

# GET HANDS-ON

## THE BEGINNER'S GUIDE TO DESIGN THINKING

設計思維新手指南

DT  
Base

## About the IDK Design Thinking Toolkit

### IDK 設計思維工具套裝簡介

This guidebook, part of the IDK Design Thinking Toolkit, is designed to be an introduction to design thinking and aims to help fresh learners to kick start the design thinking process. Yet, if you already have a basic understanding of design thinking, you might be interested to take a deeper look and explore its possibilities for further applications.

The beginner's toolkit consists of a few components. This guidebook is the backbone of the experience providing step-by-step instructions, while the prompt cards can be used as a supplementary or standalone tool for inspiration and teamwork. Throughout the different stages in the process, you may switch between the two to get the full experience. You will also find videos on our website which might assist you to embark on your very own design thinking journey.

This toolkit can be used by both an individual or a group. However, we recommend you to invite friends or coworkers to experience this design thinking journey together, as creativity often comes from bouncing ideas off each other, and innovation often sparks from co-creation. Moreover, the design thinking experience is fun and best shared with others!

這本手冊是 IDK 設計思維工具套裝一部份，以深入淺出方式介紹設計思維，帶領新手踏上設計思維旅程。假如你對設計思維已有所認識，你亦能使用此手冊更深入地探索它的潛在應用可能。

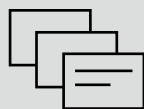
此新手工具套裝包含數個部份。這本手冊是整個體驗的骨幹，提供詳細步驟及指引，引領你走過每個階段。你亦可配合或獨立使用靈感咭，跟團隊一起尋找嶄新想法。過程的不同階段中，你可以交替使用手冊和靈感咭，以獲得全面的創新體驗。我們的網頁上亦有影片作為參考，幫助你開展設計思維旅程。

此工具套裝適合個人或團隊使用。不過，我們鼓勵你邀請朋友或同事，一起經歷這個旅程。因為集體討論更容易刺激新鮮想法，而創新亦往往源於共同協作。再者，設計思維是個有趣的體驗，適合大家一起經歷分享！

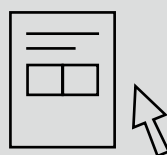
#### **The toolkit includes 工具套裝包括**



**Guidebook**  
手冊

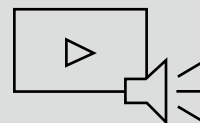


**Prompt cards**  
靈感咭



**Downloadable Worksheet**  
網上工作紙

(link below 參考下面連結)



**Animation**  
動畫

(link below 參考下面連結)

The toolkit is also available for download at  
此工具套裝亦可於以下連結下載  
[www.idk-hkdc.org/toolkit/](http://www.idk-hkdc.org/toolkit/)

# Hello

哈囉

---

(write your name here 寫上你的名字)

## Are you ready to get hands-on and minds-on?

### 準備好動手兼動腦筋了嗎？

Welcome on board! Are you ready to begin your design thinking journey? This guidebook will introduce the basics that you will need. Before we begin, let's learn about what design thinking is.

歡迎！準備好開展你的設計思維旅程了嗎？這本手冊將會為你介紹重要基本概念。開始前，讓我們先了解設計思維是甚麼。



## What is Design Thinking?

### 甚麼是設計思維？

When you hear “design thinking”, you might assume that it is something only for designers and artists. In fact, design thinking is quickly gaining traction in different sectors in society and is widely adopted by businesses, governments, schools and many other organisations. It is a methodology of creative problem-solving that equips you with effective tools, processes, but most importantly a mindset that everyone can use to solve lingering problems, catalyse innovations, create new values, or even spur organisational changes.

Design thinking is a lens helping us to get a clear picture of the problems at stake and to achieve the best solutions. It brings underlying issues to light and prompts us to realise unobvious yet effective answers, leading us to jump out of our usual thinking routes and analyse issues with a human-centred, empathetic and holistic approach.

提起「設計思維」，你可能以為它只為設計師或藝術家而設。但其實不同社會界別，都開始積極採用設計思維。不論是商業機構、政府、學院或其他組織，都正廣泛使用設計思維。它是一套有效的創意解難方法，透過一系列工具與設計流程，讓你裝備創新的思考模式，以解決縈繞的難題、催化創新、創造新價值，甚至革新組織架構。

設計思維就像放大鏡，幫助我們清晰聚焦眼前問題，尋找最佳解決方案。它能揭示潛在議題，啟發我們構思意料之外的有效解決方案。設計思維讓我們跳出慣性思考模式，以人本思維和同理心，全面地分析問題所在。

## Why Design Thinking? When is Design Thinking Most Effective?

### 為甚麼採用設計思維？甚麼情況效果最顯著？

The human-centred perspective of design thinking provides valuable insights to existing situations. Oftentimes, a product, service or innovation fails to deliver the expected outcome because it falls short of the users' needs at some point. Through design thinking, we empathise with the users and perceive what they think (and feel), such that our solutions become more valid.

設計思維讓我們從以人為本角度分析眼前問題，帶來獨到見解。有時，產品、服務或創新想法未能帶來預期成果，往往由於它們某方面未能滿足用家需要。藉著設計思維，我們以同理心代入用家角色，切身處地體會他們的想法（和感受），以制訂出更好的解決方案。



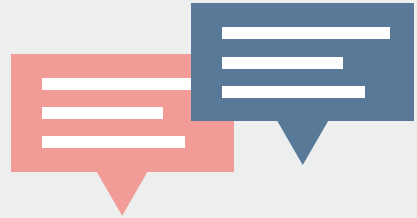
Here are some sweet spots where design thinking works best: 設計思維在以下情況效果最為顯著：

**When an existing product or service no longer satisfies evolving user needs**

當一個現存產品或服務未能滿足不斷演化的用家需要

Design thinking helps to uncover the current shortcomings and explore future market needs

設計思維能揭示現時不足之處，探索未來市場需要

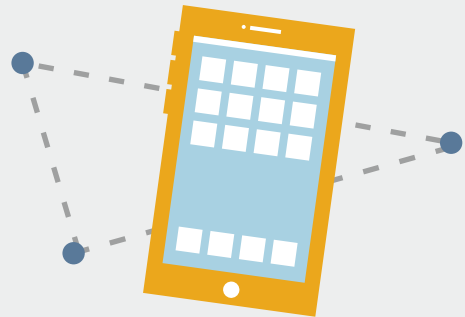


**When innovators or startups are creating something new**

當創新者或初創公司要開發新項目

Design thinking helps to reveal innovation opportunities and evaluate your ideas

設計思維能突顯創新機會，評估創意構思

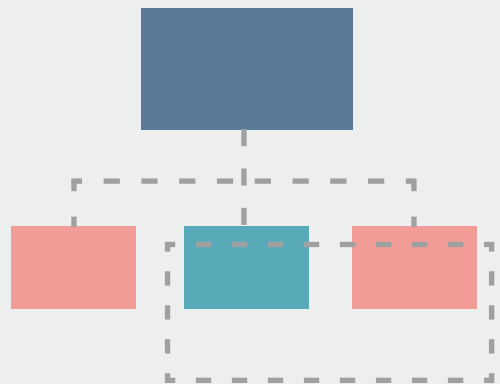


**When organisations are going through structural change**

當機構需要進行架構重整

Design thinking helps to instigate reform grounded on existing constraints and be proactive to tackle future challenges

設計思維能因應現存限制促進革新  
主動應對未來挑戰





## The Design Thinking Process

### 設計思維流程

There are many different design thinking frameworks, but all of them share a similar trajectory. A typical design thinking process begins with identifying problems, followed by defining the crux of the issue. We then come up with possible solutions, and ultimately devise and implement an effective plan.

