A·P·U
ASIA PACIFIC UNIVERSITY
OF TECHNOLOGY & INNOVATION

DM505–3–M-DT
Design Thinking

Topic 8
Testing

Learning Outcomes

At the end of this lesson, students will be able to:

- Define fundamental concepts related to testing.
- Identify and prioritize test cases based on risk and critical functionality.
- Analyze performance testing results.
- Demonstrate the practical application of SRP in developing the prototype

test

The Interactive, Flexible (and Messy) Design Thinking

Transition: Prototype >> Test

- Prototype and Test are modes that you consider in tandem more
  than you transition between.
- What you are trying to test and how you are going to test that aspect are critically important to consider before you create a prototype.
- Examining these two modes in conjunction brings up the layers of testing a prototype.

- Though prototyping and testing are sometimes entirely intertwined, it is often the case that planning and executing a successful testing scenario is a considerable additional step after creating a prototype.
- Don’t assume you can simply put a prototype in front of a user to test it; often the most informative results will be a product of careful thinking about how to test in a way that will let users give you the most natural and honest feedback.

What Is The TEST Mode?

- The Test mode is when you solicit feedback, about the prototypes you have created, from your users and have another opportunity to gain empathy for the people you are designing for.
- Testing is another opportunity to understand your user, but unlike your initial empathy mode, you have now likely done more framing of the problem and created prototypes to test.

- Both these things tend to focus the interaction with users, but don't reduce your **testing** work to asking whether or not people like your solution.
- Instead, continue to ask —**Why?** and focus on what you can learn about the person and the problem as well as your potential solutions.

- Ideally you can test within a real context of the user's life.
- For a physical object, ask people t take it with them and use it within their normal routines.
- For an experience, try to create a scenario in a location that would capture the real situation.

- If testing a prototype in situ is not possible, frame a more realistic situation by having users take on a role or task when approaching your prototype.

A rule of thumb: always prototype as if you know you're right, but test as if you know you're wrong—testing is the chance to refine your solutions and make

Why TEST?

To refine prototypes and solutions.

Testing informs the next iterations of prototypes. Sometimes this means going back to the drawing board.

- **To learn more about your user.**

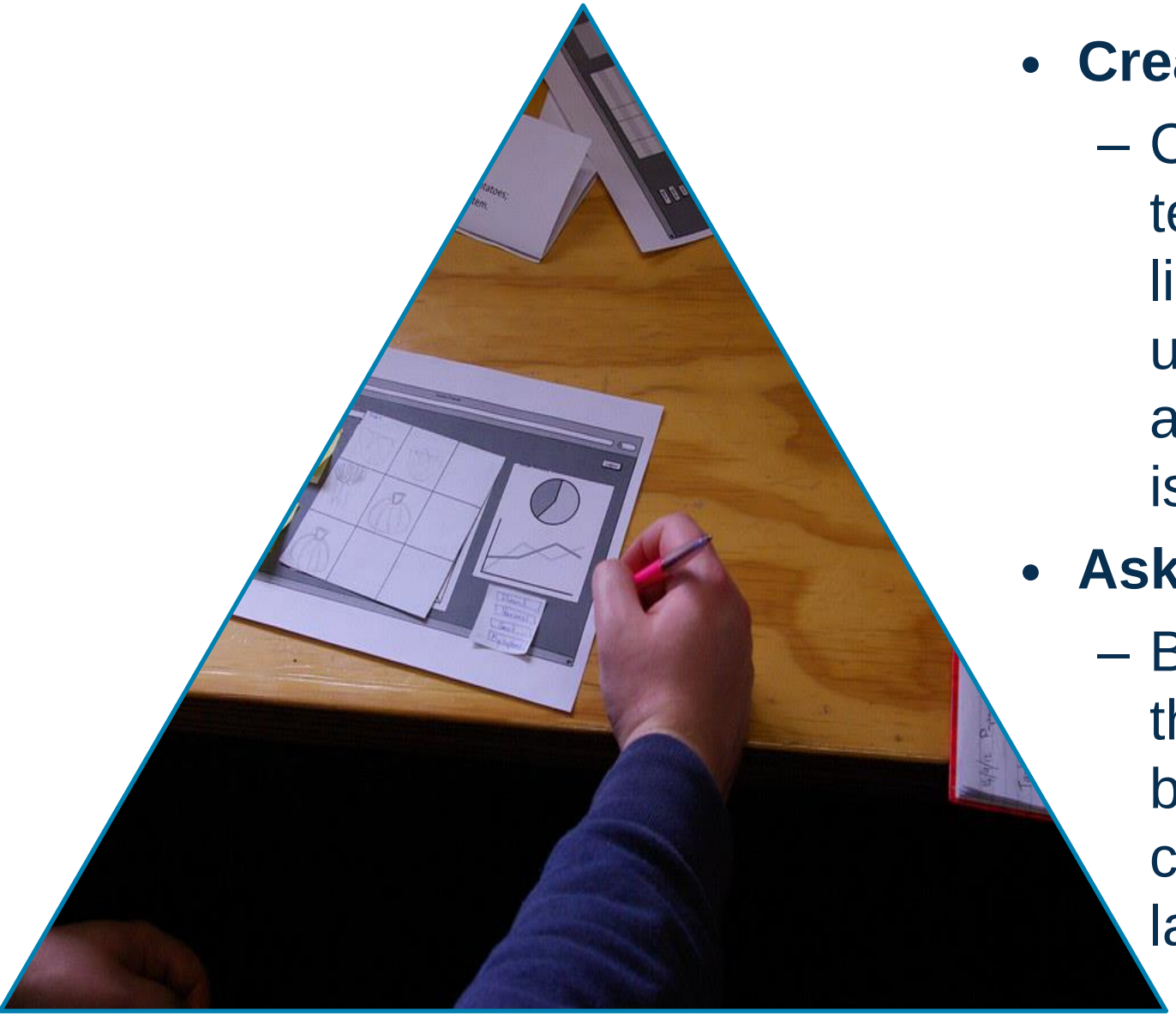
  Testing is another opportunity to build empathy through observation and engagement — it often yields unexpected insights.

