

DESIGN THINKING

26.09.2022

ATUL KUMAR
Creative Director
(b) Design Studio of Brillio

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WHAT IS IT?

The mindset: An Ideology of approaching every problem in a user-centric way

The process: 6-steps that helps you to practice user-centric design

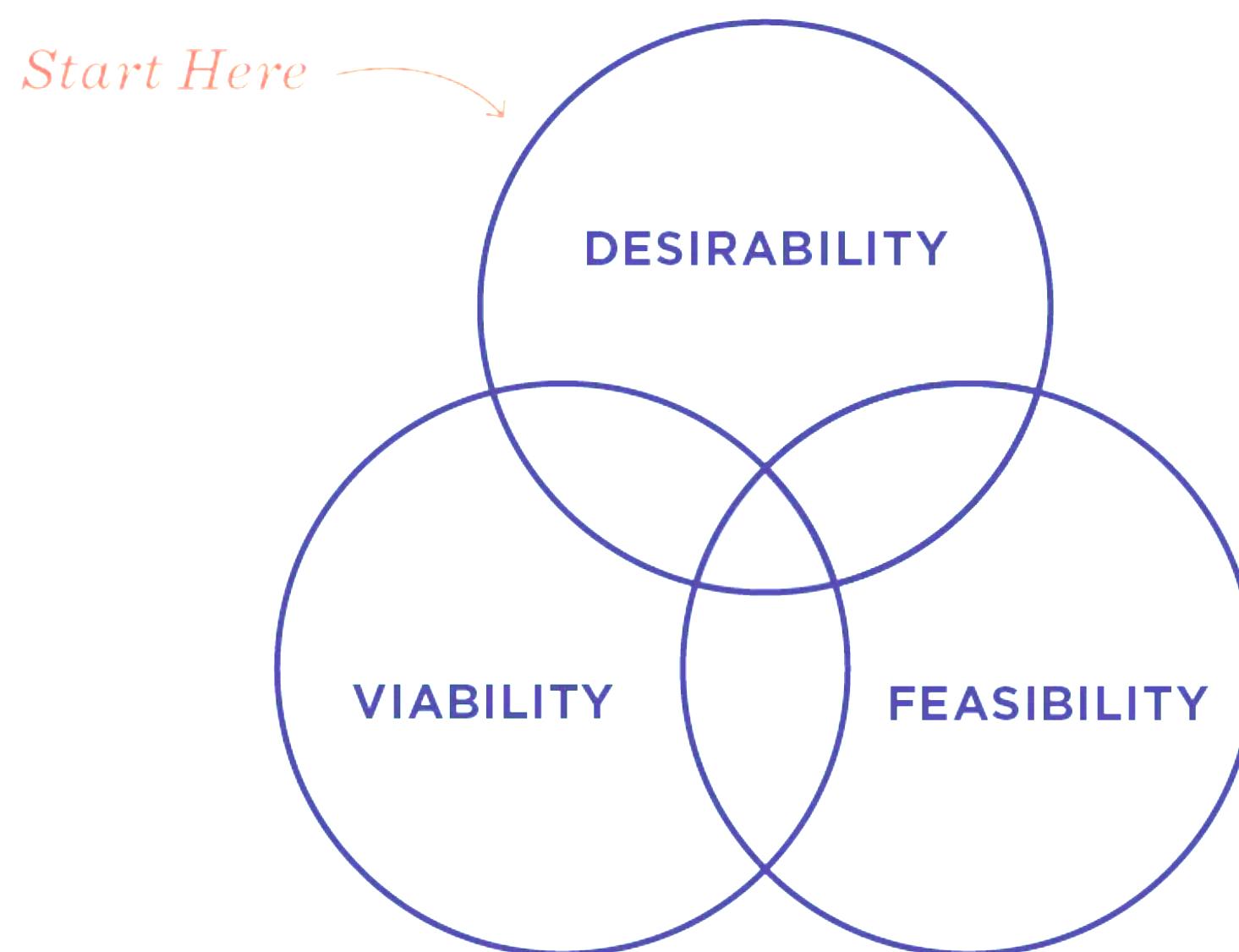
Design thinking is a human-centered approach to innovation that draws from the designer's toolkit to integrate the needs of people, the possibilities of technology, and the requirements for business success. —Tim Brown, Executive Chair Of IDEO

WHAT IS IT?

Desirability: What Makes Sense To People And For People?

Feasibility: What Is Technically Possible Within The Foreseeable Future

Viability: What Is Likely To Become Part Of A Sustainable Business Model?



WHAT IS IT?

Design Thinking Can Help Your Team Or Organization:

- **Understand The Unmet Needs Of The People You're Creating For (Customers, Clients, Students, Users, Etc...).**
- **Reduce The Risk Associated With Launching New Ideas, Products, And Services.**
- **Generate Solutions That Are Revolutionary, Not Just Incremental.**
- **Learn And Iterate Faster.**
- **Collaborate Better And Tap Into The Creative Potential Of Individuals And Teams.**

DESIGN THINKING

SOLVING THE PROBLEM RIGHT



UX DESIGN

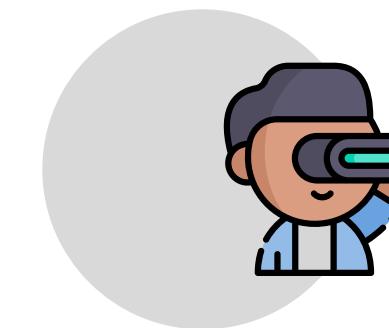
SOLVING THE RIGHT PROBLEM

THE PROCESS



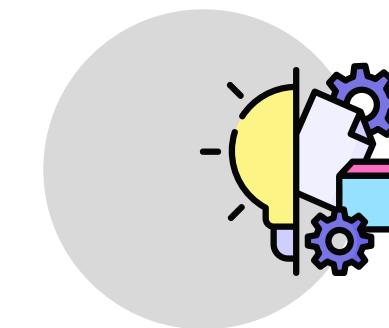
Topic Selection

Identifying Business Objectives
Identifying Brand Objectives
Definition Of A 'wow' Outcome



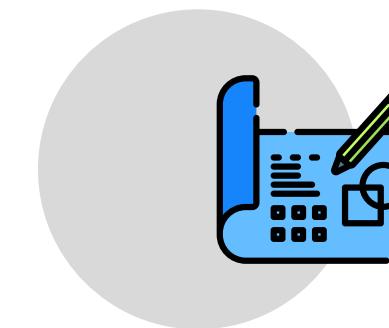
The Context

Competitive Landscape
Contextual Enquiry
Secondary Research
Walk In The Customers Shoes, Card Sorting



Understanding And Framing

Gap Analysis
Affinity Mapping
Personas
Kipling's Method
XO Mapping
Value Mapping



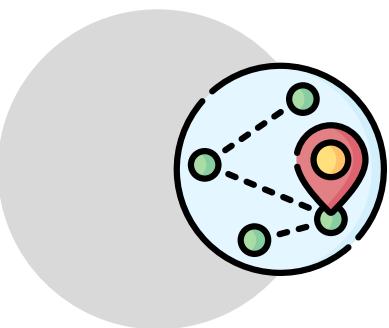
Ideation & Prototyping

SCAMPER
Rapid Prototyping
Wireframing
Visual Design



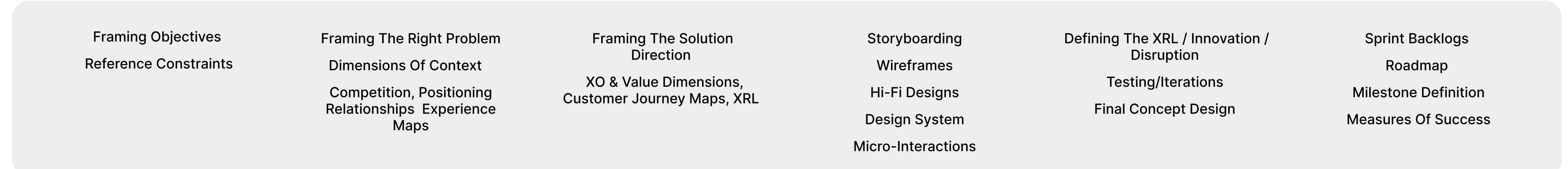
Iterate, Measure & Converge

Clickthrough Prototype
Usability Testing
Concept Testing
IA, Visual Testing



Solution Rollout

Bias Towards Action
Radical Collaboration
Crafting Clarity



TOPIC SELECTION

Why

To decide what to work on, we often gather the leadership teams to brainstorm on the problem topics. Unlike the brainstorm used later in the approach, this one is focused on topics and not solutions.

