

UNDERSTANDING  
USER EXPERIENCE  
&  
ARCHITECTURE

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**“Architecture is of the people , by the people and for the people”**

Elaborating on the above statement , Architecture has been practised from centuries by the people for satisfying their own needs and requirements in accordance to their own guidelines , with which people adapt to and interact with in their own unique sense. But with the age of technology unfolding and increasing population playing its card , architecture is increasingly being constricted to satisfy more generalized requirements. Rather than the design process being more inclined towards user centricity , it is leaping towards the ideology of monotonous manufacturing machines.

Every individual in synchronization with his / her / its persona reflects their unique needs and interests for a space or product , that can be stated as utility, hence , standardizing and forming a common image for all types of user with respect to a particular functionality is not justified. Therefore, it is highly significant to understand User Experience in Design Methodologies in Architecture.

## **USER & UTILITY**

User can be viewed as an individual who meets his space or product requirements or needs by inhabiting and adapting to the given scenario , which should suffice his / her / its demands or basic necessities. Hence it brings into picture the Utility ( Product / space ) that is to be used and the User who will be using the utility.

Some of the examples to define the relationship between User and its utility could be : Bus and the traveller boarding it , Honeybee and the flower from which the nectar has to be extracted , a Cup of tea and the person drinking it , the House and the family living in it.

## USER ANALYSIS

In order to meet user centric design following set of knowledge is significant :

1. **TASK NEEDS** , which states the activities ideally carried out by the user in a given circumstance or scenario.
2. **INFORMATION NEEDS** of the user , which states the set of information and answers that a user requires to undertake the tasks.
3. **DRIVES AS WELL AS BLOCKS** for the user , wherein Drive refers to the reason or motivation to use a utility and Block refers to the reason or hindrance that prevents the user to consider the utility.
4. **SENSORIAL PERCEPTIONS** of the user includes acoustic , visual , physical , textural , etc. impression while occupying / using the utility.
5. **USER PERSONA** , which can be defined as the character , needs , interests , frustration points , etc. that shape the overall personality of the user and requirements.
6. **THINKING PROCESS AND FEELING** , wherein , Thinking is more of a practical calculation or thought process ; whereas , Feeling accounts for the reaction , beliefs , depending on the user interaction with utility and is majorly inclined towards irrational thought process.
7. **AFFINITY CHART** , it highlights the gradation of tasks under the categories of Importance , tasks which are of high or low significance and Frequency , tasks which occur more or less frequently.
8. **CONTEXT UNDER CONSIDERATION**

## METHODOLOGY

### KITCHEN TIME LAPSE

The process of learning about the user and its context , was initiated from our houses. One of the most hardworking and dedicated member of the family was chosen for the exercise , Mother / Homemaker .

The activities of the user ( Mother ) complementing the requirements in kitchen space were observed closely with the medium of videography for approximately an hour or half , which acknowledged the diverse user interactions in a small but at the same time complex space like kitchen .

#### **OBSERVATIONS & CONCLUSION :**

Kitchen work called for more of Dynamic tasks than static , such as pouring water into the cup from the Water Purifier then rushing back to the kitchen island to switch on the stove , and again taking a walk to the refrigerator for getting vegetables and so on.

Hence , there has to be enough circulation space for carrying out these tasks . Secondly, the access points have to be in vicinity to prevent unnecessary movement.

The above analysis gave the gist of the user activity and demands for performing a certain task with respect to its immediate space / surroundings , herein the kitchen. It also highlighted the design related backdrops that were earlier left unnoticed .

## **USER STUDY IN HOME**

Home is one of the most well acquainted spaces to everyone , so the process of user knowledge was further progressed by studying the routine Tasks of each member of the family on a regular day.

List of tasks done by each member was prepared along with their age and occupation/education to set a background study . The time slots considered were : 6-9 AM, 9-12 PM, 12-3 PM, 3-6 PM, 6-9 P, 9-12 AM. For the above time slots the position and the tracklines for each member were denoted on the house plan with respect to the functioning zone.

