

Feasibility Study for Proposed Project of Modernization, Augmentation and Retrofitting Of “Shanti One”

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Abstract- *A feasibility study is simply an assessment of the practicality of a proposed plan or project. As the name implies, these studies ask: "Is this project feasible? Do we have the people, tools, technology, and resources necessary for this project to succeed?" Also, "Will the project get us the return on investment (ROI) that we need and expect?" The goal of a feasibility study is to thoroughly understand all aspects of a project, concept, or plan; become aware of any potential problems that could occur while implementing the project; and determine if, after considering all significant factors, the project is viable—that is, worth undertaking. The present seminar topic is related with studying the feasibility of a retrofitting project named as Shanti One situated in the heart of city on nagar highway near agha khan palace. The existing project was a mall building which was supposed to be converted into an IT park.*

Indexed Terms- *Feasibility study, Retrofitting, Market study.*

I. INTRODUCTION

A feasibility study is an analysis that takes all a project's relevant factors into account—including economic, technical, legal, and scheduling considerations—to ascertain the likelihood of completing the project successfully. Project managers use feasibility studies to discern the pros and cons of undertaking a project before they invest a lot of time and money into it. Feasibility studies also can provide a company's management with crucial information that could prevent the company from entering blindly into risky businesses.

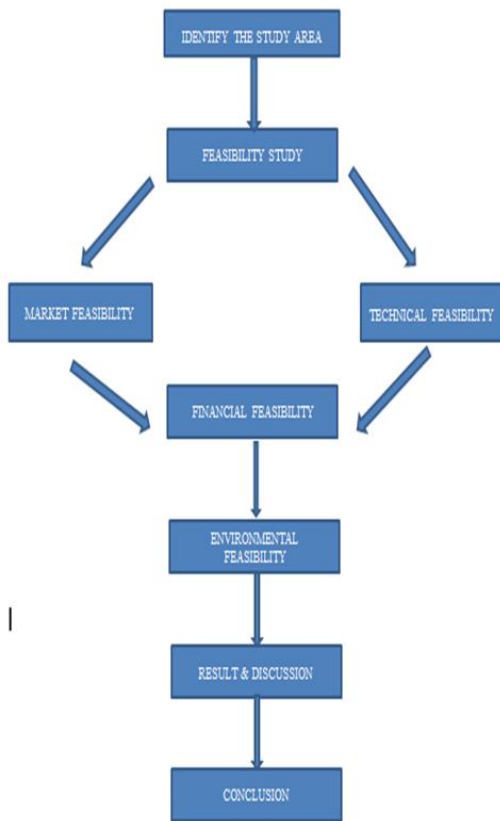
A feasibility study includes an estimate of the level of expertise required for a project and who can provide it, quantitative and qualitative assessments of other

essential resources, identification of critical points, a general timetable, and a general cost estimate. Whether a project is viable or not, i.e. whether it can generate an equal or a higher rate of return during its lifetime requires a thorough investigation of the investment per se as well as the level of current expenditure. The preliminary design is the simple description of the conceived idea with an indication of the main factors to be considered in the study.

II. OBJECTIVE

- To Study the technological support system required.
- To analyze the effect of project on environment and its management.
- To Study the economic feasibility of the project.
- To Study the Market Feasibility.

III. METHODOLOGY & CONCEPTUALIZATION



The study area is located on nagar road highway, Kalyani nagar, which is located at 1km from Pune Airport and 6.5 km Pune railway station. Analyzing the factors of feasibility includes Market feasibility, Technical Feasibility, Financial Feasibility & Environmental Feasibility. Market feasibility is done by primarily by analyzing the proposed location. The market size is being analyzed. The competitors near by the proposed location are being identified and their amenities are found out. The target group definition for individual to purchase & rental yield is calculated. The technical feasibility is done by assessing the specifications by identifying brand products based on prices & quality. Financial feasibility is obtained from the gross profit achieved from the difference between the income & revenues. From the gross profit, the gross margin of the proposed project will be achieved. The proposed project will be rated from the LEED India Green Building Rating System and certified as a Green Building. This satisfies the environmental feasibility.

