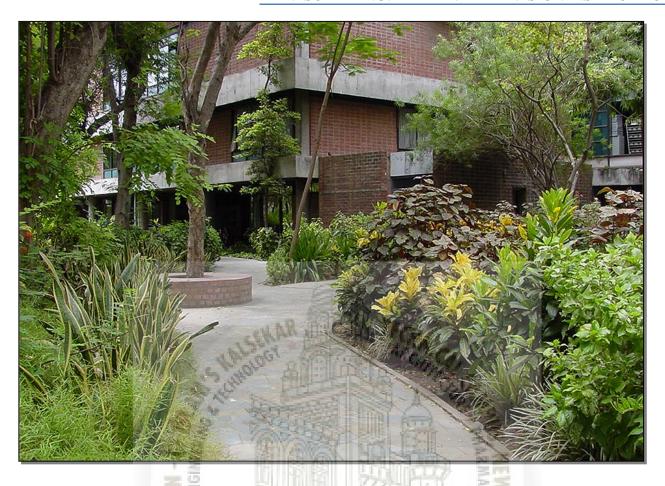






Figure 44.Images showing landscaping in NID

# **CONSTRUCTION TECHNOLOGY (PRECAST)**

Precast concrete is a construction product produced by casting concrete in a reusable mould or "form" which is then cured in a controlled environment, transported to the construction site and lifted into place.

Precast concrete production is performed on ground level, which helps with safety throughout a project.

There is greater control over material quality and workmanship in a precast plant compared to a construction site.

The forms used in a precast plant can be reused hundreds to thousands of times before they have to be replaced, often making it cheaper than onsite casting when looking at the cost per unit of formwork.



Figure 45.Image showing type of construction (NID)



Figure 46.Image showing construction (NID)

# **MATERIALS**

Precast RCC shells are designed to carry machine loads of 1000kg/sq. metre (including impact).

The first few shells were of reinforced cement concrete, but the next step was to develop them of reinforced brick with an RCC band at the edges.

In the third stage, the entire shell was made of reinforced brick.

The final stage of the development was the design of a brick shell without any reinforcement at all.





Figure 47.Images showing construction materials



Figure 48.Image showing time of construction (NID)

# LIGHTING AND VENTILATION

The campus has been designed taking into consideration the hot and dry climate of Ahmedabad.

The activities are so planned that they spill over into inward looking spaces.

The courtyards remain in the shadow for most part of the day.

To allow the inflow of light into the workshops, sliding panels has been installed which run from the height of the skirting to about 10' from the floor level.

Pockets of vegetation blend with the structure on the exterior as well as interior.

Large trees protect the building from surface glazing and courtyards from excessive heating.



Figure 49. Section showing air circulation

The external cladding is prefabricated and consists of heat resisting glass in metal frames in workshops and in rosewood frame in studios.

Winds from the riverside are captured in the studios and workshops from the terraces due to adjustable glazing.

Features like water bodies with jallis are used to filter the cooled air flowing over the water and passed in interiors.





Figure 50.Images showing source of ventilation in structure (NID)

# **SERVICES**

A channel, 5 cm. wide, is maintained between these squares. Under-floor electric wiring is laid in these channels and filled with ma9S concrete. Changes in machinery layout can be made at any time by simply removing the mass concrete in the channels and changing the under-floor electric connections as and when necessary without any damage to the concrete flooring.





Figure 51.Images showing light fixtures

Electric light fixtures are an integral part of the light-weight overhead grid suspended from the roof beams. The fixtures have been so designed that additional tube lights can be fitted if greater illumination is required.

Electric fans are also suspended from the overhead grid.

Ducts for housing various services like water pipes, electric cables, ventilation and airconditioning are an integral part of the design of building.



Figure 52.Image showing electric fan fixture from overhead grid

- 1. Sprinkler for cooling roof shell
- 2. 1230 cm. x 1230 cm. brick shell
- 3. Rain water drain
- 4. Return air duct
- 5. Air condition or humidification duct
- 6. Suspended structure for lights and fans
- 7. Steel cladding
- 8. Electrical cable, drainage and water supply duct
- 9. Wood seasoning Plant (chamber)

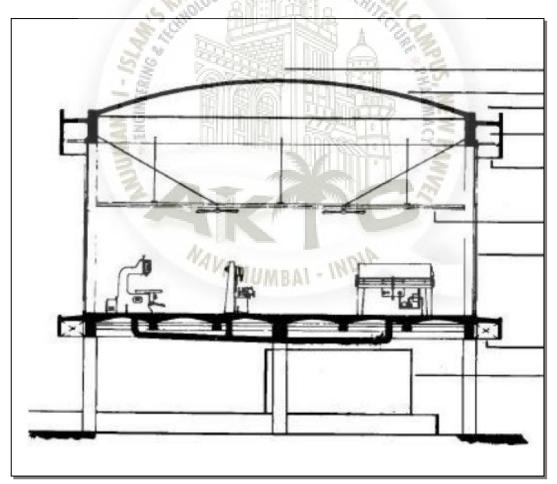


Figure 53.Section showing services (NID)

# **CASE STUDY 4**

# **CEPT UNIVERSITY**

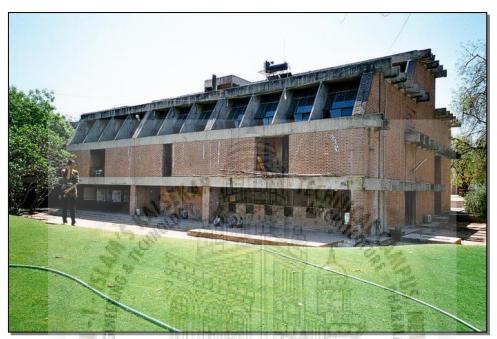


Figure 54.CEPT university (architecture building)



Figure 55.Location map (CEPT)

CEPT University was started in 1962 under the Ahmedabad Education Society and was actively supported and encouraged by Kasthurbhai Lalbhai, a leading industrialist and philanthropist of the city. Its initial direction was set by architect B.V. Doshi, Dr. Rasvihari Vakil and Bernard Kohn.