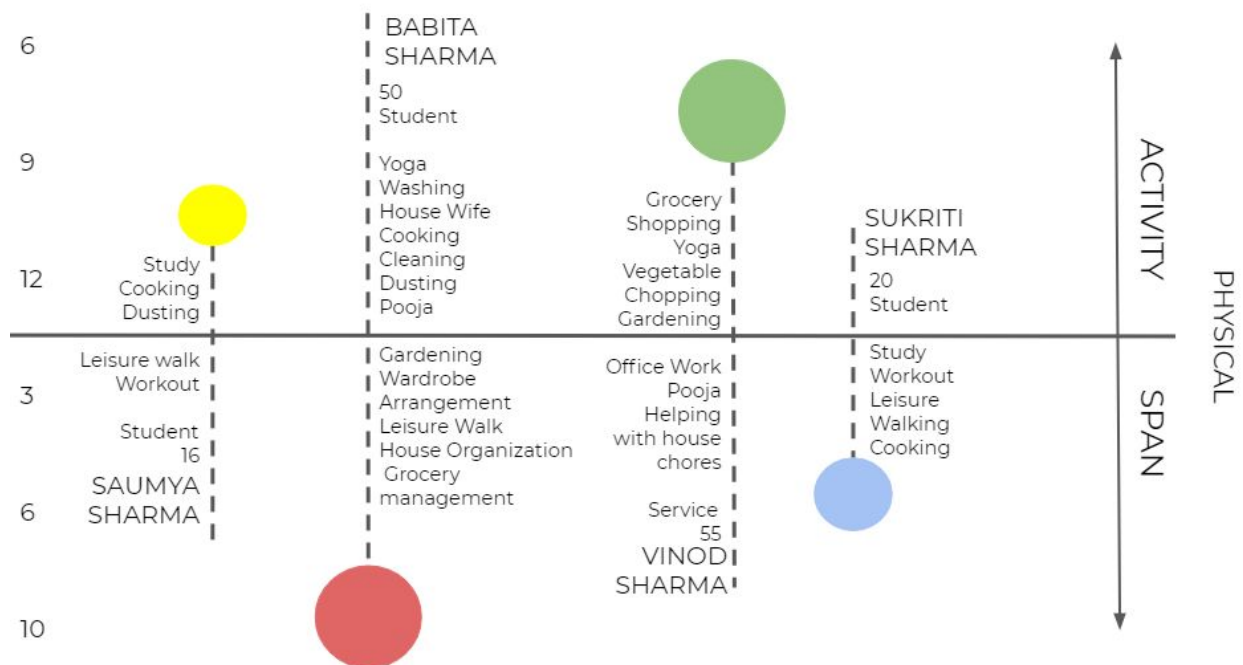
#### **OBSERVATIONS & CONCLUSION :**

As there were four members in the house , with different age groups and preferences , the list of activities / tasks and the time span to do them differed significantly. Even the space requirements and preferences can be distinguished respectively. For instance , Mrs. Babita Sharma( Homemaker) performs more tasks ( Cooking & Cleaning ) and hence time in the kitchen, whereas Ms. Saumya Sharma

