



# DESIGN: LOFI MVP

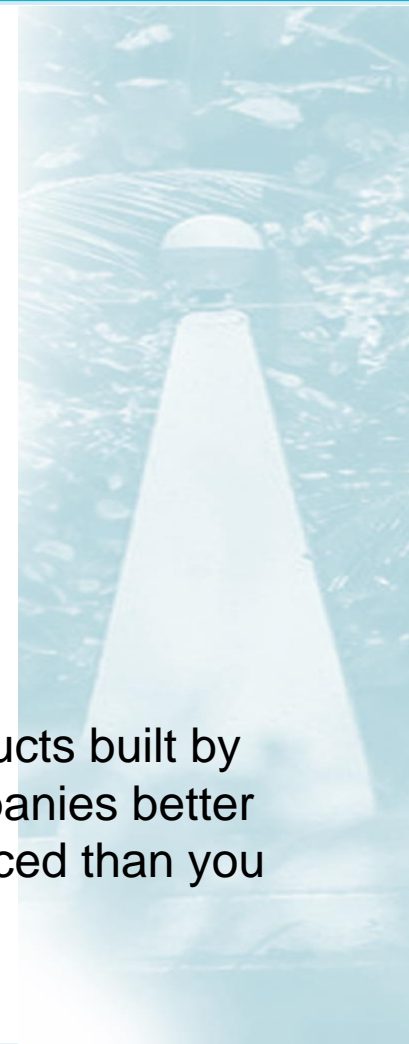
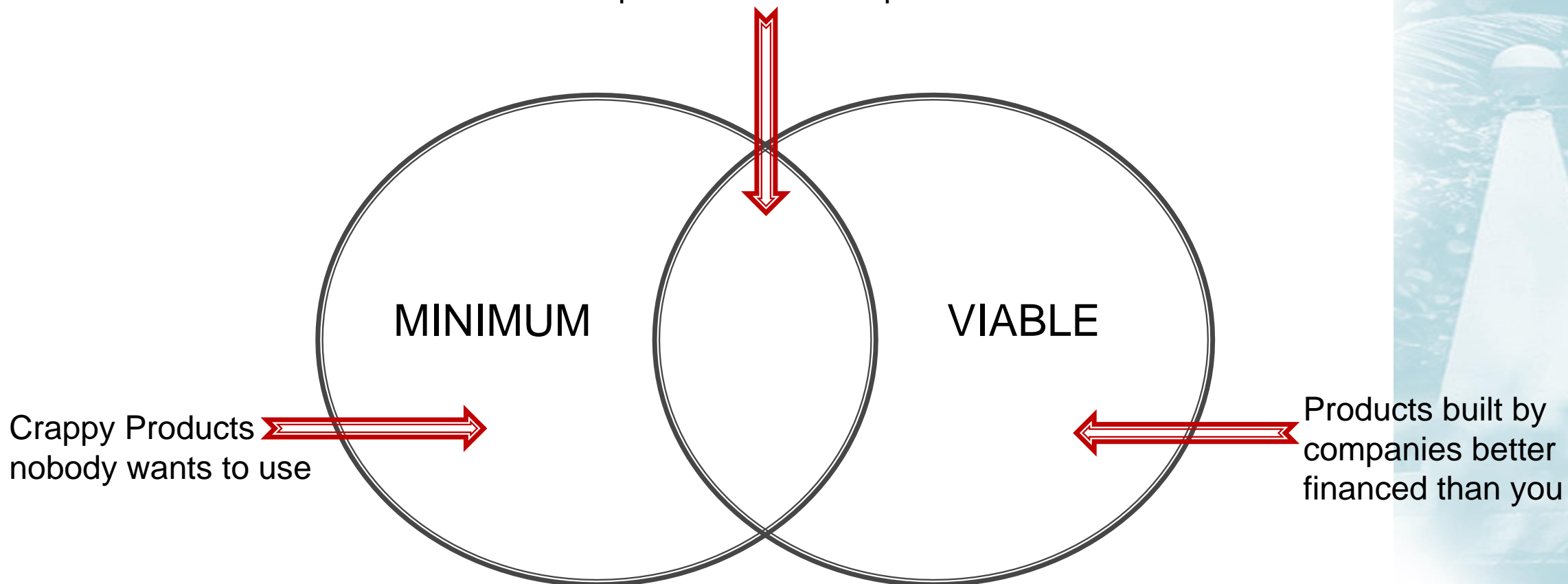




# Lesson 10

## WHAT IS AN MVP?

Minimum + Viable:  
Good products for startups to build





# Lesson 10

## MINIMUM VIABLE PRODUCT

### HOW TO BUILD YOUR MINIMUM VIABLE PRODUCT

NOT LIKE THIS -----



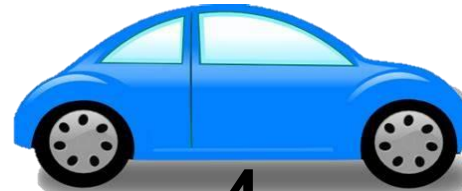
1



2



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LIKE THIS -----



1



2



3



4





### CHECKLIST FOR LO-FI MVP TO VERIFY VALUE PROPOSITION

#### ***PHYSICAL PRODUCTS***

- ☐ User story
- ☐ Specs of proposed product
- ☐ Method for verifying the specs
- ☐ Comparison of proposed product specs to competing products specs
- ☐ Optional: Product mockup
- ☐ Customer ROI
- ☐ Key components and sourcing
- ☐ Total cost of ownership