**The Double Diamond model**, proposed by UK Design Council, is the one that we are following in this guidebook. It features four stages, and involves two rounds of divergent and convergent thinking.

你可能認識不同設計思維框架，但它們的思考路徑都有共通之處。在典型的設計思維流程中，一般以辨析問題開始，繼而界定問題核心。接著我們會構思各種可行方案，最後訂立和推行最有效的實行計劃。

這本手冊中，我們將會應用由英國設計委員會提出的**雙鑽石模型**。它包含四個階段，經歷兩輪的擴散和聚斂式思考。

### The Double Diamond model 雙鑽石模型

#### DISCOVER 探索

##### Understanding People's Needs 了解人的需要

What problems are people facing in the situation?  
Dig out as many observations as possible.

我們的情況中，人們正面對甚麼問題？  
發掘越多觀察越好。

#### DEVELOP 構想

##### Ideating Possible Solutions 構思可能方案

What are the different ways to solve the defined problem?  
Explore with creativity and imagination.

有甚麼不同方式解決定義了的問題？  
盡情發揮創意和想像力。

#### DEFINE 定義

##### Defining the Right Problem 訂定適當問題

What insights can be learnt from analysing the findings?  
Define the underlying problems before taking further actions.

分析觀察所得，有甚麼重要發現？  
定義潛在問題核心，準備下一步行動。

#### DELIVER 執行

##### Prototyping and Implementing Ideas 雛型測試及實踐想法

What solutions are promising to be implemented?  
Make prototypes and bring them to evaluation with real users.

哪些方案最大機會成功？  
製作雛型，讓真正用家測試及評價。

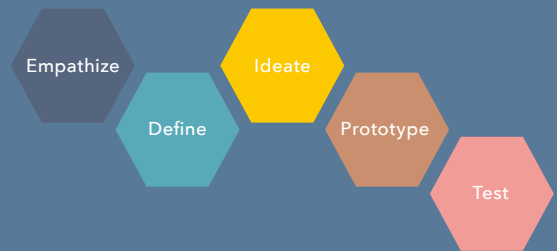


### Know more 認識更多

There are many different design thinking models advocated by various organisations. Some commonly known models include:

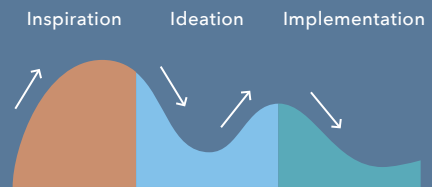
The 5-stage model promoted by the d.school of Stanford University. It starts with empathising. 士丹福大學 d.school 提倡的 5 個階段框架，以「感同身受」作開始。

不同機構各自提倡多種設計思維框架，當中較常見的設計思維模型包括：



The human-centred design process put forward by design consultancy firm IDEO. Just like the Double Diamond model, it diverges and converges twice.



由設計諮詢公司 IDEO 提倡的以人為本設計思維過程。它跟雙鑽石模型一樣，會擴散及聚斂兩次。





The innovation spiral advocated by NESTA, an innovation foundation. It focuses on amplifying the solution's impact.

由創新機構 NESTA 倡議的創新螺旋，重點在於擴大方案成效。



During your design thinking journey, you may use our prompt cards in some of the selected methods (indicated with ) to help you ideate and empathise. Worksheets are also available online for some methods (indicated with )

在這個設計思維旅程裡，某些方法（以  圖案標示）中，你可以借助靈感咭幫助，構思想法和代入用家角色。部份方法（以  圖案標示）亦配備工作紙可於網上下載。



## Choosing a Topic

### 選擇主題

Are you a start-up entrepreneur leading a team to develop a new service? Or are you a teacher attempting to enhance your students' learning experience? No matter what situation you are in, design thinking can be applied to help you understand and analyse your situation and make better design decisions.

By using this design thinking guidebook, you will choose a topic to work on and devise a solution. Think about which area matters to you most.

你是初創企業家，正在領導團隊開發新服務？或是老師希望改善學生學習體驗？不論任何情況，設計思維都能協助你理解和分析情況，作出最理想的设计抉擇。

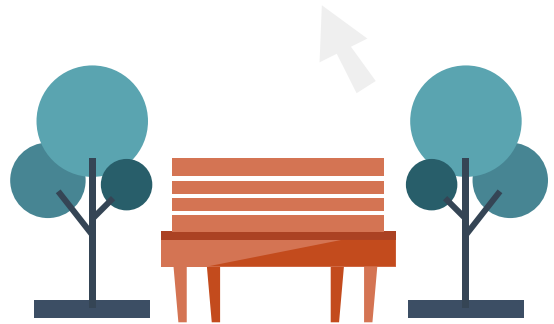
這本設計思維手冊，將帶領你針對一個選定的主題，構思解決方案。現在想想哪個範疇對你而言最重要？

### Examples of topics 項目主題例子



#### Business 商業

- Creating a new service to meet evolving customer expectations
- Developing a new marketing campaign for your product
- 開拓新服務，滿足不斷演變的客戶期望
- 為你的產品制訂全新市場推廣計劃



#### Public Services 公營服務

- Making postal services relevant in the digital era
- Designing new public spaces that citizens would enjoy using
- 因應數碼時代需要，革新郵政服務
- 設計市民能夠享受其中的嶄新公共空間





Have you thought of a topic to work on in the upcoming hands-on design thinking exercise? If you are working with a team, you may have a frank discussion on the potential opportunities and limitations, yet make sure the team listens to each other's hopes and fears and understands why the proposed topics matter.