What

Secondary Research

Competitive Landscape

Identifying Business Objectives

Identifying Brand Objectives

Definition of a 'wow' Outcome

How

Framing the problem statement

Planning the workshops

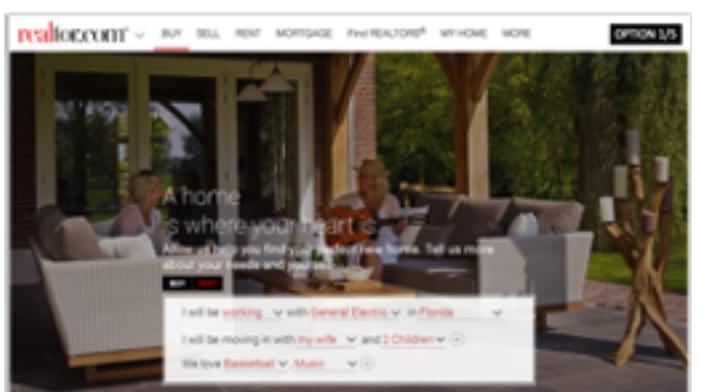
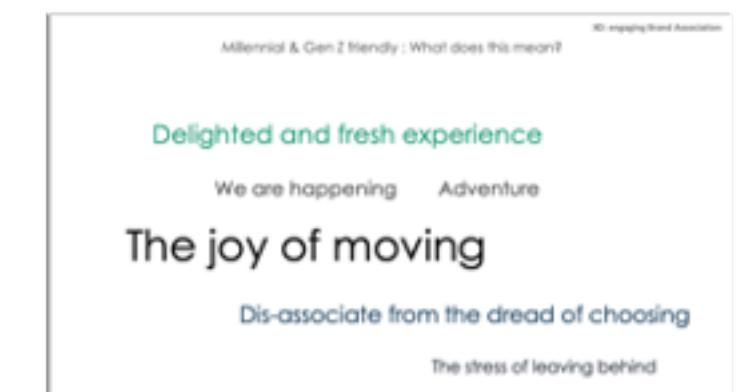
Example in Point:

Frames of reference + Reference Constraints

Topic Selection | Pre-Work

Identification of Key Focus Areas

Kipling's Method | Experience Prioritization



Frames of Reference

Relevance is not permanent... but changes... over time, circumstance and environment

Larger limitations and restrictions play a defining role in what and how our systems and products operate.

Reference Constraints

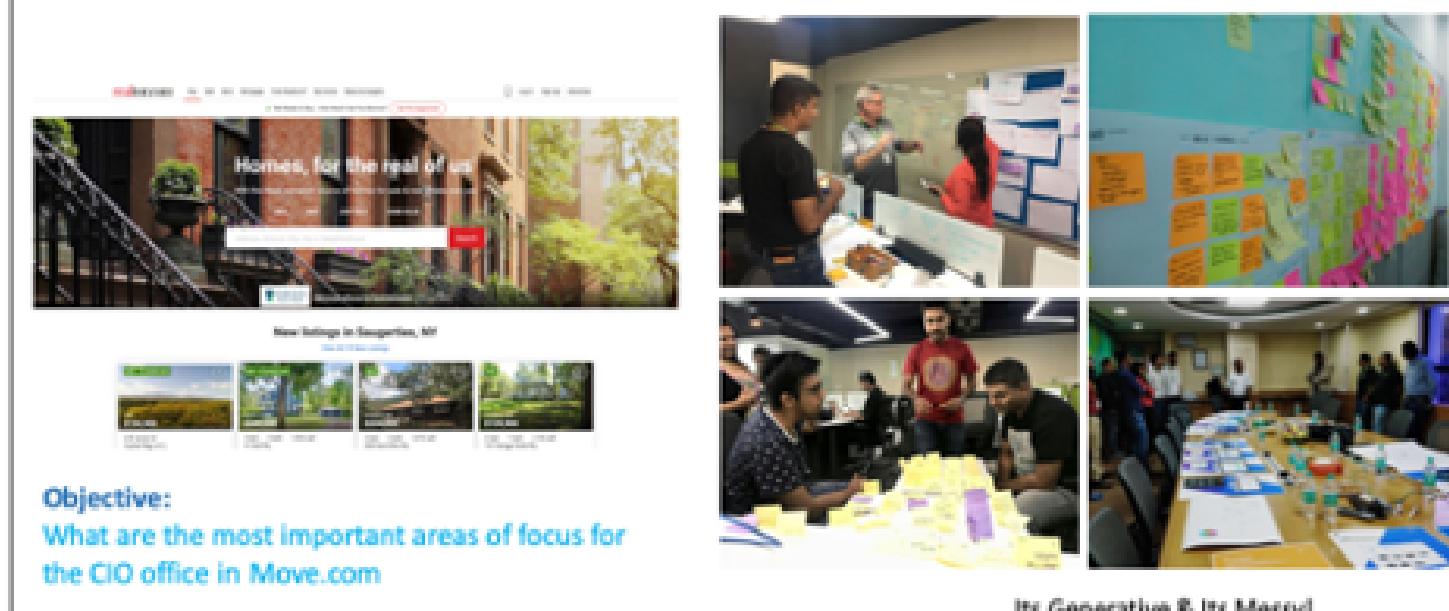
Key focus points (executive view)

- What are the key problems, opportunities this you intend to solve?
- How do you expect to grow and win in the market? What would be the success measures
- Why & What should be the primary focus and goal of the product/ service offerings, going forward
- Who is the primary market and primary users of focus that are part of your forward path strategy?
- Which customer journey will give us the greatest return – are we looking holistically?
- What, in your opinion is a 'wow' experience on this program.

What would these be a Senior Executive in Move/Realtor.com, and from the point of view on Generating increased volume, Increasing ability to premium price, Reduced cost to serve

example
Topic Selection

Topic Selection - Outcomes (Case in Point)



Objective:
What are the most important areas of focus for the CIO office in Move.com



Millennial & Gen Z friendly : What does this mean?