### CHECKLIST FOR LO-FI MVP TO VERIFY VALUE PROPOSITION

#### ***SOFTWARE/SERVICE***

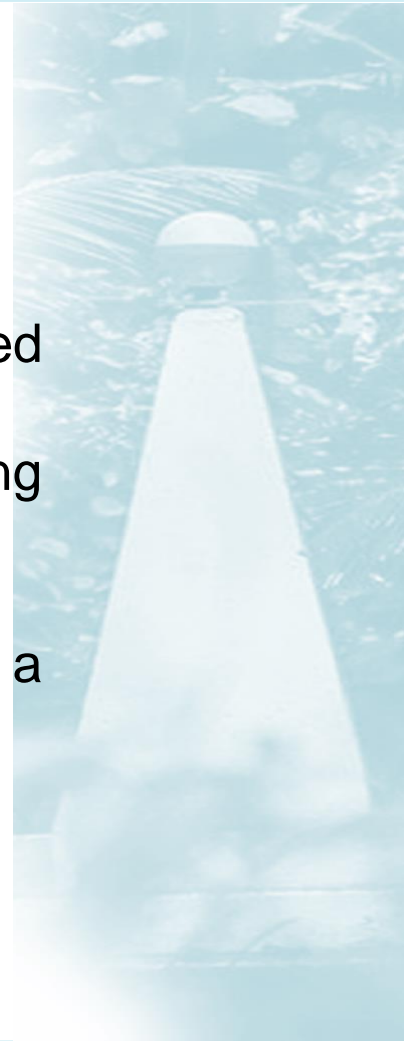
- ☐ User story ( can be built and validated by demo day)
- ☐ User Interface (screen layouts) and/or process flow of proposed software/services
- ☐ Customer ROI
- ☐ Key sources and sourcing
- ☐ Total cost of ownership





### DESIGN PROCESS GOALS

- ☐ Maximize inputs from the team and from customers.
- ☐ Prioritize the user stories that will be included in the next MVP.
  - For software ventures, next MVP should be released and customer-validated before demo day.
  - For other ventures, next MVP should be implementable in a funding proposal: 6 months to one year timeline and <P5M budget for next MVP.
- ☐ Explore as many options as quickly as possible.
- ☐ Repeat the process as a team if multiple options are available for implementing a design feature or user story.
  - Agree on evaluation metrics before discussing options.
  - If no unanimous decision from team, customer decides.