The school broke away from the conventional teaching course structure which was prevalent at the time and instead adopted a more open curriculum with many elective courses.

The concept changed from architecture as a technical discipline to architecture as a design discipline.



Figure 56.Architectural building (CEPT)



Figure 57.Central courtyard (CEPT)

LOCATION: Gujarat University area, Ahmedabad

**ARCHITECT**: BV Doshi



Figure 58.CEPT Site plan

# **AREA OF THE SITE: 12.5 acres**

**INSPIRATION:** The influence of Louis Kahn and le Corbusier can be clearly seen in the building design. The free plan concept of Corbusier is adopted with space underneath it which is active and multi-functional, designed for sun protection and exposure to breeze.

# **SITE**

The site is located in the Kasturbhai Lalbhai Campus in Navrangpura, a western suburb of Ahmedabad. It lies within a zone occupied by other educational institutions. Being at the edge of this zone, it is also immediately proximal to some residential localities which adjoin.

The site about 12.5 acres, measuring about 300 meters North-South and about 150 meters East-West.

It is roughly rectangular, with extensions on the eastern side at the northern and southern ends for vehicular parking and on the southern side (Hussain-Doshi Gufa).

The general slope is towards the north- western corner.

### SITE APPROACH

The site is 6.7 km from Ahmadabad railway station, 6.9 km from Ahmadabad Bus stand and 11.8 km from Ahmadabad airport.

# **CONTEXT (SURROUNDING AREA)**

The site is surrounded by a wide arterial road on the western side.

Smaller public approach road on the northern side Cricket field on the eastern side internal access road on the southern side

### ACADEMIC FRAMEWORK OF CEPT

Campus is of four different schools

School of planning

School of architecture

School of building science and technology

School of interior designing

# **FEATURES:**

The school building is set back 100 ft. from the main road and shielded by trees to create a serene atmosphere inside the campus and is hardly visible from the main road. Emphasis is given on open flexible spaces with hardly any doors. There is creation of a proper working environment facilitating faculty and students to have free scope to learn and teach anywhere. There are exposed local materials for low cost, easy expansion and maintenance.



Figure 59.Image showing level differences (CEPT)

The design is intended to be close to nature and experiment the designing skills, play with levels etc. Since the land was earlier a brick kiln, the site was undulated and gave opportunity to play with levels. There are inclined skylights on top of the studios, perpetually letting in natural light



Figure 61.Image showing material of structure (RCC)

into the spaces. The studio spaces have bay spaces facing the exterior, creating semi-private spaces which are yet totally open to the exterior - spaces where the individual can be alone with nature even the environment of a studio.



Figure 60.Image showing trees and sitting spaces in central courtyard

# **DISPOSITION OF BUILDINGS**

The buildings are placed orthogonally with respect to the sides of the site and hence along the cardinal directions. A look at the plan will reveal the predominance of the north- south direction in the general organizational scheme of the site as well as its component buildings. The placement of the buildings themselves spread out and interspersed with loosely held open spaces characterized by terrain features and greenery which creates a set of inter connected, flowing spaces which may be traversed by several combinations of paths taken thus conveying a sense of continuity and openness.



Figure 62.Panoramic view of central courtyard

# APPROACH MAIN ACCESS ON THE NORTHERN SIDE

There are two entrances on the southern side two entrances on the western side.

There are two types of buildings in CEPT campus

Wide spanning, multiple storied usually in transverse groupings.

Narrower spanning, single storied, vaulted, usually not combined.

# **PLANNING**

The built form starts with a pair of parallel walls. The basic component of the buildings of CEPT is a derivative of a pair of parallel, load-bearing walls, supporting a flat floor-slab. The repeated occurrence of parallel-walled structures in the buildings of the campus can be observed. The overall planning has been done around the central court with built masses on sides and green on one side which gives the campus noise protection from traffic. Architect has included uneven contours into the plan transforming a drawback into a delightful experience of space. The whole building is very simple and architectural elements are expressive of their functions. The spaces created by volumes and voids are visually exciting.





Figure 63.Image showing structural construction and planning

The building has simple horizontal lines and merges beautifully with the site. The building is twostoreyed with a split level basement. The building design incorporates the thermal comfort and natural sensibly.

Entrance: The entry to the complex is through a long axis which ends up in facing a blank wall. One is forced to turn, go down a flight of brick paved steps and turn then again to enter the main wide flight of steps rising up ever so slowly towards the framed entrance to the library.



Figure 64.New Library in campus

### **LIBRARY**

On the right side is the double storeyed studio block perpendicular to the axis of the library. The main administrative block is approached by an informal and indirect approach thus emphasizing the change in direction and the informal nature of the campus.

### **WORKSHOPS**

There are small structures of the wood workshop and the TV room, which helps in containing space. The building forms are arranged around a courtyard which can be accessed from all the sides with open spaces flowing into each other through well designed transition spaces. The entry to the individual buildings provided from the common court around which the buildings are arranged. Vehicles are restricted to the parking space provided at the periphery while the campus is pedestrianized.

# **BASEMENT**

The basement is a multipurpose space. It is a very active space of the campus. On one side of the basement rising contours can be seen, and on the other side steps towards the central courtyard. Thus the north and south walls have been avoided. Numerous activities are performed here like cultural programs, fests and exhibitions, indoor games etc.

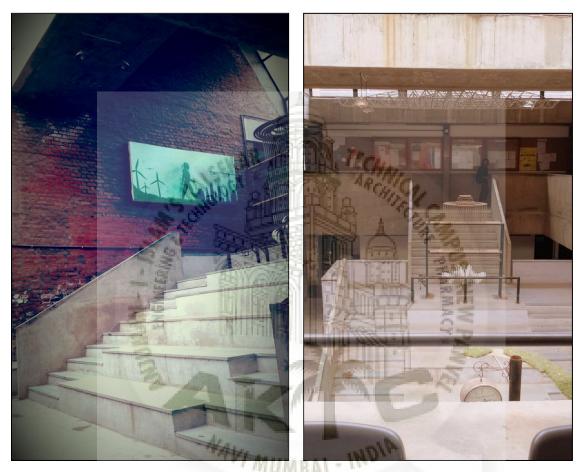




Figure 65.Basement

### **CENTRAL COURTYARD**

The central court is a combination of paved and unpaved areas, shaded by trees in certain areas. • All entrances are linked to the courtyard by pedestrian pathways. Hence the courtyard is an area of heavy circulation and interaction. The courtyard has grown organically with the addition of informal seating Court has large unpaved area, lacking in grass or vegetation. Cultural activities, reading, games, meetings etc. all happen here.