XO: engaging brand association

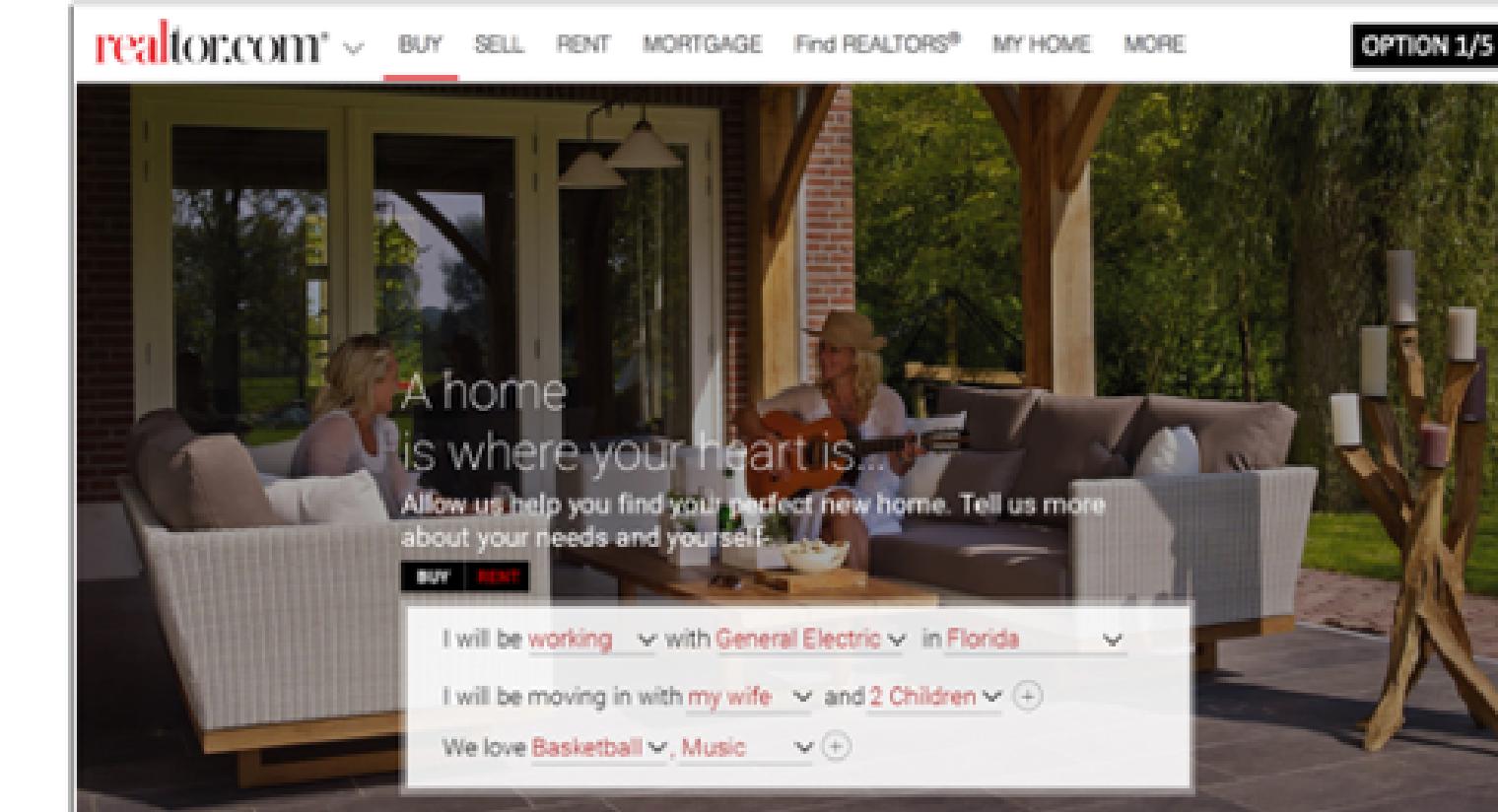
Delighted and fresh experience

We are happening Adventure

The joy of moving

Dis-associate from the dread of choosing

The stress of leaving behind



THE CONTEXT

Why:

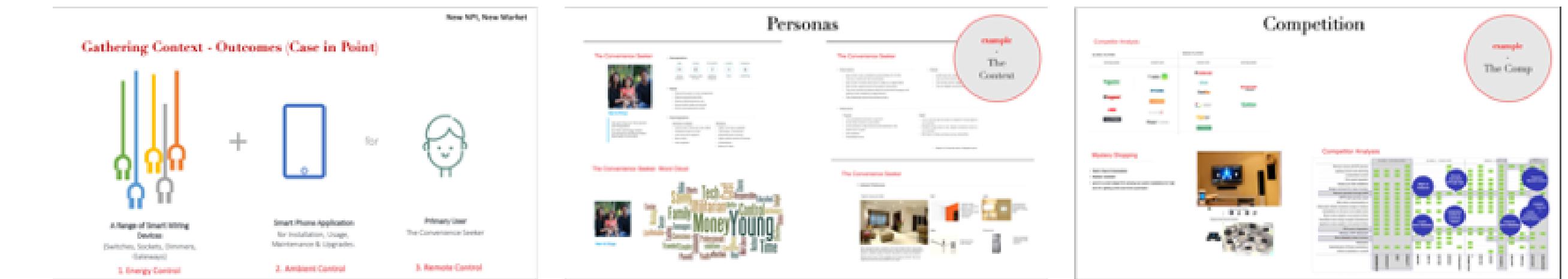
Before beginning, it's important to acknowledge the Designers' and Participants beliefs & biases and understand their impact on the Sprint.

What:

Walk in the customers shoes
Contextual Enquiry
Card Sorting
Competitor Analysis etc...

Deliverables

Dimensions of context
Competition, Positioning Relationships Experience Maps



Example in Point:

Gathering Contexts
Persona Development
Competitor Analysis
Trend Analysis



Personas

The Convenience Seeker

The Convenience Seeker Word Cloud

The Convenience Seeker

example
The Context

Competition

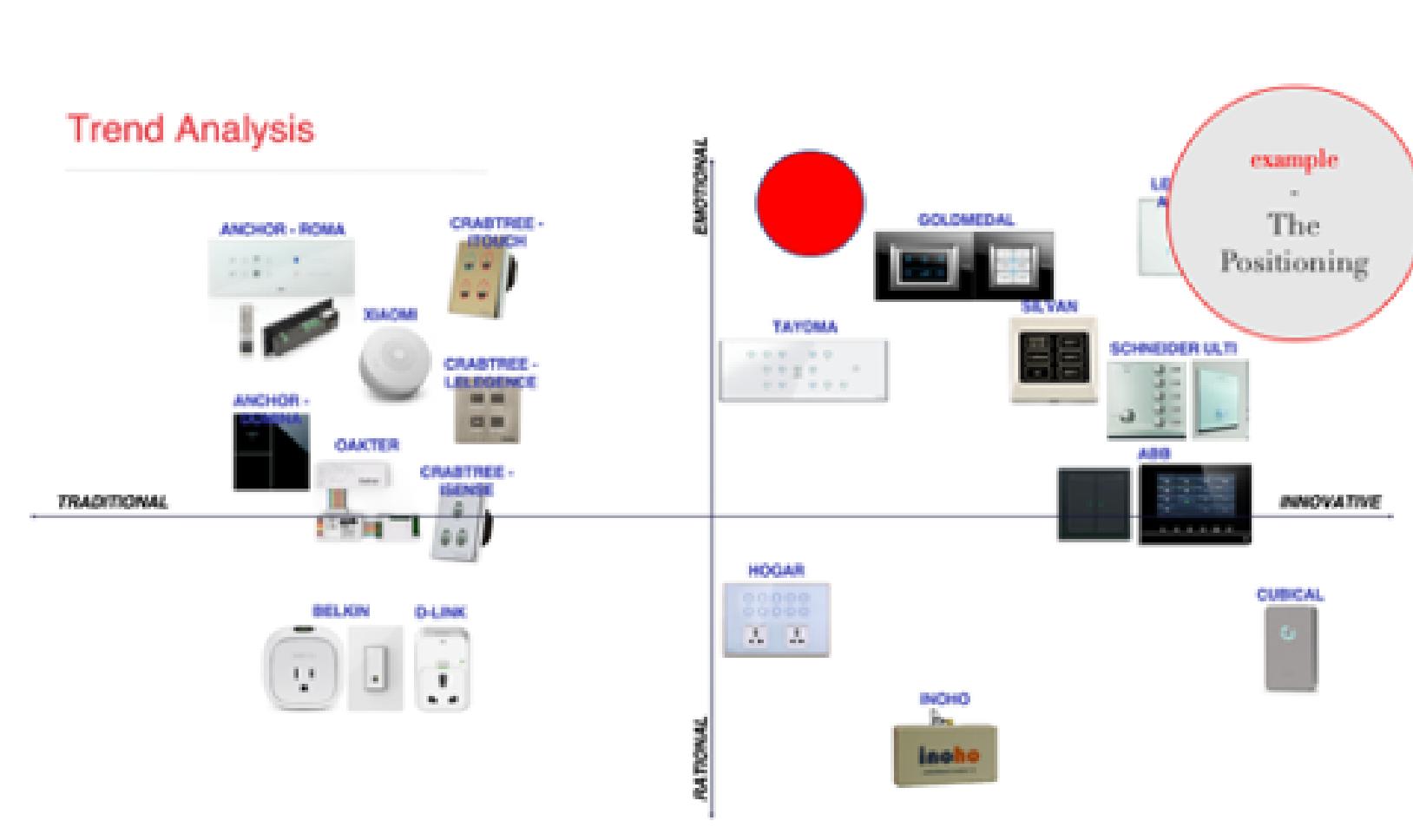
Competitor Analysis

| Category | Product | Market Share |
|-------------------|--------------------------|--------------|
| Smart Switches | Belkin WeMo | 20% |
| Smart Sockets | Leviton Decora Smart | 15% |
| Smart Dimmers | GE Z-Wave Smart Dimmer | 10% |
| Smart Gateways | Amazon Echo | 10% |
| Smart Thermostats | Nest Learning Thermostat | 8% |
| Smart Lighting | Philips Hue | 5% |

Mystery Shopping

Competitor Analysis

example
The Comp



UNDERSTANDING & FRAMING

Why:

To understand the users to build relevant personas followed by preparing the team to spend time in doing relevance based research that can be applied to this problem



What:

Gap Analysis | Affinity Mapping
Personas
Kipling's Method
Journey Mapping
XO mapping



