Chapter 2
The UX design process

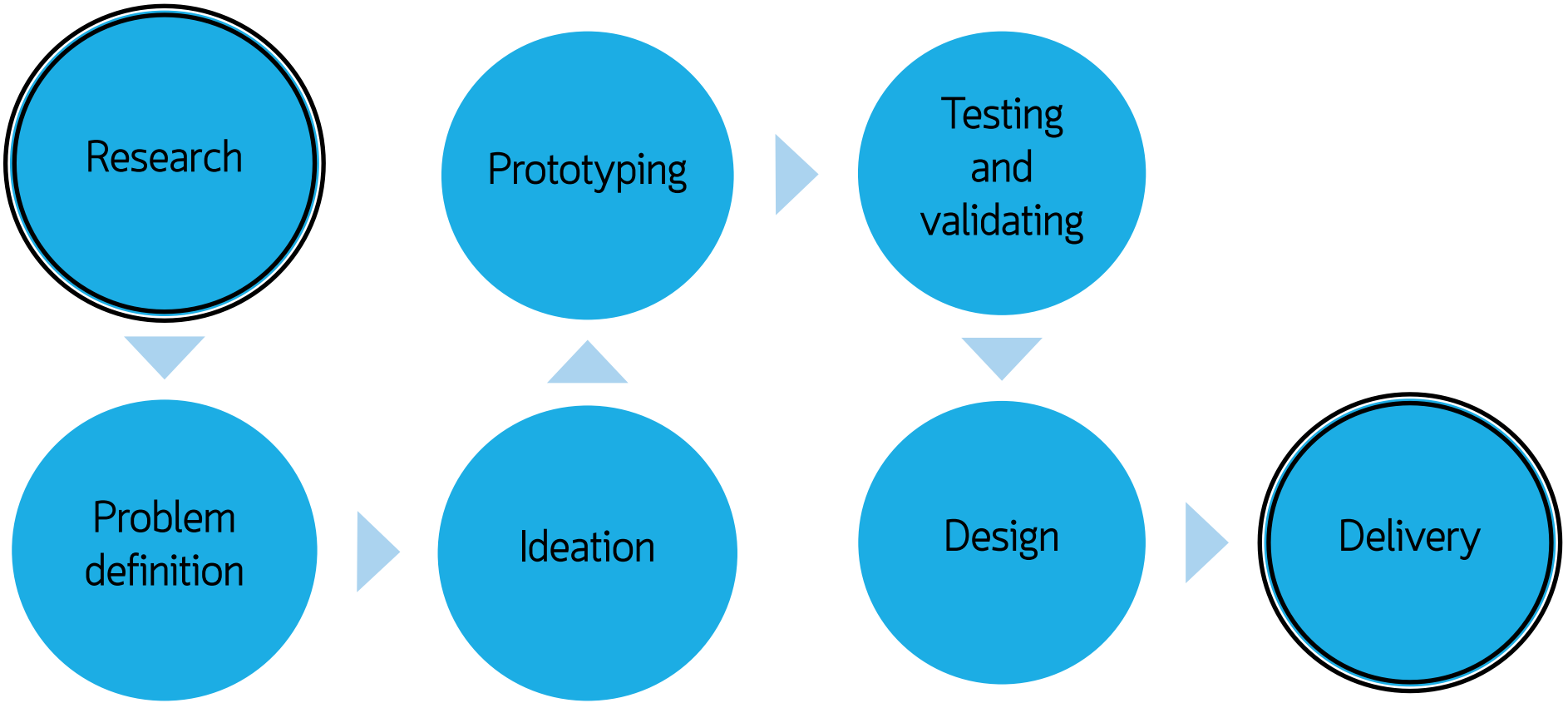
Instructors: Dr. Churee Techawut

Reference : Adrian Bilan, 2023, Confident UX,
The essential skills for user experience design, Kogan Page,
ISBN:9781398613010