Figure 66.Central courtyard (CEPT)

### **CANTEEN**

The canteen is on the corner of the axis of the studio block. There are external built in seats which encourage discussions and which over the years have evolved into the most active vibrant part of the entire campus. Both students and faculty sit around this space, chatting. This space is a true reflection of the spirit and culture in the campus with a great atmosphere of interaction, informal discussions and learning.



Figure 67. Canteen view of CEPT campus

# **STUDIOS**

The studios have large openings which open into the greenery outside. Panels at the sides help the students to put up the important and useful sheets. All the studios are above one another, along with the adjacent lecture rooms. There are common interaction zones between the studios of different years. The studios are designed keeping in mind the climatic needs and comfort of its users. The building section and double height studios are well conceived to facilitate air flow. The building is oriented along the East-West axis with openings on North and South and thick walls are provided on the east and west to keep off the hot sun.





Figure 68.Studio space

# **VENTILATION**

The parallel walls, forming an open tube of space are predominantly aligned North-South, effectively closing off the East and West sides. The north side is heightened to allow more number of North's light in while the south side is kept low to shield from the harsh direct radiation. This results in a configuration with a double height north side and a single height south side. Such difference in heights in section leads to a combined volume, emphasizing the directionality set out by the parallel walls in plan.

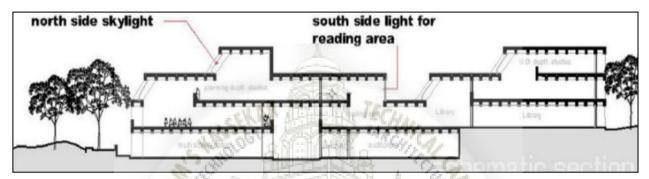


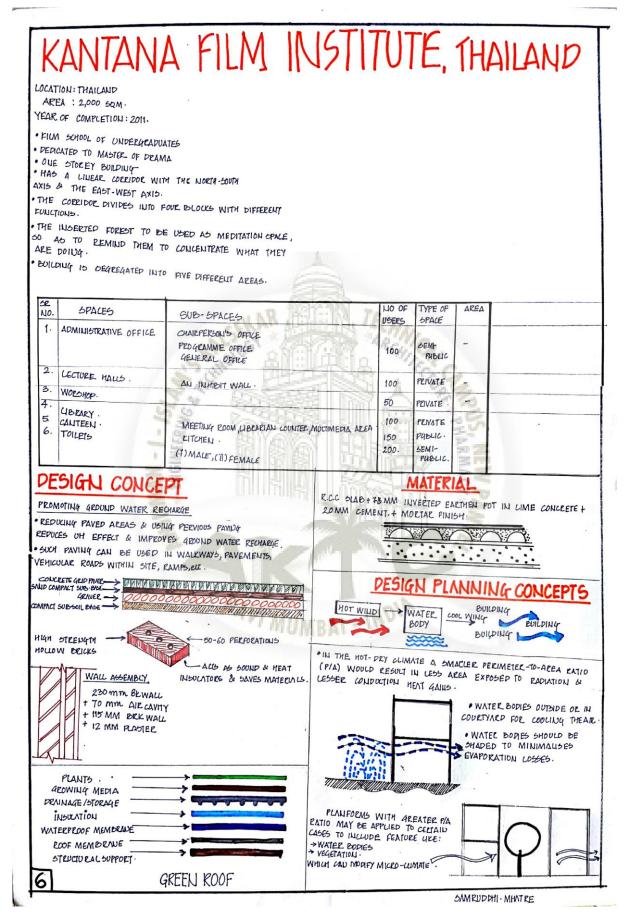
Figure 69. Section showing ventilation of CEPT architectural building

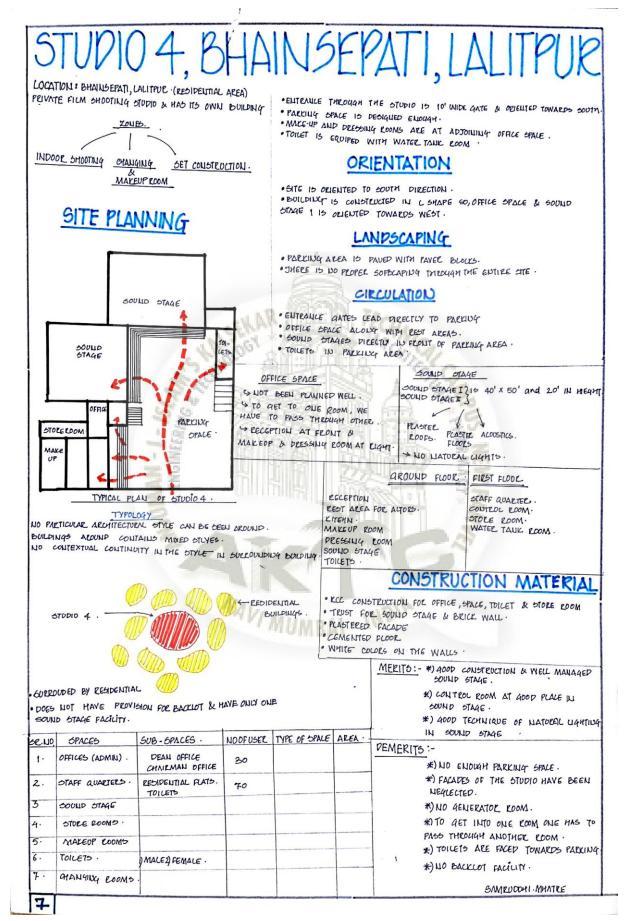
# SCULPTURE PARK

The campus also has magnificent sculptures. A sculpture park is situated in the southern part of the campus. The "Hussain Doshi Gufa" forms another locus of the campus designed by B. V. Doshi in collaboration with eminent artist M. F. Hussain.