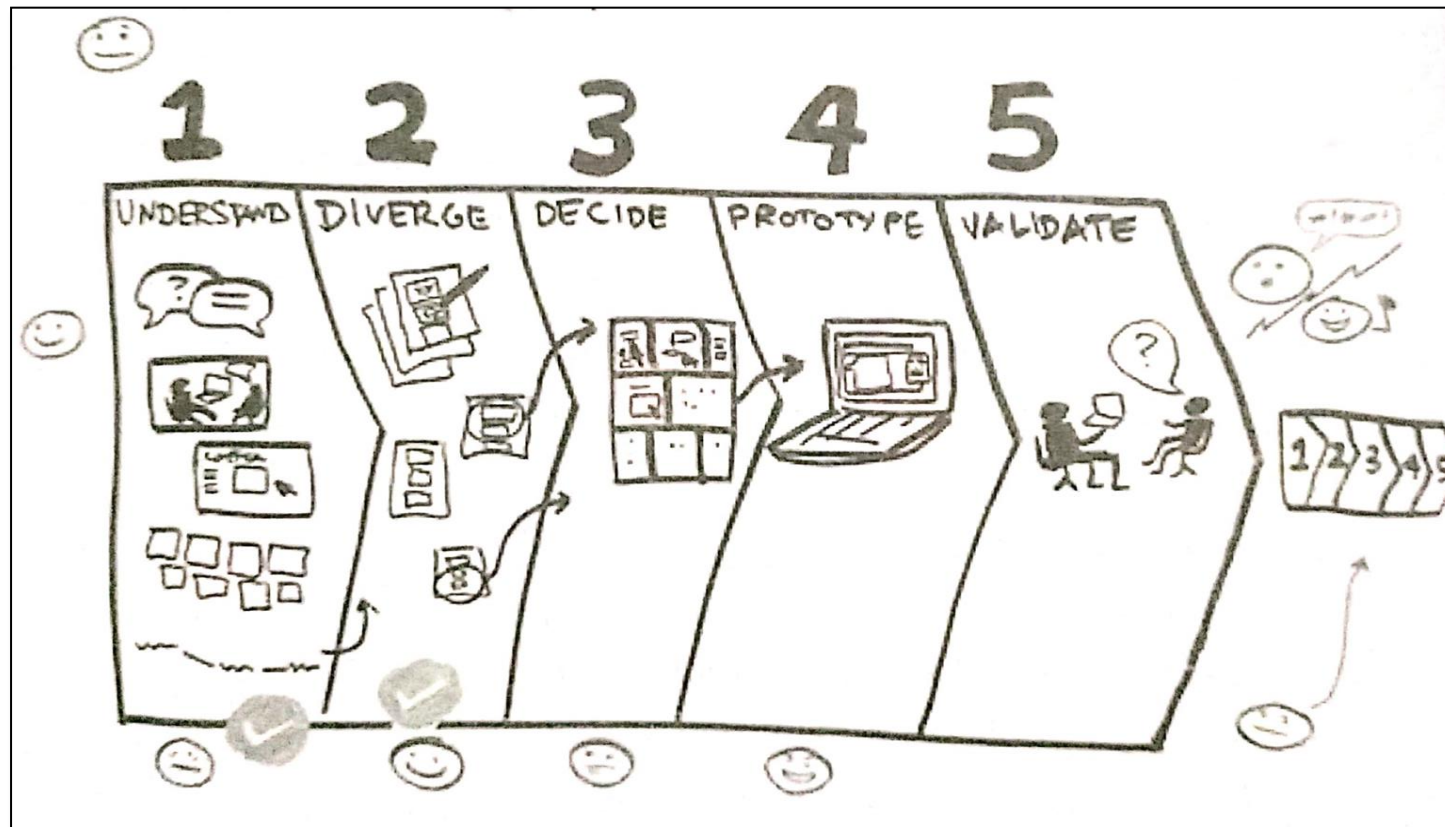




# Lesson 10

## DEVELOPMENT SPRINT

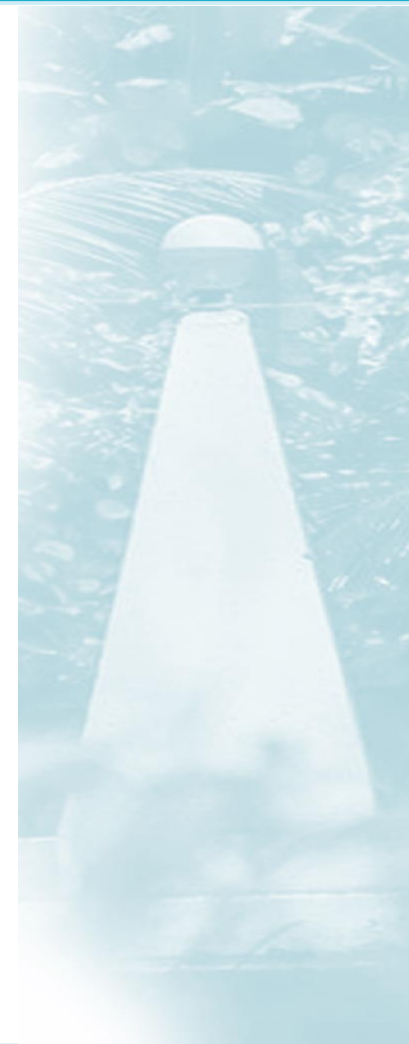
### DEVELOPMENT SPRINT





### DEVELOPING A STORYBOARD

- ☐ Understand the problem.
- ☐ Sketch complete user story
- ☐ Scope MVP
- ☐ Organizes notes and mind-map
- ☐ Crazy eights
- ☐ Critique
- ☐ Organize ideas into storyboard







### UNDERSTAND

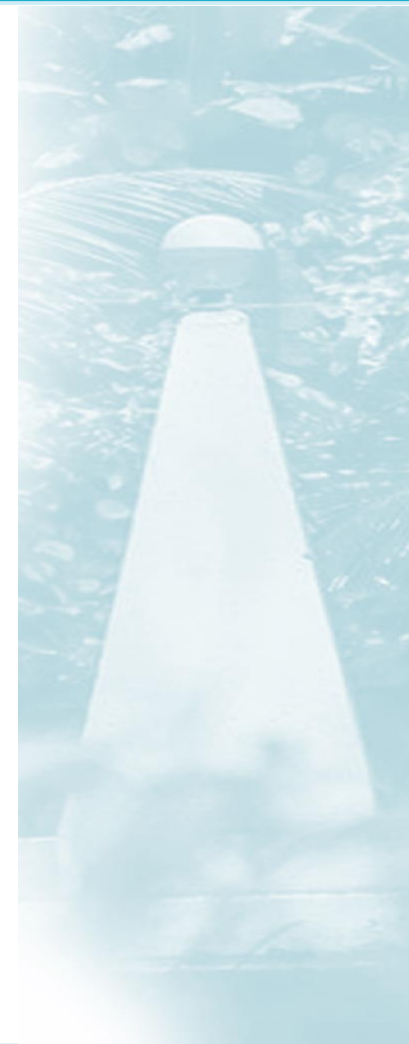
- ☐ Review opportunity/market
  - User story before and after your product
- ☐ Show lightning demos (design pegs)
  - Competitor's products and non-competitive products that solve a similar kind of problem in a different market
- ☐ Show existing user research
  - Results from one-day validation and other customer or literature interviews
- ☐ Decide evaluation metric(s)