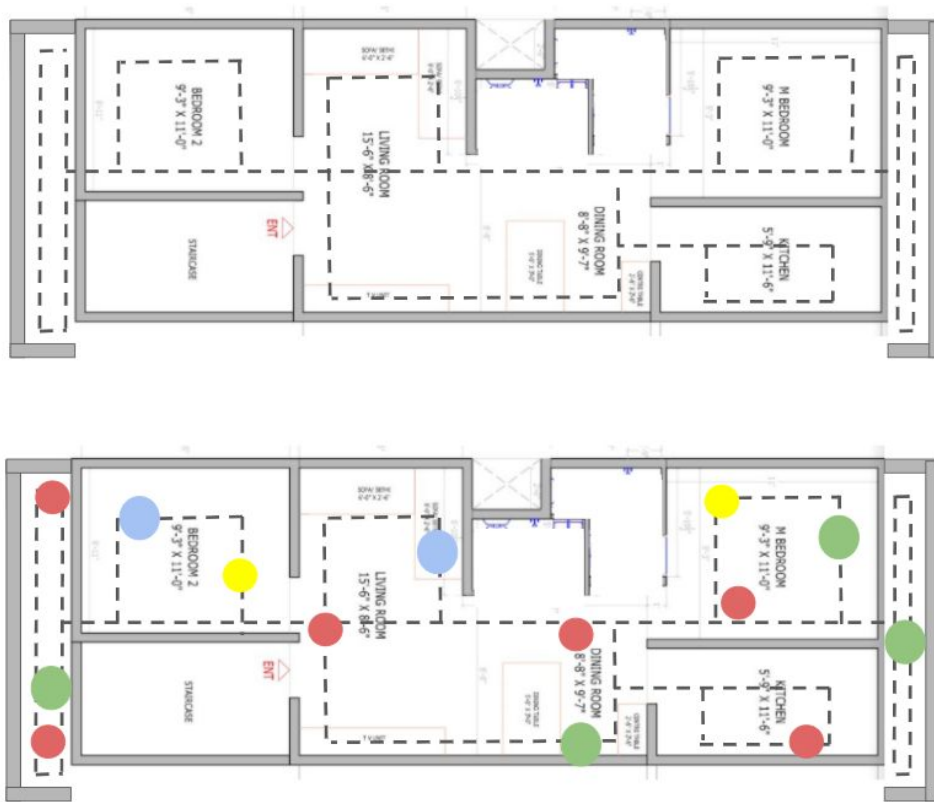
( Student ) is more dedicated to her Bedroom ( Studying ) than to the kitchen.

Tracking each members activities and circulation in different niche and functional spaces of the house according to respective time slots helped in determining the fact that, though, all the four members belong to the same family , but difference in the tasks performed and the circulation pattern each of them can be metaphorized as a separate and unique user in themselves .The exercise brought in a better clarity regarding the user interactions with spaces depending on the type of user , similar to the roles followed by each member in the family.

## FAMILY TIMELINE



# HOUSE PLAN WITH TRACKLINES AND MAPPING OF MEMBERS



# CREATING USER PERSONAS

User is a diverse entity that comprises innumerable layers to its identity , talks about an individual of a certain age , practicing a certain occupation or education or hobby or a lifestyle , having certain information or knowledge , carrying certain character , demands or questions , and many more aspects.

If we compare the user entity to each member of the family, then each member comes up with a list of task rituals, information needs and behavioural character identical to them. Hence , in order to effectively dive into user study , Hobbies and Frustration points of each member were noted , in addition to their Static and Dynamic roles done in the household. Further process was taken ahead with extending the knowledge by segregation of Task Needs and Information Needs.

## OBSERVATIONS & CONCLUSION :

After conducting the user persona study on the members it was conferred that , the personality of each member varied with respect to the task needs and information needs noted according to the routine schedules of the each user gathered from the previous exercise .This includes the distinguishing leisure activities and hobbies as well from each other.

Hence , on observing the likes and dislikes of the specified users , it was concluded their preferences and specifications for a particular product and space will also differ. Hence, each one of them demands different design solutions according to their persona needs.



