

GUJARAT TECHNOLOGICAL UNIVERSITY

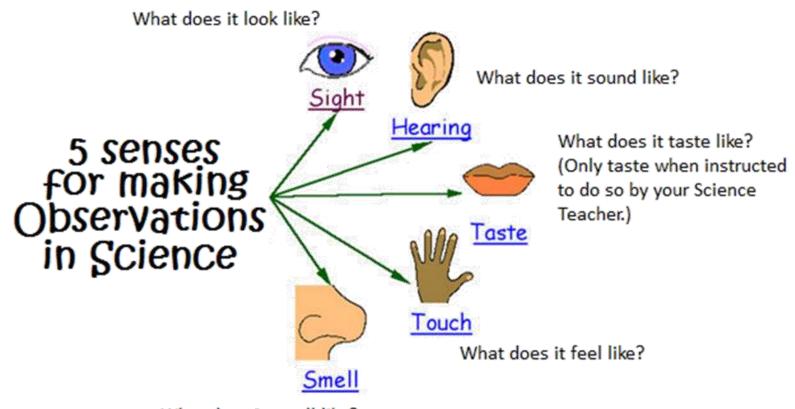
**OBSERVATION** 

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Surat



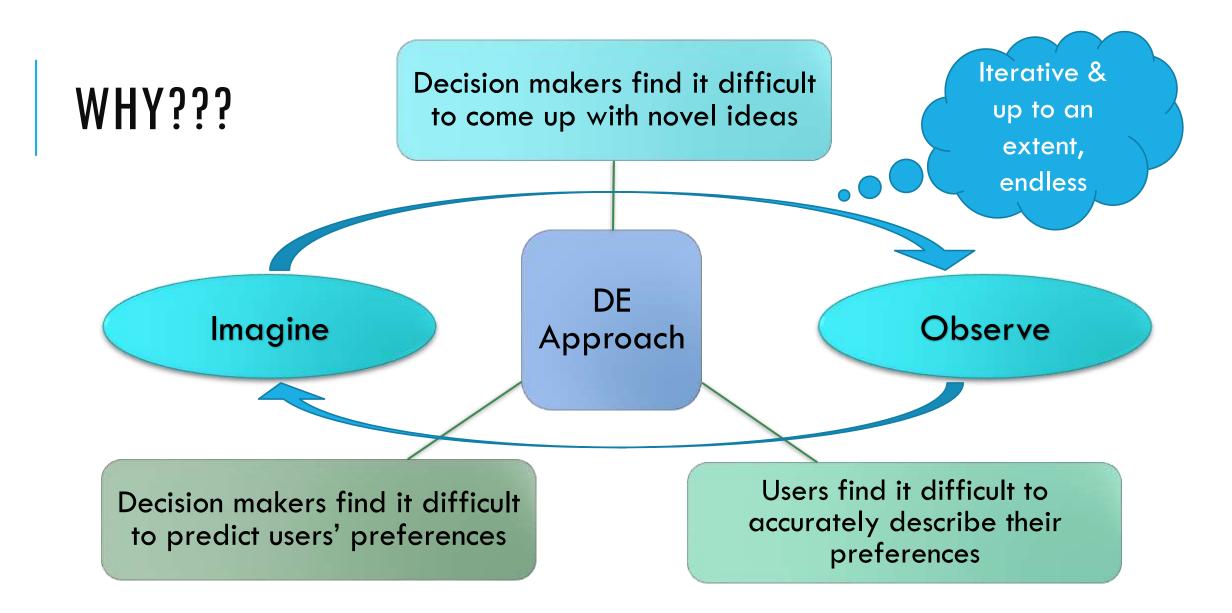
#### PHASE - I OBSERVATIONS

#### towards Evaluation of Idea



What does it smell like? (Please fan the smell in your direction.)