### EVALUATION METRICS (RODDEN)

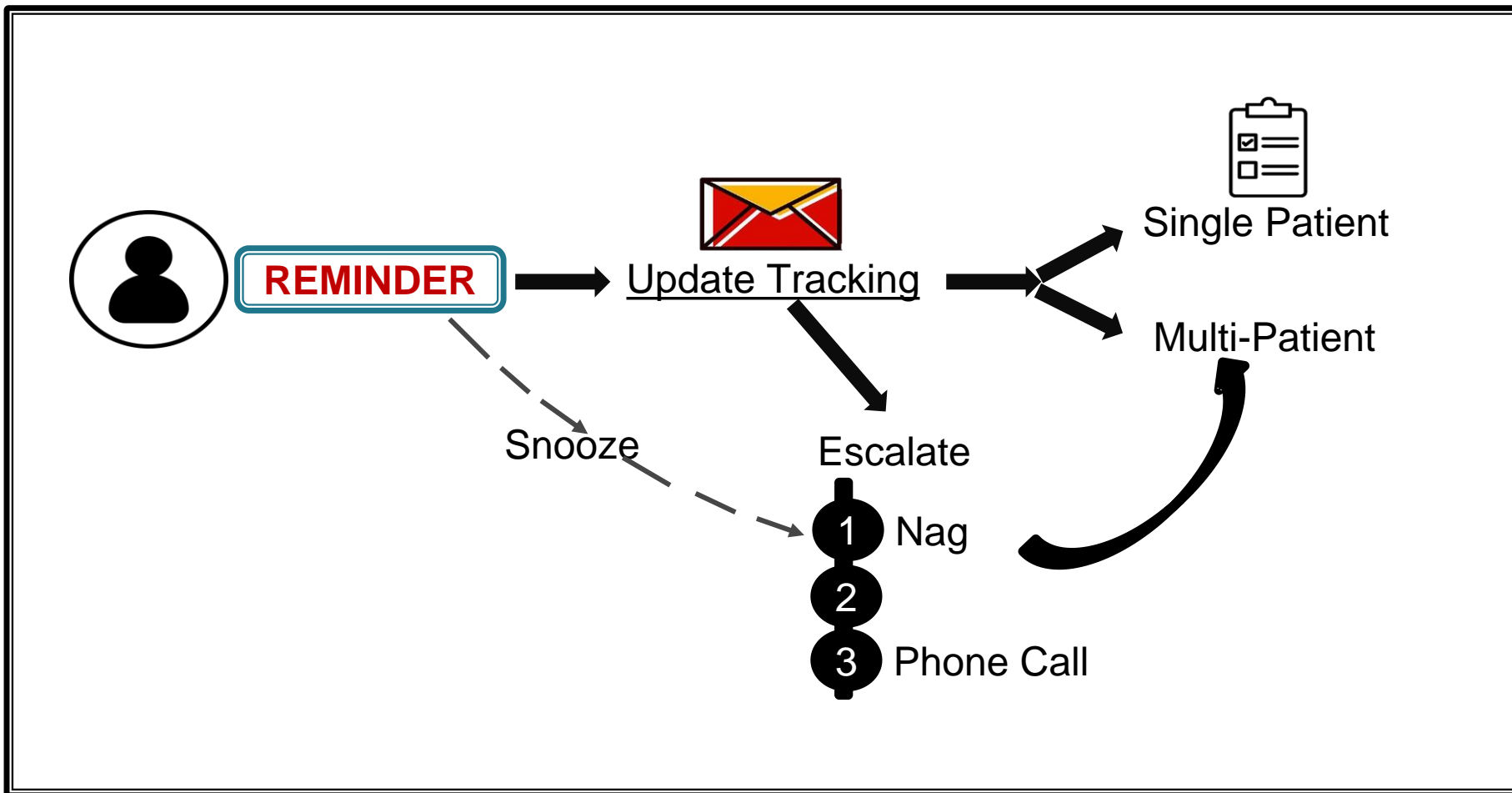
- ☐ Happiness
- ☐ Engagement
- ☐ Adoption
- ☐ Retention
- ☐ Task success





