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DESIGN THINKING
PHOTOCOPY

BRANCH	MCA
GROUP	1RV21MC108 SURAJ N M 1RV21MC114 VAIBHAV KULKARNI 1RV21MC115 VAIBHAVA HATHWAR T L

EMPATHIZE PHASE

Scenario

Places such as Xerox shop, Stationery, and Canteen are usually overcrowded by students in college.

In the crowded Xerox shop, it becomes difficult for the students to manage time as well as the shop owner to manage the customers. This may cause several problems for students, such as late submission of work, long wait in the queue, unable to print the required documents, etc.

Miscommunication may happen between the shopkeeper and the student due to which student may get the wrong printout. This is a problem for both students and the shopkeeper. Because of the long queue shopkeeper may lose some customers.
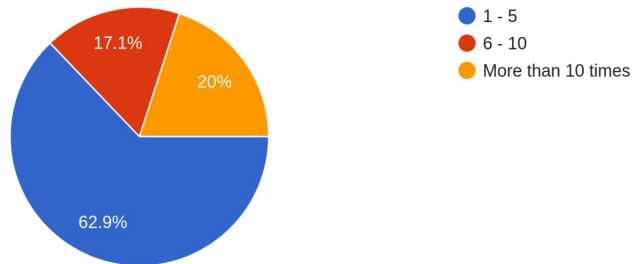
Tools used in Empathy Stage

1. Questionnaire

2. Interview

3. SWOT Analysis

4. STP Analysis

5. Competitor Analysis

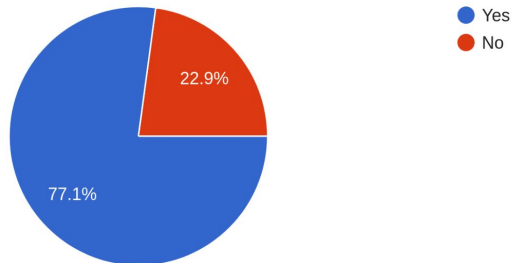4) How often do you visit Photocopy (Xerox) shop of the college in a month?

35 responses

- 1 - 5
- 6 - 10
- More than 10 times

17.1%

20%

62.9%

5) Have you compared the prices with printing costs outside the college?

35 responses

- Yes
- No

22.9%

77.1%

6) What would you prefer more?

35 responses

- Cheap price with longer waiting time.
- Relatively expensive price with no waiting time

48.6%

51.4%
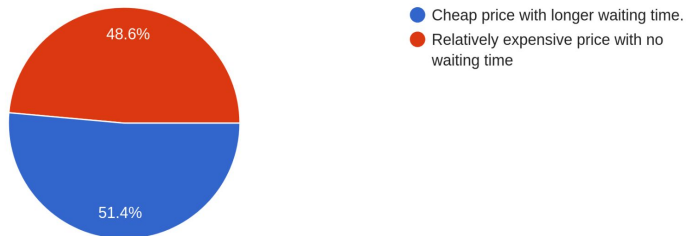
7) Does the college schedule permit you time, to wait in queues?

35 responses

- Yes
- No

91.4%

8.6%

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8) Which mode of payment do you use?

35 responses

- ● Cash
- ● UPI / Online mode

94.3%
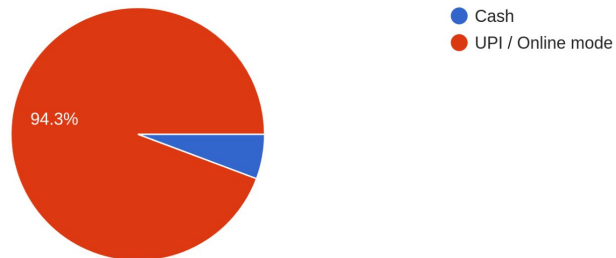
9) Have you ever come back from Photocopy (xerox) shop because the queue was long?

35 responses

- ● Yes
- ● No
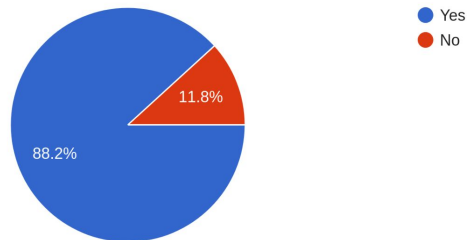
100%

11) Have you ever paid more money outside to get the printout because of the crowd in the college Photocopy (xerox) shop?