已經想好在接著的設計思維練習中，要動手解決的主題了嗎？假如你與團隊一同參與，你們也可以先分享主題的潛在機會和限制。請謹記要聆聽彼此的希望和擔憂，理解每個建議項目的重要性。



### Education 教育

- Developing a new curriculum for future learning needs
- Redesigning the learning environment for more enjoyable school life
- 發展新課程，滿足未來學習需要
- 改造學習環境，締造更理想的校園生活



### Tech Startups 科技初創

- Developing a new mobile payment service
- Perfecting a beta-version product
- 開發全新手機付款服務
- 完善測試版產品



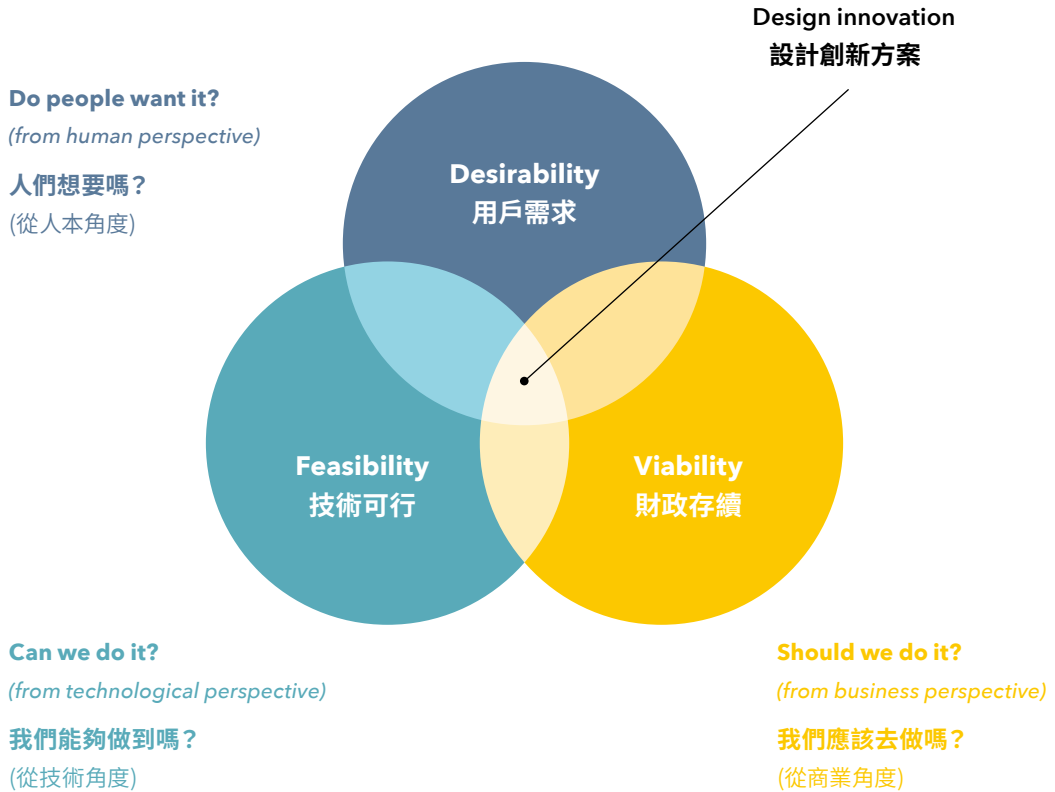
# The Benefit of Adopting Human-centric Design

## 人本設計的好處

Design thinking focuses on understanding human needs. By putting people first, innovations are developed by emphasising its desirability, and further balanced by its business viability and technological feasibility in implementation. The Desirability / Viability / Feasibility model not only guides innovation teams through the design thinking process, but also helps them evaluate the practicality of solutions, envisioning whether they will be successful in the long run.

設計思維著重了解人的需要。這個將人放在首要考量的原則，使我們最初能以用戶需求為依歸發展創新方案，繼而以執行時的商業財政考量和技術可行性作平衡。「用戶需求／財政存續／技術可行」模型，不只是創新團隊進行設計思維過程時的藍圖，更能評估方案的實際可行性，預視它長遠會否成功。

### The three lenses of human-centred design 人本設計的三大聚焦鏡



# DISCOVER

---

探索



# DISCOVER 探索

***DISCOVER is about uncovering new knowledge in things you come across every day but don't understand.***

「探索」是在日常事物中發掘以往未了解的新知識

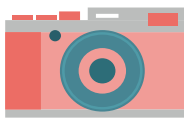
With the topic decided, we will start off by understanding the issue better. The first stage is the time for discovery. We gather useful information about the stakeholders and the current situation, which can take us to useful findings, insights and inspirations. What is particularly crucial at this stage is empathy. We must put ourselves in the shoes of the stakeholders to understand their real needs.

訂立主題後，我們首先會嘗試更深入了解問題。第一個階段是「探索」。我們會搜集有關持份者和現時情況的資訊，從中得出有用發現、洞見和靈感。此階段中，我們最重要是帶著同理心，切身處地了解不同持份者的真正需要。

## Objectives 目標

- Observe and gain insights about the situation
- Discover underlying user needs
- Gather as many findings and knowledge resources as necessary which we can refer to at later stages
- 觀察及掌握有關現時情況的有用發現
- 探索潛在用家需要
- 搜集大量而必需的資訊和有用資源，供以後階段參考

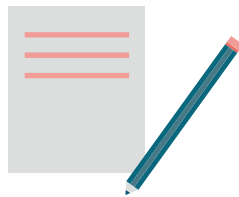
## Methods 方法



**Photo Safari**  
照片探尋

Take pictures and put them together to create a visual gallery

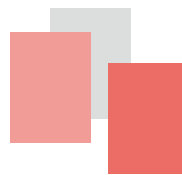
拍下照片，整理成一個視覺圖庫



**Interviewing / Shadowing** (U)  
訪問和跟隨

Learn people's experience through conversation and observation

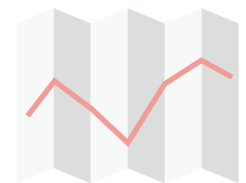
透過對話和觀察，深入了解持份者的實際體驗



**Card Sort** (U)  
排列咭牌

Order and prioritise what matters the most by sorting visual cards

排列圖咭，整理出事物的優先次序



**User Journey Mapping** (U)  
用家體驗歷程圖

Map out significant events and user interactions across time

按時序列出重要事件和用家互動

### Example 1 例子 1

A headphone manufacturer is trying to improve the sales of a few selected products. They may begin by analysing why their sales performances are not meeting the expectations. The team may diverge their thoughts as broadly as possible by looking into different directions at this stage:

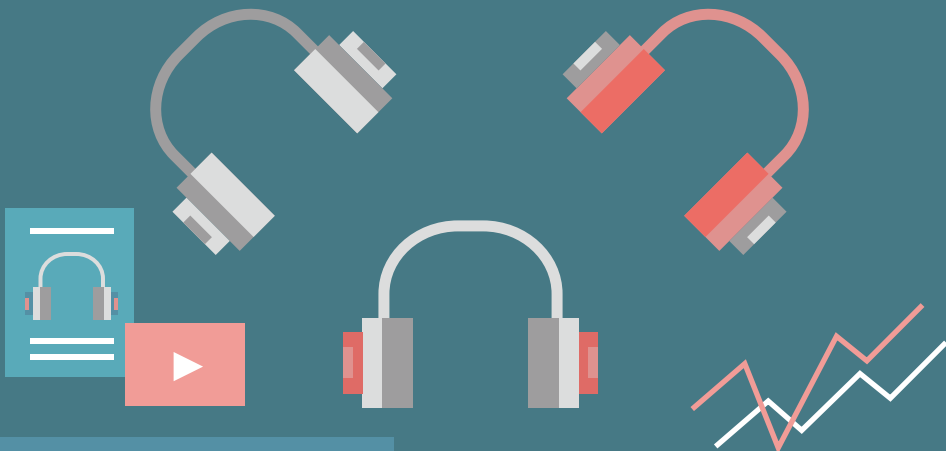
有耳機生產廠牌希望改善旗下部份產品銷量。該團隊可以先分析銷量未如理想的原因。此階段中，他們可以盡量擴大思考範圍，從不同方向切入。

How do people use the products? Is it possible to learn about how users interact with the products in context via observation?