Outline

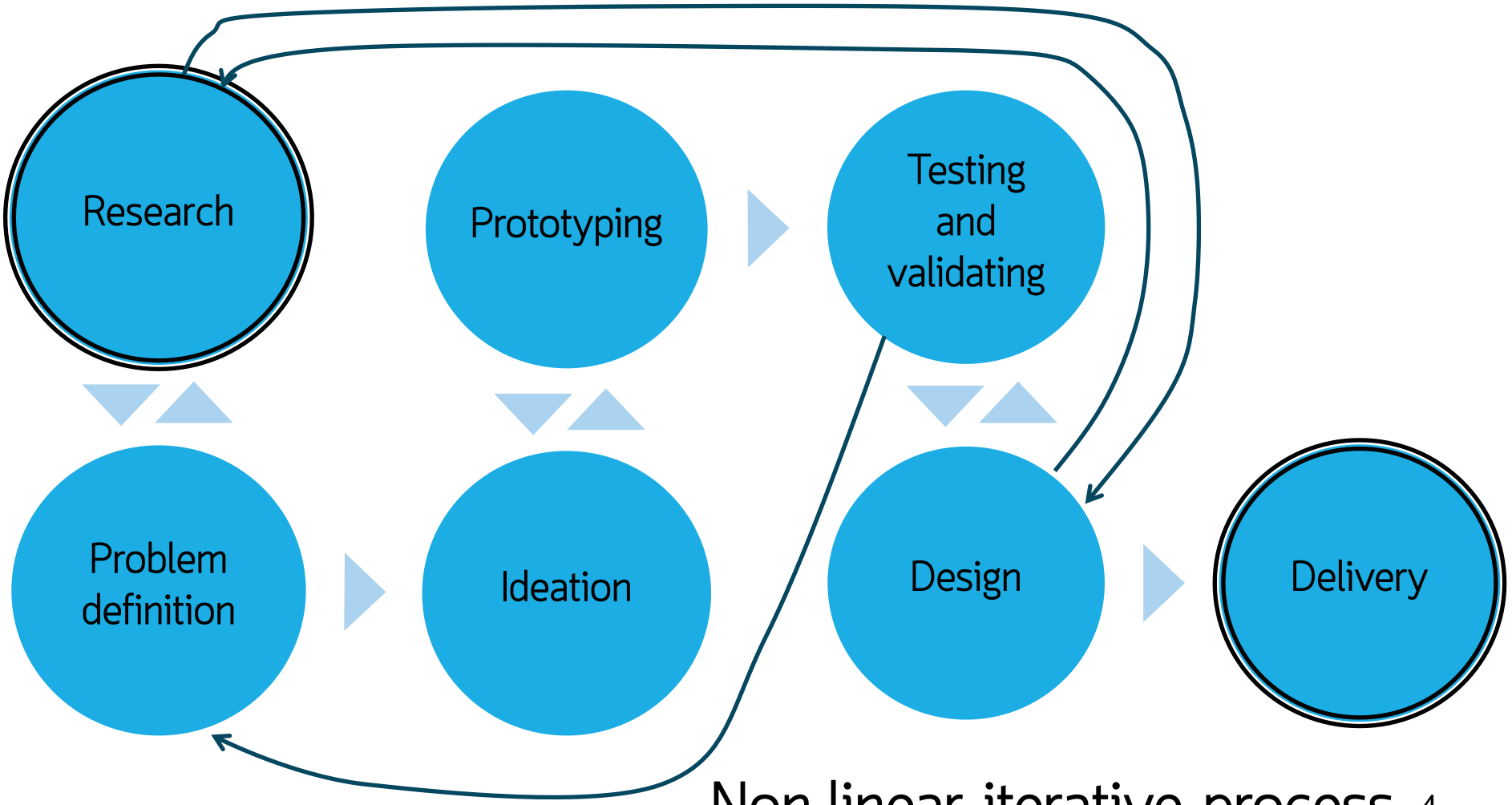
1) A linear view of a non linear process
2) Good UX
3) User research methods
4) User research tools