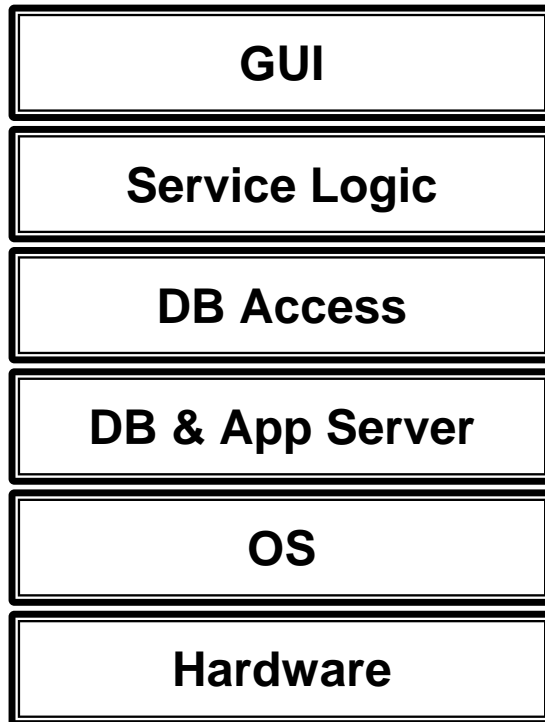
# Lesson 10

## ACTIVITY: SKETCH THE WHOLE REVISED USER STORY

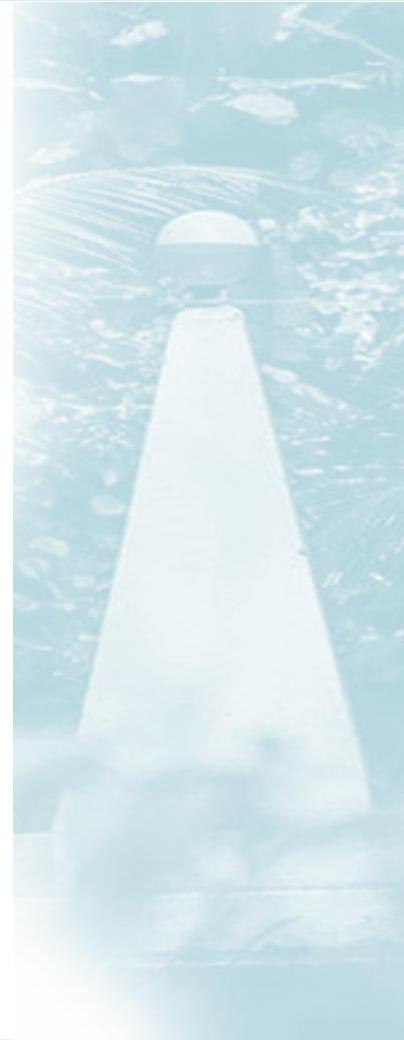
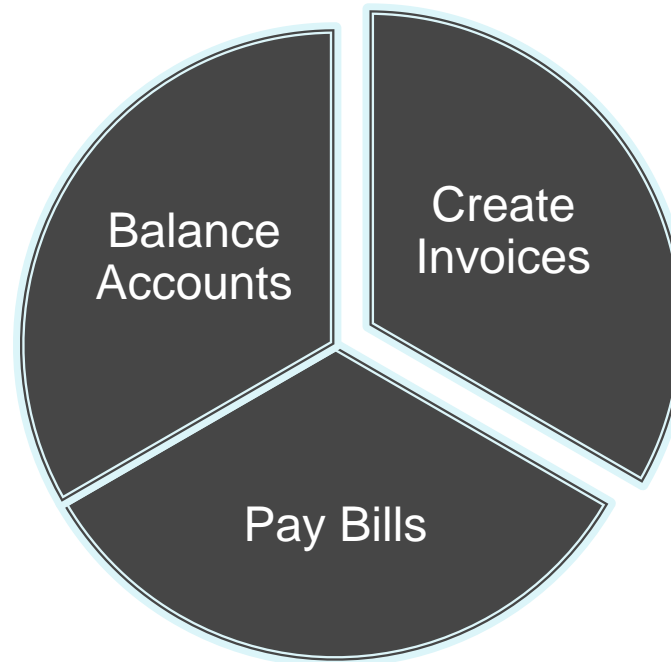




*Wrong View*  
(Developer's Perspective: layers of cake)

