

**Addressing the Human and Technical
Capacity Challenges Through Digital Skills
ITU—DOT TRAINING PROGRAM**

THE VALUE OF DESIGN (THINKING)

**29th July — 1st August, 2019
New Delhi, India**

Mr. Peter Argent, ITU Expert

Topics



1. What is a design?

2. Why is design so important?

3. Design processes

4. Making design a part of everything



Questions, questions, questions...



The value of “good” questions

“

Why and "how" are words so important that they cannot be too often used.



Napoleon Bonaparte

“

I had six honest serving men-they taught me all I knew: Their names were Where and What and When-and Why and How and Who.



Rudyard Kipling



“

A prudent question is one-half of wisdom.



Francis Bacon



Course design questions

1. What outcomes do I want for the participants?
2. What topics need to be covered to achieve the outcomes?
3. What activities will be best?
4. **What can I do to make it fun?**

What problem is my organisation solving?

Business owners have difficulty keeping up with changing technology.

This is a problem because customers will go find competitors who offer the innovative solutions they expect.

More than one problem

Organisations quite often solve more than one problem

And perhaps for more than one group of people

- What is the most compelling problem?
- Who do you want to solve the problem for?

What problem/s is your organisation solving?

Simple problem statement template:

(Group of people) have difficulty (doing something).

This is a problem because (impact of problem).

5 Whys Tool

5 Whys is an iterative, interrogative technique to find the root cause of a problem.

Example:

1. **Why?** - The battery is dead. (First why)
2. **Why?** - The alternator is not functioning. (Second why)
3. **Why?** - The alternator belt has broken. (Third why)
4. **Why?** - The alternator belt was well beyond its useful service life and not replaced. (Fourth why)
5. **Why?** - The vehicle was not maintained according to the recommended service schedule. (Fifth why, a root cause)

What is design?

Putting thought into what you create.

Good design:

Putting **considered** thought into what you create, following a process or methodology.