人們如何使用產品？可以透過觀察，了解用家與產品互動的實際情況嗎？

Are the functions of their headphones satisfying their customers' needs? Is it possible to interview the users so as to listen to their first-hand experiences?

功能方面，產品能滿足顧客需要嗎？可以訪問用家，聆聽他們的親身使用體驗嗎？



What are the promotion channels? Are the points-of-sale effective? Are they reaching the target audience?

產品有哪些宣傳渠道？銷售點有效嗎？能夠接觸目標顧客群嗎？

How are their products doing compared to their competitors, say in terms of functionality, appearance, brand attributes, market positioning, etc?

公司產品跟其他競爭對手相比，表現如何？可以從功能、外型、品牌個性、市場定位等方面比較。

Can they do a comprehensive survey to understand prospective buyers (e.g. demographics, budget)? Is it necessary to develop new products?

可以進行全面調查，研究潛在顧客嗎（例如客群背景、購買預算等）？有必要開發新產品嗎？



## Example 2 例子 2

A healthcare centre has a low staff retention rate. Employees quit their jobs often. It is said that long working hours is the main cause.

一家醫院的員工流失率高企，常有員工離職。有些人認為主因是工時過長。

Can they interview employees to learn about their working experience and map out their daily journey? How did the employees feel?

可以訪問員工，了解他們的工作體驗，並列出日常工作流程嗎？員工們有甚麼感受？

Where have the employees gone after leaving the healthcare centre? Do they work at other centres, or switch to other industries?

員工們離職後轉到哪裡工作？是到其他中心任職還是轉投別的行業？

Has anyone tried to do something to mitigate the situation? What was the result?

有人嘗試過改善情況嗎？成效如何？

Is it possible that other causes are leading to the problem?

有可能是工時以外的原因導致問題嗎？



Now it's your turn to work with your situation. Try to get as many findings as possible. The methods in the following pages may help. You do not have to use all of them. Depending on your topic and the time you can start by picking one or two methods that are the most effective in your case. You may work individually before sharing your findings, or collaborate in a group from the outset.

現在輪到你動手解決問題，盡量搜集發現了。接下來介紹的方法，將為你提供指引。你毋須使用全部方法。你可以視乎你所選定的主題以及能夠投放的時間，選擇一至兩個對你眼前問題最有效的方法。你可以先個別單獨探索，再跟大家分享，又或者直接全組一起探索發現。

### Tips 小貼士

- Remember to observe with fresh eyes
- Think about what is new and interesting to you
- Be human-centric - use your empathy
- 記得換個新角度觀察熟悉事物
- 想想有甚麼事情新鮮有趣
- 以人為本，多用同理心看事物

## Photo Safari 照片探尋

Photo safari is a tool for studying experiences surrounding user groups. Researchers observe daily experience of users and take pictures for record. Alternatively, users are asked to take pictures of things, places or anything that are important to them. By putting together the photos they have taken, we get a comprehensive and visual impression of their needs, perceptions and feelings.

The focus of photo safari is to gain new insights and inspirations, rather than just collecting factual information. You may compare the photos from different participants and try to find similarities and differences. You may even ask them to share the stories behind.

### Features

- A visual repository that conveys non-verbal details
- Gives us insights about the perceptions and feelings of users
- An understanding of people's activities, interactions and context

### Outcome

A photo wall with the collected photos organised in a way that highlights certain insights.

照片探尋是用以了解特定用戶群體的工具。研究者會觀察用家的日常體驗，拍下照片作紀錄。又或者用家會被邀請親自拿起相機，拍下認為重要的事物、環境等。只要將所得照片整理，就能得出一個全面的視覺印象，理解他們的需要、觀點和感受。

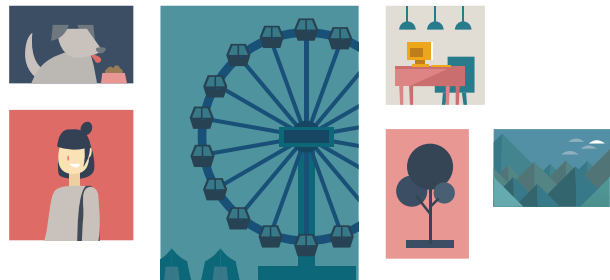
照片探尋的重點在於獲取新發現和靈感，多於單單收集資訊。你可以比較不同參與者的照片，找出相同及相異之處。你更可以邀請他們分享照片背後故事。

### 特點

- 構建視覺資料庫，表達言語以外的細節
- 揭示用家觀點和感受
- 了解人們的活動、互動和周邊環境

### 成果

一幅照片牆整理收集到的照片，以突出某些發現。



## Interviewing and Shadowing

### 訪問和跟隨

Talking to stakeholders and observing their daily experiences is a very useful and direct way to understand their needs. Having a conversation with someone and learning about them sincerely may sometimes bring a 180-degree turn to your assumptions. The goal is to encourage them to reveal things they have taken for granted and understand what matters to them.

On top of interviews, you may even shadow selected people and document what they encounter in an unobtrusive way. Empathy is particularly important in these methods. Through understanding their experience, we get a clearer picture of the stakeholders' interactions, barriers, touchpoints and opportunities.

### Outcome

A summary of what you have learned from the interview and shadowing. You may use any visual reference, e.g. photos, drawings, videos to illustrate your observations.

