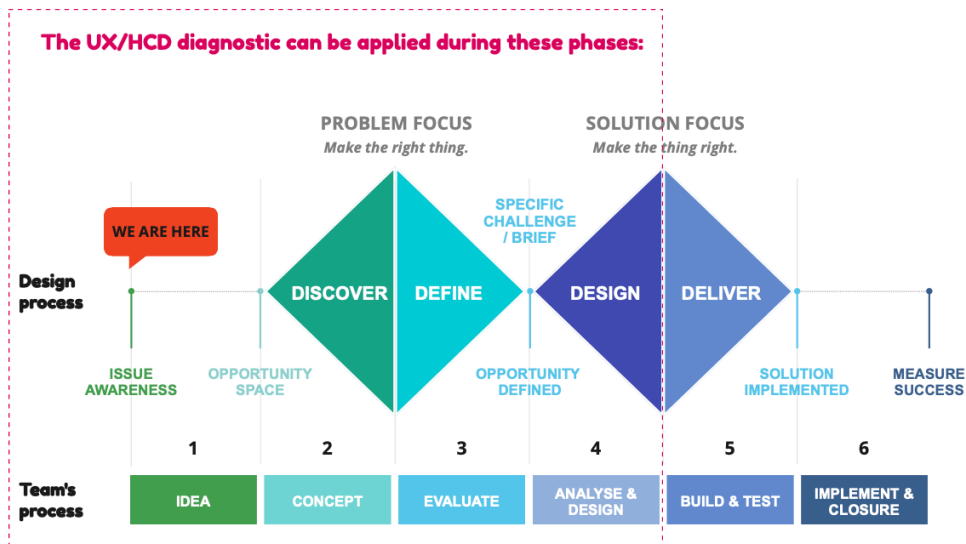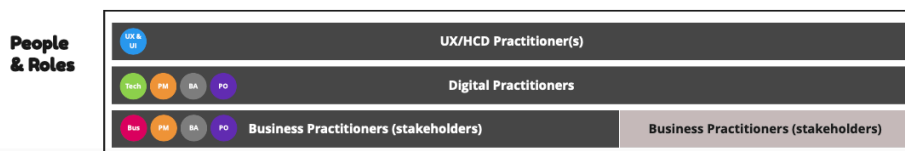# Flexi Design Thinking (DT)

I often used the DT diagram below to introduce and educate my HCD project teams, engineers and stakeholder alike. With success, I applied this heavily at Telstra Health, nbn, Wolters kluwer, Australia Post, Open Universities Australia, TfNSW and many more. **This step is important to:**

+ ensure the team(s) understand that DT is <u>not rigid</u> rather **DT should be flexible enabling designers to assess thus, positioning themselves and the problem-to-be-solved on the right design phase.** From there, the problem can be dial up or down depending on many factors such as; project's requirements, business goals and user needs, technical or engineering capabilities and budget.

+ provide visibility to the team(s) of the **type of HCD activities** will potentially involve and **who are the experts the designers required** to collaborate with and supported from for that activities.

+ **to help communicate and draw expectations of potential outcomes** from the HCD activities to the multifaceted layers of teams and stakeholders.

Hypothetical scenario
The diagram above also assumed that the project is new and required to start with discovery or lean inception. Here is an example of the typical steps I would take flexibly:

Phase: Discovery
Step 1 - Conduct a Lean UX Canvas workshop with the stakeholders (the education content company - say we called it XYZ Ltd-) and their technical team, including a PM, BA, content experts.

Why?
This step to diagnose the actual problems, limitations and most importantly to get a clear picture of their business vision so that we can come up with solutions that are aligned to their business goals and visions.
I use the 9 grid of UX Lean Canvas during the workshop to get a clear understanding and recorded them as an epic canvas in Confluence :

1. Business problem
2. Business vision and goals
3. Target user(s)
4. User goals
5. Existing solution
6. Business/Technical limitation and capability
7. Assumption/hypothesis
8. Risks
9. Validate assumption

Step 2 - Based on the design brief, it's clear that we need a technical solution to support that homeschooling needs. So, I would run a Technical Feasibility Workshop with the engineers team.

Why?
This is to ensure our team are confident and capable to engineer that experience to boost the end-users' productivity - E.g. To have technical capability such as fast load time, device-agnostic approach, and users engagement strategy through interactive or gamification way of learning.

Step 3 - Conduct user research - since this looks like a "new feature" that the company wanted to introduce to the school, I would suggest running user research or getting some data or insights of what actually the end-users needed to support their virtual learning.

Why?
This is to ensure that the business vision is aligned with the user needs, also by running an interview or survey with the end-users a clear set of business cases and requirements can be surfaced - to know if there is value in solving this problem.