Design processes

Design thinking

Human-centred design

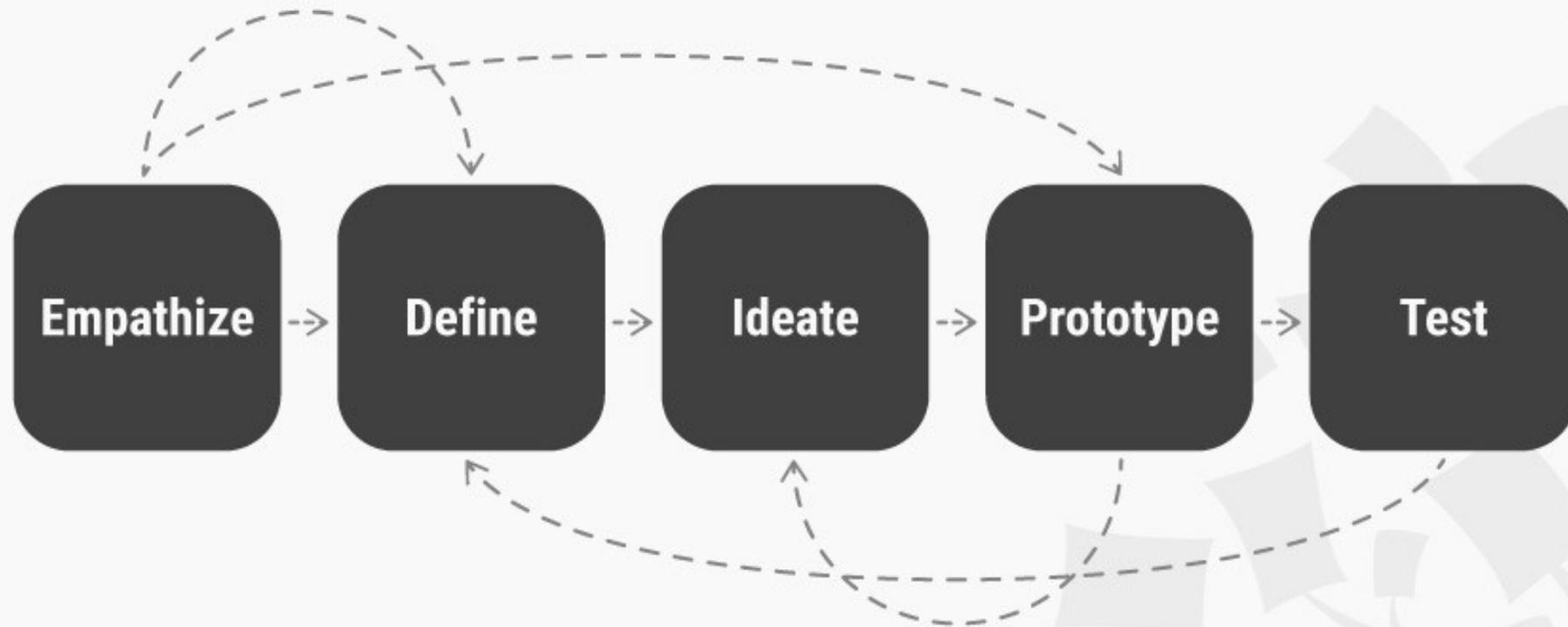
User experience design

Service design

Design sprint

Digital product design

Design Thinking: A 5-Stage Process



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RESOURCES /

Get Started with Design Thinking



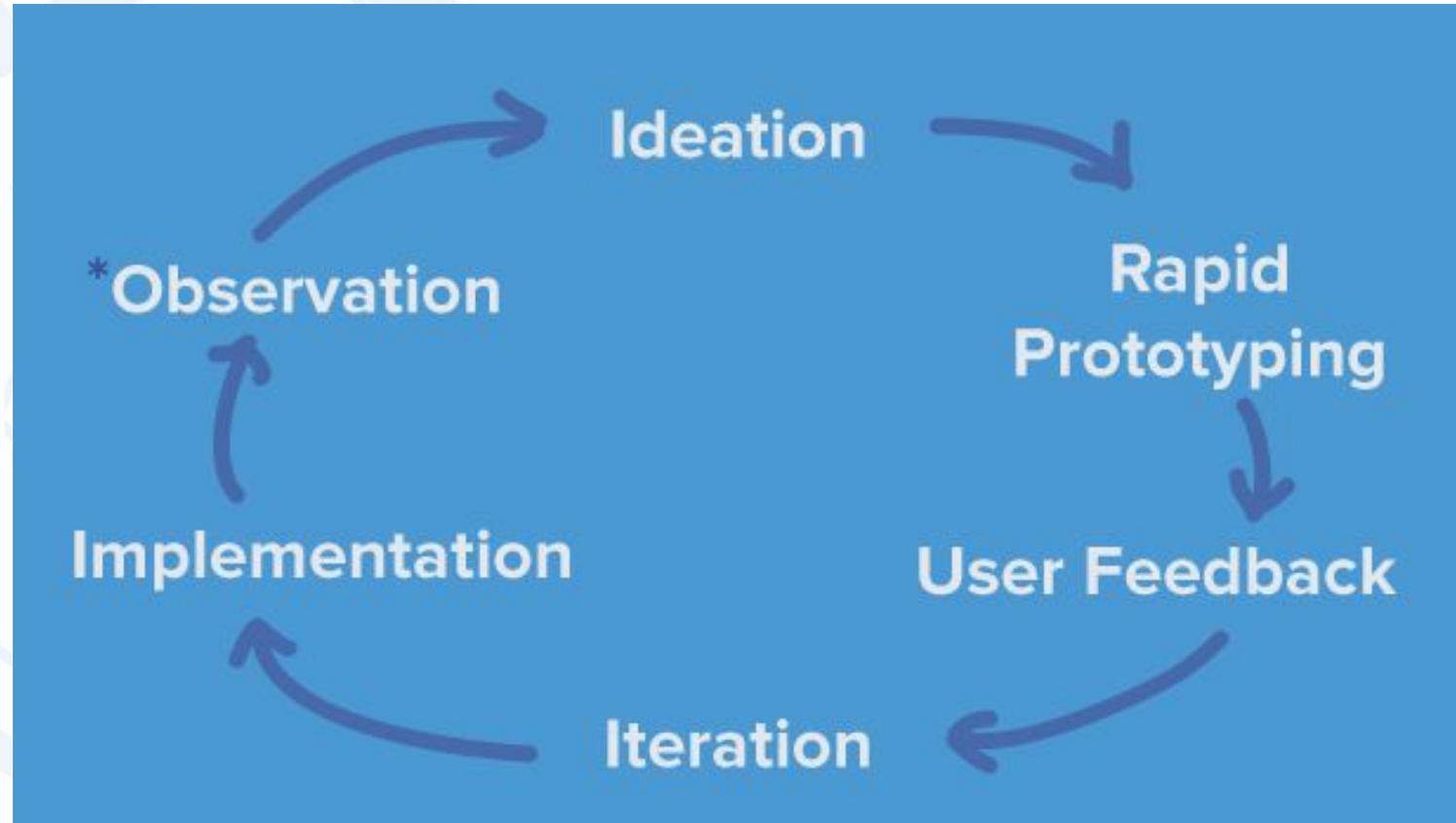
Human-centred design

A framework involving the human perspective in all steps of the process to develop solutions to problems.

“Using a human-centered approach to design and development has substantial economic and social benefits for users, employers and suppliers.”