Figure 70.Sculpture park (CEPT)





# THREE MILLS STUDIO, LONDON.

ONE OF THE LARGEST STUDIO LOCATED IN SEVEN MILES

PROVIDES SERVICE TO FAMOUS FILM MAKERS & T.V SHOWS. SCREENING ROOM.

THESE MILES STUDIO

PEOP STORES.

10 SOUND STAYES

EXTERIOR

PEISON EXTERIOR

MAKEUP PRESSING ROOM.

LOCATION FILMING

CELL.

# SITE PLANNING

CAN BE APPROACHED THROUGH THIS POADL

SUGAR HOUSE CANE THREE MILLS LANE

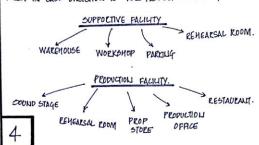


- · SUGAR HOUSE CANE IS SEPERATED FOR VEHICULAR ENTRANCE WHICH CEAPS TO A PIECE OF CAND IN WEST DIRECTION STUTIO.
- IMMEDIATELY AFTER ENTRANCE, WE CAN SEE PARTING ON THE EIGHT. SIDE & WALEHOUSE ON THE CEFT SIDE.
- THIS PIECE OF LAND OF LAND COUSISTS MOSTLY WARE HOUSE & WORKSHOPS.
- SOUND PIECE OF LAND IN EAST DIRECTION MOSTLY CONSISTS OF SOUND STAGES & OTHER PROLITIES WE PROP STORE, REHEARSAL ROOM NECESSARY FOR PROPULTION PHASES.

# PLANNING

AREA IN WEST DIRECTION IS SEPTERATED FOR SUPPORTIVE FAULTY, PRODUCTION FACILITY &

· AREA IN EAST DIRECTION IS FOR PRODUCTION FACILITY.



# GIRCULATION

- . SUGAR HOUSE LANE APPEACH FOR WEST FICE OF LAND I.E. SUPPORTIVE FACILITY FOR PROPURTION FACILITY FOR PROPURTION FACILITY.
- · THREE MILLS LAUE APPROACH FOR EAST PIECE OF LAND T.E. PROPUCTION FACILITIES .
- · BACK ACCESS FOR STORAGE FACILITIES.
- · PIRE EXIT PROVISIONS BETWEEN SOUND STAGE AS THEY ARE CLOSE TO EACH OTHER.
- · BEIDGE CONNECTS TWO PIECE OF LAND DNIDED BY THREE MILLS WALL EIVER.

# LANDSCAPING

- · CANDECAPHIC IS VERY WELL DONE DONE & VERY ATTRACTIVE & DELOCATIVE THAT ELIMANCES THE SITE.
- · BLACK TOP ROAD ROUNING THROUGHOUT THE STUDO.
- · FIRE EXIT PROVISIONS BETWEEN SOUND STAYE AS THEY ARE CLOSE TO EACH COTHEL
- · BEIDGE CONNECTS TWO PIECE OF LAND DIVIDED BY THREE MILLS WALL RIVER.

# MATERIALS USED.

- . STEEL STRUCTURE FOR FOUNDATION & SUPER STRUCTURE.
- · BRICK WALL WITH TEUSS ROOF IN SOUND STAGE.
- . SOUND ABSORBING PALIELS ON THE WALLS OF SOUND STAGE
- · CONCRETE PLOOPING WITH WOODEN OVERLAY IN SOUND STAGE
- · PITCHED ROOF WITH ROOF
- . P.C.C ON PARLING
- · WOOD PLOOLING. ON REHEARSAL ROOM WITH TRUSS ON THE ROOF.

# SOUND STAGE.

- · GOT 11 SOUND STAGES OF AREAS 2200 39 FE TO 12500 SQ FE WALLS & CEILING OF THE SOUND STAGES ARE COVERED WITH SOUND PROOF MATERIALS 30 THAT SHOOTING CAN BE DONE IN A QUALITY ENVIRONMENT.
- · FOR ELECTRIC SUPPLY IN SOUND STATE, POWER GOLLETS OF 100 amp, 32 amp & 18 amp. one PROVIDED.
- · FLOORS ARE CONCRETE FLOORS WITH WOODEN OYELLAY & WATEL SPRINKLE & SMOKE DETECTIONS ARE USED FOR FIRE PROTECTIONS.

1) 50UND 5TAGE --- 366.502 5QM. WOODEN

- 2) -- 299.055 50.M. WOODEN.
  - -> 560.5769 SAM. CONCRETE WITH WOODEN OVERLAY.
    - -> 969.62 SQM. CONCRETE WITH WOODEN OVERLAY.

SAMRUDOMI. MHATEE 12 ARCHT 5TH YEAR B-ARCH .

#### 1.2. RESEARCH DESIGN

#### I. STANDARDS AND DATA COLLECTION

### Facts and statistics related to Indian film industry

Among all the glitter of Hollywood, people often forget about the other globally recognised movie capital, which is India, strongly established in Mumbai, the Indian film industry was expected to grow to 138 billion Rupees by 2014 - that's \$2.28 billion.

The numbers are definitely impressive. In terms of the number of movies produced per year, Bollywood is on top of the pile with 1,602 in 2012. The U.S. produced 476 films that year while the Chinese managed 745. In the same year, Hollywood sold 1.36 billion tickets compared to Bollywood's massive 2.6 billion. Indian movies cannot compete with Hollywood in box office income, however. U.S. films earned nearly \$10.8 billion in 2012 compared to India's just \$1.6 billion.

People in India don't tend to remember those numbers though; they just want to watch films, with nearly 2.7 billion cinema admissions in 2013. India produces more films than the other three biggest film producers - USA, Japan & China combined.