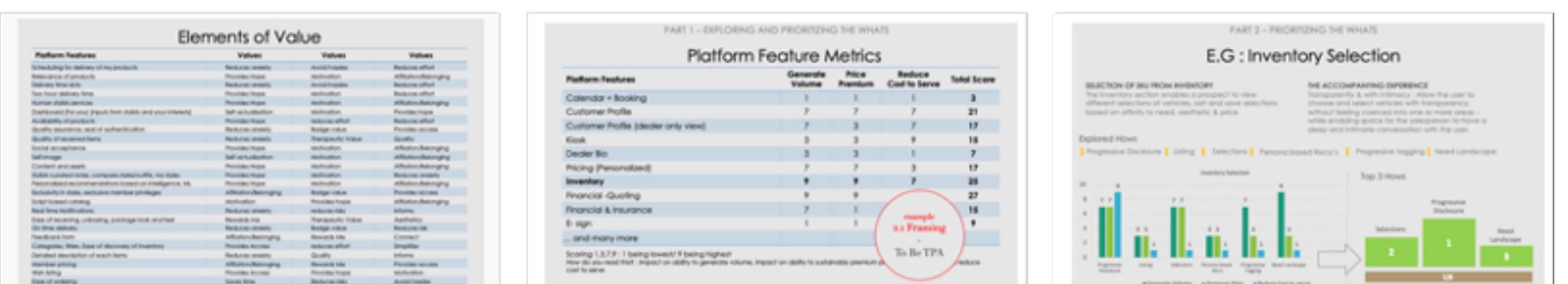
How

Framing the solution direction
XO & Value Dimensions, Customer Journey maps



Example in Point:

Futures Discussion | Stakeholder Mapping
Framing the Problem Statement | Elements of Value
Manifesting the value | The XO Framework | Journey Mapping | Prioritizing the whats



| PART 3 - XE (Experience Readiness Level) - experiences we can | | | | |
|---|-----|-----|--------------|--|
| Platform Feature Metrics | | | | |
| Platform Features | TNL | CDF | Time to Serv | |
| Calendar + Booking | 6 | 9 | 9 | |
| Customer Profile | 7 | 7 | 7 | |
| (Customer Profile [dealer only view]) | 7 | 7 | 7 | |
| Kiosk | 6 | 5 | 5 | |
| POS | 6 | 5 | 5 | |

IDEATION & PROTOTYPING

Why:

To understand the users to build relevant personas followed by preparing the team to spend time in doing relevance based research that can be applied to this problem

What:

- SCAMPER
- Storyboarding
- Attribute Listing
- Opportunity Mind Map
- Rapid Prototyping
- Top 5 Voting etc...

How

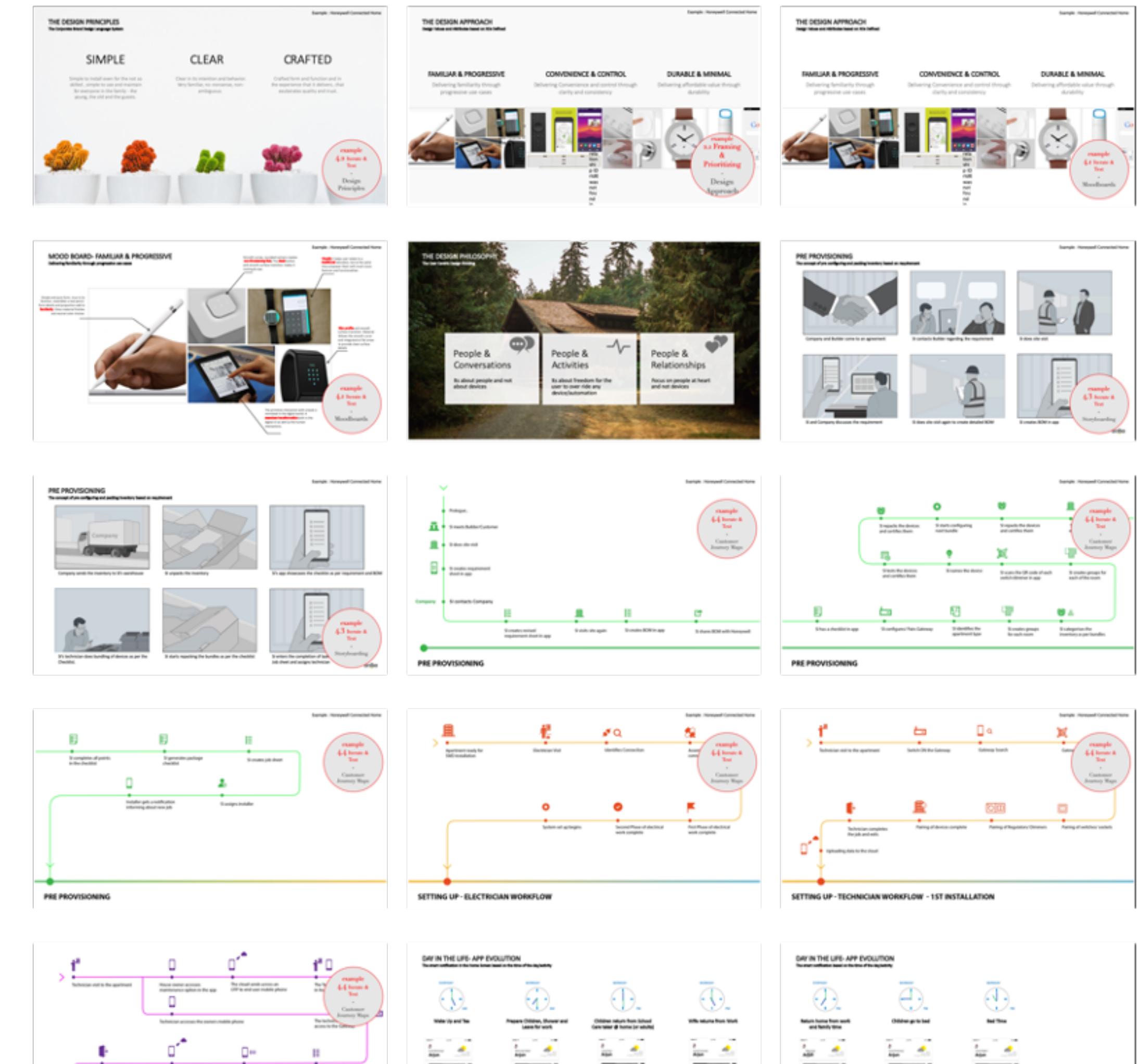
- Concept & Story Boarding
- Journey Mapping
- Heuristic Evaluation

Example in Point:

Design Principles | Design Approach

Mood boards | Design Philosophy | Story Boarding | Journey Maps

Day In The Life | Iterate & Test

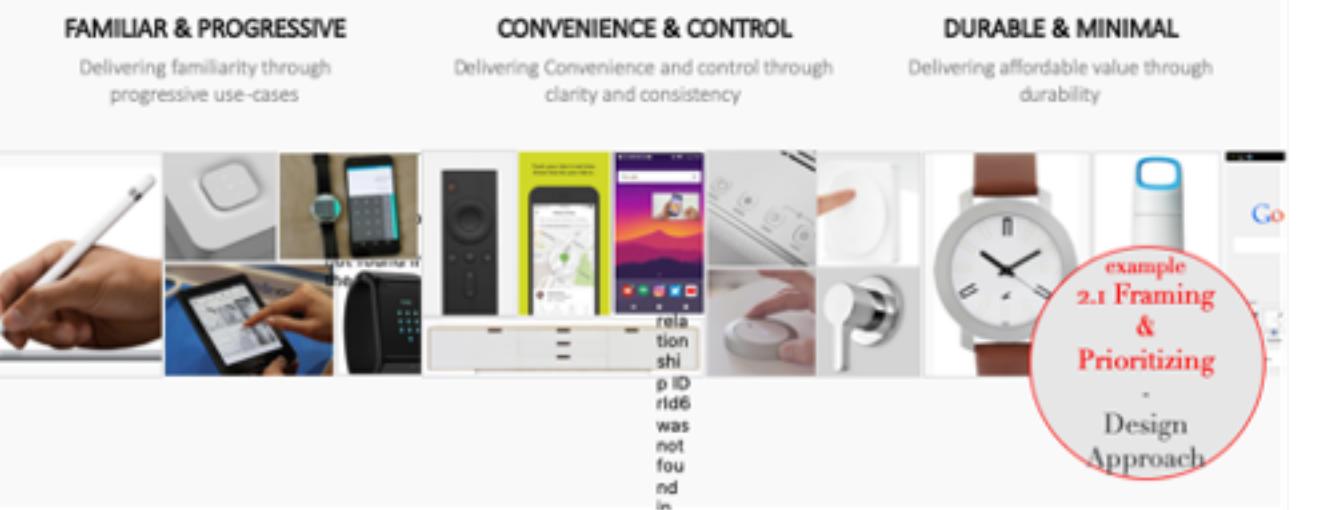


THE DESIGN PRINCIPLES
The Corporate Brand Design Language System



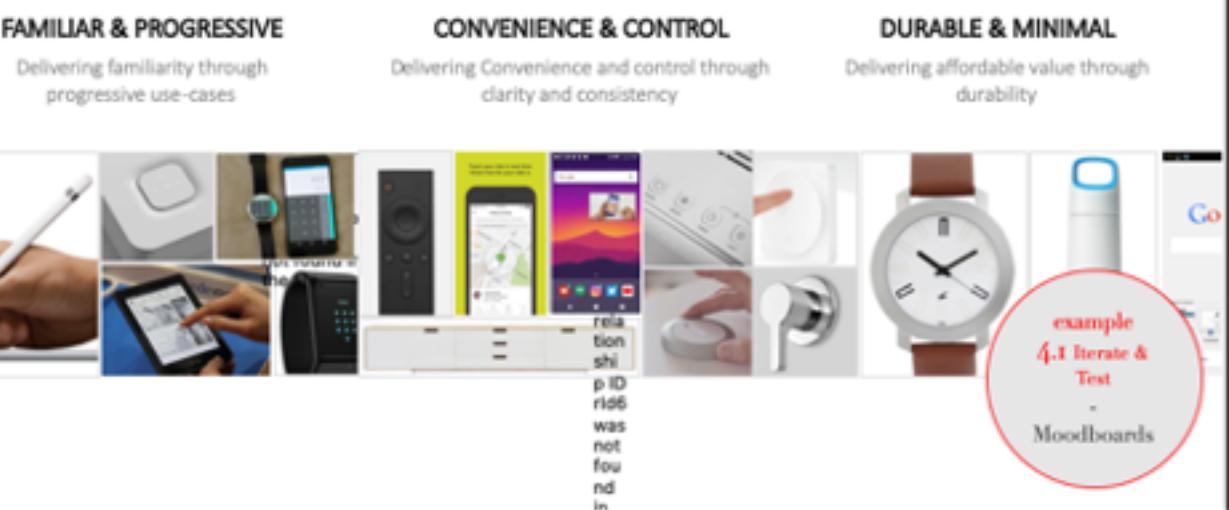
Example : Honeywell Connected Home

THE DESIGN APPROACH
Design Values and Attributes based on XDs Defined

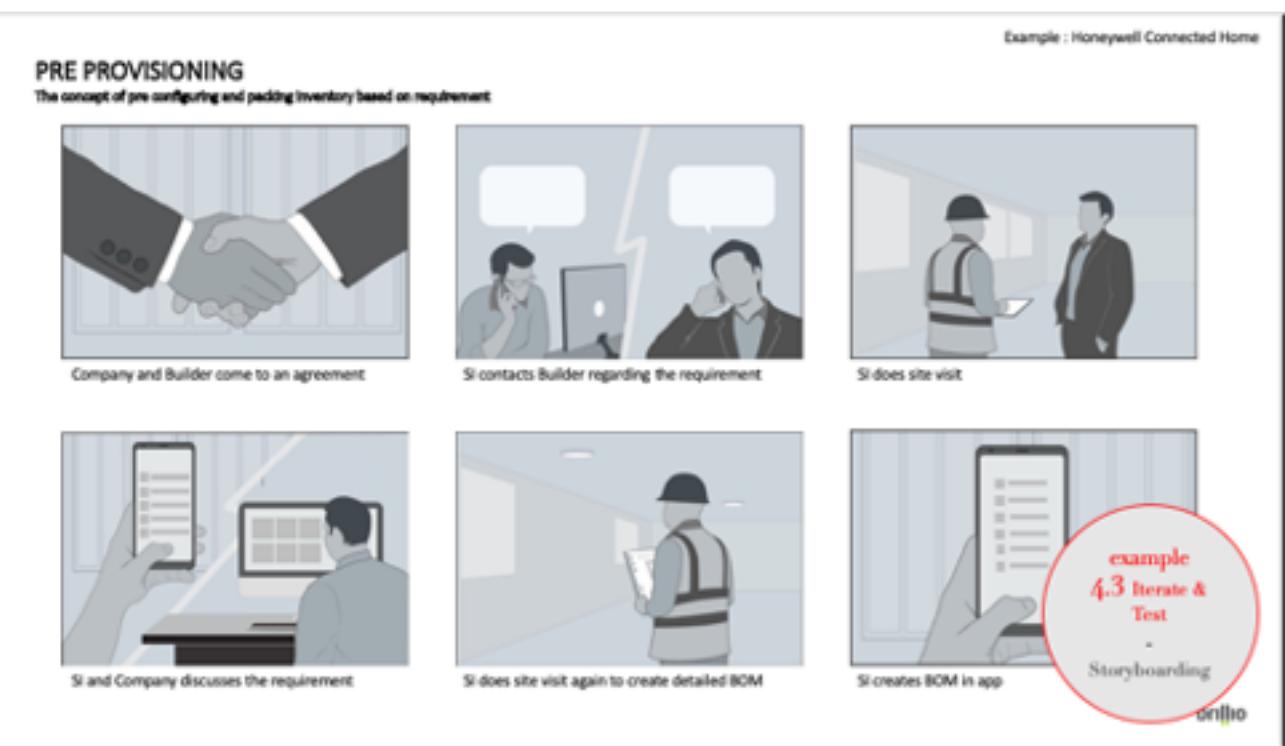
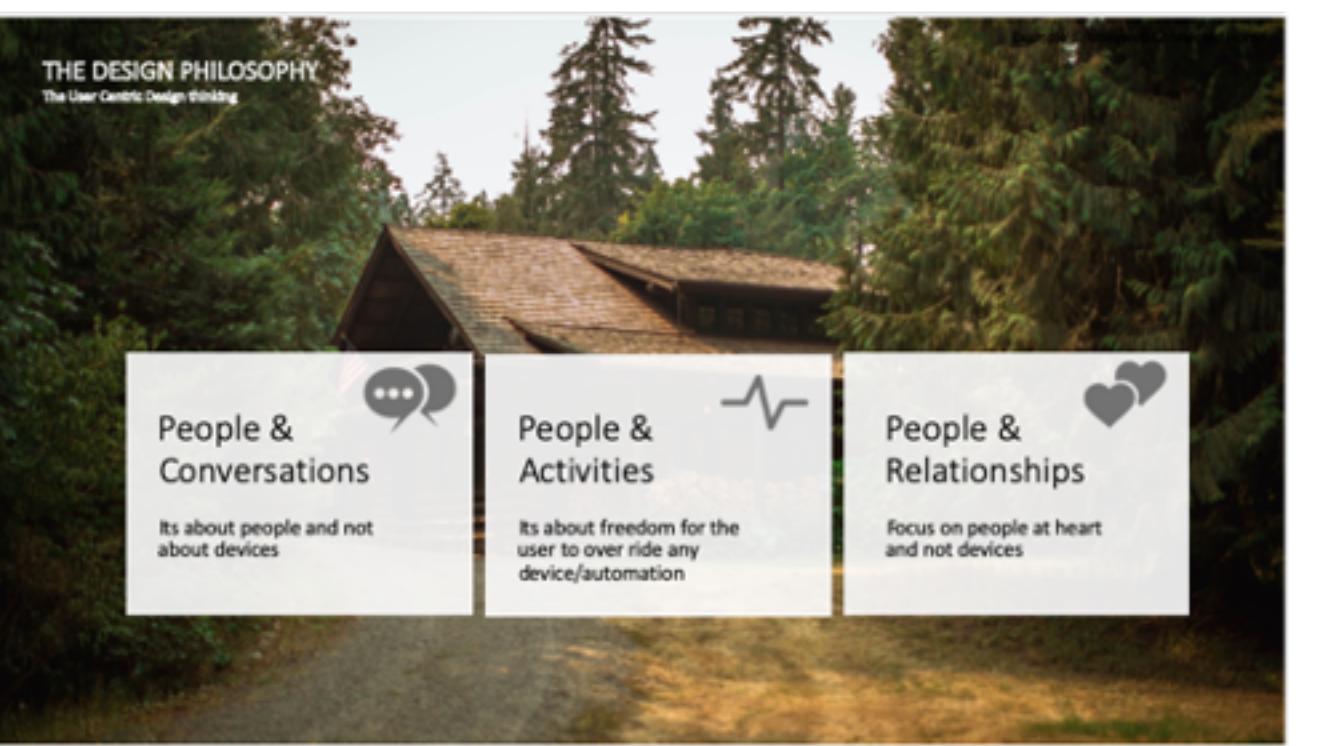