Human-centred design process

Human-centred design process



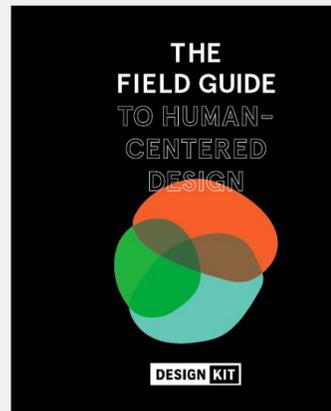
Resources

Design Kit is hardly the only place to learn about the power of human-centered design. These books, guides, and free downloads are all great destinations to help you routinely innovate and solve big problems.

IDEO.ORG

The Field Guide to Human-Centered Design

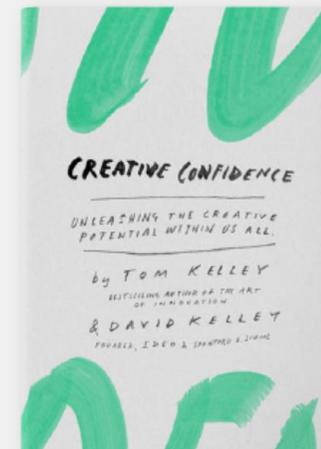
A step-by-step guide that will get you solving problems like a designer.