Source: The frequent failure of traditional market research methodologies to accurately predict users' preferences are well documented (Elliott & Elliott-Jenkel, 2003)

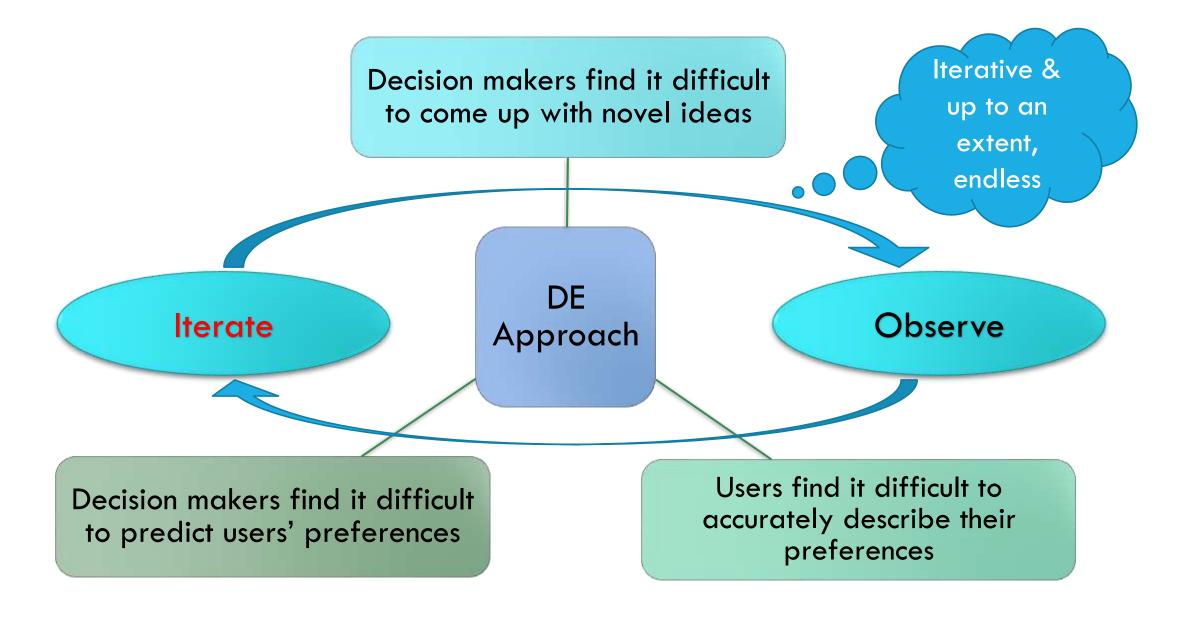
### IMAGINATION FAILS...

Its tendency to fill in and leave out without telling us... and the features and consequences we fail to consider are often quite important...

Its tendency to project the present onto the future.

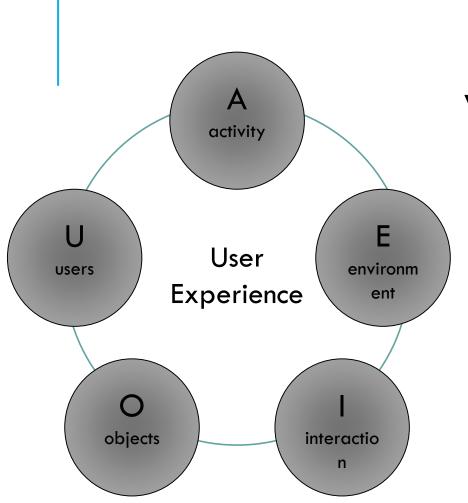
Its failure to recognize that things will look different once they happen.

Source: Gilbert, D. 2006. Stumbling on Happiness. New York: Alfred Knopf.



Source: The frequent failure of traditional market research methodologies to accurately predict users' preferences are well documented (Elliott & Elliott-Jenkel, 2003)

#### **HOW TO??**



We follow – AEIOU Framework

(developed by Ethnohub)

Activities

**Environments** 

nteractions

Objects
Users

The AEIOU framework was originated in 1991 at <u>Doblin</u> by <u>Rick Robinson</u>, Ilya Prokopoff, John Cain, and Julie Pokorny. Its aim was to help analyze <u>Ethnomethodology</u> data and Conversation analysis with MECE categories.

(Source: http://help.ethnohub.com/guide/aeiou-framework)

#### OBSERVATION RECORDING SHEETS

Observe

(PAPER SIZE A3)

Following set of record sheets are to be kept with students for recording and documentation on field during Ethnographic observations.

It basically, will contain:

**OBSERVATIONS** by means of...

Notes, Photographs, sketches, interview and such...

(As applicable in a case under study)

### **OBSERVATION RECORD SHEETS**

These are of 5 types.