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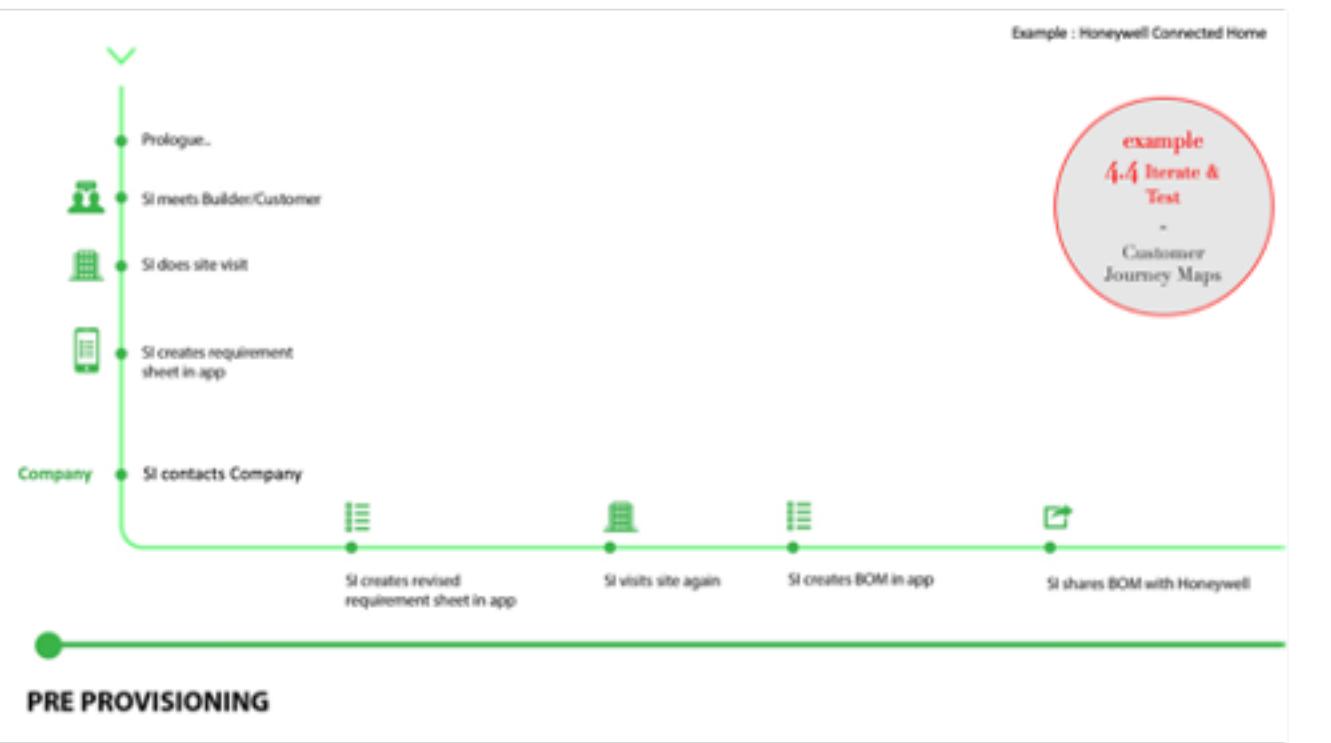
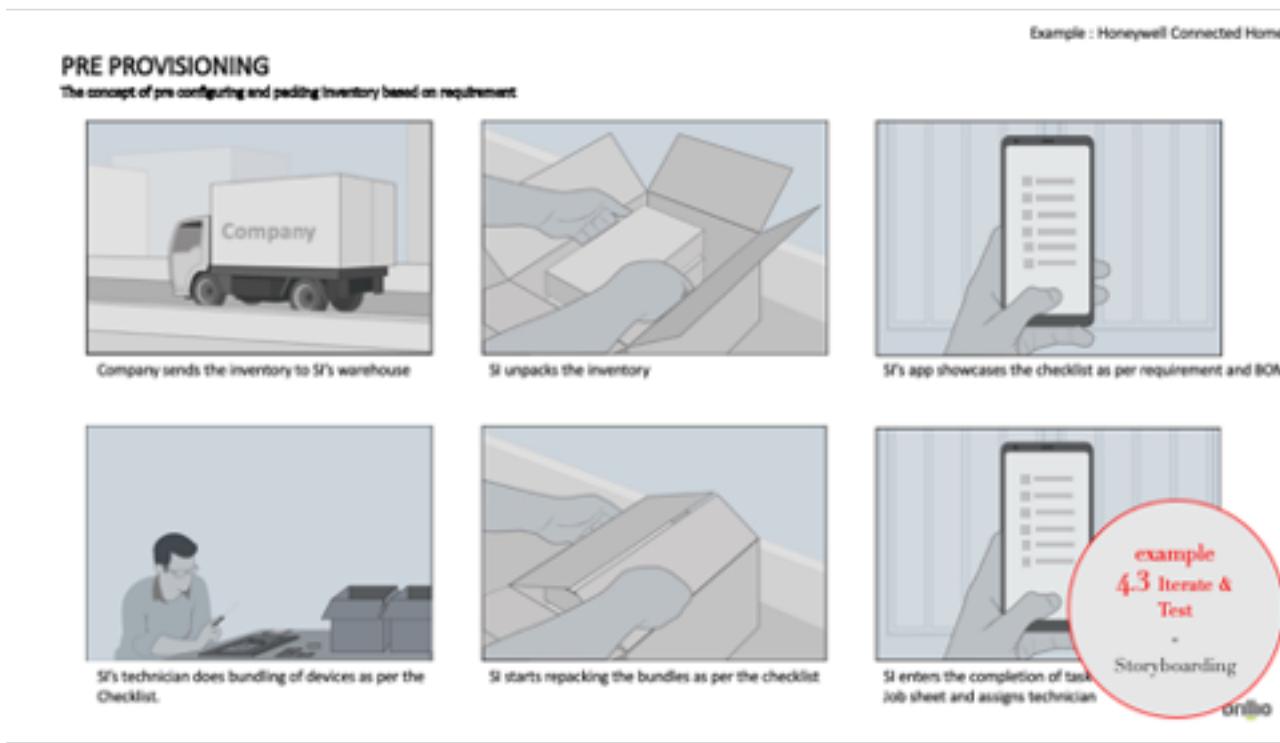
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Design Values and Attributes based on XDs Defined



Example : Honeywell Connected Home



Example : Honeywell Connected Home



Example : Honeywell Connected Home



Example : Honeywell Connected Home

ITERATE, MEASURE & CONVERGE

Why:

Look at options on what would be the ideal solution and empathy that needs to be valued.
Revisit to ensure that it is well validated and tested to deliver the promise to the end customer.

What:

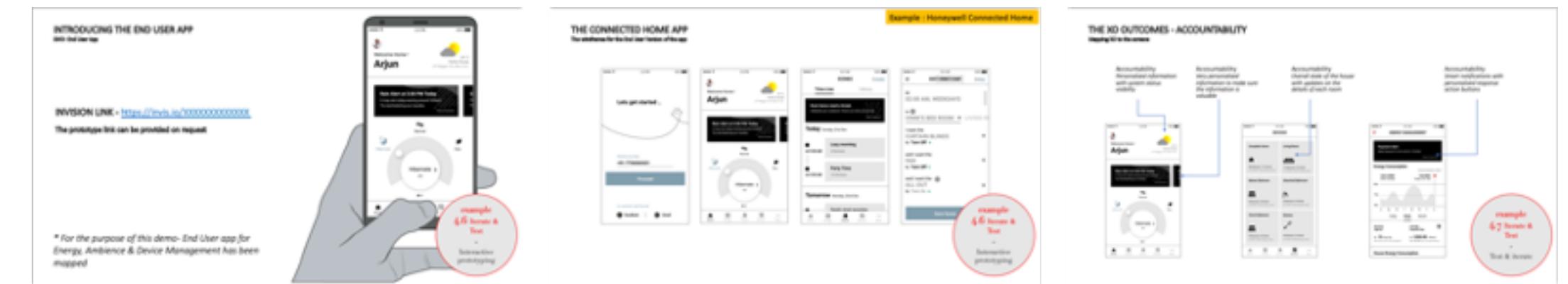
Now, How and Wow

Feedback

Guerilla Testing

Heuristics Evaluation

Desirability Testing etc...