Mumbai is the center and birthplace of multi-million dollar Indian film industry. Brad Pitt once admitted in an interview with the Indo-Asian News Service that he "would love to work in a Bollywood film as there is so much drama and color in the films there." The drama and colors seem to be appealing to the Indian audience as well, considering the domestic figures for Indian films are impressive. There were two thousand multiplex theaters in India as of 2015. A year later, more than 2.2 billion movie tickets were sold in India, placing the country as the leading film market in the world. In comparison, about 1.25 billion movie tickets were sold in second-placed China in 2016.

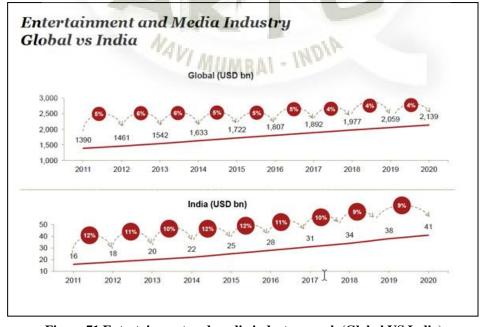


Figure 71.Entertainment and media industry graph (Global VS India)

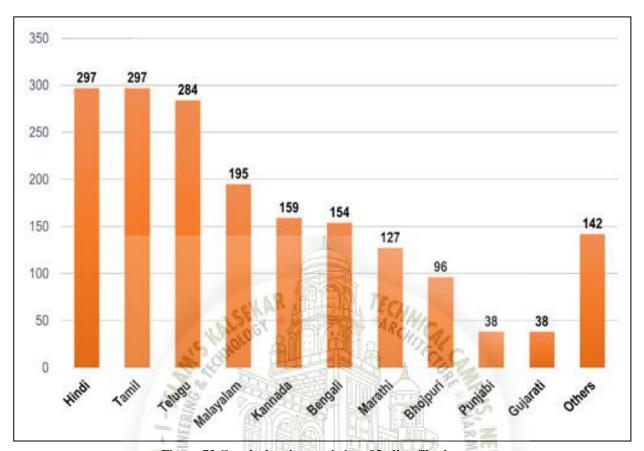


Figure 72. Graph showing statistics of Indian film languages

In India 'Aashiqui 2' a romantic musical drama released in 2013 as a sequel to the 1990 musical 'Aashiqui', generated 612 percent of the original cost of the movie. This staggering amount of return on investment ranked 'Aashiqui 2' top of the leading movies produced in India in 2013 by return on investment. Another film which performed well in 2013 was the romantic comedy 'Yeh Jawanni Hai Deewani' which generated 322 percent of the original cost.

Domestic box office is another way of measuring a film industry's performance. Back in 2009, the domestic box office revenue in India amounted to 65.8 billion rupees. It has been estimated that by 2018 this revenue will have by almost grown to a staggering 160.2 billion rupees. Advertisers in India are aware of the industry's popularity with audiences and have invested heavily in cinema based advertising. In 2006, cinema advertising spending in India amounted to 17 million U.S. dollars. It is a medium that advertisers are expected to continue with so that by 2015 cinema advertising spending will reach an estimated 43 million U.S. dollars.

The vividness and diversity of Indian culture is reflected in its movies too. The last few years, have proven to be bliss for Indian film industry and through its variety film making ranging from commercial cinema to contemporary and serious cinema, it has made a mark on the international platform. Its growing popularity spans beyond the all-time followers from UK and the US to surprisingly countries such as Nigeria, Egypt, China, Afghanistan and Pakistan.

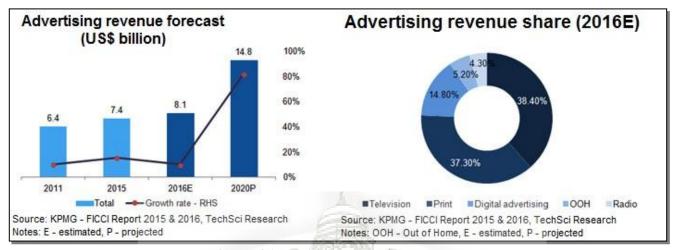


Figure 74. Advertising revenue forecast

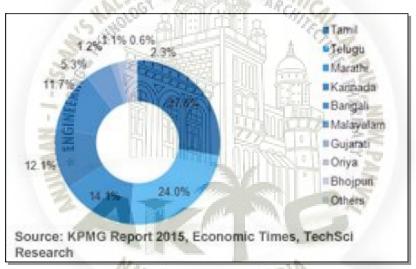


Figure 73. Pie chart showing Indian film language statistics (year 2015)

With over 600 television channels, 10 million pay-tv households, 70,000 newspapers and 1,000 films produced annually, India's vibrant media and entertainment (M&E) industry provides attractive growth opportunities for global corporations. Enticed by economic liberalization and high volumes of consumption, many of the world's media giants have been present in the Indian market for more than two decades. However, in recent years, with near double-digit annual growth and a fast-growing middle class, there has been a renewed surge in investments into the country by global companies. Media sectors, regarded as "sunset" industries in mature markets, are flourishing in India, presenting global media companies with exciting opportunities to counter declining revenues. For example, the newspaper industry, which is facing declining readership in many international markets because of digital media, continues to thrive in India, driven by increasing literacy rates and consumer spending as well as the growth of regional markets and

specialty newspapers. Newspapers account for 42% of all advertising spend in India, the highest in all media streams. India's favorable regulatory environment and recent reforms are creating investment opportunities in a number of M&E sectors. Entry restrictions for foreign companies have been relaxed and Foreign Direct Investment (FDI) caps have been recently increased in key sectors, including Direct-To-Home (DTH) and radio. Mandatory digitization of the country's TV distribution infrastructure has spurred the growth of digital cable and DTH, and created the need for these companies to fund their expansion. The third round of radio license auctions (phase III), expected in the near future, is expected see radio networks adding around 700 radio stations across the country. Then, there are India's diverse content markets. The bulk of the country's urban consumption is from non-metro cities (the tier 2 and tier 3 towns) and comprises regional markets with distinct cultures, languages and content preferences. These markets, which are huge markets within markets, provide global M&E companies with a variety of opportunities to deliver localized content. Many global film studios and TV broadcasters have already entered these markets and are producing regional language content.