Each type may be in varying numbers depending on the case under research.

More numbers of these observation records will ensure sincerity in the work as well as make sure of Novelty in the project.

## **ACTIVITIES**

These are **goal-directed sets of actions**—paths towards things people want to accomplish.

What are the modes people work in, and the specific activities and processes they go through?

### **A**CTIVITIES

#### Someone (User) is involved...

- Hows
- What actually is going on?
- Why it is going on?
- How it is going on?
- What is involved?



### **ACTIVITIES**

GROUP ID: \_\_\_\_\_\_
PROJECT ON: \_\_\_\_\_

DATE: \_\_\_\_
SHEET NO. \_\_\_\_

General impressions / Observations	Sketch/ Photo — Summary of activities
Elements, Features and Special Notes	

## ENVIRONMENTS

It include the entire arena where activities take place.



What is the character and function of the space overall, of each individual's spaces, and of shared spaces?

## ENVIRONMENTS — THE SURROUNDINGS...

- Where (Activity) is happening?
- What are circumstances?
- Time effects, any?
- Seasonal effects, any?
- Person effects, any?
- Operational effects, any?

Why variations
Or
What versions

What governs...?

#### **ENVIRONMENT**

GROUP ID: \_\_\_\_\_\_
PROJECT ON: \_\_\_\_\_

DATE: \_\_\_\_
SHEET NO. \_\_\_\_\_

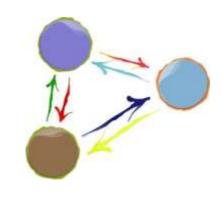
General impressions / Observations	Floor plan
(Style, materials & atmosphere)	•
Elements, Features and Special Notes	
	Scene

### NTERACTIONS

These are between a person and someone or something else; they are the building blocks of activities.

What is the nature of <u>routine</u> and <u>special interactions</u> between people; between people and objects in their environment, and across distances?

### NTERACTIONS



- Who are involved? Why? How?
- What (users) are holding/operating/using...

**Human Extensions** 

- How the contacts are in action?
- Action vs. Reaction...

### **INTERACTIONS**

GROUP ID:	
PROJECT ON:	
DATE:	
SHEET NO.	

General impressions / Observations (Who is interacting with whom, what?)	Scene of interaction (How it is being done)
Elements, Features and Special Notes	

### **OBJECTS**



These are building blocks of the environment, key elements sometimes put to complex or unintended uses (thus changing their function, meaning and context).

What are the objects and devices people have in their environments and how do they relate to their activities?

#### **OBJECTS**

GROUP ID:	
PROJECT ON: _	
DATE:	
SHEET NO.	

General	impressions /	Observations
How compa	onents are involved	21

(How components are involved?)

Inventory of Key Objects
(Prepare a list here of 'THE
THINGS' involved)

Elements, Features and Special Notes (How objects are relating to the activities?)

### **U**SERS



Users are the people whose behaviours, preferences, and needs are being observed.

Who is there? What are their roles and relationships? What are their values and prejudices?

#### **USERS**

GROUP ID: \_\_\_\_\_\_
PROJECT ON: \_\_\_\_\_

DATE: \_\_\_\_
SHEET NO. \_\_\_\_

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(Who is present? Roles & responsibilities?)

Inventory of people (List of identified people involved)

Scene of users in context

#### Materials are gathered via ethnographic methods:

- Notes
- Photos
- Videos
- Interviews
- Field observationsAnd so on...



During **field observation**, use the AEIOU framework as a <u>lens</u> to observe the surrounding environment.

Once done, do brainstorming among members

What – Why – How – When – Where

Observation again and again...!

Because anticipated difficulty was identified....!

Record observations under the appropriate headings.

Notebook / Record book / Tables for observation

Questionnaire – answer summary

**Supplement** direct observations with photos or video tape when appropriate.

Video clips / Animations / Audio record clips

Photographs / Sketches in field

**Review** and **cluster observations** to disseminate higher-level themes and patterns.

- → Identifying impacting and important Findings (Clues)
- → Review the set of clues

Looking forward to resolve through engineering means.

# Findings on Observation (AEIOU) Framework during FDP 16<sup>th</sup> – 18<sup>th</sup> February, 2015 @ GIC-GTU

Observations for theme

"Pedestrian Safety"























### Strategy and preparation

- Distribution of work responsibility
- Initial brainstorming
- Identification General Impressions

























## Activities

#### Someone (User) is involved...

- How?
- What actually is going on?
- Why it is going on?
- How it is going on?
- What is involved?

