34 responses

- Yes
- No

88.2%

11.8%

12) Have you ever received printouts in wrong format because of miscommunication due to the crowd?

35 responses

- Yes
- No

42.9%

57.1%
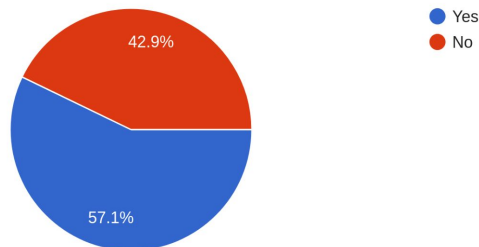
Questionnaire for Students

14) After COVID times, do you fear crowd?

33 responses

- Yes
- No
- Maybe

39.4%

33.3%

27.3%
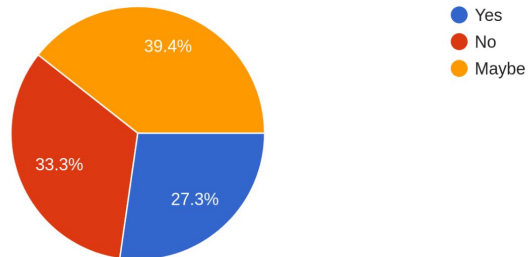
15) Did you experience a scenario where a person who came later got the print first?

35 responses

- Yes
- No
- Multiple times

42.9%

11.4%

45.7%
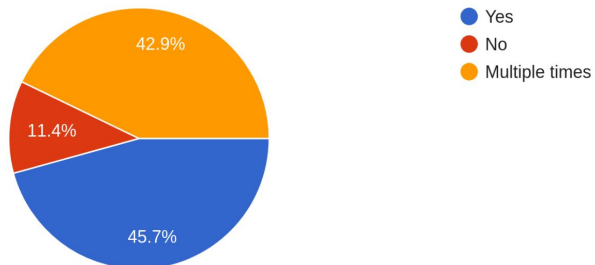
1) What is the peak hour of the day?

2) How difficult does it become to handle the crowd in the shop?

3) How many people handle the shop operations?

4) How many machines do you have in working condition?

5) Have you ever thought of increasing the number of machines? Why?

6) How common it is to experience miscommunication due to crowd?

7) Are you able to manage the crowd?

8) Is maintaining more number of machines feasible?

9) How stressful is it to respond to all customers during crowd?

10) How many times have you experienced customers not paying amount or the right amount?

11) How do you keep track of customers who give for printout and collect later?

Weaknesses
- Hard to control the crowd
- Miscommunication because of crowd
- Limited machines and staffs
- Long waiting time

Threats
- Competition from other shops (On campus or Off-campus)
- Unsatisfied customers because of the crowd
- Malfunctioning of limited machines may increase crowd

S W O T

Strengths
- Inside the campus
- Cheap price compared to outside
- Print, Photocopy, and binding at single place

Opportunities
- Increasing number of machines and staffs
- Handling the crowd
- Increasing the number of shop

STP Model

SEGMENTATION

- Photocopy, Project binding, Color Printing, Report generation
- Mode of sale is offline
- Mode of payment is online or offline
- Students and teachers are end users
- A4 and A3 style papers, bond paper

TARGETING

- Students looking for affordable services
- Students expecting different photocopy services inside the campus
- Teaching and non teaching staff

POSITIONING

- Affordable prices
- Variety of services
- Easy access
- Available from morning to evening

Competitor Analysis

Inside Campus

- Easily accessible
- Facilities are mostly accessed by students and staff
- Photocopy, Project binding, Color Printing, Report generation
- Cheaper price compared to opposite of college

Opposite to college

- Crossing of busy road is required
- Facilities are accessed by general public along with students
- Lamination, Photocopy, Project binding, Color Printing, Report generation
- Costlier than other near by shops

Near Global City

- 2 K.M of travelling is required
- Facilities are accessed by general public along with students
- Photocopy, Project binding, Color Printing
- Most affordable