A linear view of a non linear process



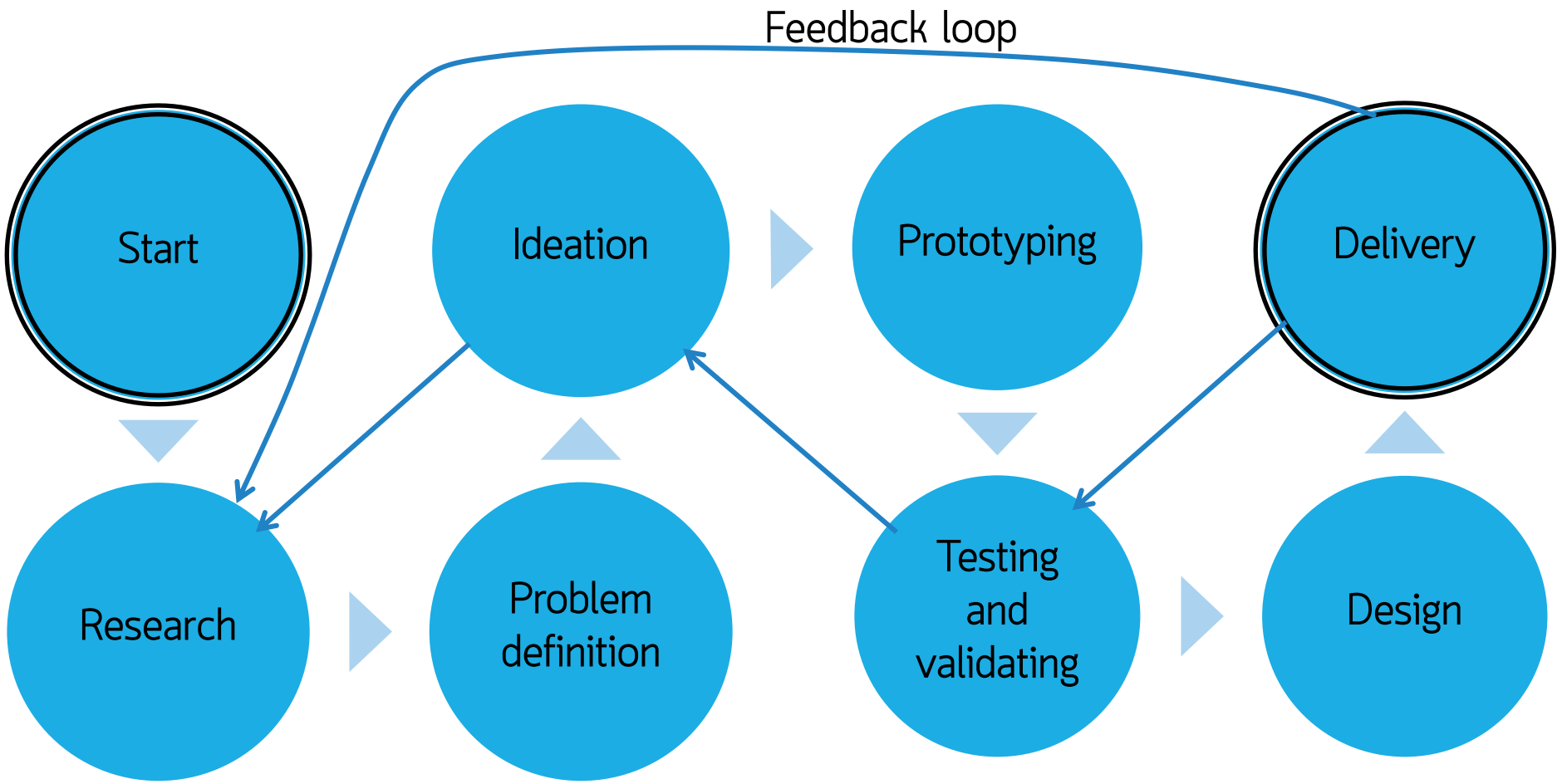
Linear process

A linear view of a non linear process



Non-linear iterative process

A linear view of a non linear process



Real-life like process

Advantage of iterative approach

- User feedback helps making adjustments and improvements.
- Reduce risks for businesses.
- Get creative by allowing to try different things and see what works best.
- Spot potential issues early in the process before they become bigger problems.
- Saving time and money.