Phase: Define
Step 4 - Once the research is completed, I would again gather the team with the stakeholders /SME, for a synthesis workshop to fine-tune the definition of the problem and prioritise the possible solutions.

Why?
This is critical to let the team including the stakeholders to be in the end-users shoes (empathise).
When everyone agreed with the problems and the type of problems we need to solve, I would then run a "Prioritise" workshop. This is for everyone in the team to know which problems are valuable to be solved/ focused on first.

Phase: Ideate (concept) & validate
Step 5 - Once it's clear what needs to be solved first/priorised, I will start drafting the design ideas (lo-fi) - providing that I have worked with the BA and the stakeholders to shape the user journey and information architecture.
Say that the solution that XYZ-Ltd wanted to implement is to have virtual classrooms with avatars as the teacher's assistants to motivate and excite the learning experience.

Why?
Ideation is an important step to get everyone in the team to collaborate to shape up the initial ideas (architecture, flow and micro-interactions, UX content) . At this stage I will include stakeholders and the technical team to gather their input so that I can iterate and be ready for a quick user-testing (usability test) before refining the design into hi-fi.

During ideation, there will be a lot of collaboration with the technical teams back-end and front-end regarding the architecture, integration and UI patterns that we can/will use.
It is also worth having the business stakeholders and change-management team in the discussion to guide the "crafter" so we don't go beyond the business scope.

Phase: Develop
Step 6 - Once the initial ideas are tested / approved by the business, I will start working on the hi-fi screens design aiming for development (can use Figma or Sketch). The design must comply to the agreed UI patterns library that the engineers are using / can use.

Why?
Aligning the final screen design with the agreed UI patterns or design system makes the design outcome consistent. Constant communication with the engineers and content experts are important at this stage to reduce rework.
Once the first MVP or EVP is passed to the engineers, I would expect to be invited into their UAT session for another round of iterations.

Phase: Measure success
Step 7 - If the teams are lucky, then after the first launch, I would expect to receive some feedback from the end-users through data analytics channels or by running satisfactory user surveys.

Why?
This is to measure the success of the product/features that we built.

THE TOOLS

LEAN UX CANVAS

Title: _____

Date: _____
Iteration: _____

1. Business Problem Identify the problem - **WHAT** problems are we solving?	**2. Business Vision & Goals** **WHY** is that problem important to be improved to shape the desired vision that adds value to the end users experience / change of behaviour?	**3. Target User** **WHO** are user we would like to improve the experience first?
4. User Goals **WHAT** are the goals these users trying to achieve?	**5. Solution Ideas / POV** **HOW** might we achieve that vision? e.g. product / feature / enhancement ideas we think could help the users achieve their goals.	**6. Limitation** **WHAT** do we know that might be a show stopper?
7. Hypothesis Statement from combined assumptions 2, 3, 4, 5 = "We believe that (business outcome) will be achieved if (user) attains (benefits) with (feature)". 1 hypothesis for 1 idea.	**8. Riskiest assumption we need to learn** List of most risky assumptions from the hypothesis. .	**9. Validate the assumptions** **WHAT** might be the right methods to validate the assumptions?

UX RESEARCH PLAN

Type of testing: _____

Date: _____
Iteration: _____

1. Research Background	**2. Research Focus / Problem statement**	**3. Research Objectives**
WHICH assumption / hypohesis are we investigating? What are the desired goals of the improved experience?	WHY are we doing this test? What are the benefits. What are the risks of not doing it?	WHAT is the evaluation goal? Write ONE short statement.

4. Participants How many?	**5. Stakeholders**	**6. Methods to be used**
WHO are the participants? Invitation date:	WHO are the stakeholder involved?	WHAT research methods might we use to address the problems?
Key characteristics:		

7. Questions to be asked		**8. Outcomes**
3-5 questions		WHAT might be the outcome?

9. Responsibilities	**10. Time & Location**	**11. Equipment**
Who will involves in the test and what are their responsibilities?	Where and when the test take place? When and how the results be shared?	What equipment needed? How will we capture the data?

PROBLEM DEEP DIVE

Title: _____

Date: _____
Iteration: _____

WHAT	WHO	WHY	WHERE	WHEN	HOW
What is the problem?	Who is involved?	Why is the problem important?	Why is the problem important?	When did the problem begin?	How could this problem be an opportunity?
What would we like to know?	Who is affected by the situation	Why does it occur?	Where was it already resolved before?	When do people want to see results?	How could it be solved?
What are the assumptions that are scrutinised?	Who decides?	Why was it not yet solved?	Where did similar situations exist?	When can the project be started	What has already been tried to solve the problem?