



PUSHKAR P | HCD4AR/VR | L1

HUMAN-CENTRED DESIGN



PUSHKAR PATANGE

- ▶ Design | Advertising | Games
20 years of experience
Vancouver | Dubai | Mumbai
- ▶ UX+UI Designer @ArchiactVR
VR+AR games & business solutions
- ▶ I have Cat, his name is Oreo
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ABOUT YOU HUMANS

- ▶ Background
- ▶ Program Goal
- ▶ Longterm Career goal
- ▶ Favorite VR/AR experience
- ▶ A random fact

SOME GROUND RULES

- ▶ Be present and participate
- ▶ Keep your phone & other distractions away
- ▶ Video on when you are in class
- ▶ Don't talk over others, mute yourself when needed
- ▶ Create a safe space to share & learn
- ▶ Check your email and Moodle daily
- ▶ You are responsible for your learning

WHAT IS ?

HUMAN-CENTRED DESIGN

WHAT IS ?

DESIGN

WHAT IS DESIGN?

~~Design is making things pretty~~

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

Steve Jobs

WHAT IS DESIGN?

Design is a
solution to a problem

WHAT IS DESIGN?

Design is a quick, cheap, elegant,
innovative, simple, dynamic,
solution to a problem

WHAT IS ?

HUMAN-CENTRED DESIGN

PICK UP A PERFECT GIFT FOR



PICK UP A PERFECT GIFT FOR



WHAT IS HUMAN CENTRED DESIGN?

Human-centered design is a process that starts with the people you're designing for and ends with new solutions that are tailor-made to suit their needs.





The upside-down
ketchup bottle
earned its inventor,
Paul Brown,
\$13 million.

INFLATABLE HELMET





FLETCHER
CAPSTAN TABLE

WHAT IS HUMAN CENTRED DESIGN?

- ▶ A design framework that develops **solutions to problems by involving the human perspective at every step**
- ▶ Human involvement takes place in **observing the problem within context**, brainstorming, conceptualizing, developing, and implementing the solution.
- ▶ Human-centred design **builds upon participatory action research** by moving beyond participants' involvement and producing solutions to problems rather than solely documenting them.

THE MINDSET

- ▶ Learn from Failure
- ▶ Fail Fast
- ▶ Make it
- ▶ Iterate, iterate, iterate
- ▶ Creative Confidence
- ▶ Empathy
- ▶ Embrace Ambiguity
- ▶ Optimism

BEST PRACTICES

- ▶ Focus on the people
- ▶ Find the right problem
- ▶ Think of everything as a system
- ▶ Always test your design decisions