跟持份者交談和觀察他們的日常體驗，是個有效且直接的方式去了解他們的需要。真誠對話和了解受訪對象，有時會將我們既有想法 180 度改變。此方法的重點在於鼓勵受訪者揭示潛在觀點，讓你認識對他們來說至關重要的議題。

除了訪問，你更可以跟隨特別選定的對象作體驗，低調地從旁記錄他們的所見所聞。這些方法特別講求同理心。透過切身處地認識他們的經歷，我們就能更清晰地理解當中的互動、困難、接觸點和機遇。

### 成果

一篇簡單報告，整理訪問和跟隨中的發現。你更加可以善用各種視覺元素，例如照片、圖畫、影片等來闡釋觀察所得。

#### Tips 小貼士

- Have a plan. You will feel more confident knowing what you want to learn about
- Converse, not just ask questions. Show interest in what people say
- Don't be afraid to stray from your interview plan if you notice things that are interesting.
- Use visual aids. Ask interviewees to show / draw things they talk about
- Keep asking "Why?" to unravel the assumptions
- You may incorporate the Card Sort method on the next page in the interview
- 預先訂立訪問計劃。當你清楚知道調查方向，會更有自信
- 展開對話，而並非單向地提問。多表現對對方所談事物感興趣
- 假如發現有趣事物，可深入追問，不用擔心偏離原訂計劃
- 多用視覺參考，邀請受訪者展示或繪畫所描述的事物
- 不斷問「為甚麼」以拆解潛在假設
- 可在訪問中拼用下頁的排列咭牌方法



## Card Sort 排列咭牌

Card sort is a simple exercise to identify what's most important to your stakeholders with the help of cards. The person will be asked to order them e.g. in terms of preference, or to tell a story by arranging the cards. It starts off deeper conversations about what matters to the person.

You can apply this tool with any visuals of your choice, or with the prompt card set downloadable from our website (You may select 4-6 prompt cards that are relevant to the situation for this card sort exercise. Focus on the image side instead of the text side). In your selection, include both concrete and abstract ideas in the mix to get more illuminating findings.

### Outcome

Notes of in-depth discussion about the person's story, supported by the card sort results.

排列咭牌是個簡單的練習，借用咭牌幫助，辨別出持份者心目中最重要東西。我們會邀請對象按喜愛程度等方法來排列咭牌，又或者透過排序來講故事。它有助開展更深入的對話，揭示深層想法。

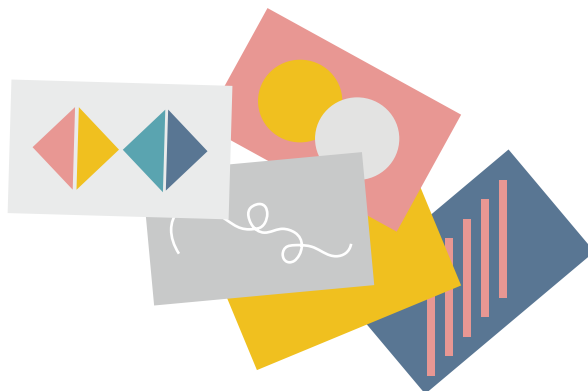
你可以自行選擇圖片進行此練習，又或者使用我們網頁上供大家下載的靈感咭（你可以挑選 4-6 張與眼前情況相關的靈感咭，進行此練習。請利用有圖畫的一面，毋須理會文字）。在你所選擇的咭牌中，可以同時加入一些較具體及一些較抽象的圖片，以得出更有意思的發現。

### 成果

以咭牌排列結果與對象深入討論他的故事，摘錄成筆記。

### Tips 小貼士

- You may set up imaginary scenarios, e.g. what if you have everything you wanted? What if you are of a different age? etc., as variations
- 你亦可以提出一些假設情況，例如「假如你得到一切想要的東西」或「假如你年紀跟現在不同」等，來刺激思考



## User Journey Mapping 用家體驗歷程圖

User journey mapping is a visual and diagrammatic representation of a major stakeholder's experiences and changing feelings across time. Map out what they encounter, think and feel and how they respond, such that the changes in their behaviour become apparent and comprehensible. The temporal dimension enables us to identify pain points and critical moments where interventions can take place and new possibilities are opened up.

### Features

- Taking the user's point of view and contextualising their experiences
- Visualising touchpoints and the interactions involved according to timeline
- Identifying crucial "magic moments" and pain points
- Dissecting the cross-links and intertwining causality of events in a holistic way

### Outcome

The outcome should be a diagram similar to the below. You may alter the time scale from a day to seasons or stages, and add suitable rows that are deemed relevant. Put images or illustrations as you see fit. You may download the worksheet from our website.

用家體驗歷程圖是一個重要方式，以圖表按時序呈現一個持份者的體驗和感受變化。我們會列出他們的所見所聞、想法感受和反應行動，以清楚掌握他們行為上的變化和箇中原因。透過按時序列出用家歷程，我們能夠辨別出痛點和介入狀況的重要契機，尋求新可能。

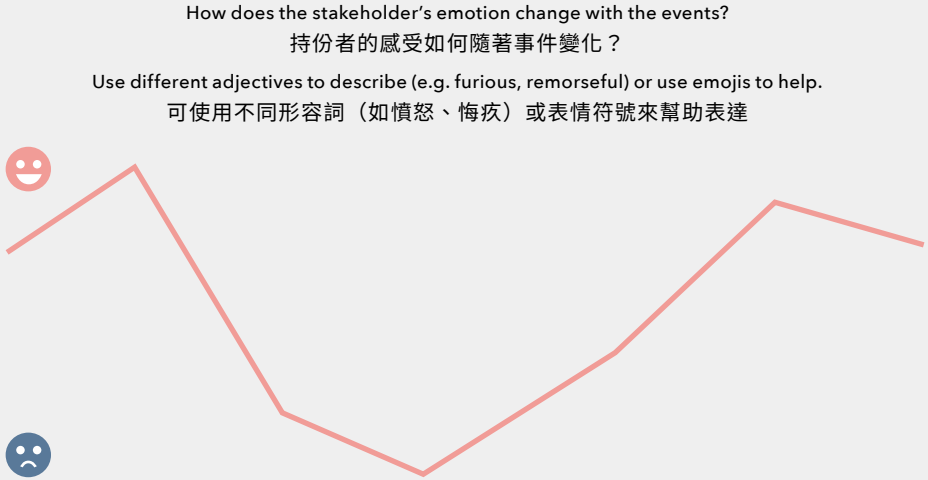
### 特點

- 代入用家角度，從他們的處境理解體驗
- 視覺化呈現過程中的接觸點和互動
- 找出「關鍵時刻」和痛點
- 全面剖析互為牽連的角色互動和因果關係

### 成果

我們會得出一個類似以下的歷程圖。你可以按需要調整時間維度，按一日不同時間、四季或事情不同階段等方式區分。此外，你亦可以加入不同欄目，填寫相關有用資訊，或輔以照片或繪圖加以闡釋。我們的網頁上亦有工作紙可供下載。

Stages 階段	Starting point 起始				Ending point 完結
Stakeholder's experience 持份者的體驗	When do the problems arise? 問題出現的時間? When are they resolved? 甚麼時候得到解決? Are there any fluctuations? 當中有任何起伏嗎?				
Stakeholder's feelings (can present in a graph) 持份者的感受 (可以圖表表達)	How does the stakeholder's emotion change with the events? 持份者的感受如何隨著事件變化?  Use different adjectives to describe (e.g. furious, remorseful) or use emojis to help. 可使用不同形容詞 (如憤怒、悔改) 或表情符號來幫助表達				
Interaction with other stakeholders 與其他持份者的互動	How do they interact with other stakeholders, e.g. family, friends, professionals such as teachers and doctors, users, etc? 他們怎樣與其他持份者如家人、朋友、老師或醫生等專家、用家互動?				
Pain points 痛點	What pain points have been identified from the user's journey? 從用家歷程可以辨認出甚麼痛點?				