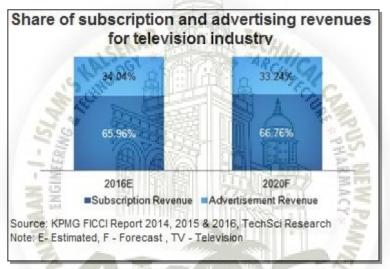


Figure 75. Share of subscription and advertising revenues for television industry

Finally, there is the evolution of consumption of digital content, which is at an inflection point in India. Although internet penetration is currently low in the country, the recent launch of 3G services and the eventual launch of 4G are expected to bring a late surge in wireless-based broadband adoption. In conjunction with India's mobile phone user base of more than 750 million subscribers, the scale and impact of the country's potential for digital content consumption is huge. This presents M&E companies, foreign and domestic, with an exciting opportunity to develop digital businesses that cater to a new generation of broadband users. While there are many opportunities to tap, there are also unique differences and challenges. Diverse content preferences and the low price point and high volumes of content consumption are some of the critical differences that global M&E companies need to assess when entering the Indian market. Companies that understand and adapt to the economic and social fabric of the country's operating environment and that invest in tailored content and services are likely to maximize their success. M&E companies operating in India continue to be exposed to risks ranging from local competition to fraud, corruption and piracy. Furthermore, although the development of corporate governance norms and ongoing structural and regulatory reforms are expected to mitigate these threats, global M&E companies need to develop flexible business plans, and identifies and develop mitigation strategies for key risks.

# a. SITE JUSTIFICATION

> Site location: PUNE

Latitude: +18.53 (18°31'48"N)
 Longitude: +73.84 (73°50'24"E)
 Time zone: UTC+5:30 hours

**Local time**: 20:22:05

Country: IndiaContinent: Asia

> Sub-region: Southern Asia

➤ **Distance**: ~120 km (from your IP)

➤ **Altitude**: ~580 m









Figure 76.Site location (Pune)