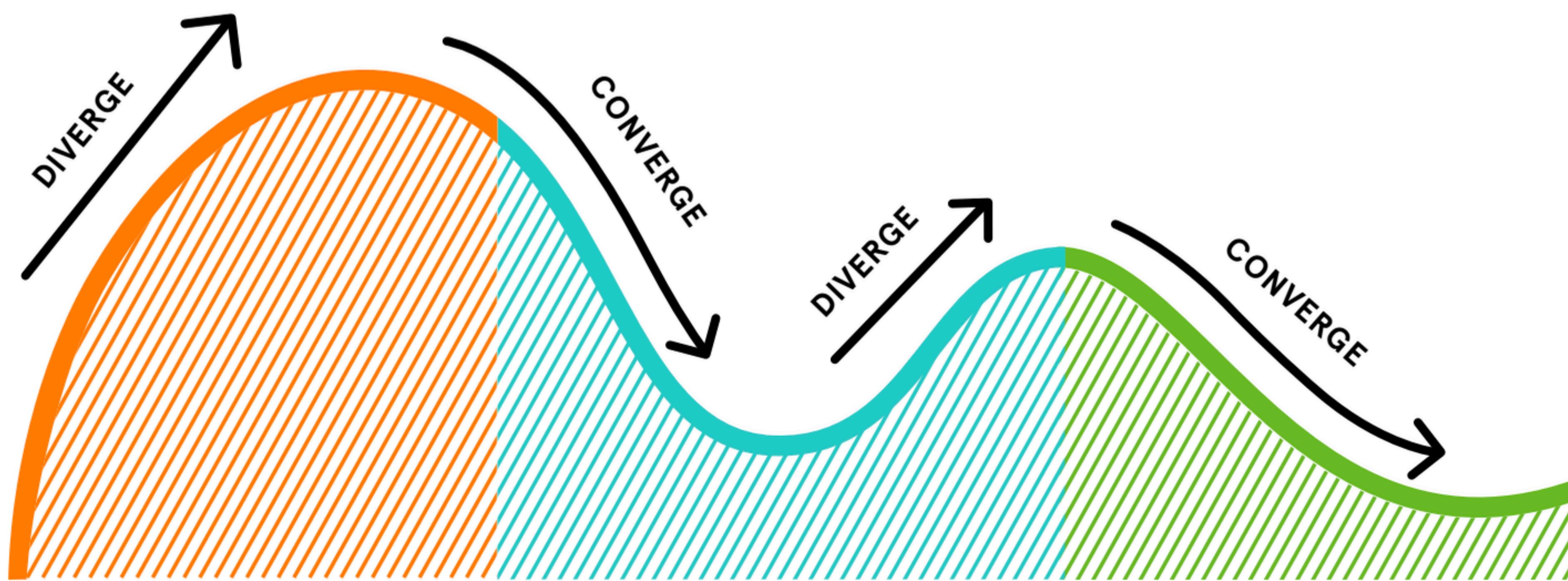


MINUTES
BIO BREAK

INSPIRATION

IDEATION

IMPLEMENTATION



LEARN ON THE FLY

ALWAYS REMAIN GROUNDED TO THE NEEDS OF THE PEOPLE

INSPIRATION

COMING UP WITH LOTS OF IDEAS
SOME MIGHT BE TOO HARD TO TRY OR TOO EASY NOT TO TRY
ALWAYS BE TESTING AND LISTENING TO THE AUDIENCE -