- **To refine your POV.**

  Sometimes testing reveals that not only did you not get the solution right, but also that you failed to frame the problem correctly.

How To Test?

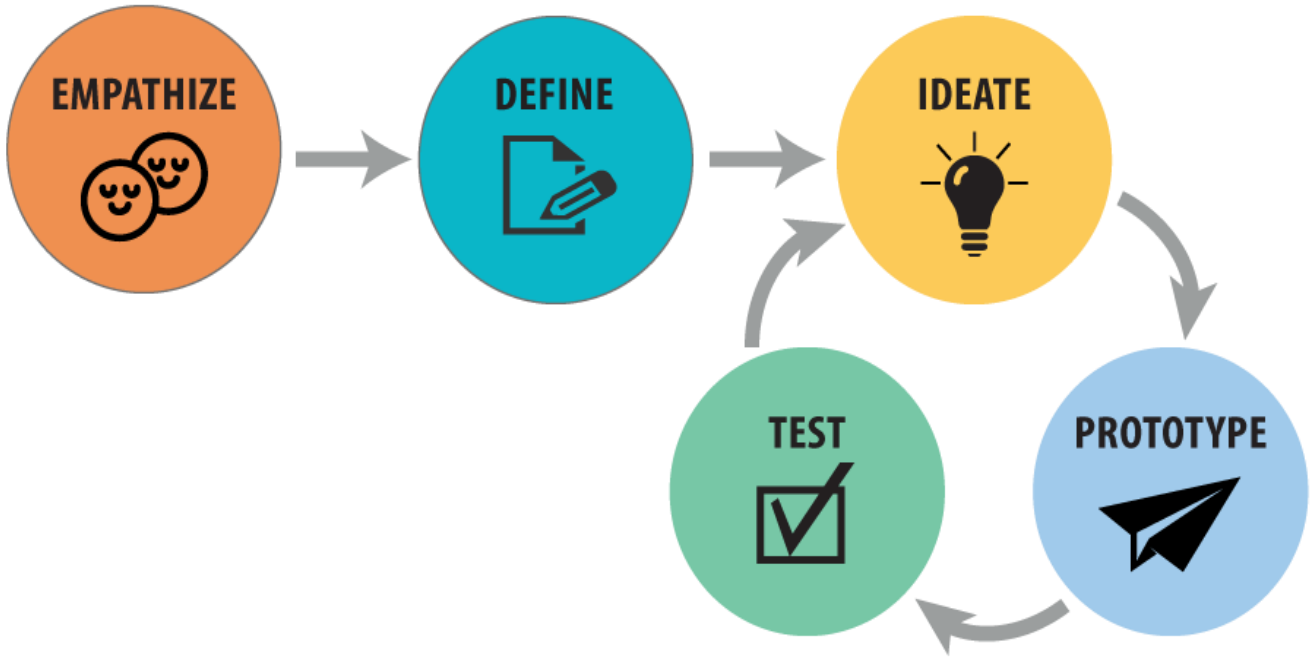
- **Show don't tell.**
  - Put your prototype in the user's hands – or your user within an experience. And don't explain everything (yet).
  - Let your tester interpret the prototype.
  - Watch how they use (and misuse!) what you have given them, and how they handle and interact with it; then listen to what they say about it, and the questions they have.