#### **Activities**

#### General impressions / Observations

- Use of mobile
- Surfing / listening music
- Talking
- Waiting for transportation
- Crossing roads
- Reading news papers
- Parking "on–footpath"

- Watching for signal
- Finding locations
- Eating food
- Walking 'off-road'
- Helping elder citizens
- Advertisement (watching/ listening)

#### Elements, Features and Special Notes

- Mobile
- Headphones
- Vehicles (personal/ private)
- Bag luggage
- Dustbins
- Booths
- Bottles
- Signal poles
- Eateries/ stalls
- Zebra-crossing
- Helping aid stick
- Hoardings
- Loud speakers

#### Sketch/ Photo – Summary of activities

























## Environments – The Surroundings...

- Where (Activity) is happening?
- What are circumstances?
- Time effects, any?
- Seasonal effects, any?
- Person effects, any?
- Operational effects, any?

Why variations
Or
What versions

What governs...?























#### Environment

- General impressions / Observations
- (Style, materials & atmosphere)
- Weather (Sunny/ Fog/ Rainy/ Cloudy)
- Crowd
- Day/ Night
- Traffic jams
- Noisy
- Urban/ rural
- With or without light

- Bad road conditions
- High wind
- Encroached road space
- Trees/ Plants

#### Floor plan

#### Elements, Features and Special Notes

- Light poles
- Traffic signal system
- Traffic police
- Noise barriers
- Footpath / dedicated pedestrian facility
- Tree guard (nets)































### Interactions

- Who are involved? Why? How?
- What (users) are holding/ operating/ using...

**Human Extensions** 

- How the contacts are in action?
- Action vs. Reaction...























#### **Interactions**

General impressions / Observations

(Who is interacting with whom, what?)

- Asking for directions/ address
- Group discussions
- Purchase/ selling goods/ stuff
- Buying tickets
- Communicating in loud voice
- Traffic police



- Address/ location boards
- Seating arena/ benches
- Shops/ kiosks
- Booths
- Traffic police stand

Scene of interaction (How it is being done)





























 These are building blocks of the environment, key elements sometimes put to complex or unintended uses (thus changing their function, meaning and context)

 What are the objects and devices people have in their environments and how do they relate to their activities?























#### **Objects**

- General impressions / Observations (What components are involved)
- People are using mobile phones
- Reading News paper
- Bag / Luggage/ Purse
- Listening music via Ear phones
- Wearing Masks to protect themselves
- Watch to see timings

- Throw rubbish in Dustbins
- Drinking water from Bottle and throwing them on road or footpath
- Whistle
- Cap
- Muffler
- Elements, Features and Special Notes (How objects are relating to the activities?)
- Mobile: talking, texting, music, using camera to take pic
- News paper: reading, crossword puzzle, sitting on it
- Bag / Luggage/ Purse: safeguard the bag, sitting on it
- Ear phones
- Masks
- Spectacles
- Watch

## Inventory of Key Objects (Prepare a list here of 'THE THINGS' involved)

- Mobile
- News paper
- Bag / Luggage/ Purse
- Ear phones
- Masks
- Spectacles
- Watch
- Dustbins
- Bottle
- Whistle
- Cap
- Muffler























## Users

Users are the people whose behaviours,
 preferences, and needs are being observed.

 Who is there? What are their roles and relationships? What are their values and prejudices?























#### **Users**

- General impressions of people (Who is present? Roles & responsibilities?)
- Students were waiting for bus, crossing the road, playing around school on roadside
- Employees waiting for bus, talking to each other
- Children were crying, playing
- Male/ Female
- Inventory of people
   (List of identified people involved)
- Students
- Employees
- Children
- Male/ Female
- Housewives
- Traffic Police
- Rickshaw/ Bus Driver
- Senior citizens
- Hackers
- Vehicle owners
- Beggers

- Housewives: shopping around the roadside
- Traffic Police: controlling traffic
- Rickshaw/ Bus Driver: waiting on roadside
- Senior citizens were sitting on benches

#### Scene of users in context



























#### **Thanks**

#### Disclaimer

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