TOM AND DAVID KELLEY

Creative Confidence

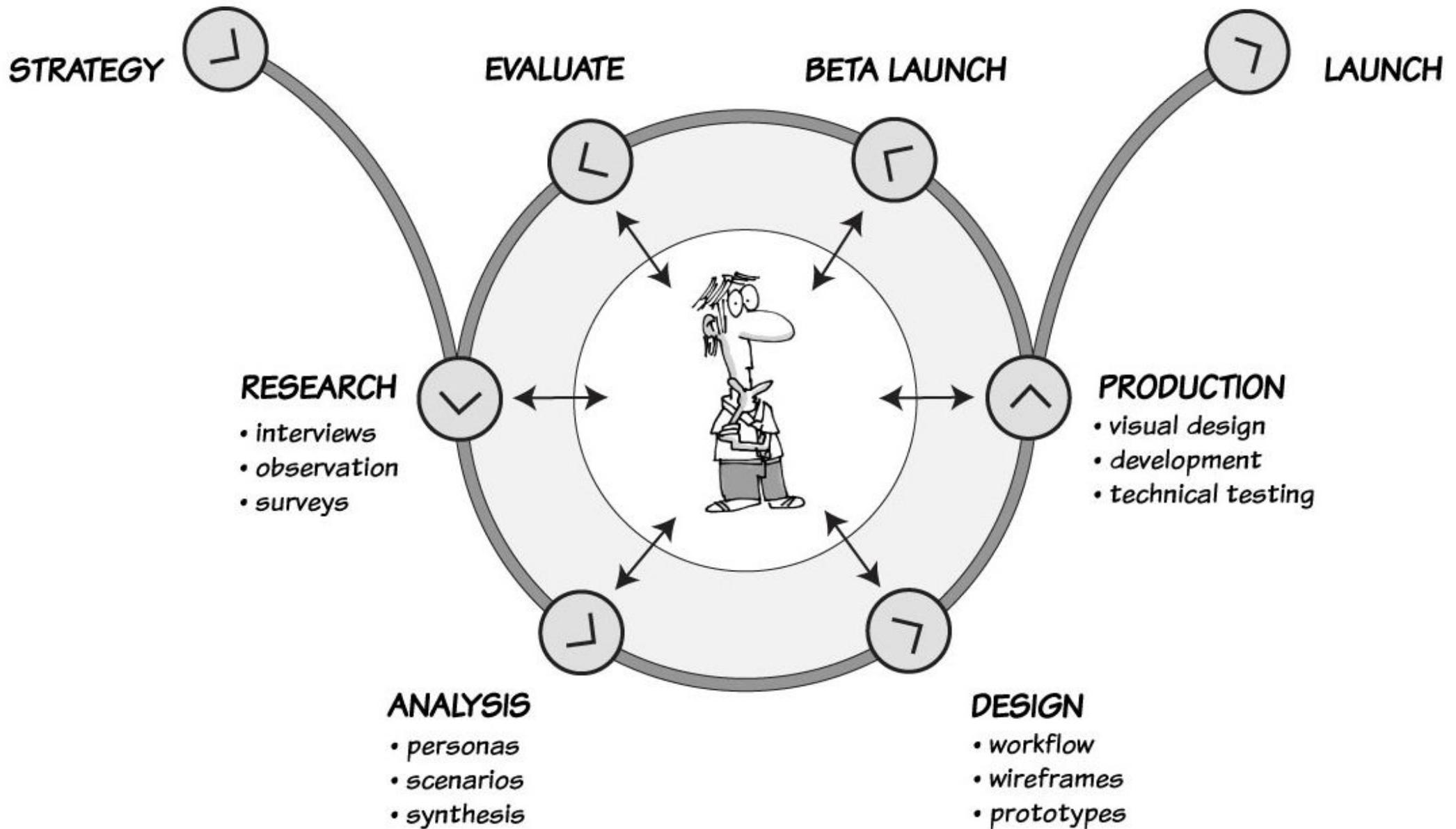
A powerful book on unleashing the creativity within all of us.



User experience design

A process of **enhancing user satisfaction** with a product by improving:

- the usability,
- accessibility,
- and pleasure provided in the interaction with the product.





Rahul Bajaj

Mumbai, India

Gender : Male

Age: 34

Status: Single

Education: MBA

Profession: Job

Archetype: Explorer

Bio

Rahul Bajaj is a tech geek who loves reading and giving his opinion on the new things happening around. He lives in Mumbai, India. He has a lot of friends and he visits them usually on weekends. He is a big fan of discovery TV channel. Whenever he has time, he watched various shows on Discovery such as Man Hunt.

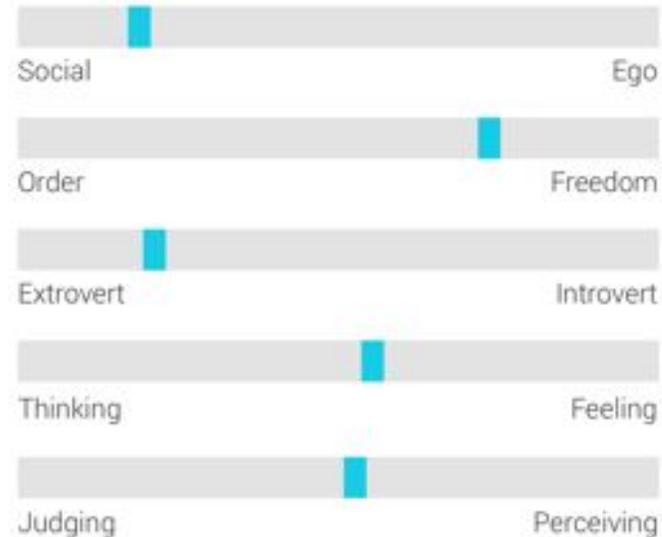
He uses various apps such as the verge and NDTV to get updates from all over the glob reading new discovery in space science and technologies. However, he feels frustrated specially when he needs to switch apps to read news from different domain. For example, he can get updates regarding technooogy innovations on the verge whereas he uses NDTV for speifially electronic gadgets.