BABITA SHARMA  
50  
FEMALE  
HOMEMAKER

TASK NEEDS	INFORMATION NEEDS
<ul style="list-style-type: none"> <li>• WAKE UP IN THE MORNING</li> <li>• FRESHEN UP</li> <li>• PREPARE WARM WATER FOR DRINKING AS WELL AS TEA</li> <li>• SWITCH ON WATER MOTOR</li> <li>• SWITCH ON THE FILTER TO REFILL IT</li> <li>• DO YOGA</li> <li>• GO TO THE TERRACE TO WATER THE PLANTS</li> <li>• PREPARE FOR ANOTHER ROUND OF TEA &amp; MILK FOR CHILDREN</li> <li>• DO LAUNDRY WORK</li> <li>• HAVE BATH &amp; DO pooJA THEREAFTER</li> <li>• GROOMING</li> <li>• ASSIST &amp; GUIDE THE CLEANING AUNTY</li> <li>• PREPARATIONS FOR TIFFIN &amp; BREAKFAST</li> <li>• BUY VEGETABLES FROM THE BALCONY BY HANGING THE ROPED BAG TO THE STREET VENDOR, WASH THEM &amp; QUARANTINE</li> <li>• HAVE BREAKFAST</li> <li>• ORGANIZE THE HOUSE</li> <li>• REST AND WATCH MOBILE</li> <li>• PREPARE FOR LUNCH</li> <li>• HAVE LUNCH WITH CHILDREN</li> <li>• COLLECT THE DRIED CLOTHES &amp; ORGANIZE THEM</li> <li>• REST , HAVE CONVERSATION WITH FAMILY &amp; WATCH MOBILE</li> <li>• GO TO THE BALCONY AND MANAGE THE QUARANTINED VEGETABLES</li> <li>• PREPARE FOR TEA</li> <li>• LEISURE WALK ON THE TERRACE AND TAKE CARE OF PLANTS</li> <li>• HAVE CONVERSATIONS WITH THE FAMILY MEMBERS OR ACQUAINTANCES ON MOBILE</li> <li>• RETURN BACK AND PREPARE FOR MILK FOR CHILDREN &amp; FRUITS / SNACKS</li> <li>• GO DOWNSTAIRS FOR BUYING VEGETABLES FROM VENDOR</li> <li>• RETURN &amp; PREPARE DINNER &amp; HAVE DINNER WITH FAMILY</li> <li>• SIMULTANEOUSLY WATCH TV &amp; ATTEND CALLS</li> <li>• TAKE A WALK IN BALCONY</li> <li>• PREPARE FOR SLEEPING</li> </ul>	<ul style="list-style-type: none"> <li>• HOW MUCH MILK I HAVE IN FRIDGE OR IS IT TO BE BOUGHT</li> <li>• WHEN I LAST ADDED FERTILIZERS TO THE PLANT OR SHOULD I ADD IT TODAY , DO I COVER THE PLANTS WITH NET (DEPENDING ON THE SUN )</li> <li>• IS THE WATER TANK FULL , SHOULD I SWITCH OFF THE MOTOR SWITCH</li> <li>• WILL THE CLEANING LADY SHOW UP TODAY OR I HAVE TO PREPARE FOR CLEANING TODAY</li> <li>• WHAT SHOULD I MAKE FOR BREAKFAST / TIFFIN TODAY</li> <li>• DO I NEED TO BUY MORE VEGETABLES</li> <li>• WHEN WILL THE VEGETABLE VENDOR COME</li> <li>• WHAT IS THE DATE , IS THERE ANY FASTING SCHEDULE TODAY</li> <li>• SHOULD I PREPARE FOR AN ADDITIONAL CURRY/ ITEM FOR LUNCH</li> <li>• HAVE THE CLOTHES DRIED</li> <li>• SHOULD I GO TO PARK TODAY ( DEPENDING ON CHILDREN'S WORK /CLASSES )</li> <li>• SHOULD I ENJOY MY TEA UPSTAIRS ON THE TERRACE</li> <li>• WHEN SHOULD I PREPARE KIDS MILK</li> <li>• WHAT ALL VEGETABLES DO I NEED TO BUY AND THEIR PRICE</li> <li>• WHAT CAN I MAKE FOR DINNER</li> </ul>



# USER PERSONAS FOR SPECIFIC DESIGN SITES

For a more broader vision , the next step was taken towards public programming spaces as the design site. This exercise was facilitated as a group project . Earlier, user experience was studied in our own house as an individual analysis which led to observing a more primary and personalized space, wherein , the user study was limited to our family members.