Write down or draw out your findings on sticky notes and attach them to the corresponding phases on the user journey map. You may also supplement with photos.

你可以在便利貼上寫下或畫出發現，貼在歷程圖相應階段，並加上相片補充說明。






By coupling user journey mapping with photo safari or other methods such as interview, we can ensure the map accurately reflects the genuine user experience, rather than merely ungrounded imagination.

此外，我們亦能將用家體驗歷程圖，結合照片探尋或訪問等方法，以確保歷程圖能如實反映真正用家體驗，而不只是純粹單方面想像。

### Example 例子

A public healthcare system is trying to extend community health services to chronic patients by mapping the patient journey of a 50-year-old overweight man with high cholesterol level.

一個公營醫療網絡正致力拓展社區康健服務，幫助長期病患者。他們正製作歷程圖，記錄一位年屆 50、膽固醇過高、體重超標的男士的體驗。

Stages 階段	Latent stage 潛伏階段	From chronic to critical 從慢性轉為急性	Diagnosis 診斷	Medication 治療	Continual care 持續跟進
<b>Stakeholder's experience 持份者的體驗</b>	he worked long hours everyday, was too busy and tired for workout knew that he was obese, but was afraid to go to bodycheck 工時長，太忙太累，疏於運動 自知癡肥，但諱疾忌醫，不願做身體檢查	one day, after drinking a lot with his friends, he suddenly couldn't control his body at first, he thought he was just getting drunk 一次，跟朋友喝至酩酊之後，部份身體動彈不得 他本以為只是喝得太多	he was diagnosed with mild stroke and demanded to stay in the hospital 他被診斷出有輕微中風，被要求留院治療	his situation improved, and the doctor gave him long-term medications he started to realise that he had to change his lifestyle 男士的情況改善，但需要長期服用藥物 他意識到需要改變生活方式	he forgot irregular consultations to keep track on his health and cholesterol level he felt difficult to sustain exercise and cut down fatty diet 男士忘記定時覆診，監察健康狀況及膽固醇指標 難以堅持運動及減少進食肥膩食物
<b>Stakeholder's feelings 持份者的感受</b>	● <b>Overweight Man 超重男士</b> tired, afraid to face the problem 勞累，不敢正視問題 	● <b>Overweight Man 超重男士</b> hesitant and panic 又躊躇又恐慌 	● <b>Overweight Man 超重男士</b> remorseful 悔疚 	● <b>Overweight Man 超重男士</b> relaxed 豁然開懷 	● <b>Overweight Man 超重男士</b> helpless 無助 
<b>Interaction with other stakeholders 與其他持份者的互動</b>	● <b>Wife 妻子</b> his wife was concerned about his health, but didn't dare to tell him directly 妻子擔心他的健康，但不敢直言	● <b>Wife 妻子</b> his wife realised that something wasn't right, and was determined to send him to hospital 憂心妻子感到不妥，決意要送他到醫院	● <b>Doctor 醫生</b> the doctor gave him a thorough body check 醫生為男士進行全面身體檢查		
<b>Pain points 痛點</b>	user underestimates seriousness of illness 用家低估疾病嚴重性	people lack comprehensive information on symptoms 公眾缺乏全面資訊，認識疾病癥狀	user misses the best timing to seek help from doctor 用家錯失求醫時機		user cannot sustain healthy lifestyle 用家無法維持健康生活習慣

# DEFINE

---

定義



# DEFINE 定義

***DEFINING the crux of the issue helps you focus on the right problems to tackle.***

「定義」問題核心有助你專注解決最關鍵的問題

After gathering lots of information in the first stage, we will then narrow down into a solid action statement based on the crux of the issue we have identified. We should analyse our findings so far and summarise them into innovation opportunities.

When defining a problem, we should make sure that it is “actionable” (we are able to do something about it). It leads to some design-led solutions that we will deliver later. If you want to be more precise, you may even work out a detailed design brief delineating the ultimate outcomes.

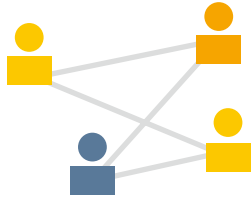
在第一階段中收集到大量資訊後，我們將會歸納出問題癥結，化成一個具體行動陳述。我們會分析早前的觀察所得，綜合出創新機遇。

定義問題時，我們需要確保它是我們能力範圍中可參與解決或改善的問題。在稍後階段，我們將會按此發展出一些設計方案。假如你想更準確，你甚至可以撰寫詳細的設計提案，勾勒對最終成果的要求。

## Objectives 目標

- Define the problem to be solved
- Understand the root causes of problems
- Identify unmet needs which can be addressed as opportunities for innovation
- 定義需要解決的問題
- 理解問題背後的深層原因
- 尋求尚未被滿足的用家需求，並認清創新機遇

**Methods 方法**



**Stakeholder Mapping**  
持份者關係圖



**Downloading Your Findings**  
下載發現



**Segmentation**  
分門別類



**User Personas** Ⓡ  
用家人物誌



**Action Statement:** Ⓡ  
"How might we..."  
行動陳述：「我們怎樣可以…」



**Devising a Design Brief** Ⓡ  
訂立設計大綱

You may apply a few of the above methods to help you better define the problems. 你可以使用部份上述方法，去幫助你定義問題。

**An Overview of the "Define" Stage 「定義」階段流程**





## Example 例子

A bus company is studying transportation in the city, in an attempt to revamp its services for better commercial performance. They have interviewed managers, bus drivers and users to identify a plethora of problems regarding their bus services, such as expensive fares, delays and irregular timetables, etc.

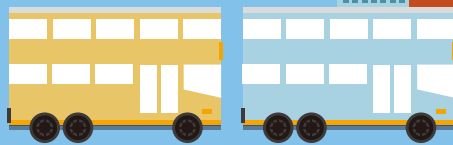
一間巴士公司正著手研究市內交通情況，以革新旗下服務，改善商業表現。他們訪問了管理層、巴士司機和用家，辨別出大量有關轄下巴士服務的問題，包括票價過高、班次延誤及時間表不規律等。

## Key findings 主要發現

### Old buses 巴士老化

frequent breakdown causing delays, high repairing costs

經常壞車導致延誤和維修費高昂



### Increasing fuel cost 油價攀升

causing a pressure in bus fares

對票價造成壓力

### Inefficient routes 路線欠缺效率

some bus routes have not been updated for years. Some bus stops are used by few passengers but takes a long time to reach  
部份巴士路線多年沒有更新，部份車站客量稀疏但需要大量時間駛經

After identifying the above issues, they eventually come up with this action statement:  
找出以上問題後，他們總結出以下行動陳述：

*How might we improve the efficiency of our bus services through increasing our total passenger rides so as to maintain our competitiveness?*

我們怎樣可以改善巴士服務效率，藉著提昇總客運量，使我們可以保持競爭力？



## Stakeholder Mapping 持份者關係圖

You may first begin by mapping out the intertwining relationships of the stakeholders involved.