He is always hunting for a single app that can provide up to date news of new discovery.

Goals

- Easy discovery of news and updates
- News and updates of space science & technology domain
- Comment and share articles
- Save news for later reading

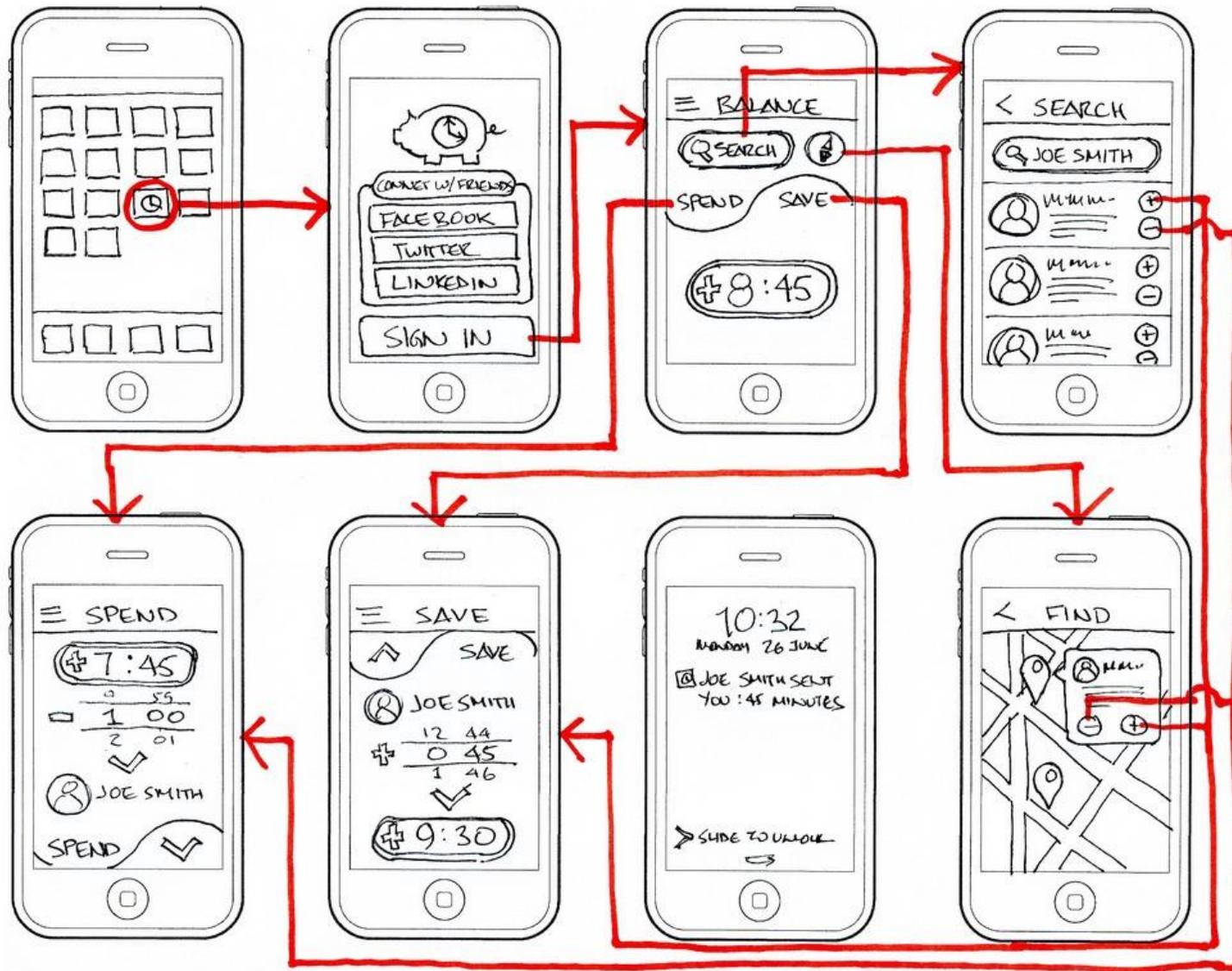
Personality



Pain Point

Difficult to find single hub of getting news of news and updates of new things happening around the glob. Need to read on various apps to get news and updates.