Progressively, Mall was selected as the Public space and studied. It fosters a set of diverse users belonging to varied age groups , occupations , interests , persona , task needs and information needs , and requirements.

As a group , five user analysis were performed :

SHOPPER , VENDOR, ADMINISTRATOR, JANITOR , SECURITY

## OBSERVATIONS & CONCLUSION :

On considering Vendor to be one of the users for Mall as the Public Space :

Under the occupation of Vendor, the post of Assistant Sales Manager was acknowledged. The analysis of User study herein was proceeded by listing out the task needs and information needs of the vendor, that is , the routine tasks or ideal duties that the vendor needs to follow and the set of information or answers required for a certain consequence or scenario.

Later one of the Core users of Mall , The Shopper , was given an in depth study by applying the layers of categories including : Thinking , Feeling , Drives , Blocks , Sensorial Perceptions, Space Requirements . All the above mentioned aspects were as a group collectively discussed and configured , hence, led to an understanding of user experience from varied filters. For instance if we consider one of the scenarios , when the shopper comes across a food section they usually are driven by the aroma of the delicacies and might feel hungry but the restaurant is crowded or expensive they might not give it a try.

The last phase for the study of the design site was marked by preparation of affinity chart , that helped in identification of the tasks with respect to their significance and frequency gradient as detailed out in the below mentioned table.

This led to an understanding of how the spaces / furniture / product could be curated meeting the requirements of the specified user. It was quite beneficial to curate the observation in group as it helped in placing and justifying varied viewpoints and perspectives for a varied User along with their Personas , task needs , information needs and Space requirements.

## VENDOR



NAME : SAMEEP KUMAR

AGE: 26

POST: ASSISTANT SALE  
MANAGER

COMPANY: LIFESTYLE

### TASK NEEDS

- Greeting the customers entering the shop
- Be involved in stock control and management
- Assisting shoppers to find goods and products
- Processing cash and card payments
- Arranging merchandise in shelves
- Answering customer queries
- Reporting / dealing with customer complaints
- Being on the lookout for shoplifters/ fraudulent credit cards
- Dealing with customer refunds
- Receiving and storing large amount of stocks
- Keeping updated with special promotions / putting up displays

### INFORMATION NEEDS

- What is the Budget of the Customer ?
- Any Vacancy available in better firms / companies
- What are the requirements or Interests of customer?
- when is the next holiday of Holiday ?
- How to meet local competition ?
- What are the Demand of the user as per changing Trends ?
- Is there Need for alteration of quality of product according to sales?
- Any Margin for increment in Salary ?
- Is there any new Employee joining this month ?
- What all shifts shift and duties I have today ?
- What are the Lunch / Break timings for today ?
- What is the Customer Feedback?

MALL				
	High Importance	Low Importance	High Importance	Low Importance
	High Frequency	High Frequency	Low Frequency	Low Frequency
	Arranging merchandise in shelves	Having light conversations with colleagues while working	Talking to strangers and other people	checking if any customer belongings were left behind in trial rooms or at other places
	Safely storing the store accounts	Rest and have lunch(tiffin or purchase)during break	Dealing with stock deliveries ( intake )	Visiting washroom
	Assisiting Shoppers in selecting the apparels	Handling customer complaints	Check stock availability	checking if any customer belongings were left behind in trial rooms or at other places
	Greeting the customers		Assisiting Shoppers in selecting the apparels	Going to nearby tea stall / coffee shop with colleagues
	Processing cash and card payments		Manage promotions and offers	
	Maintaining the right order of isles and pile of clothes		Handling customer complaints	
	Keeping update of discounted items and Fresh arrivals		Dealing with customer refunds	
	Answering customer queries			
	Customer service and feedback			