INCORPORATING THE FEEDBACK INTO YOUR PROTOTYPE

IDEATION

CREATE PARTNERSHIPS AND BUILD RELATIONSHIPS
TO GET YOUR PRODUCTS OUT THERE

IMPLEMENTATION

INSPIRATION

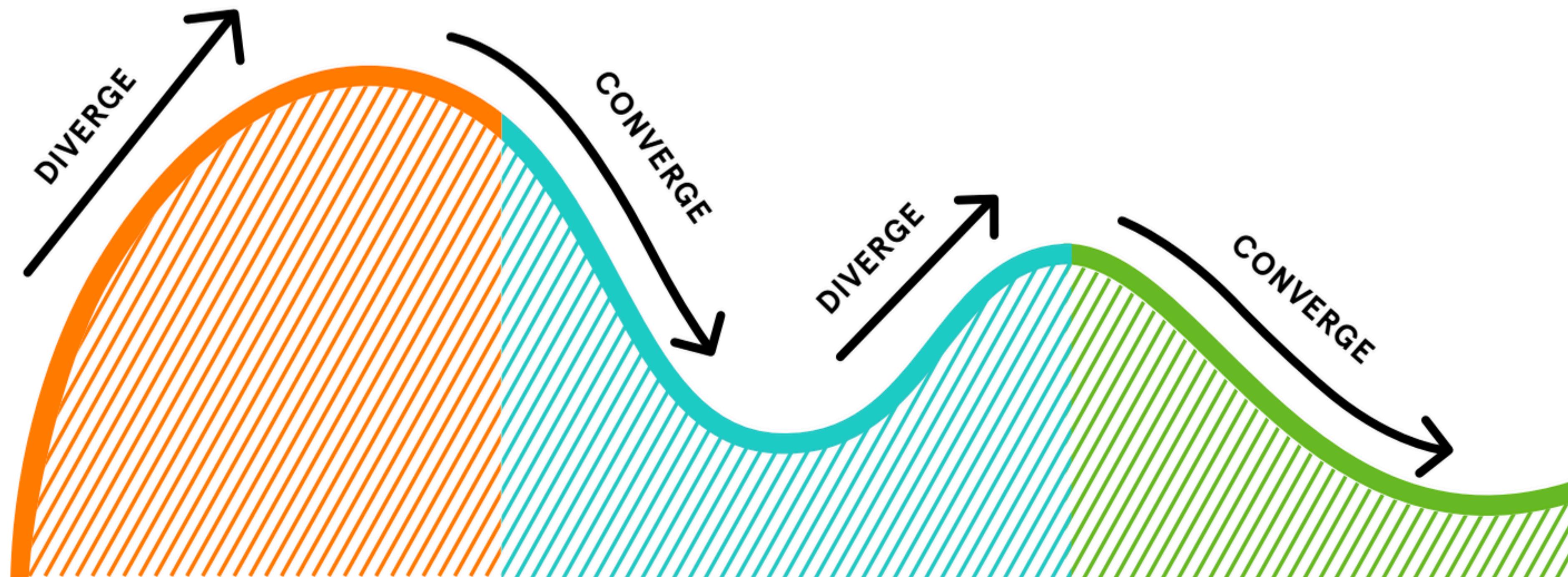
I have a design challenge.
How do I get started?
How do I conduct an interview?
How do I stay human-centered?