Advantage of iterative approach

Jakob Nielsen, 1993

"It has long been recognized that user interfaces should be designed iteratively in almost all cases because it is virtually impossible to design a user interface that has no usability problems from the start.

Even the best usability experts cannot design perfect user interfaces in a single attempt, so a usability engineering lifecycle should be built around the concept of iteration."

Remember

Perfect design !??

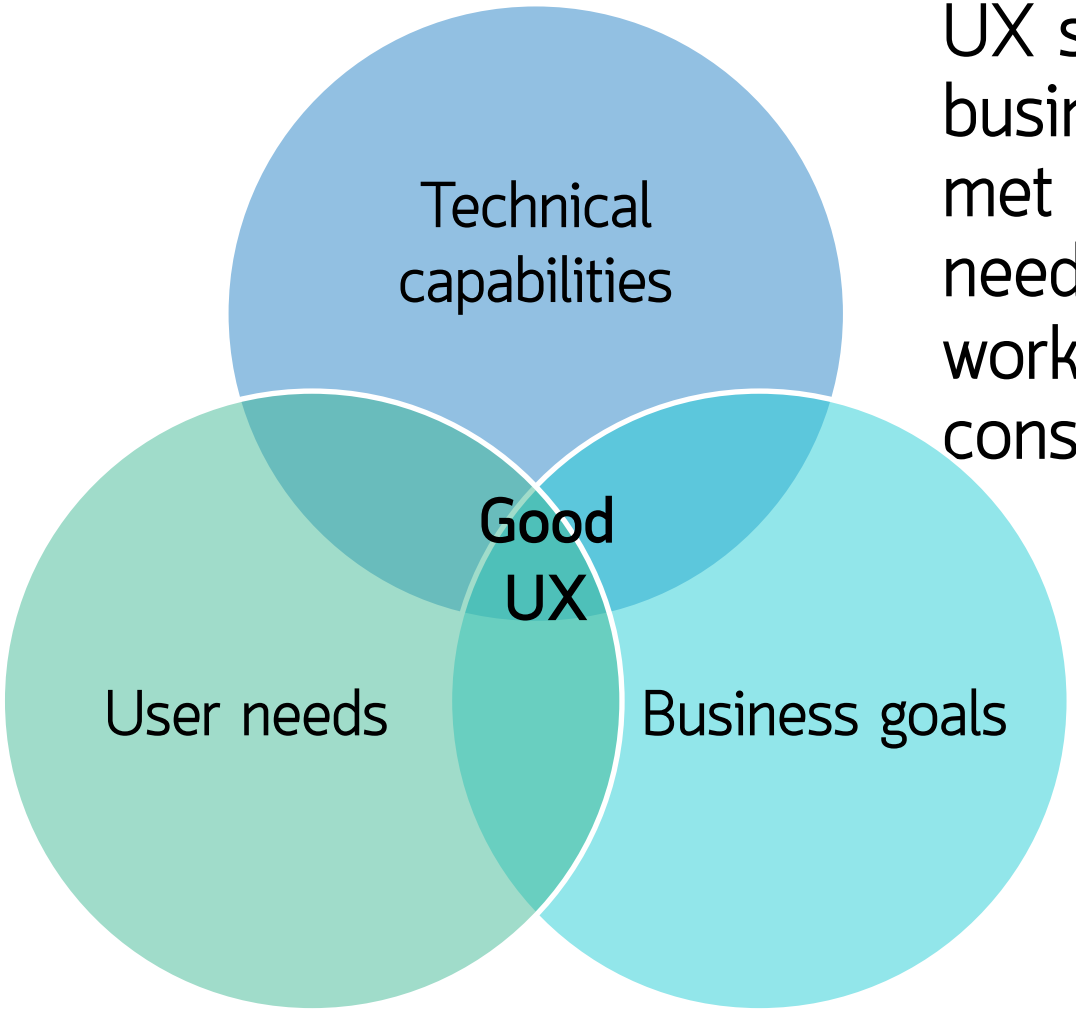
Things change all the time

Be patient

Be resilient

Do lots of diplomacy

Good UX

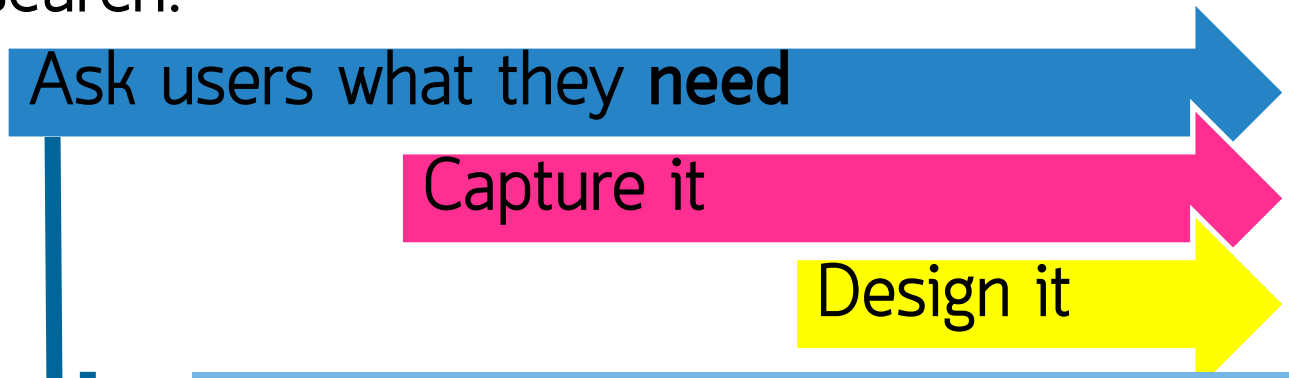


UX should ensure that business objectives are met while keeping user needs as a priority, and work with technical constraints.

Engineering team is a part of the entire UX design process from start to finish.

User needs

User needs are the result of carefully collected and analyzed user research.



1. Listen to what users have to say, what they feel, and what their goals are.
2. Use all our knowledge (user research behavioral science, data analysis, etc.) to interpret.
3. Draw conclusion.

User needs VS User wants

- User wants is the users' demands.
- We listen to users, note down what they ask for, and proceed to deliver them.
- We do not analyze user research data or pass it through any critical thinking lens.
- When utilizing user needs, you are the designer.
- When utilizing user wants, they are the designer.

Business goals

- Business goals provides the necessary boundaries to keep the focus on what is importance.
- UX design without business goal is like steering a ship when the passengers (your users) have not indicated a destination.

Technology constraints

UX designers (Balancing)

Engineers
(Technology architecture)

Financials
(Budgets and operational costs, etc.)

The impact of technology constraints on UX design outcomes

User needs	Business Goals	Technical constraints	Outcome
✓	✓	X	Exceed the budget expectations or too technically complex to build