"I want easy discovery of news and happing around technology & space science"



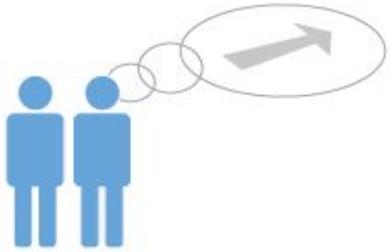
Service Design

Improving the interaction between the service provider and its customers by planning and organizing:

- people,
- infrastructure,
- communication and
- material components

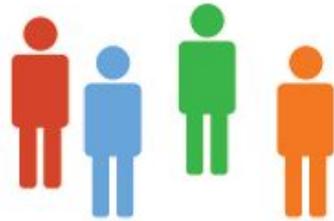
SERVICE DESIGN PROCESS AND TOOLS

VISION



Values, philosophy and goals to provide direction and guide decision-making

PERSONAS



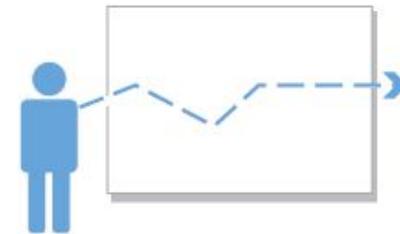
Representative users based on research into motivations and behaviors

LOCATION PLAN



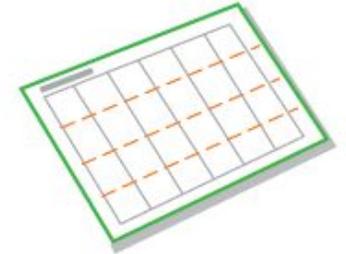
Determining what services are offered where, when, and by whom

JOURNEY MAP



Mapping service use over time, identifying the touchpoints in the user experience

BLUEPRINT



Guidance on delivery of a service across different channels for staff and systems

©brightspot strategy

Design Sprint

A design sprint is a time-constrained, five-phase process that uses design thinking with the aim of reducing the risk when bringing a new product, service or a feature to the market.

What is a Design Sprint

Case Studies

FAQs

Transform the way your team works



Collaborate

Innovate

Accelerate

How to Use This Kit

The Design Sprint Kit is an open-source resource for design leaders, product owners, developers or anyone who is learning about or running Design Sprints. Whether you are new to Design Sprints and gaining buy in for your first Sprint, or an experienced Sprint facilitator looking for new methods, this site will help you learn, plan, and contribute to the Design Sprint Methodology.

Sprint Methodology
Learn about Design Sprints

Planning Overview
Plan Your Next Design Sprint

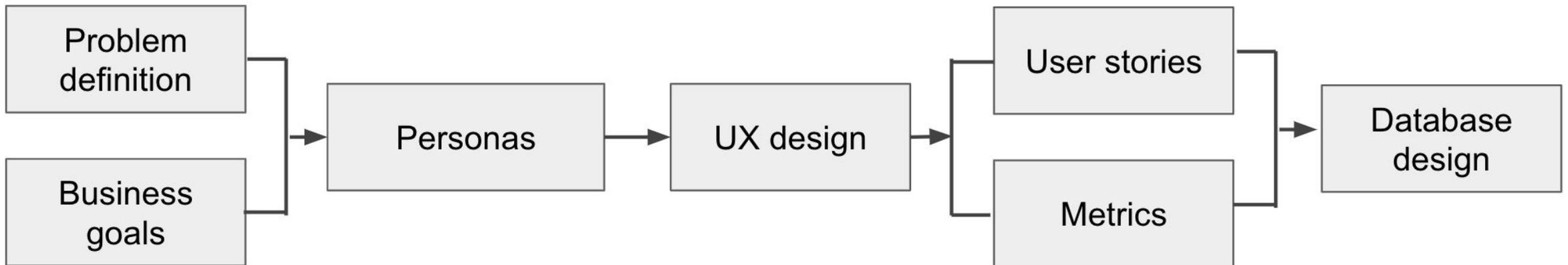
Methods & Recipes
Contribute to the Kit

Digital Product Design Process

A process that combines design thinking, UX design, service design with the aim of producing assets that aid in the development of a digital product.