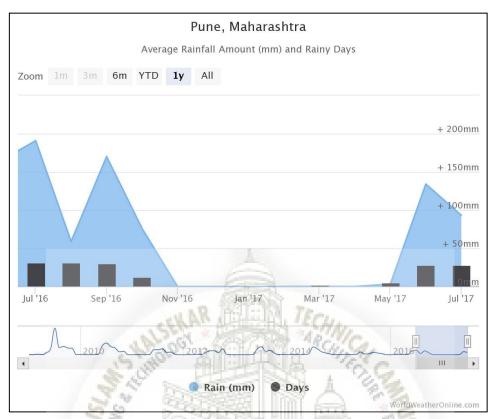


Figure 77. Average rainfall (cm) in Pune



Figure 78. Average snowfall amount (cm) in Pune

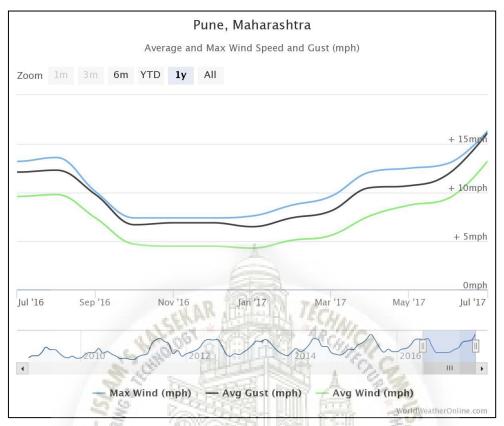


Figure 80.Average and max wind speed and gust (mph) in Pune

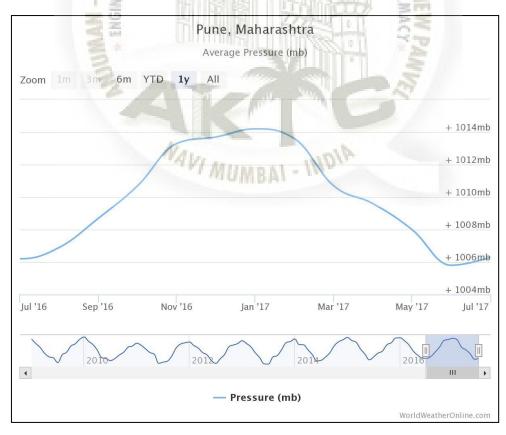


Figure 79. Average pressure (mb) in Pune

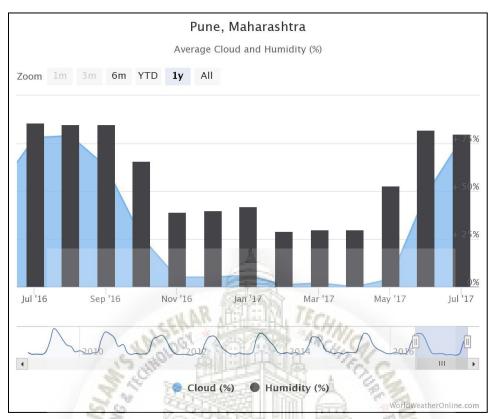


Figure 81. Average cloud and humidity in Pune

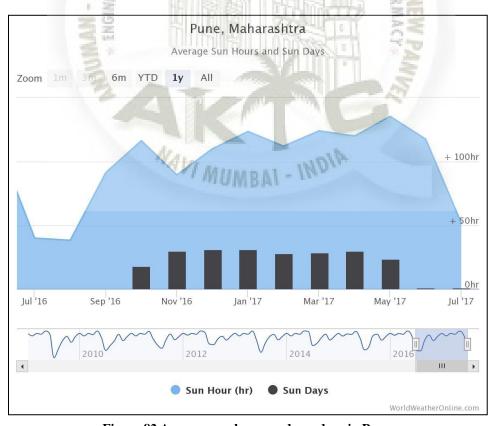


Figure 82.Average sun hours and sun days in Pune

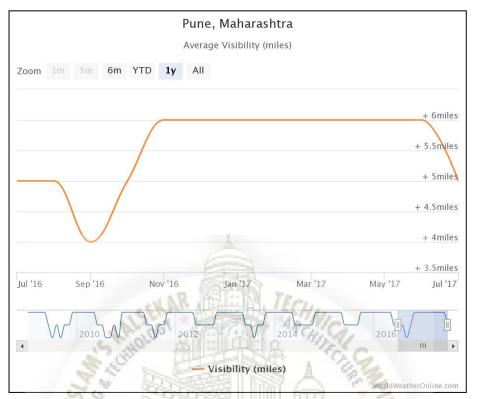


Figure 83. Average visibility

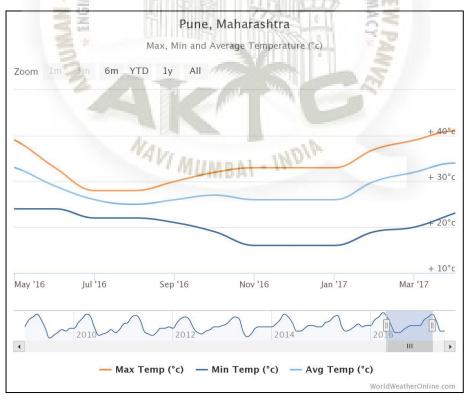


Figure 84.Maximun, minimum and average temperature

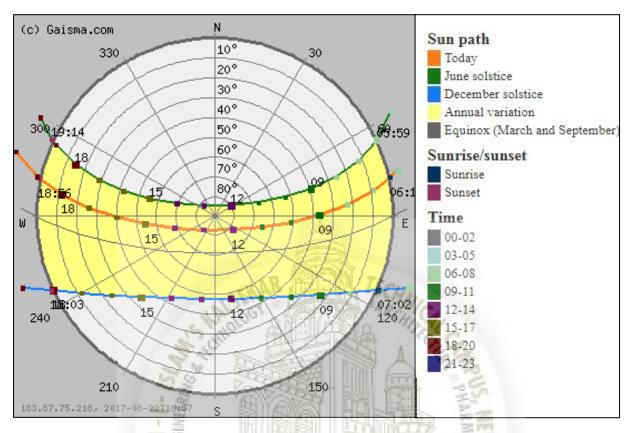


Figure 86.Sunpath diagram

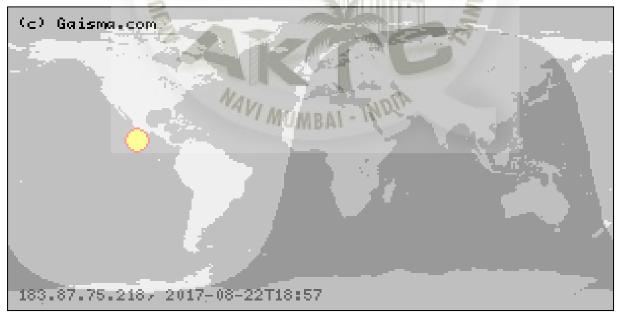


Figure 85.World map context

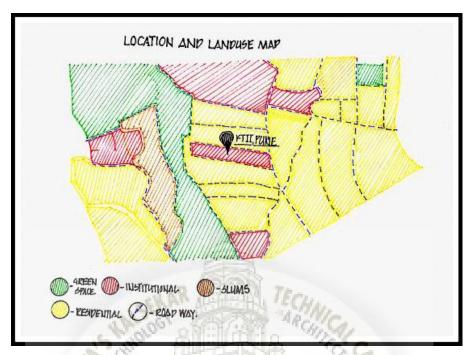


Figure 87.Location and Land use map

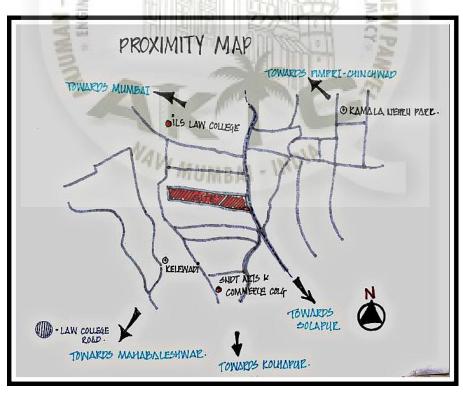


Figure 88.Proximity map of site (Pune)

# SITE DEMARCATION AND AREA:



Figure 89.Demarcation of site

NAVI MUMBAI - INDIA

### REVISUALIZING FILM AND TELEVISION INSTITUTE OF INDIA (PUNE)

- ➤ The Film and Television Institute of India (FTII), Pune was established by the Government of India in the Ministry of Information and Broadcasting on the recommendation of the Film Enquiry Committee for imparting training in the art and techniques of film making and started functioning on 20th March 1961.
- Later, in 1974 the television wing was introduced and the institute was renamed as the Film and Television Institute of India. The institute has trained many of the present day luminaries of the film industry and has made its mark all over the world.
- ➤ With the fast paced growth in Film, TV and Media industry, there is a **need felt for up** gradation of FTII to enable it to play a pivotal role in facilitating the Indian Film, TV and Media industry manages the growth.
- Additionally, in the last few years the number of students studying at FTII has been increased by more than 50% due to starting of new courses as well as due to introduction of OBC reservation policy. This increase in number of seats has caused immense pressure on the existing resources and faculty.
- More importantly, a premier institution like FTII can serve as a Cultural Brand Ambassador showcasing Indian talent, culture and ethos to the world at large. Also, there is a strong need to keep up with the latest changes in the world of film and television.

#### WHY FTII NEEDS TO BE UPGRADED?

#### NEED FOR UP GRADATION AND ACHIEVING INTERNATIONAL STANDARDS

- > FTII ever since its inception in the early sixties, has been **one of the premier institutions** for Film and TV education in South Asia, several Indian as well as Foreign students passed out from FTII and are today eminent Industry leaders in their respective domains.
- The need for FTII to play a larger role and a more global role in the field of Film and Television education has been felt for a long time.
- ➤ This is reflected in several previous concept notes and committee reports like (Satish Chandra Reports, Estimates Committee Report etc.).
- ➤ Many film school, even in Asia which have come up after FTII have gone on to acquire more impressive international credentials in the last couple of decades, especially, Beijing Film Academy and Korean Academy of Film Arts can be cited as only some of such examples.
- > Today when Indian Film, Television and Media industry is poised for registering a global presence there is also a need to enable a premier educational institution like

- FTII to educate and train human resource to international standards to sustain this growth.
- Additionally, due to a fast paced change of technology / trends / practices / industry needs in the Films, TV and media domain there has been a need realized to upgrade and re-establish. FTII as a film school up to International standards.