IDEATION

I have an opportunity for design.
How do I interpret what I've learned?
How do I turn my insights into tangible ideas?
How do I make a prototype?

IMPLEMENTATION

I have an innovative solution.
How do I make my concept real?
How do I assess if it's working?
How do I plan for sustainability?



FIND 3 EXAMPLES OF

#GR8DESIGN



FIND 3 EXAMPLES OF

#BADDESIGN



1. MAKE 4 TEAMS OF 2 EACH
 2. FIND 2 EXAMPLES OF GOOD DESIGN
 3. FIND 2 EXAMPLES OF GOOD DESIGN
 4. TOTAL TIME 30 MINUTES
 5. PRESENT RATIONALE 6 MINUTES EACH
-

TASK

1. PRESENT RATIONALE 6 MINUTES EACH
 2. WHY IS IT GOOD?
 3. WHY IS IT BAD?
 4. HOW MIGHT WE IMPROVE THE BAD DESIGN?
 5. HOW MIGHT WE MAKE GOOD DESIGN > GREAT?
-

PRESENT







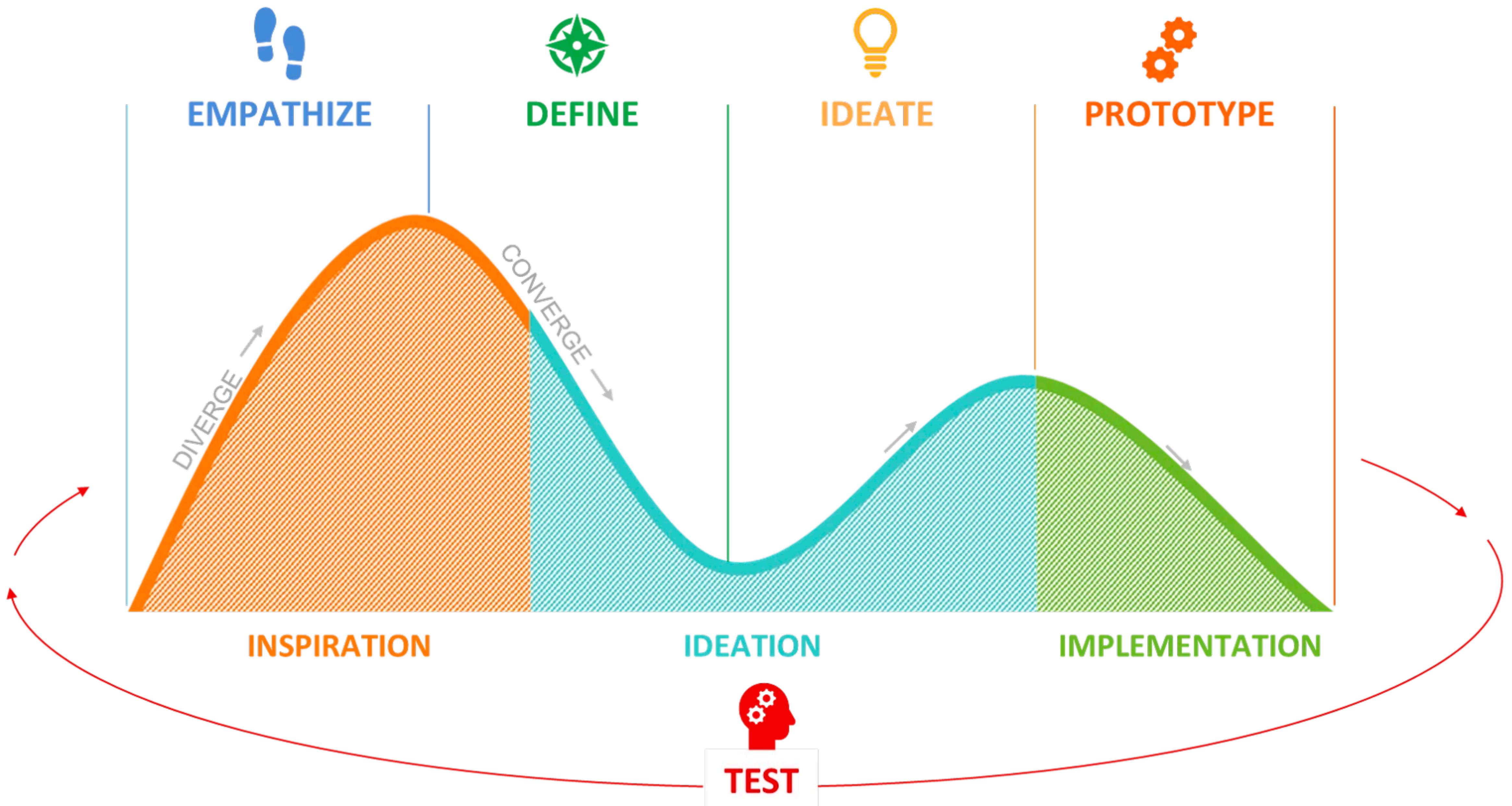
END CLASS #1

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PRESENT



THE METHODS - LEARN

- ▶ Body Language
 - ▶ What you don't say can be as important as what you do. The right body language, eye contact, and facial expressions can help you learn more and engage deeply
- ▶ Photojournal
 - ▶ Photos are a fantastic way to learn about a person's life, especially if they're the one taking them
- ▶ The Five Whys
 - ▶ This easy research method will help you uncover the deep motivations and assumptions that underpin a person's behaviour.
- ▶ Frame your design challenge
 - ▶ Properly framing your design challenge is critical to your success. Here's how to do it just right.

METHODS

LEARN



THE METHODS - LEARN

- ▶ Recruiting tools
 - ▶ Human-centred design isn't just talking to a lot of people, it's about talking to the right people. These tools will make sure that your interviews really count.
- ▶ Interview
 - ▶ There's no better way to understand the hopes, desires, and aspirations of those you're designing for than by talking with them directly
- ▶ Group Interview
 - ▶ You can come to a quick understanding of a community's life, dynamics, and needs by conducting a group interview
- ▶ Expert Interview
 - ▶ Experts can get you up to speed quickly on a topic, giving you key insights into relevant history, context, and innovations.

THE METHODS - LEARN

- ▶ Conversation starters
 - ▶ Conversation Starters put a bunch of ideas in front of users to spark their reactions.
- ▶ Analogous Inspiration
 - ▶ To get a fresh perspective on your research, shift your focus to a new context.