DEFINE PHASE

1   Longer waiting time
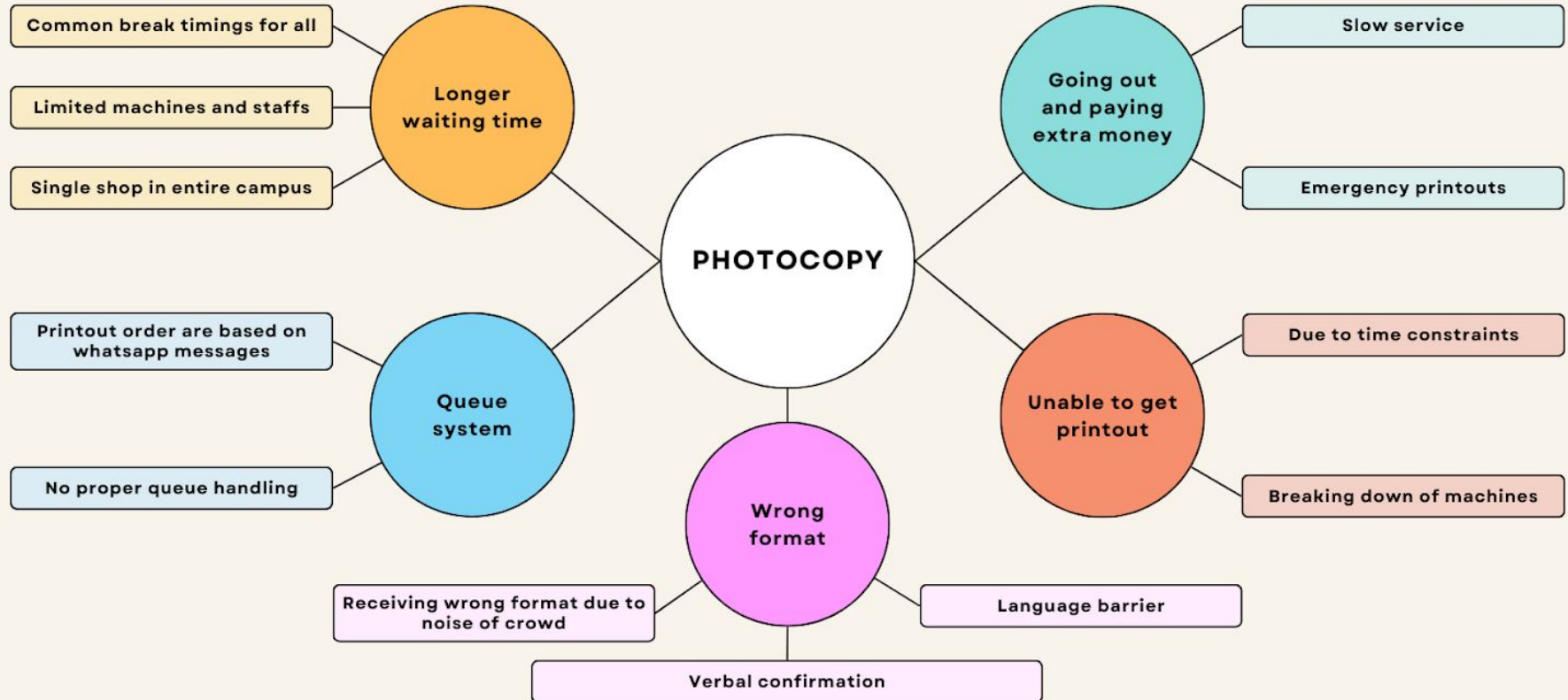
2   No proper queue system

3   Getting printouts in wrong format

4   Going outside and also paying extra for the photocopy

5   Unable to get the phototcopy on time because of crowd

Affinity Diagram

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PHOTOCOPY

Longer waiting time
- Common break timings for all
- Limited machines and staffs
- Single shop in entire campus

Going out and paying extra money
- Slow service
- Emergency printouts

Queue system
- Printout order are based on whatsapp messages
- No proper queue handling

Unable to get printout
- Due to time constraints
- Breaking down of machines

Wrong format
- Receiving wrong format due to noise of crowd
- Language barrier
- Verbal confirmation

- **Who is experiencing the problem?**
  - Students who need to take printout during peak hours are experiencing the problem
- **What is the problem?**
  - Long waiting time
  - Huge crowd
  - No proper queue
- **Where does the problem present itself?**
  - The problem can be experiences inside the college campus
  - Photocopy shop inside the college campus
  - Additionally, teaching and non-teaching staff may be involved
- **Why does it matter?**
  - It may save time
  - It may provide proper queue system
  - It may provide a way to manage the crowd

- **Problem:**

  Due to huge crowd in the photocopy shop, it gets difficult for the students to get their work done on time.