How

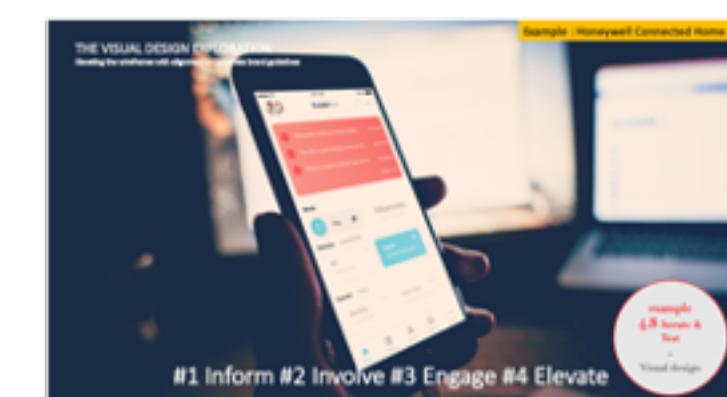
Hi / Low Fidelity Prototypes

Field Testing

Feedback Forms

Learning cards

Journey Maps



Example in Point:

Interactive Prototyping | Iterate & Test | Visual Design

INTRODUCING THE END USER APP

SWD- End User App

INVISION LINK - <https://invis.io/XXXXXXXXXXXXXX>

The prototype link can be provided on request



* For the purpose of this demo- End User app for Energy, Ambience & Device Management has been mapped

example
4.6 Iterate &
Test
-
Interactive
prototyping

THE XO OUTCOMES - ACCOUNTABILITY

Mapping XO to the screens

Accountability
Personalized information with system status visibility

Accountability
Very personalized information to make sure the information is valuable

Accountability
Overall state of the house with updates on the details of each room

Accountability
Smart notifications with personalized response action buttons

example 4-7 Iterate & Test

Test & iterate

THE XO OUTCOMES - DURABILITY

Mapping XO to the screen

Durability
Digital interface identical to physical world

Durability
Digital interface mimicking the physical dimmer settings

Durability
No nonsense interface which showcases all rooms and devices

Durability
Elsewhere graphs to make sure the content is understood by everyone

Durability
Metrics displayed in the form of easy to understand values

example 4-7 Iterate & Test
Test & iterate

THE VISUAL DESIGN EXPLORATION

(Ensuring the wireframes with alignment to Corporate brand guidelines)

Durability
Digital interface identical to physical world

Durability
Digital interface mimicking the physical dimmer settings

Durability
No nonsense interface which showcases all rooms and devices

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Example : Honeywell Connected Home

example 4.7 Iterate & Test
- Test & iterate

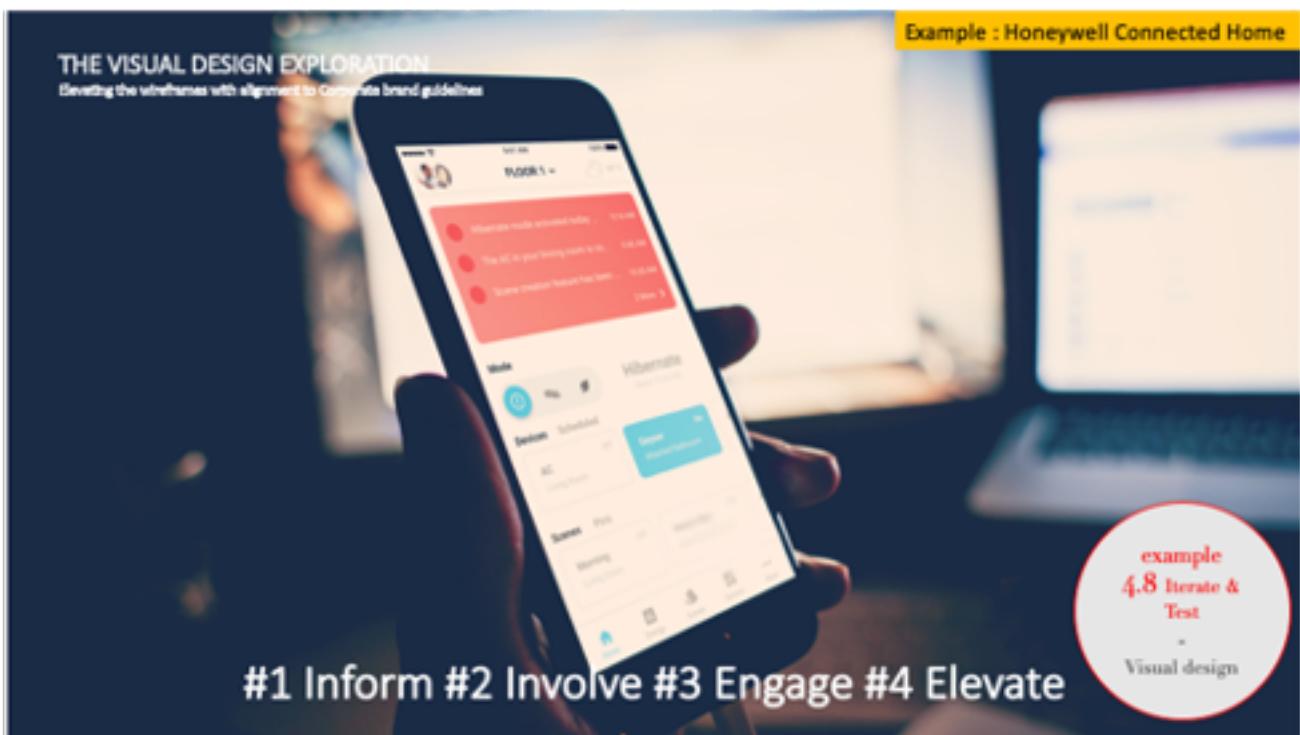
THE VISUAL DESIGN EXPLORATION

Wireframes converted to visual designs with complete adherence to brand guidelines

Example : Honeywell Connected Home

example 4.8 Iterate & Test

Visual design



SOLUTION ROLLOUT

Why:

Once all the Sprint work is done, it's then time to create a timeline for rolling out the solutions. This is best done by scheduling with all staff present, so that dates and needs can be determined together.

What:

Bias towards Action
Radical Collaboration
Crafting Clarity etc...

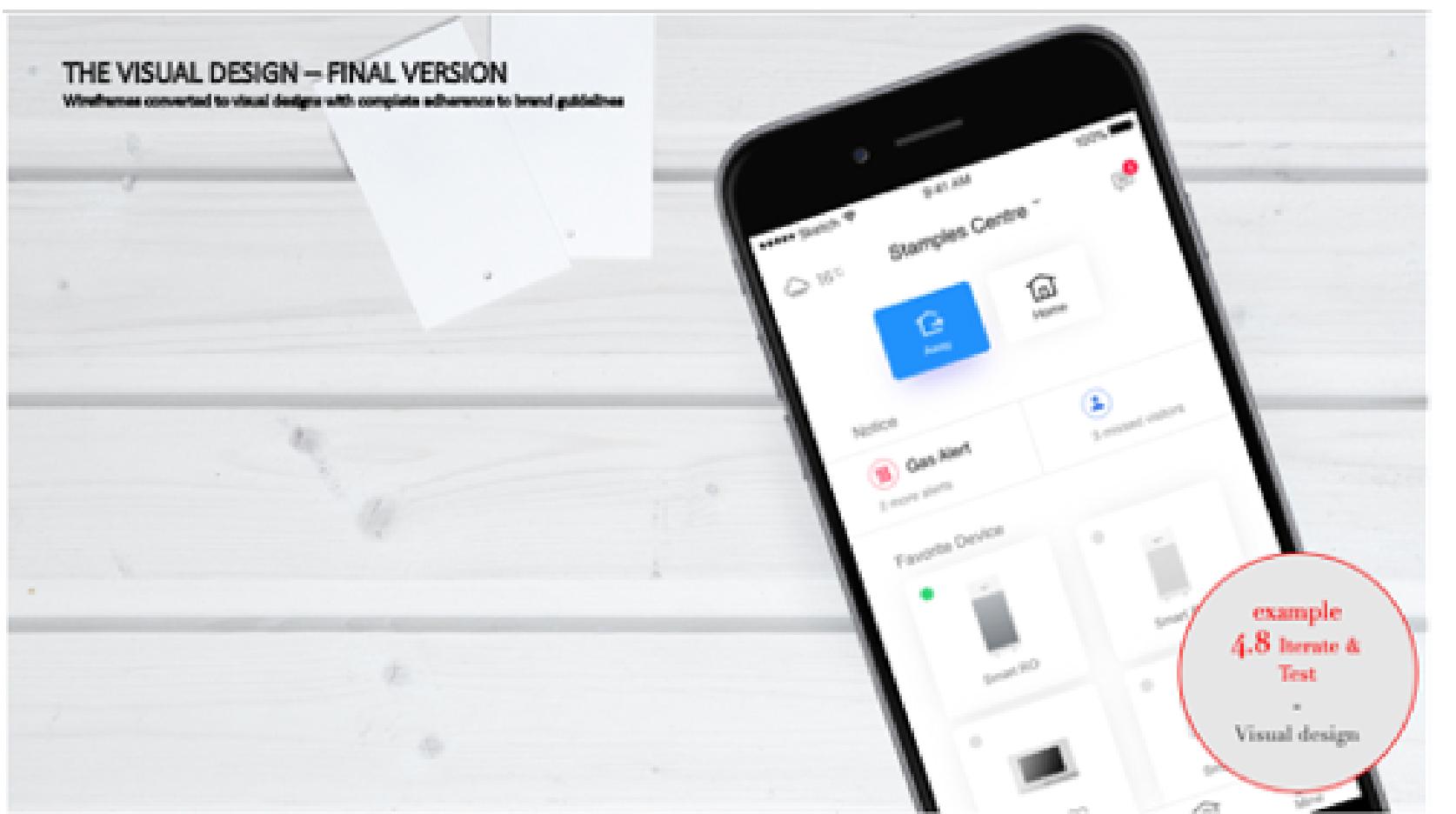
How

Sprint Backlogs
Milestone Definition
Roadmap
Measure of Success

Example in Point:

Final - Visual Design
Final - User Testing

The image consists of four separate screenshots arranged horizontally. The first screenshot shows a wireframe of a mobile application interface. The second screenshot shows a smartphone displaying the application with a specific button highlighted. The third screenshot shows a group of people in a meeting room, likely participating in user testing, with a button highlighted. The fourth screenshot is a document titled "USER TESTING - CVOIC OUTCOMES" containing various sections and bullet points.