✓	X	✓	Little chance to see the light of day
X	✓	✓	End up with the failure
✓	✓	✓	Perfection simply does not exist

User research methods

No “one size fits all” process.

Context is important.

Answer these questions:

- Where in the product life cycle are you?
- Is it a greenfield initiative (a product developed entirely from scratch) or a mature product?
- What is the type of application you are developing?
- Is it native mobile?
- Is it a responsive website?
- What is a business context?
- Is it business-to-customer (B2C) or an internally facing enterprise app?

User research methods

Strategy	• Stakeholder interviews, Strategy workshops, Surveys, Market analysis
Discovery	• User interviews, Stakeholder interviews, Requirements gathering, Journey mapping, Surveys, Competitive analysis, Design thinking workshops
Design	• Persona, Task analysis, Prototyping and testing, User stories, Cart sorting, Surveys

User research methods

Evaluation	• Usability testing, Surveys, Accessibility testing
Delivery	• Usability testing, Surveys, User interviews, Design thinking workshops
Production	• Analytics, Usability testing, User interviews, Heuristics reviews, Sentiment analysis

The strategy phase

- It is a long-term thinking process for an individual or a small group of business people, until they decide to put their ideas into action.
- Finding product vision.
- Defining the North Star - the aspirational long-term mission of the product

The discovery phase

- For green field projects, this phase is the most important in terms of the potential impact on the product.
- Defining the business goals (ideally with business, design, product, and engineer).
  - An engineer can think about an innovative way to use technology.
  - A business stakeholder can find new untapped markets.
  - A product manager can steer the product towards much better market fit.
  - UX designer plays 2 major roles:
    - Own the research efforts and
    - Be the bridge that connects ideas and people.