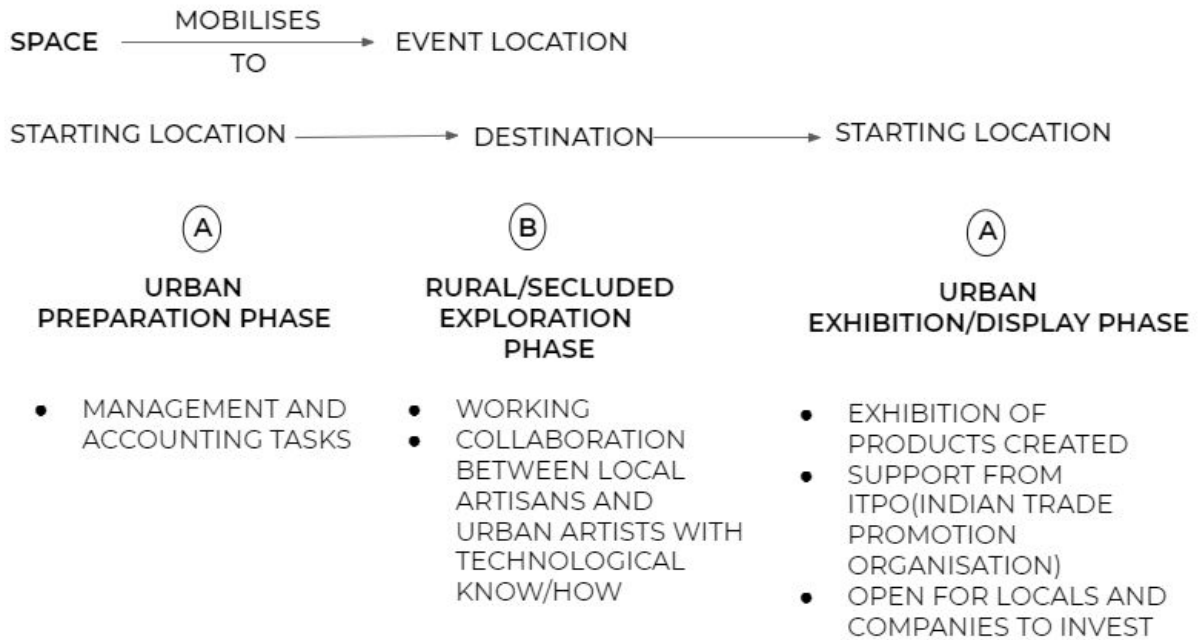
# CASE STUDY

## COLLABORATIVE DESIGNING PROGRAMME AMONG URBAN & RURAL ARTISTS



The Interior Design Exercise revolved around a Train Coach that was designed meeting the interior furniture or technical requirements of the programme under consideration. So, the programme devised was a Collaborative Design event among the Handicraft craftsmen from rural setting that explore their craft with a new lens of urban culture, accompanied by a set of urban artists. As a concluding step, the products developed by the artists will travel to the urban destination where the exhibition will be arranged inside the train coach itself. Hence the coach is supposed to function as both the workspace as well as the exhibition space in a transformable manner.

**PROGRAMME:**



As described in the above flow chart , the journey will start from the urban location boarding the varied users including staff members, managerial team, organizers , and urban artists ; and halt at the rural setting wherein the workspace will be curated in the coach , as the handicraft craftsmen and urban artist will do explorations at this stage. Once the exhibits are ready few representative rural artists will travel to the urban location / destination for the final display.

List of Users have been mention in the table below :

**USERS:**

ARTISTS

6

STAFF MEMBERS

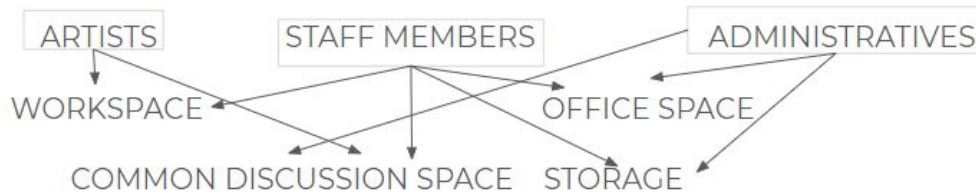
- CARETAKERS
- TRAVEL GUIDE
- EMERGENCY TEAM

ADMINISTRATIVES

- MANAGING TEAM
- REPRESENTATIVES OF ORGANISERS

**BASIC COMMODITIES:**EATING SPACE,WASHROOMS+BATHING+GROOMING SPACE, SLEEPING SPACE, LUGGAGE STORAGE, KITCHEN, CIRCULATION SPACE.