你可以首先將持份者間錯綜複雜的關係，以圖表詳細分析。

### Outcome

A stakeholder map similar to below example.

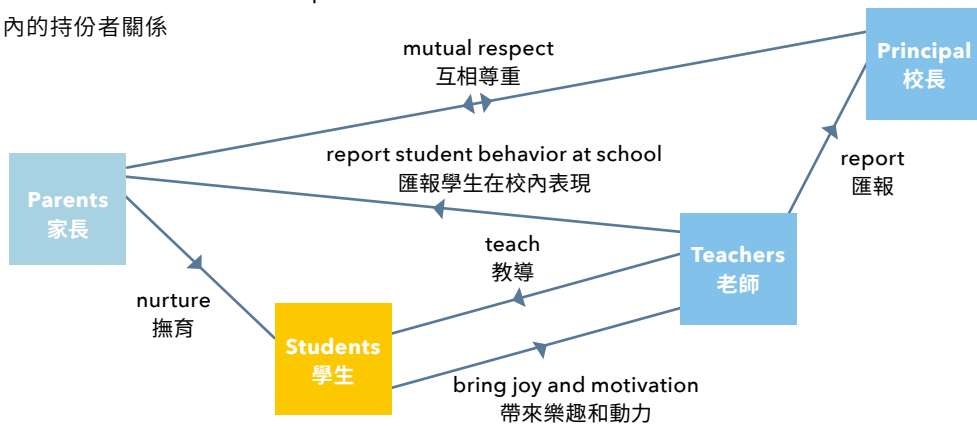
### 成果

類似以下例子的持份者關係圖。

### Example 例子

Mapping out the stakeholder relationships in schools

列出學校內的持份者關係



## Downloading Your Findings 下載發現

Write down (or draw) your findings on sticky notes. Put them on the wall around the room and group similar ideas together.

在便利貼上寫下或畫下你的發現，將它們貼在牆上，把內容相近的貼在一起。

### Outcome

A wall / large poster full of sticky notes grouped according to similarity.

### 成果

一幅牆或一張大海報，貼滿分門別類的便利貼。

## Segmentation 分門別類

Presenting your findings visually is a good way to gain insights. There are different ways to segmentise or sort your findings. You can find some common examples below.

### Outcome

A diagram or visual mapping where underlying tendencies and interactions become apparent.

#### Clustering and themes 分類和主題

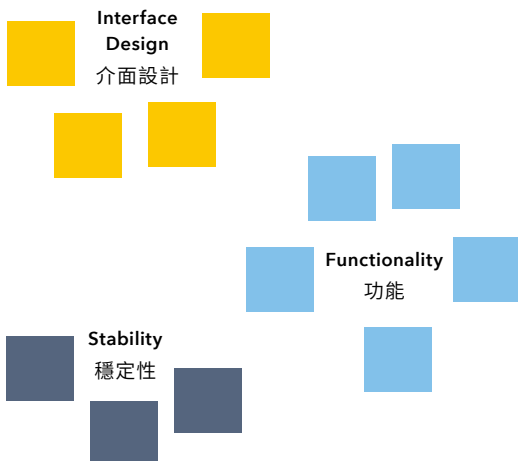
Arrange the findings according to their similarities and common themes.

將類似發現按共通點及主題放在一起。

#### Example 例子

A tech startup is studying what users think about the beta version of their app. They have collected many opinions and are sorting them by themes.

有科技初創公司正分析用家對應用程式試用版的用後感。他們將收集到的意見按主題分類。



以視覺方法呈現你的發現能讓你找到新的見解。將資訊分類排列的方法有很多，以下是一些常見例子。

### 成果

讓潛藏趨勢或互動關係浮現的圖表或視覺分析。

#### 2x2 matrix 表格

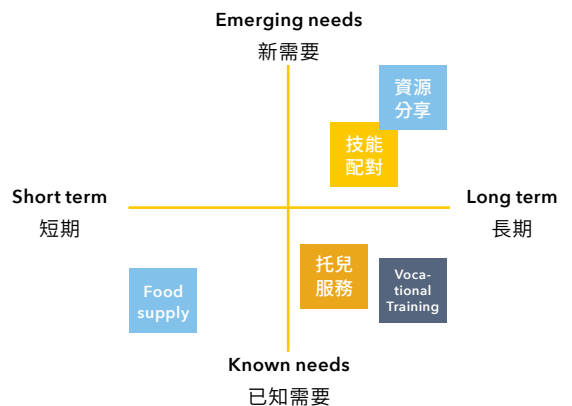
Draw out the X and Y axes, where you will put down the extremes of the qualities that are defining the spectrum. This is a useful tool to analyse possible innovation opportunities.

畫出 X 軸和 Y 軸，在兩端寫上能夠定義光譜兩極的特質。這個方式有助你分析可能的創新機遇。

#### Example 例子

A municipal body is attempting to address community needs and provide new services. They have interviewed different users and have yet to define what could be done.

有市政機關想為市民提供新服務，滿足社區需要。他們訪問了不同用家，但尚未界定具體工作範圍。



## User Personas

### 用家人物誌

Define stakeholders as common personas according to their characteristics. You should base on your findings from “Discover” stage to define the distinguishing features for each of the personas and present them on separate cards.

根據持份者的共同特點將他們歸類，界定成一系常見人物類型。你可參考「探索」階段中的發現所得，勾勒出每個人物類型的主要特徵，記在不同咭片上。

### Outcome

User personas similar to below.

### 成果

類似以下例子的用家人物誌。

### Example 例子

A telecommunications service provider studying their user demographics to identify new market for expansion. 有電訊服務供應商正研究用家背景，尋找拓展市場的契機。



The image displays three user persona cards, each with a profile picture, name, age, and key characteristics. Each card also includes a list of specific behaviors or needs and two progress bars at the bottom representing 'Economic power' and 'Desire to get new plan'.