IV. MARKET STUDY

Catchment Analysis – Catchment Analysis from User’s Perspective: The project is developed on an 6 grounds property located in Kalyani Nagar. The project location is in the heart of the city with reputed corporates, high end commercial developments, retail outputs & institutional developments. This area predominantly consists of upper & upper-middle income group residing. Development in the neighbor is a mixture of commercial, residential & retail use. Significant commercial developments have created huge need for office spaces in Kalyani Nagar. Commercial developments in the catchment include mostly high-end Software companies, Kpo, Bpo and IT companies. The supply of such spaces mainly lies in the location of that area. Several IT HUB of varying scales are under construction in Kalyani Nagar with major IT Companies including EON IT park, Barclays, Magarpatta City, Gega Space etc.,

Sr. No	Project	Unit Sizes	Unit Rate	Location
1	Eon IT Park	500 – 3000 Sq. Ft	28000/-	Kharadi
2	Magarpatta	500 – 3000 Sq. Ft	30000/-	Kharadi
3	Barclays	500 – 3000 Sq. Ft	29000/-	Kharadi
4	Gega Space	500 – 3000 Sq. Ft	27000/-	Viman Nagar
5	Shanti One	500 – 3000 Sq. Ft	25000/-	Kalyani Nagar
6	Cerebrum	500 – 3000 Sq. Ft	25000/-	Kalyani Nagar

V. AMENITIES

The traditional and conventional style of office spaces in Pune have made it clear in the survey that basic amenities are only required for a successful project. Social infrastructures such as transport, parking facility, recreation area, lift etc. are some of the very important requirements. Other facilities such as power backup, security too are some of the important factors to be considered while designing the project. Amenities provided in this project are: Gym Clubhouse, Centralized HVAC system, Fire Fighting System, STP, Water Purifier SYSTEM, 12 Passenger lift, office automation, LED Lights in common area Roof Garden / Party Lawn, Cafeteria, Open Garden etc

VI. ECONOMIC FEASIBILITY

Particulars	Units
Average Unit Size	1920
Average Price/Sq. Ft	22000
Unit Price	4,22,40,000
Funding Details	Units
Own money (%)	20%
Own money (Rs.)	84,48,000
Bank loan (Rs.)	3,37,92,000
Emi Calculation	Units
Bank loan (Rs.)	3,37,92,000
Interest rate(p.a.)	10.50%
Loan Tenure (yrs.)	20
EMI(Rs.)	3,37,373
Eligibility Salary Calculation	Units
Banker's thumb rule (%)	40%
Net salary per month(Rs)	8,43,431
Annual Salary (Rs.)	1,01,21,176
Rental Yield Calculation	Units
Office Unit price (Rs.)	4,22,40,000
Rent Per Month (Rs)	2,50,000
Annual Rent (Rs)	30,00,000
Return on investment (%)	7.1%
EMI out of pocket (Rs.)	87,373

VII. RESULTS & DISCUSSIONS

Project Location	Kalyani Nagar
Land Location	located on nagar road highway, Kalyani nagar, which is located at 1km from Pune Airport and 6.5 km Pune railway station
Competitors	Eon It Park, Magarpatta It Park, Barclays, Gega Space, Cerebrum
Amenities	Gym Clubhouse, Centralized HVAC system, Fire Fighting System, STP, Water Purifier SYSTEM, 12 Passenger lift, office automation, LED Lights in common area Roof Garden / Party Lawn, Cafeteria, Open Garden etc.
Target Group	IT Companies, Corporate Companies, Investors.
Average Unit Size (Sq. Ft)	500 -3000 Sqft

VIII. CONCLUSIONS

The proposed project was found to be feasible by the market, technical, financial, environmental feasibility. The market feasibility done in the proposed site in Kalyani Nagar is found feasible by location. The various amenities make the project Grade A. The technical feasibility is feasible by using the specified technological methods suggested. The financial feasibility infers, 34% of gross profit is achieved to the construction company, making it feasible. The proposed project will be verified through the LEED India NC criteria for environmental feasibility. Thus, this building will be rated as —certified green building —and also environmentally suitable project. The proposed project will be profitable provided the execution of the project does not exceed the timeline, minimum wastage of resources, no compromise in quality & minimal cost escalation.

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