- **Background:**

  From personal experience, we decided to conduct a survey and analysis. The results of the survey shows that most of the students return back without getting their work done.

- **Details:**

  On further observation, we found that the crowd is at peak during break and lunch time as well as during assignment and project submission time every semester.
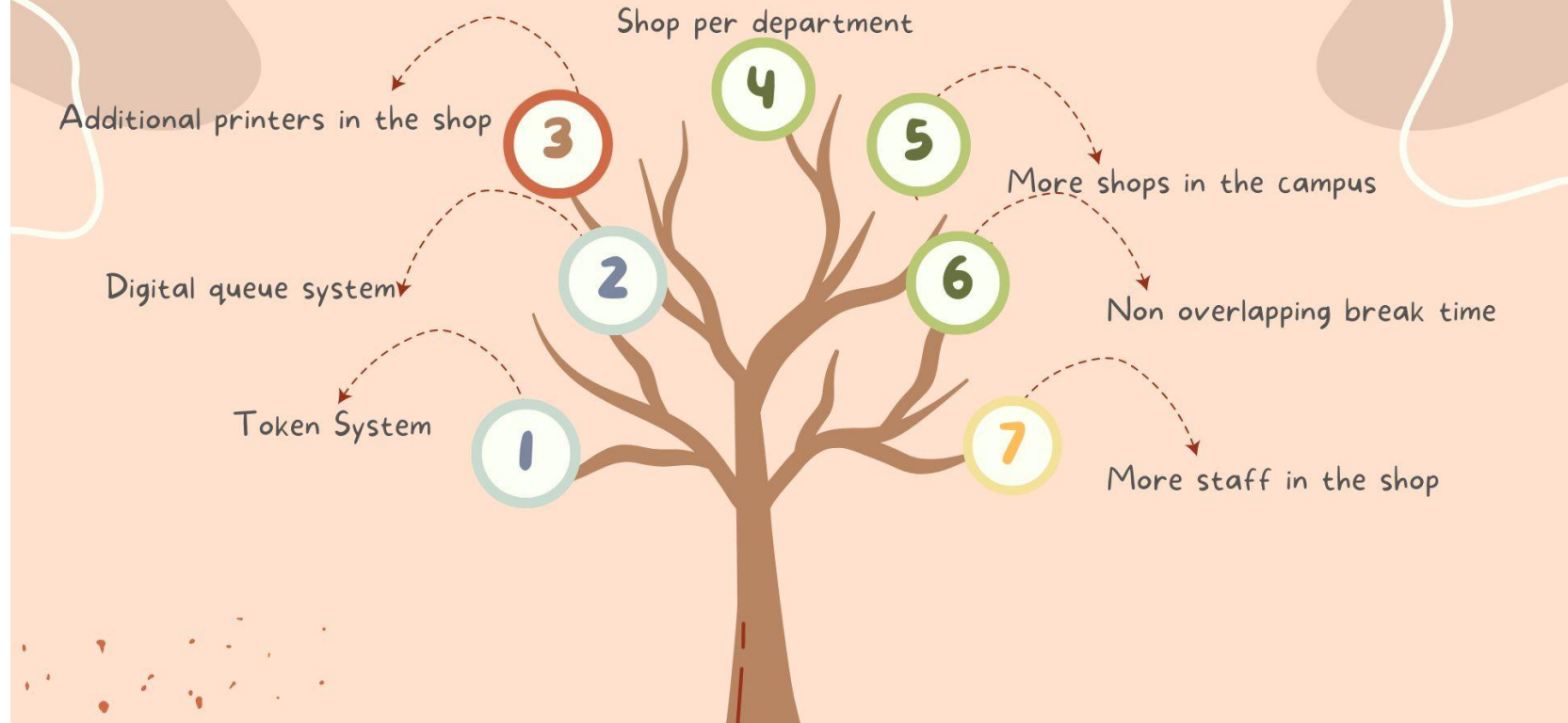
- **Impact:**

  It may impact the submission time of the assignments to be submitted by the students.

IDEATE PHASE

Thank You!