METHODS

TOOLS



THE METHODS - TOOLS

- ▶ Card Sort
 - ▶ This simple exercise will help you identify what's most important to the people you're designing for
- ▶ Collage
 - ▶ Having the people you're designing for make and explain a collage can help you understand their values and thought processes
- ▶ Create a project plan
 - ▶ Get organized, understand your strengths, and start identifying what you'll need to come up with innovative solutions

THE METHODS - TOOLS

- ▶ Guided tour
 - ▶ Taking a Guided Tour through the home or workplace of the person you're designing for can reveal their habits and values far better than talking to them on the street
- ▶ Draw it
 - ▶ Spur deeper and different kinds of conversations by picking up pen and paper and drawing
- ▶ Peers observing peers
 - ▶ Get a glimpse into the community you're designing for by seeing how they document their own lives

THE METHODS - TOOLS

- ▶ Build a team
 - ▶ An interdisciplinary mix of thinkers, makers, and doers is just the right combination to tackle any design challenge
- ▶ Define your audience
 - ▶ Consider the broad spectrum of people who will be touched by your design solution
- ▶ Immersion
 - ▶ There's no better way to understand the people you're designing for than by immersing yourself in their lives and communities

THE METHODS - TOOLS

- ▶ Resource flow
 - ▶ By organizing and visualizing how a person or family spends money, you'll see how it comes in, goes out, and opportunities for more efficiency in the system
- ▶ Secondary research
- ▶ Getting smart around your challenge is crucial to success in the field

METHODS

PROTOTYPING



THE METHODS - PROTOTYPING

- ▶ Journey map
 - ▶ A Journey Map allows you to identify and strategize for key moments in the product, experience, or service you're designing
- ▶ Download your learnings
 - ▶ In the Inspiration Phase you gathered tons of information. Here's how you share it with your team and put it to use
- ▶ Brainstorm rules
 - ▶ IDEO has seven little rules that unlock the creative power of a brainstorming session
- ▶ Bundle ideas
 - ▶ Now that you've got lots of ideas, it's time to combine them into robust solutions

THE METHODS - PROTOTYPING

- ▶ Create a concept
 - ▶ Move from a handful of ideas and insights into a fully-fledged concept, one that you'll refine and push forward
- ▶ Design principles
 - ▶ As you build out your ideas, you'll notice that certain unifying elements are starting to guide the design. Here's how to recognize them
- ▶ Create frameworks
 - ▶ Visual representation of a system, and a great way to make sense of data. Use them to highlight key relationships and develop your strategy

METHODS

TRACKING



THE METHODS - TRACKING

- ▶ Mash-ups
 - ▶ What would the Harvard of agricultural extension services look like? Mash-up two existing brands or concepts to explore new ideas
- ▶ Gut check
 - ▶ We've been generating a ton of ideas. Here's a chance to look at them critically and figure out what to pursue, what to evolve, and what to discard
- ▶ Co-creation session
 - ▶ The people you're designing for can tell you plenty, and they can show you more. Here's how to further incorporate them into your design process
- ▶ Determine what to prototype
 - ▶ What part of the project are we going to prototype and show our audience

THE METHODS - TRACKING

- ▶ Share inspiring stories
 - ▶ Once you've had a chance to Download Your Learnings it's time to make sense of them. One way is to share the most inspiring stories you've heard with your teammates
- ▶ How might we
 - ▶ Every problem is an opportunity for design. By framing your challenge as a How Might We question, you'll set yourself up for an innovative solution
- ▶ Rapid prototyping
 - ▶ Build your prototypes quickly, share them immediately, keep learning
- ▶ Storyboard
 - ▶ A quick, low-resolution prototype, a Storyboard can help you visualize your concept from start to finish