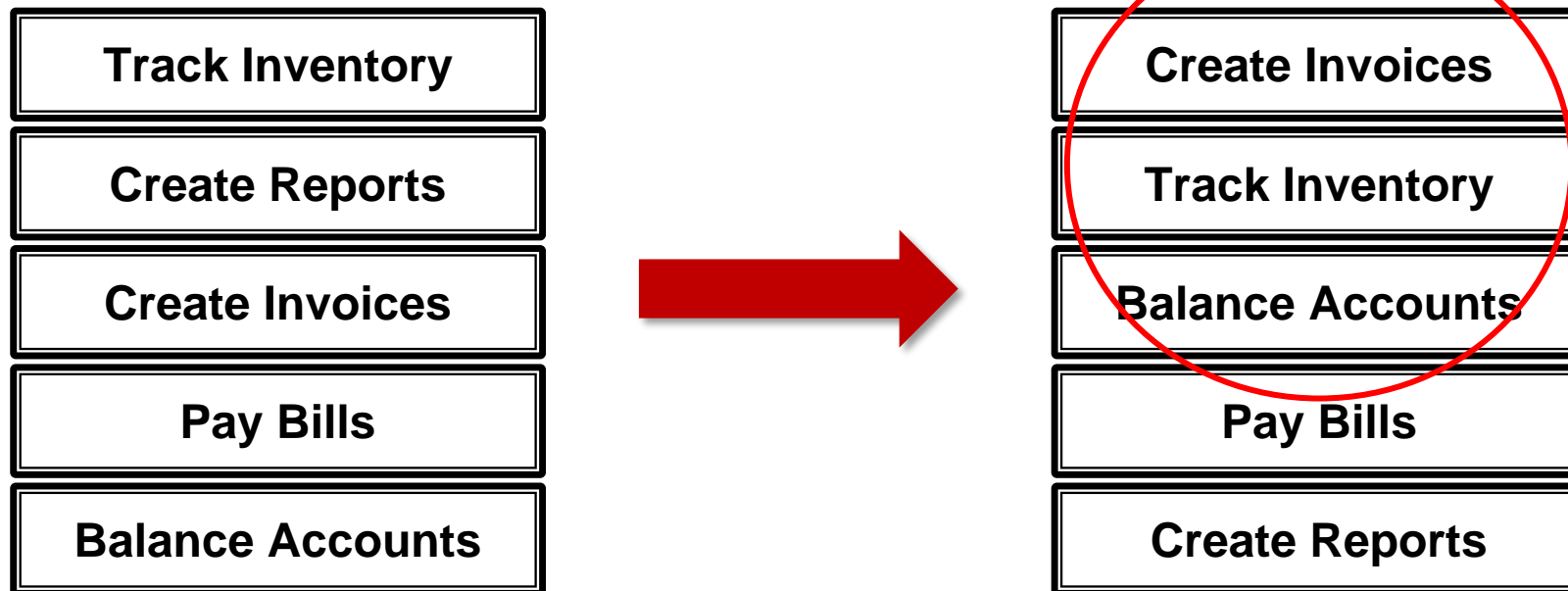


*Right View*  
(Customer's perspective slices of cake)





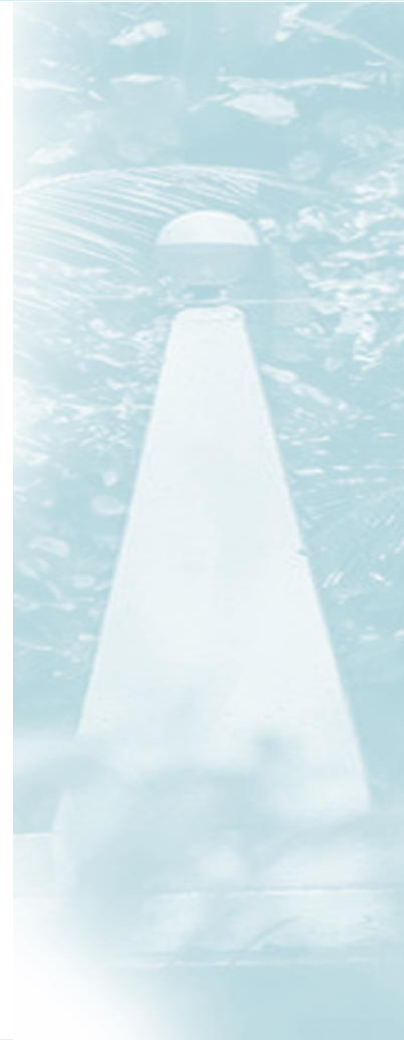
### ACTIVITY: MVP SCOPING







What are the bases for the customer ROI?	
What are the shortcomings of the current prototype in addressing the value proposition?	
Rank the users stories in decreasing order of relevance to the customer ROI?	
Encircle the top priority items for your MVP <input type="checkbox"/> Software ventures: Functional MVP reviewed by customer before demo day <input type="checkbox"/> Hardware ventures: one-step TRL advancement can be completed in 6mons or less assuming full funding, equipment, and staffing available	





### HUMAN-CENTERED DESIGN PRINCIPLES (NORMAN)

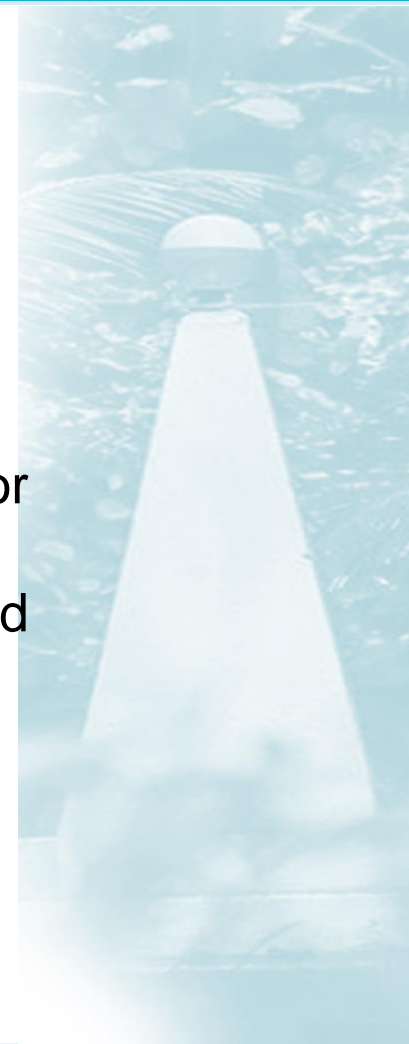
- ☐ Visibility – can I see it?
  - ✓ Can see the state of a device and possible actions.
- ☐ Feedback – what is it doing now?
  - ✓ Tactile, audio, visual
  - ✓ Needs to be immediate and synchronized with user action
- ☐ Affordance – how do I use it?
  - ✓ Perceived and actual properties of an object that gives clues to its operation
- ☐ Mapping – where am I and where can I go?
  - ✓ Relationship to controls and their effect