1. Define the problem to be solved
2. Who experiences the problem (Personas)
3. Ideation
4. UX design phase (Wireframes)
5. User stories
6. Database design

Digital Product Design Process



The Business Model Canvas

Designed for:

Designed by:

Date:

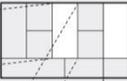
Version:

Key Partners 	Key Activities 	Value Propositions 	Customer Relationships 	Customer Segments 
	Key Resources 		Channels 	
Cost Structure 		Revenue Streams 		

Benefits of a Business Model Canvas

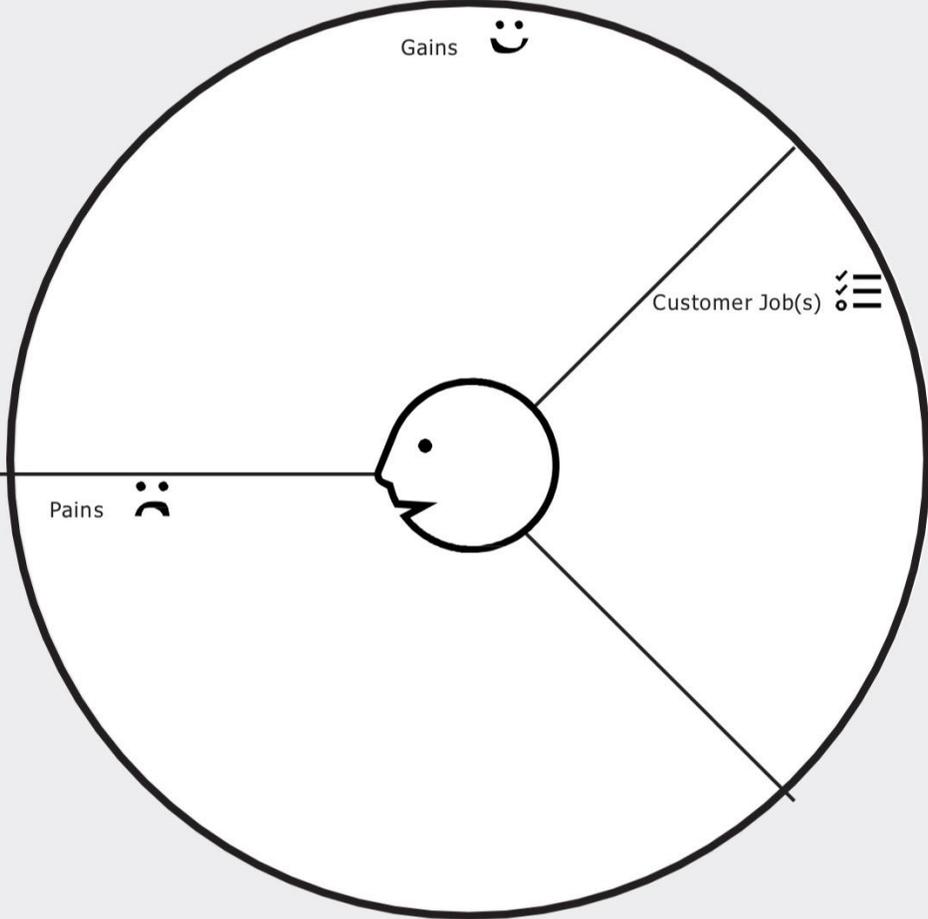
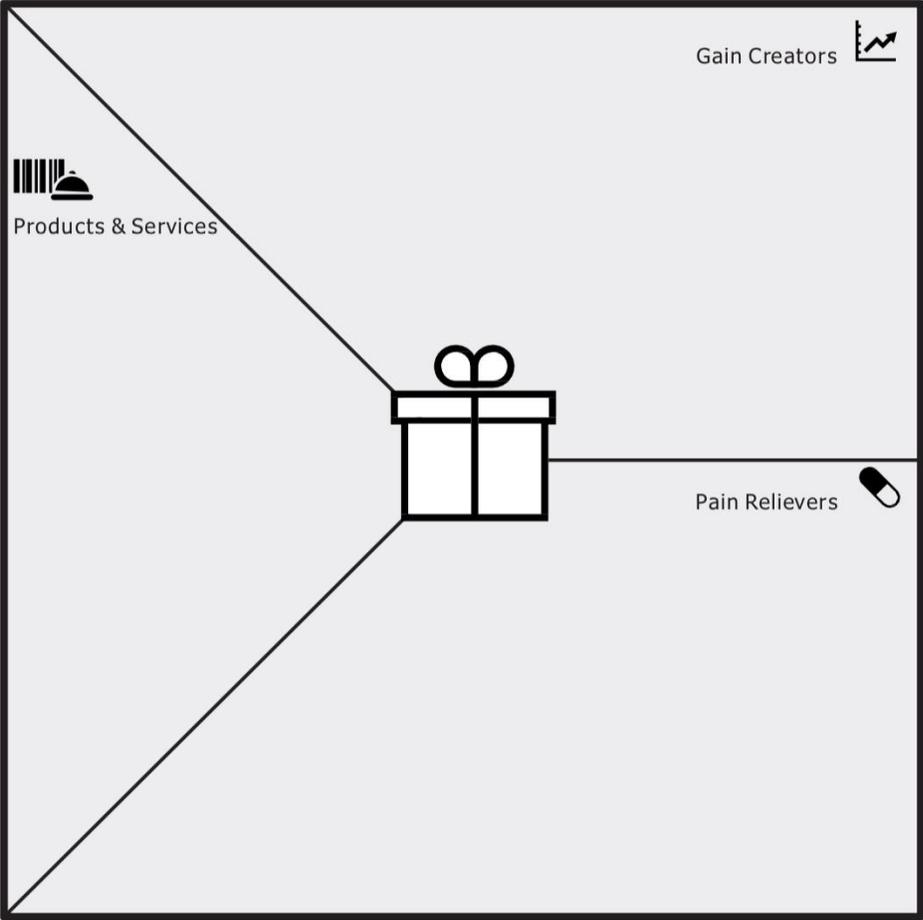
1. Gets you to ask good questions and find answers
2. Helps you see the different parts of your business from a new angle
3. Helps you think of new approaches
4. Helps you see ways to innovate on your business model