The discovery phase

- A product is not just about getting a sense of what needs to be done; it is also about understanding why something needs to be done.
- User interviews - one-to-one conversation with a user to gain insights into people's needs and define how would they interact with the product.
- Stakeholder interviews.
- Requirements gathering creates foundation and allows us to make the transition from conceptual to concrete.

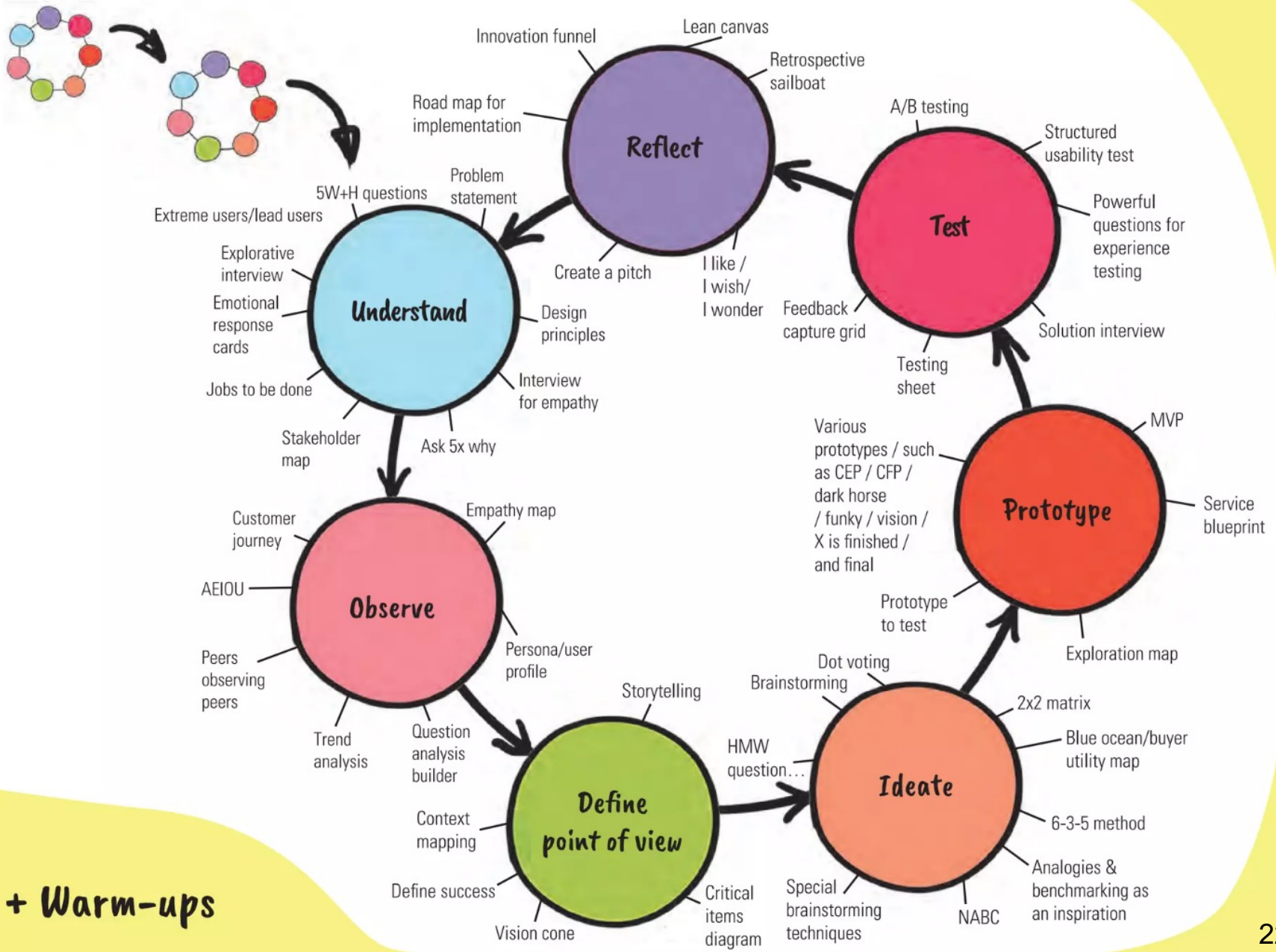
The discovery phase

- Design thinking - methodology for creative problem-solving that supports defining a product's requirements.

การคิดเชิงออกแบบที่เน้นผู้ใช้เป็นศูนย์กลาง ซึ่งนำเสนอแนวทางปฏิบัติจริง สำหรับการวิเคราะห์ปัญหาซับซ้อน ที่จะเกิดขึ้นกับโซลูชันที่เป็นนวัตกรรมใหม่

