INNOVISIONARIES

Problem Statement:

As freshers, one inconvenience we noticed at IIT Kanpur is the arduous process of finding available seats within the campus library during peak hours, midsems, and end sem exam periods. This inconvenience affects students' perception and discourages them from going to the library in the future. The library, a critical academic resource, becomes a source of frustration and inefficiency as students spend valuable time searching through its three floors for vacant seats.

Frequency and Scope:

This problem primarily occurs within the campus library, with its impact most pronounced during peak study hours, such as evenings, mid sem exams and end sem exam periods. The issue is pertinent to all students who rely on the library as a primary location for academic study and project work(individual or with peers).

Relevance and Impact:

The problem of finding vacant seats in the library during exam times is highly relevant for several key reasons:

- Academic Performance:

The availability of a suitable study environment directly impacts a student's ability to concentrate, retain information, and perform well academically. Difficulty in finding a seat can lead to reduced study effectiveness.

- Time Efficiency and Productivity:

Time is a precious resource for students, especially during exam times. Wasting time searching for a seat in the library is counterproductive and hampers a student's ability to make the most of their study hours.

- <u>Resource Utilisation:</u>

The library's seating capacity, ranging from 800 to 900 seats, is relatively modest when considering the 9,000 students on campus who have mid-term and final exams concurrently. It's worth noting that if there are unoccupied seats, despite the high demand, it implies that the library's resources are not being fully utilised.

Urgency:

The urgency to address this issue arises from the immediate academic needs of students, especially during crucial examination periods. Solving this problem is essential to ensure that students have equitable access to study resources. Additionally, the lack of available seats may force students to resort to suboptimal study environments, such as crowded common areas or dormitories, which can negatively impact their focus and productivity.

Stakeholders:

The key stakeholders include students who use the library, faculty and staff who manage library operations, and the university administration responsible for campus facilities.

In summary, the problem of finding vacant seats in the library during exam times is highly relevant as it directly impacts the academic success, well-being, and overall experience of students at IIT Kanpur. Addressing this issue through a technology-driven solution aligns with the university's commitment to providing a world-class learning environment.

Desire for Change:

There exists a clear and collective desire for change within the IIT Kanpur campus community regarding this problem. Students, faculty, and staff alike recognize the inefficiencies and frustration of the current situation. There is a strong consensus that resolving this issue is paramount to enhancing the academic experience and ensuring
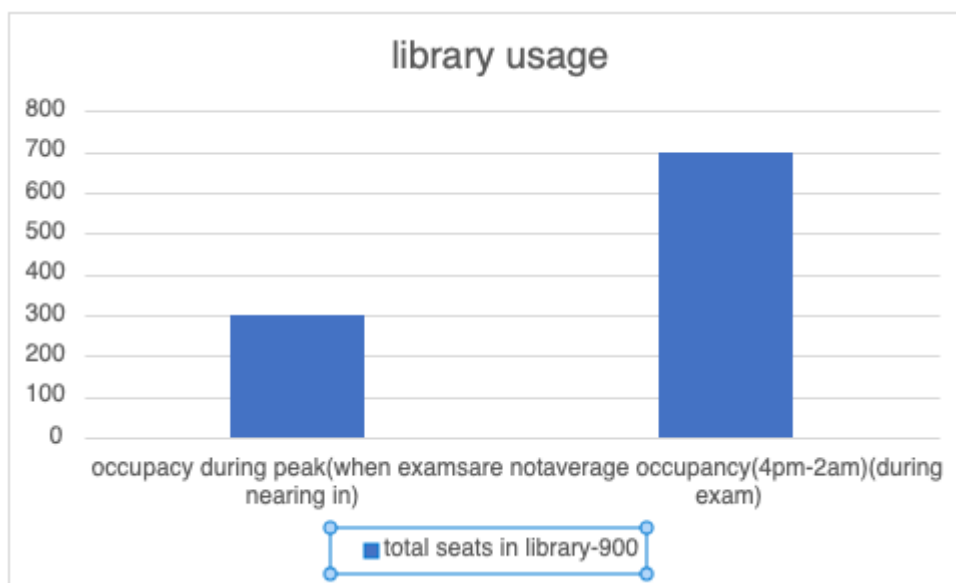
equitable access to the library's resources. The need for change is rooted in a shared will to improve the campus community's overall academic success.
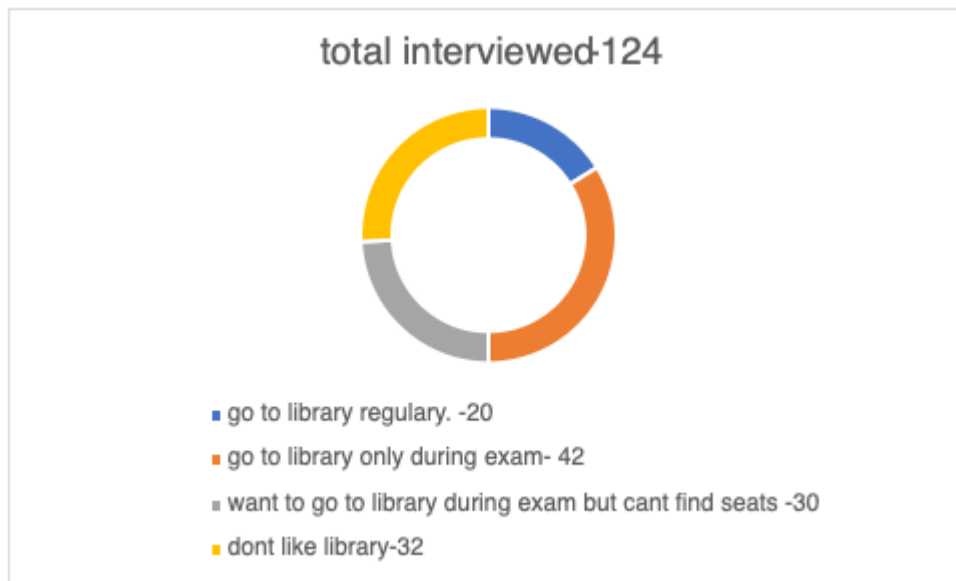
Data:

Upon interviewing assistant library information officers of the PK Kelkar Library, we received testimonials that emphasised the need to make library more accessible to everyone.

We also learnt that the 800-900 seats of the library are not completely filled during midsem and end-sem exam periods. However, students who come alone or with their peers are not able to find such seats due to the multitude of students in library.

 All the data presented here is based on interviews from students studying in the library, staff and our peers . The sample size has a disproportionate representation of 1st-year undergraduate students.

total interviewed-124

- go to library regulary. -20
- go to library only during exam- 42
- want to go to library during exam but cant find seats -30
- dont like library-32

While it is impractical to increase the number of seats to accommodate every student who wishes to study in the library, the library's utility would be used to a better extent if there was a smart seat monitoring technology that could monitor and report the location and availability of free seats via AI implemented in overhead cameras within the library. This would also be greatly convenient for the students.