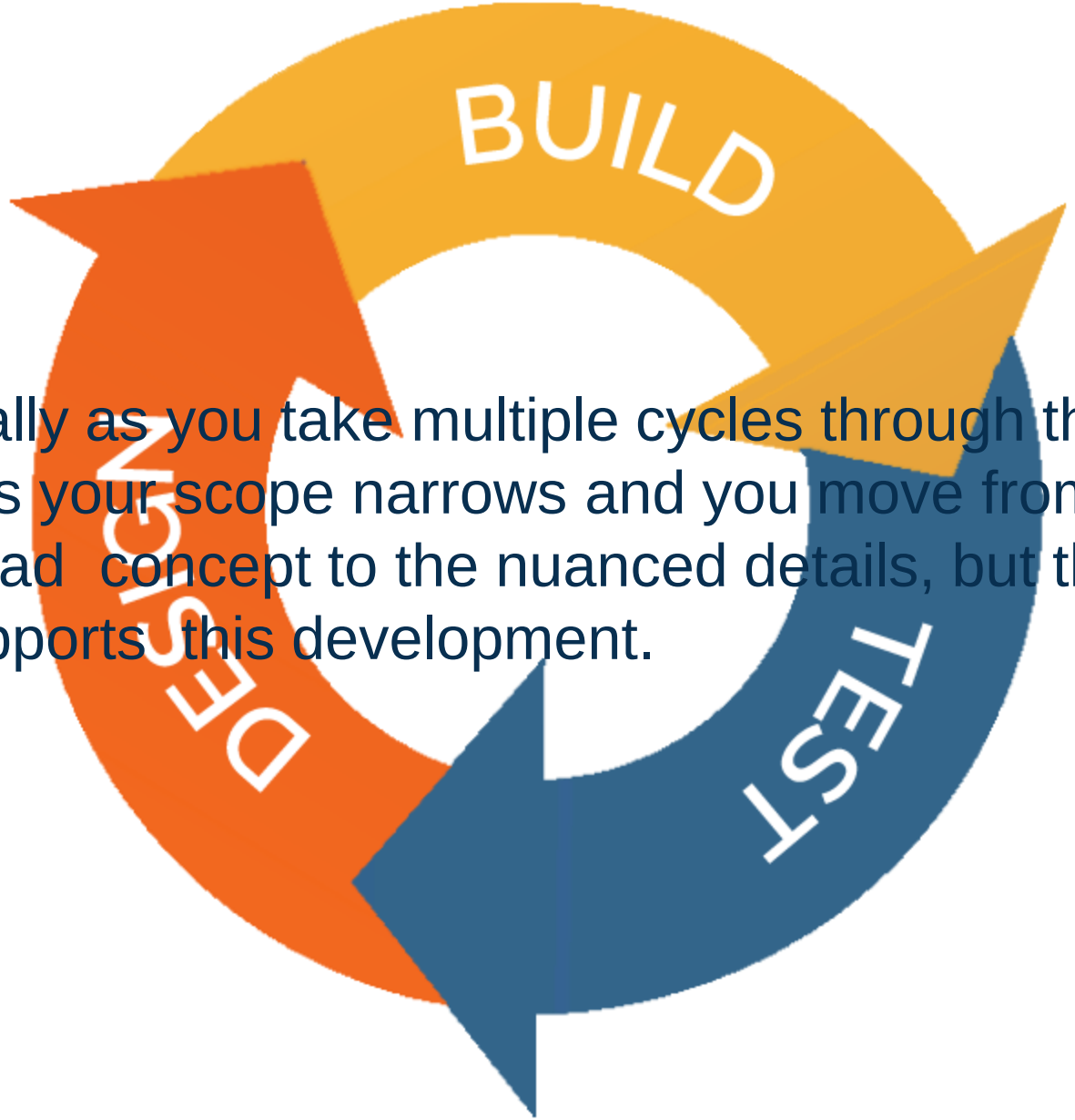


- **Create Experiences.**
  - Create your prototypes and test them in a way that feels like an experience that your user is reacting to, rather than an explanation that your user is evaluating.
- **Ask users to compare.**
  - Bringing multiple prototypes to the field to test gives users a basis for comparison, and comparisons often reveal latent needs.

Iteration & making the process your own

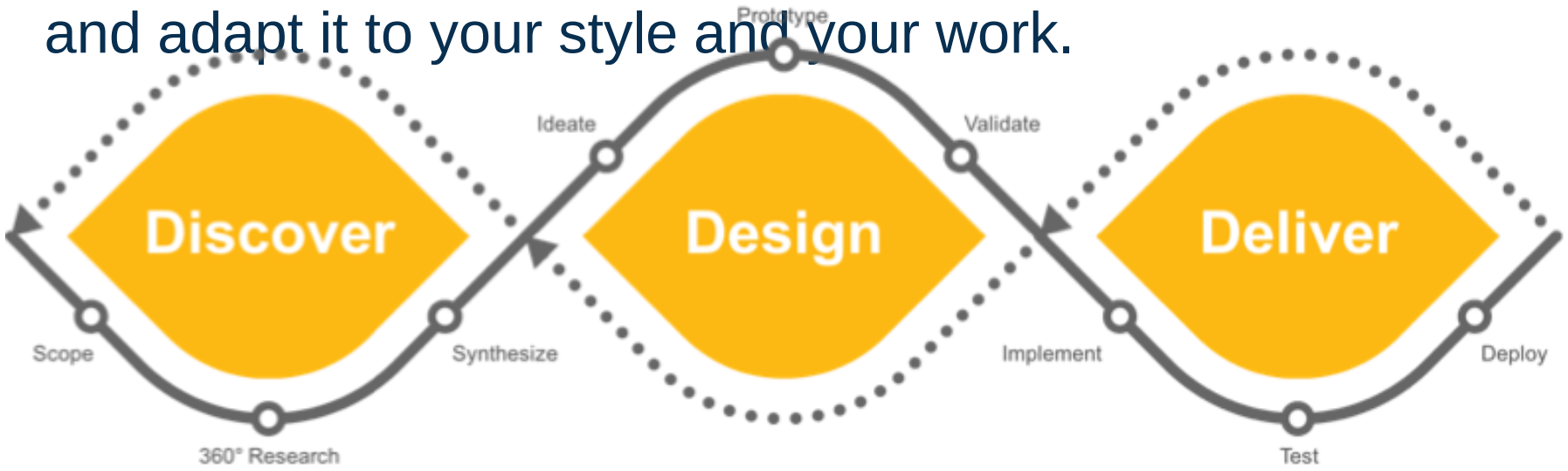
- Iteration is a fundamental of good design.
- Iterate both by cycling through the process multiple times, and also by iterating within a step — for example by creating multiple prototypes or trying variations of a brainstorming topics with multiple groups.





- Generally as you take multiple cycles through the design process your scope narrows and you move from working on the broad concept to the nuanced details, but the process still supports this development.

- For simplicity, the process is articulated here as a linear progression, but design challenges can be taken on by using the design modes in various orders; furthermore there are an unlimited number of design frameworks with which to work.
- The process presented here is one suggestion of a framework; ultimately you will make the process your own and adapt it to your style and your work.



- Hone your own process that works for you.
- Most importantly, as you continue to practice innovation you take on a designerly mindset that permeates the way you work, regardless of what process you use.

Q&A

If you have questions you can also Email me at idzuan.othman@staffemail.apu.edu.my, Book a consultation session with me or just send me a message on Microsoft Teams!

Thank you