Reference: UX beginner, https://www.uxbeginner.com/ux-design-processes/

- This method is often used in Discover & Delivery phases.
- However, it provides different kinds of tools used in various contexts.



+ Warm-ups

M. Lewrick, P. Link, and L. Leifer. 2020. The design thinking tool box. Wiley.

The design phase

- Persona - reinforce user research findings amongst the team.
- Journey mapping and User stories - are used to give shape to the actual product

The evaluation phase

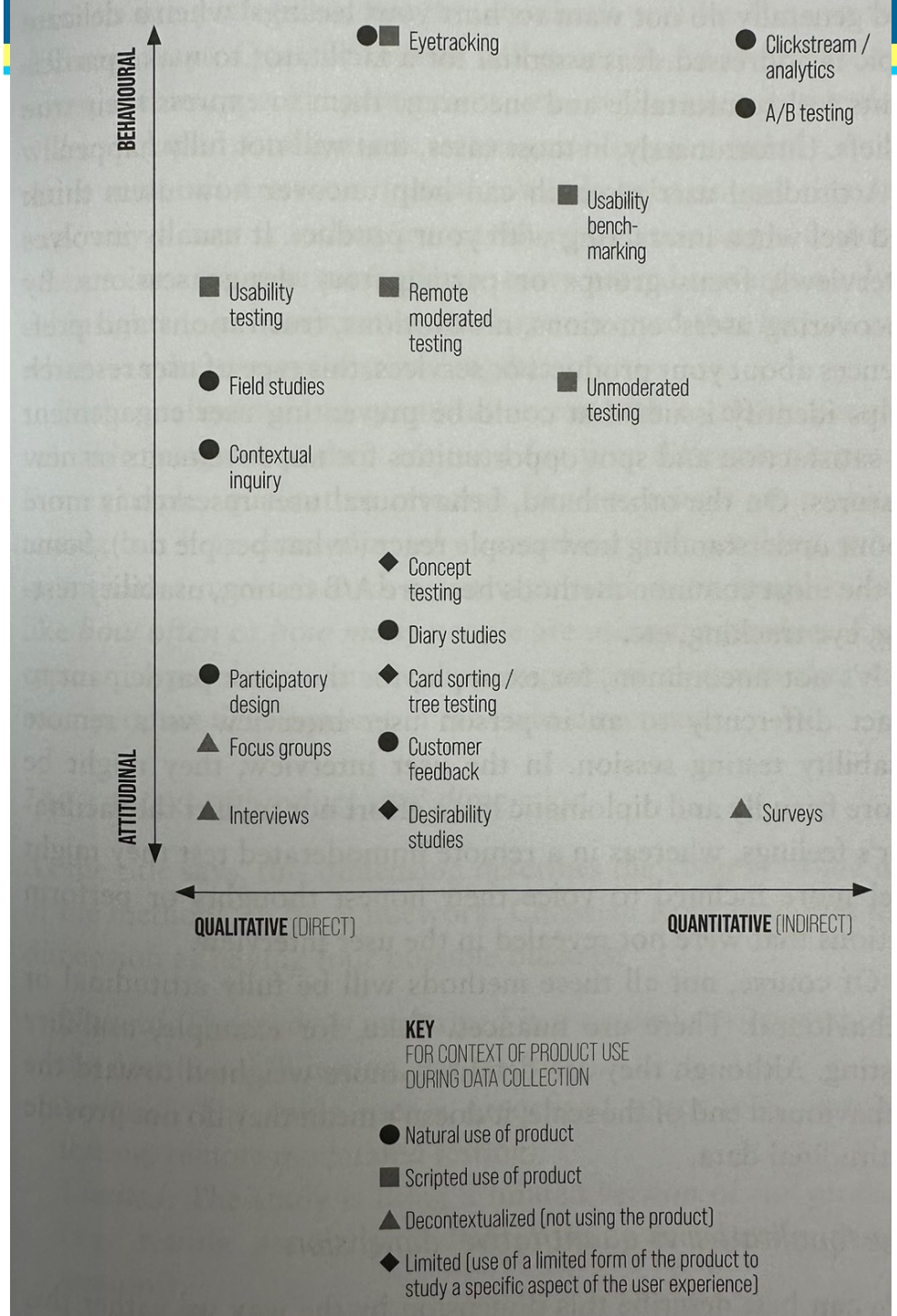
- Evaluate the effectiveness of our design solutions with users.
- Usability test - a form of user research interview to test prototype to get user feedback
  - Set the evaluation goals
  - Give users a set of tasks to complete and we get the respond from them