THE VISUAL DESIGN – FINAL VERSION

What has converted to visual designs with complete adherence to brand guidelines

USER TESTING- OVOCs

Evaluating the designs with the actual users

- **Objective-** Validate Installer, end user workflow and gather feedback for improvement.
- **Process-** Validate/Get Feedback on Workflow for End User and Installer, Conduct "Buy a Feature", First Click Method based Usability Testing, Desirability Testing (Microsoft Desirability Testing, RBT Method for the features/functions).



Example : Honeywell Connected Home

USER TESTING- OVOC OUTCOMES

Key Takeaways from the OVOC sessions

| | | |
|--|--|--|
| Home Automation Perception: | Home Automation Challenges: | Connectivity Challenges: |
| Offering Security systems like CCTV cameras and Video Door phones is perceived currently as home automation. | Personalization of automation is time consuming. | Operating on mobile network is prone to tower conditions and switching off user data on gateway. |
| Expectation of the product functionality is high. | Installing system initially as home automation ready will be tricky as all automation should be user specific. | Usage of Honeywell proprietary platform for device communications. |
| Fear of digital intrusion in life is high. | Privacy of data concerns. | |

| | | |
|--|---|---|
| Design and CMP: | Budget Issues: | Miscellaneous: |
| White palette switches are the most preferred choice amongst customers and developers. | Overall home automation cost including security systems should be 1-3 lacs budget, for a <1 crore home. | Home automation should integrated with security systems like CCTV cameras and Video Door phones as a single solution. |

The app needs to be clean and minimal.

Value for money is prime focus for middle class families.

Single App to connect all products.

Installation by experts.

Example : Honeywell Connected Home

USER TESTING- OVOC OUTCOMES

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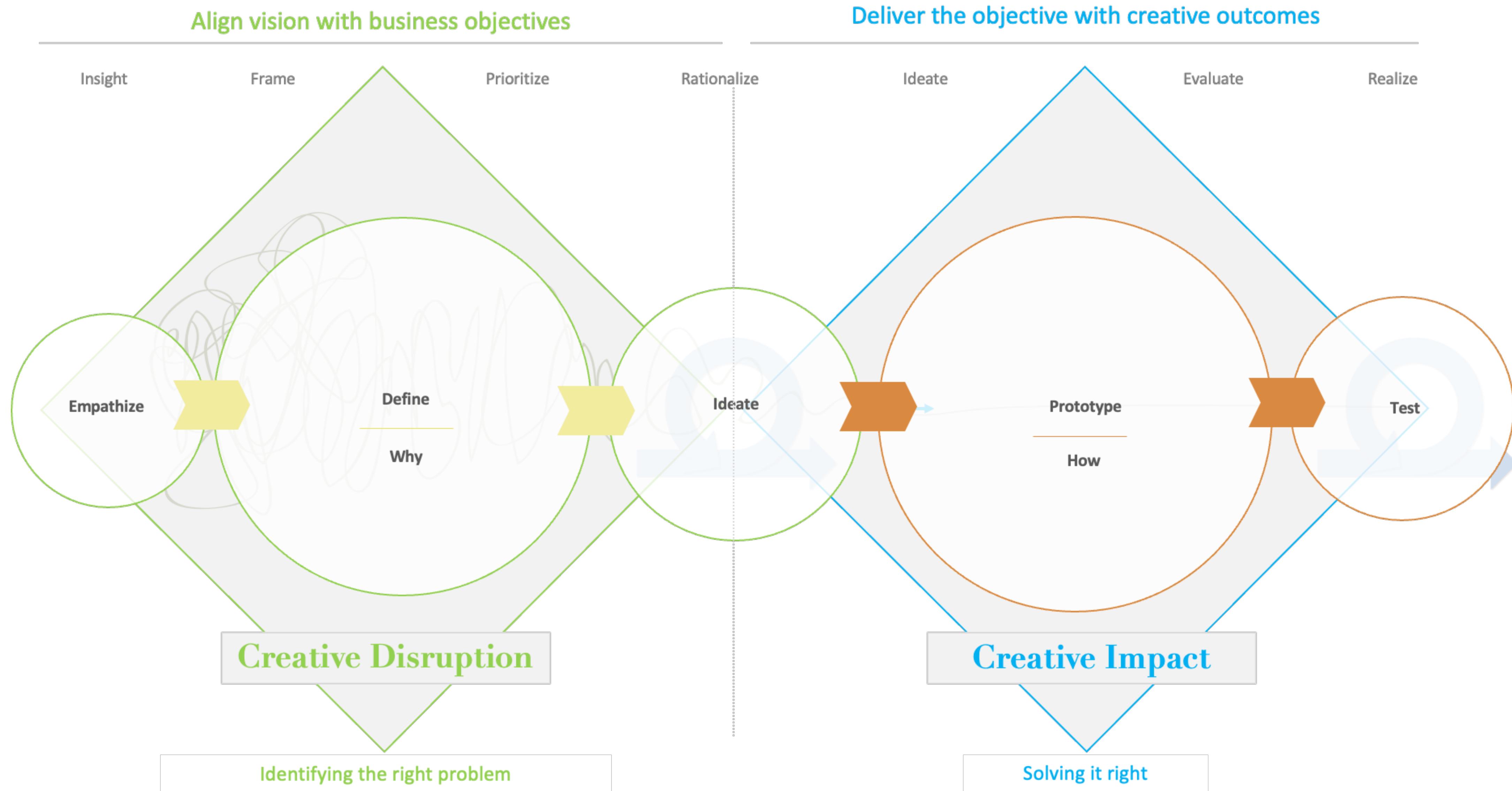
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**example
4.8 Iterate &
Test**

User testing -
Final

PROCESS IN A NUTSHELL



TYPES OF PROBLEMS AND METHODS



Known - Known

Known - Unknown

Unknown - Unknown

| THE CONTEXT | UNDERSTANDING & FRAMING | IDEATION | ITERATE, MEASURE AND CONVERGE |
|----------------------------|-------------------------|------------------------|-----------------------------------|
| Dairy Studies/Journaling | GAP Analysis | SCAMPER | Now, How & Wow |
| Fly on the Wall | Affinity Mapping | Story Boarding | Getting feedback |
| Walk in the Customer Shoes | Key Personas | Statement Status | Rose, Bud, Thorn |
| Contextual Inquiry | Activity Analysis | Attribute Listing | Buy a feature |
| Card Sorting | Cognitive mapping | Role Playing | Guerrilla Testing |
| Competitor Analysis | Conceptual Diagrams | Opportunity Mind-map | Heuristic Evaluation |
| SWOT Analysis | 5W1H – Kipling's Method | Rapid Prototyping | Usability Testing |
| Benchmarking | Feasibility Analysis | Metaphor Brainstorming | Desirability Testing |
| Historical Study | XO Discovering | Concept Brainstorming | System Usability / Maturity Scale |
| Radar Scope | Stakeholder Mapping | Top 5 Voting | |
| | User Journey Mapping | | |
| | Abstraction Laddering | | |

BUSINESS VALUE OF DESIGN THINKING

Improving your UX **saves you money**

- A little up-front UX research can save you hundreds of engineering hours and thousands of dollars
- Decreases the cost of customer support

Focusing on UX **increases your revenue**

- Increases conversion rates
- Improves customer retention and loyalty

Insisting on great UX drives **competitive advantage** and affects the bottom line. Just look at Dyson, Uber, Mint, Apple, IBM, and Intuit.

**DESIGN IS NOT JUST
WHAT IT LOOKS LIKE
AND FEELS LIKE.
DESIGN IS HOW IT
WORKS.**

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