**SPACE REQUIREMENTS:**



**USERS:**

**CORE USERS**

**ADMINISTRATIVES:**

- MANAGING TEAM - 5 PEOPLE
- ACCOUNTING SECTION - 2-3 PEOPLE
- REPRESENTATIVE OF ORGANISER'S FRONT OR GOVERNMENT REPRESENTATIVE - 1 PERSON

**STAFF MEMBERS:**

- TRAVEL GUIDE(KNOWLEDGE OF DESTINATION) - 1 PERSON
- CARETAKERS/CLEANING STAFF- 4-5 PEOPLE
- CHEF OR KITCHEN STAFF - 4 PEOPLE

**ARTISTS:**

- URBAN ARTISTS - 2-3 PEOPLE
- LOCAL ARTISTS (REPRESENTATIVES WHO WILL TRAVEL) - 5 PEOPLE

**ADDITIONAL USERS**

**GROUP OF LOCAL ARTISTS**

10-15 PEOPLE

**DELIVERY PEOPLE**

5-6 PEOPLE

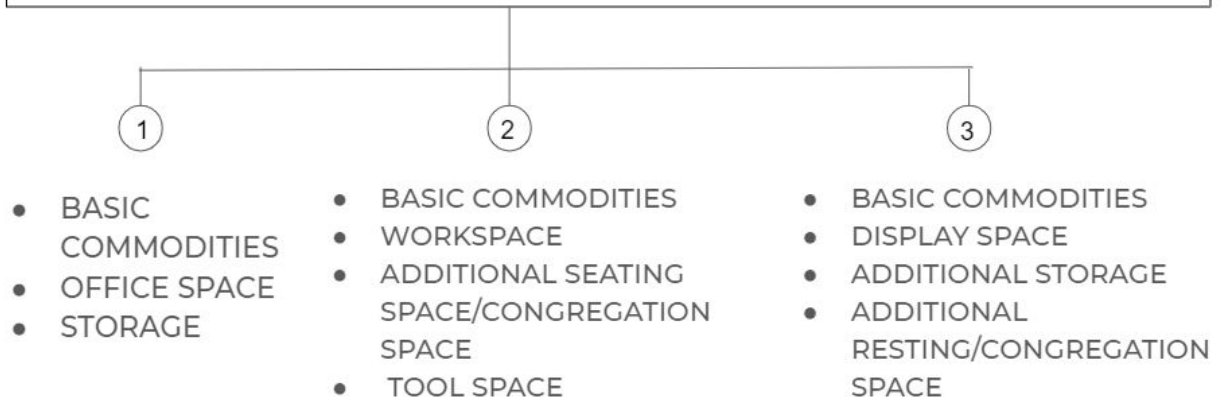
**LOCAL PEOPLE**

30+ PEOPLE

**TRADERS**

15+ PEOPLE

## VARIED SPACE REQUIREMENTS



## CONCLUSION

Architecture is the field that solely revolves around its users as its existence can be justified only when it suffices or adapts to the needs and requirements of the being inhabiting it. Hence, it's high time we regain the trust of the user in a more empathetic architectural design which effectively shapes itself amidst user experience. From the elaborative analysis of the User study it can be concluded that each individual has discrete and unique persona as well as preferences according to their consequences and task needs, therefore, the methodology of designing should be customized and central to the type of user in question, in order to retain the User and Utility Relationship.