### HUMAN-CENTERED DESIGN PRINCIPLES (NORMAN)

- ☐ Constraint – why can't I do that?
  - ✓ Reduce error by restricting the kind of interactions that can take place
- ☐ Consistency – is this familiar?
  - ✓ Designing interfaces to have similar operations and use similar elements for achieving similar tasks
  - ✓ Enables people to quickly transfer prior knowledge to new contexts and focus on relevant tasks





## BRAINWRITING

*“We tend to think of groups as more effective than each individual but the power of social pressure and conformity is usually counter to the process of brainstorming.*

*To help overcome these problems a better method of brainstorming was created called brainwriting. As the name implies, you write out your ideas rather than speak them out.*

*Extensive research and testing has shown that brainwriting generates 40 percent more creative ideas compared to traditional brainstorming.”*





## Take notes and mindmap (10-15 mins)

Using a notebook or laptop organize the info presented by the group so far including:

- ☐ User stories in the MVP
- ☐ Your own breakdown of each user story into sub stories
- ☐ Design pegs for each user story

## Crazy eights (5min)

One or more ideas or options on any of the following:

- ☐ Specifications
- ☐ Implementations options and verification method for each user story
- ☐ Key components and sourcing
- ☐ Turn off self-filter: crazy, not so crazy and half-baked ideas welcome





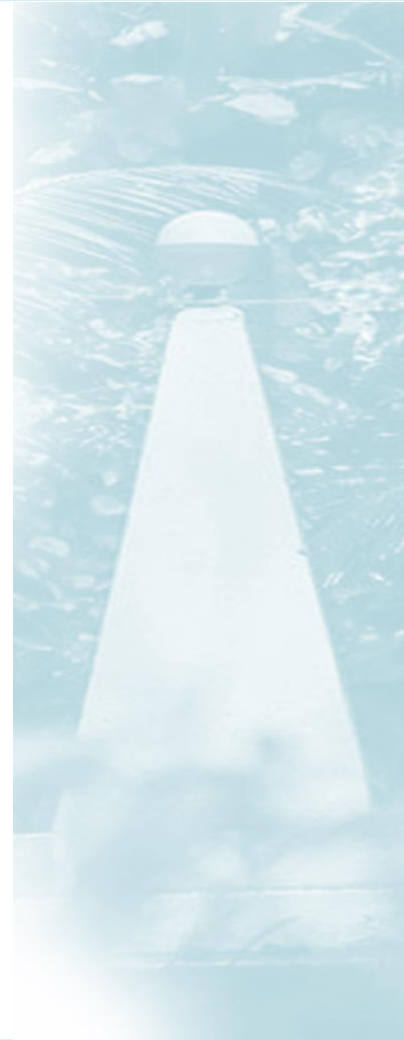
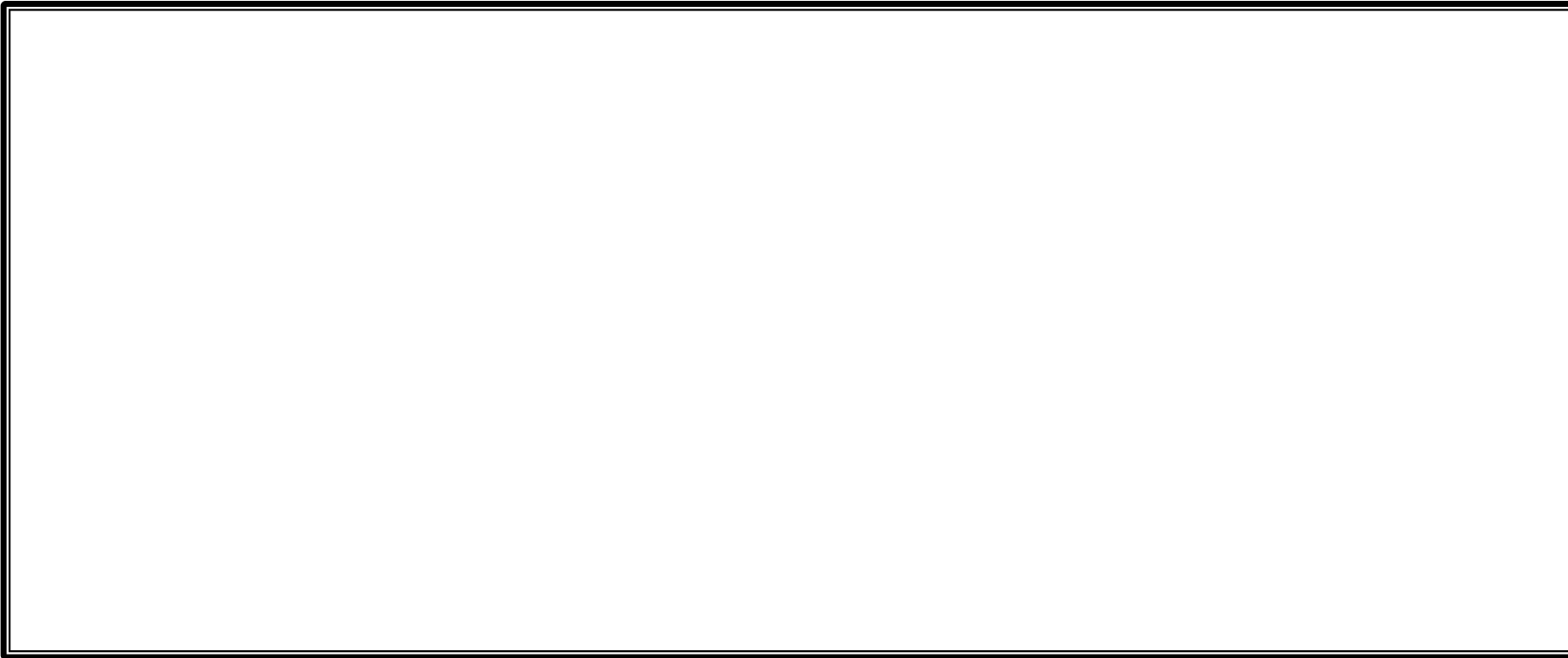