THE METHODS - TRACKING

- ▶ Role play
 - ▶ A quick and tangible way to test an idea or experience is to get into character and act it out
- ▶ Get feedback
 - ▶ You've learned and built. Now share what you've made with the people you're designing for and see what they think.
- ▶ Integrate feedback and iterate
 - ▶ Let the feedback of the people you're designing for guide the next iteration of your solution
- ▶ Get visual
 - ▶ Incorporating drawing, sculpting, and building into the Ideation process can unlock all kinds of innovative solutions

THE METHODS - TRACKING

- ▶ Find themes
 - ▶ As you share your learnings, hidden patterns are likely to emerge. Here's how to spot and make sense of them
- ▶ Explore your hunch
 - ▶ A huge part of human-centred design is following your nose. If you've got a feeling about something, give yourself a chance to explore it
- ▶ Business model canvas
 - ▶ A handy worksheet can help you think through some key aspects of a social enterprise, service, or business
- ▶ Value proposition canvas
 - ▶ An added bonus tool for you to use

METHODS

ANALYSING



THE METHODS - ANALYZING

- ▶ Top five
 - ▶ Prioritize, communicate, and strategize with your team
- ▶ Insight statements
 - ▶ A critical piece of the Ideation phase is plucking the insights that will drive your design out of the huge body of information you've gathered
- ▶ Brainstorm *
 - ▶ Energize your team and drum up a staggering amount of ideas

* This actually is not as useful as some people think.

METHODS

DESIGNING



THE METHODS - DESIGNING

- ▶ Keep iterating
 - ▶ Testing, getting feedback, and iterating will help you get a great solution to market and let you know where to push it when you do
- ▶ Live prototyping
 - ▶ A Live Prototype is a chance to run your solution for a couple weeks out in the real world
- ▶ Pilot
 - ▶ A longer-term test of your solution and a critical step before going to market

METHODS

NEXT STEPS



THE METHODS - NEXT STEPS

- ▶ Build partnerships
 - ▶ You may well need some help getting your concept to market. Build the Partnerships you'll need now
- ▶ Sustainable Revenue
 - ▶ Your Funding Strategy will get you through launch, but you'll need a long term revenue strategy to have maximum impact
- ▶ Roadmap
 - ▶ You'll need a timeline and a plan of action to get your idea out into the world. A Roadmap keeps you on time and on target

THE METHODS - NEXT STEPS

- ▶ Ways to grow framework
 - ▶ This easy-to-make chart will help you understand whom your design solution is for and what implementation will look like
- ▶ Define success
 - ▶ Sit down with your team and map out what Success looks like. Setting key milestones will keep you on course and give you something to work toward
- ▶ Measure and evaluate
 - ▶ Your goal has always been to have big impact. Design the ways that you'll measure and grow it into your solution

THE METHODS - NEXT STEPS

- ▶ Staff your project
 - ▶ Now that you've got an idea to put in motion, build the team that can take you from concept to completion
- ▶ Capabilities quicksheet
 - ▶ You've got a great solution, but what is it going to take to execute it? The team you've currently got may not be enough
- ▶ Create a pitch
 - ▶ Now that your idea is pretty well set, you'll want to communicate it to funders, partners, consumers, everyone

THE METHODS - NEXT STEPS

- ▶ Keep getting feedback
 - ▶ Even though your idea is now as close to market as it's ever been, you still need the input of the people you're designing for
- ▶ Funding strategy
 - ▶ Without a coherent Funding Strategy in place, you may not have the money you need to get your design solution off the ground

WHAT WORKS

& WHAT DOESN'T



WHAT WORKS AND WHAT DOESN'T

These are some tools for human centred design, but these are not all set in stone.
Some of them might work for you and some might not.

Throughout the course we'll see and use other tools to achieve these goals.

Use these tools carefully and choose the right one for each case.

The DESIGN
of EVERYDAY
THINGS



DON
NORMAN

RECOMMENDED READING

DESIGN
CLASSICS



NEXT CLASS

**FUN SIDE OF
RESEARCH**