The Value Proposition Canvas



Value Proposition

Customer Segment



Mindsets for design

Beginners Mindset

Shoshin (初心) is a word from Zen Buddhism meaning "beginner's mind." It refers to having an attitude of openness, eagerness, and lack of preconceptions when studying a subject.

Learn from Failure

"Don't think of it as failure, think of it as designing experiments through which you're going to learn."

Mindsets for design

Empathy Mindset

Empathy is the capacity to step into other people's shoes, to understand their lives, and start to solve problems from their perspectives.

Iterative Mindset

By continually iterating, refining, and improving our work we put ourselves in a place where we'll have more ideas, try a variety of approaches, unlock our creativity, and arrive more quickly at successful solutions.

Mindsets for design

Playful Mindset

We design best when we are in a playful mindset. Have fun with the process and you will be more creative and uncover new insights.

“Be in a state of play”

Prototyping

Have a bias toward action, and that means getting ideas out of your head and into the hands of the people we're looking to serve.

It doesn't have to be perfect the first time. Try your prototype with a small group of sympathetic customers. Observe and learn from how they use it to make it better.

TEAM CHALLENGE: Design Challenge

Your team has been given the responsibility to setup a “Community Technology Innovation Lab”.

The goal is to encourage the community (children and adults) to learn digital skills and create technology products and services that help people.

1. Complete the Business Model Canvas for this venture.
2. Take a photo and share in Whatsapp group

The Business Model Canvas

Designed for:

Designed by:

Date:

Version:

Key Partners 	Key Activities 	Value Propositions 	Customer Relationships 	Customer Segments 
	Key Resources 		Channels 	
Cost Structure 		Revenue Streams 		