### ACTIVITY: MIND MAP





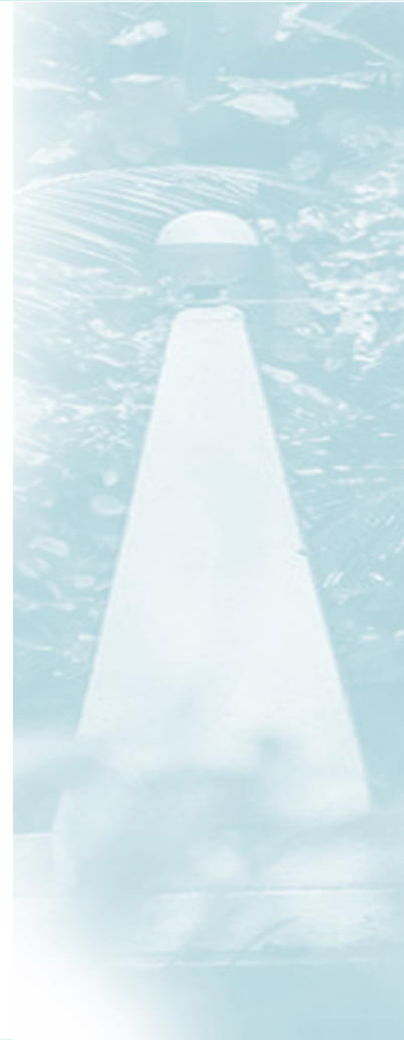
### ACTIVITY: CRAZY EIGHTS (5MINS)





### ACTIVITY: STORY BOARD (10-20 MINS)

Organize your crazy eight design ideas into the sequence of user stories in your MVP for your teammates to view and understand without an oral explanation from you.





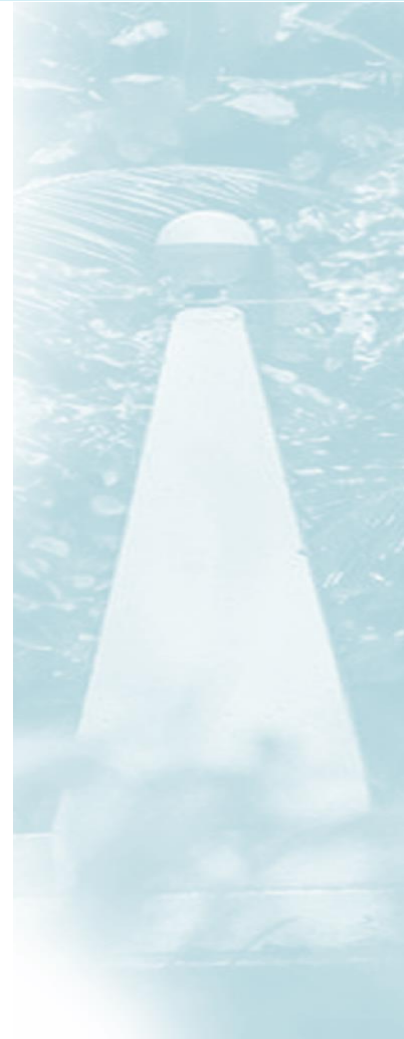
### Silent Critique (5-10mins)

- ☐ Criteria for evaluation (decide as a team)


- ☐ Without speaking, everybody look at the storyboards of their teammates and writes a star (or puts a sticker) on every part of the storyboard they like using the above criteria.

### Oral review and Integration

- ☐ 3 minute review
  - Each teammate has 3 minutes to go over all the storyboards to talk what they liked and ask any questions from the teammate who made it.
- ☐ Integration
  - Combine the best ideas into a single board.





**Prepare presentation slides using the checklist below.**

### ***Physical products***

- User Story
- Specs of proposed product
- Method for verifying the specs
- Comparison of proposed product specs
- Optional: Product mockup
- Customer ROI
- Key components and sourcing

### ***Software/Service***

- User story (can be built and validated by demo day)
- User interface (screen layouts) and/or process flow of proposed software/services
- Customer ROI
- Key resources and sourcing