The delivery phase

- After our designs are validated and the team decides it's time to go into development.
- The product team will define a minimum viable product (MVP) - a set of core features that allows the user to perform most of their tasks and can produce business value.
- User interviews and usability testing are employed to test a real product.

The production phase

- Is the product team happy with the core features already implemented ?
- The line between the delivery and production phases is a bit blurred because it depends upon the context.
- Check engineering perspective - reaching a stable product.
- Analytic studies and surveys - usage stats and adoption metrics.
- Usability testing - keep an eye on the quality of execution of the UI.



A framework for choosing user research methods

User research tools

User interview tools

Usability testing tools

Survey tools

Analytic tools

Design and prototyping tools

Collaboration and conceptualization tools

Data analysis tools

User interview tools

Zoom

- Screen sharing and Video recording
- Recording to the cloud and automatic transcripts

Calendly

- Sharing available calendar and book the interviews at any convenience
- Integrating with Outlook, Google Calendar, and Apple calendar

UserZoom, UserTesting, Dscout

- Platforms for user interview with usability testing

Usability testing tools

Maze

- Usability testing platform
- One tool with various methods like task analysis, heat maps, A/B testing, etc.

Userlytics

- User research platform that has a big focus on usability testing
- Unique features like VR testing and sentimental analysis

Loop11

- Good option on the market
- Unique features like information architecture testing, benchmarking and true intent studies

Survey tools

Typeform

Microsoft Forms

Analytics tools

- Provide heatmaps
- record user sessions
- check conversion funnel, etc.

Design and prototyping tools

Cloud-based solution, no need to install software, real-time collaboration; Good UI design tools (basic prototyping tools); Suitable for simple interaction, not very complex logic.

Good prototyping tools, complex interactions, animations, and conditonal logic; Flexible for usability testing

Collaboration and conceptualization tools

- Hybrid working and online collaboration tools.
- Access to a digital whiteboard.
- Run design thinking session, stakeholder workshops and prioritization sessions remotely.
- Integrate with Slack, Jira, Google Drive, Dropbox, etc.

Data analysis tools

- Analyze and extract the valuable insights to help improve user experience.
- Data analysis tools VS Manual analysis:
  Time saving
  Accuracy
  Visualization
  Automation

- Excel for quantitive analysis.
- MAXQDA and NVivo for qualitative analysis.

Data analysis tools

- Airtable for quantitive and qualitative analysis.
- It provides spreadsheet, databases, and project management into a single platform.
- It has advance features such as cross-linking tables, grouping and sorting data, tagging data and filtering data.
- It can also recruit participants and send emails after post study.
- Use social media to follow ux communities and keep update with tools and trends.

Questions and Answers