Figure 90.Article by DNA



Figure 91.Image showing contoured site

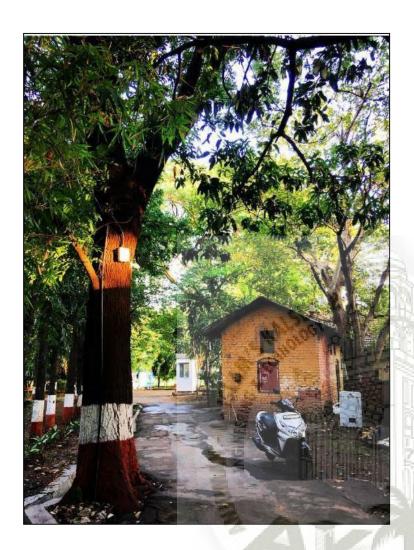
- > Site is contoured; the site is accessible from two approach roads on the highest and lowest levels
- > levels vary between 121(highest) and 91(lowest), i.e. 30 meters height difference
- > Site is covered approximately 50% by trees and vegetation.
- Existing trees are very large in number.
- > There are informal sitting spaces around the trees for students.



Figure 92.Image showing vegetation on site



Figure 93. Canteen and other informal areas



Some existing single storeyed structures found on site which are temporary but can be retained in practice.



Figure 94.Image showing site conditions

# 3. ARCHITECTURAL SPACE PROGRAME

No.	PROFORMA - 1		4.12
10 and 10 and		r. (.) : (., .) 2.223	
	AREA STATEMENT	SOMT	
			150
<del>,</del>			-
1.	AREA OF PLOT	71005.00	
• 2.	DEDUCTIONS FOR		11.5
а.	ROAD ACQUISITION AREA	NIL	
В.	PROPOSED ROAD	NIL	<b>4</b> ( ) ( )
c.	ANY RESERVATION	MIL a	
	TOTAL (a + b + c) (		
3.	NET GROSS AREA OF PLOT (1 - 2)	71005.00	
4.	DEDUCTIONS FOR		1 3.4
a. b.	RECREATION GROUND AS PER RULE NO. 13.31 INTERNAL ROADS	10650.75	4
c.	TOTAL (a + b)	6630.00	
5.	NET AREA OF PLOTS (3 - 4c)	17280.75	. 1
6.	ADDITION FOR F.A.R. 2(a)	53724.25	
	TOTAL BUILT UP AREA 2(b)	Mall	
ring is	PURPOSE POP. 2(c)		
7	TOTAL AREA (5 + 6)	53724.25	
8.	r.a.r. permissible	53724.25	
9.	PERMISSIBLE FLOOR AREA (7 + 8)	53724.25	
10.	EXISTING FLOOR AREA	22569.04	
11.	PROPOSED AREA	2326,39	1
12.	AREA STATEMENT EXCESS BALCONY AREA TAKEN IN F.A.R. AS PER B(c) BELOW	NIL	
13.	TOTAL BUILT UP AREA (10 + 11 + 12)	22052 00	1.0
14.	F.A.R. CONSUMED (13/7)	0.446	
	LEGEND	0.446	
٠.,	PLOT BOUNDARY SHOWN THUS	B 3	
	PROPOSED BUILDING SHOWN THUS		
	EXISTING BUILDING TO BE RETAINED SHOWN THUS	VZZZZ	
9 9	EXISTING BLIX TO BE DEMOLISHED SHOWN THUS	27773	
4.00	DRAINAGE LINE SHOWN THUS		
	WATER LINE SHOWN THUS		
<b>4</b>	AREA OF PLOT AS PER P.R.C.		
	FINAL PLOT NO.	AREA (SQ	
× 2	81/1		7
* 3	81/2	1375.00	4.1
	81/3 & 4	1356.00	
	81/9	2504.00	Sept.
	78 PART	25824.00	
1	78 PART	29829.00	
	TOTAL AREA	71005.00	
	AREA AS PER TRIANGULAR CALCULATION	V 100 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
	THE COLLARY CALCULATION	72017.99	
,		1.4	

Figure 95.Current area statement of FTII (Pune)

#### **BUILDING BLOCKS TO BE DESIGNED ON SITE:**

- 1. SECURITY CABIN
- 2. DIRECTOR'S OFFICE
- 3. DIRECTOR'S RESIDENCE
- 4. CARPENTER'S WORKSHOP
- 5. WORKSHOP PROPERTY STORE
- 6. P.R OFFICE
- 7. T.V TRAINING BLOCK( MAIN BUILDING)
- 8. SOUND EDITING DEPARTMENT
- 9. STUDIOS
- 10. FILM EDITING AND SCREENPLAY DEPARTMENT
- 11. ART DIRECTION DEPARTMENT
- 12. BOY'S HOSTEL
- 13. GIRL'S HOSTEL
- 14. PARKING AREA
- 15. CANTEEN
- 16. METERING ROOM
- 17. REDESIGN PRABHAT MUSEUM

SPACE	SUB-SPACES	NUMBER
Dark rooms with developing machines		3
Developing room		4
Chilling plant		2
Recovery unit		2
Maintenance room and store room		3
Painting room		2
Film grading room		2
Indoor shooting studio	a) Shooting space b) Storage	4
TOTAL		

SI	PACE	SUB SPACE	30	NUMBER
T.V studios	Till &	E/255	24	4
Control rooms			N. Y.	3
Master control room			h	4
Make up room	-		25	2
Costume & Property store	4 18 2			1
Video library				1
Conference room	-			2
Preview theatre	MAVIL	Algue		1
Video library	I W	UMBAI - IN-		1
Video editing rooms				6
Classrooms				10
Toilets/Restrooms		I. Gents II. Ladies		10
Hostel		I. Boys II. Girls		2

# TOTAL BUILT-UP AREA OF STRUCTURE:

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