- Jaden (10)**  
 熹熹  
 student 學童  
**reliance on phone 依賴手機**
  - uses phone to attend online lessons 使用手機網上上課
  - parents don't allow to get own phone 想有自己手機但家長拒絕
  - loves watching funny clips on social media 喜歡看社交媒體有趣短片
- Grandma Lam (68)**  
 林婆婆  
 retired 退休人士  
**avoid novel things 抗拒新事物**
  - doesn't know how to use smartphones 不懂使用智能手機
  - but wants to facetime grandchildren 但希望與孫視像
  - nobody ever introduced her new plans 沒有人介紹新服務計劃
- Roy Wong (32)**  
 黃文樂  
 working adult 在職成年人  
**tech savvy 熟悉高科技**
  - heavy user 高用量用家
  - into phone gaming 喜歡打手機遊戲
  - connection speed is very important 連線速度非常重要



**Action Statement: "How might we..."** 

**行動陳述：我們怎樣可以...**

Defining an action statement gives us a clear direction of what kind of solutions we might develop in future stages. It should be up-to-point, concise, but also broad enough for exploring a wide range of possibilities. You can do so by turning your insight into a "how might we" question.

訂立行動陳述能夠給予我們清晰方向，以後階段要發展怎樣的解決方案。它需要言簡意賅地概括出重點，同時又提供足夠空間探索新機會。你可以將早前得出的見解，轉化成為「我們怎樣可以...」問題。

**Outcome**

A clear, actionable "how might we" question.

**成果**

一個清晰而能夠執行的「我們怎樣可以...」問題。

**Insight 見解**

---

**How might we 我們怎樣可以...**

---

**through/by (means) 藉著 (方法) ...**

---

**so that (better outcome will result) 使 (期望達到的結果) ...**

---

**Example 例子**

**Insight 見解**

The playground facilities in the neighbourhood are underutilised because children find them unattractive.  
區內遊樂場設施使用率偏低，因為未能吸引小朋友。

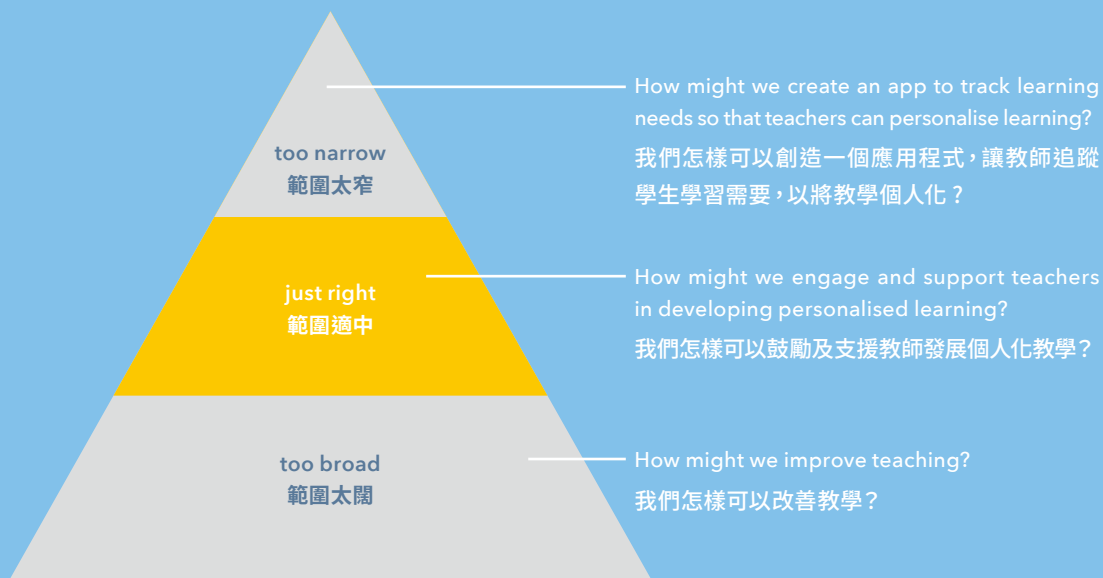
**How might we 我們怎樣可以...**

make our playground facilities more attractive by re-designing them so that they can be better utilised?  
讓遊樂場設施更吸引，藉著重新設計它們，使它們的使用率得到改善？

### Tips 小貼士

When devising a "How might we..." statement, we should avoid being too broad or too narrow.

訂立「我們怎樣可以」陳述時，應避免範圍太闊或太窄。



### Tips 小貼士

#### Reaching Consensus with Dot Voting

If you are working in a group, you may use dot voting to pick the best idea. You may also discuss your ideas and persuade each other, before a consensus is reached.

#### 用貼紙投票 達成共識

團隊可以考慮用貼紙投票，投選最佳想法，並透過討論和游說達成共識。





## Devising a Design Brief

### 訂立設計大綱

A design brief defines the challenge to be addressed and states clearly the goals and constraints at stake. It keeps us on the right track and prevents us from deviating. It may also outline the budget, timeline and potential risks. Everyone can align their understanding of the future working directions based on the design brief. However, it should avoid being overly rigid or specific, which may limit creativity.

設計大綱能清晰界定我們將要應對的挑戰，列出目標和當前局限。它確保我們朝着正確方向進發，避免偏離。它也可以大概列明預算、時間表和潛在風險，並讓所有人對未來工作方向有一致理解。不過，大綱中的要求應避免過份僵固或細微，以免窒礙創意。

### Outcome

A design brief similar to the below.

### 成果

類似以下的設計大綱：

**Brief title** 設計大綱標題

---

**We are designing** 我們將會設計…

---

**that** 可以…

---

**for** 給…

---

**so that** 從而…

---

### Example 例子

#### "RE/SOURCE" 「易搜」

**We are designing** a system **that** connects users with unused objects at home **for** efficient exchange **so that** wastage can be reduced and money can be saved.

我們正在設計一個系統，可以連繫家中有多餘物件的用戶，給他們方便有效地交換物件，從而減少浪費和節省金錢。

# DEVELOP

---

構想





## DEVELOP 構想

***Push the envelope.***

***Wrack your brain.***

***DEVELOP as many ideas as possible  
so as to get the best ones.***

「構想」大量不同概念，掏空腦袋，以得出最佳方案

The third stage is to develop solutions that are responding to the action statement defined in the previous stage. We ideate as many creative solutions as possible through brainstorming and linking ideas from a human-centric point of view. We will then go through them again and pick a few that are practical to be developed into our final solution.

Brainstorming sessions need not be too long - 15 mins to an hour is a good benchmark. Also, working in small groups that involve people with diverse skills and perspectives would generate the most novel ideas, as we can always build on others' ideas.

踏入第 3 階段，我們會根據在上一階段所定義的行動陳述，發展出不同意念。首先，我們會發揮想像進行「大腦震盪」，連結不同想法，並從用戶角度出發，構思出大量創意方案。仔細審視過每個想法後，我們會從中選出一些實際可行的，發展為最終方案。

「大腦震盪」時間不需要太長，一般 15 分鐘至 1 小時已足夠。如果小組內包含技能和觀點不同的人，回應及建立彼此想法，定能產生出更多新穎意念。

### Objectives 目標

- Generate a good number of ideas based on the action statement or design brief
- Ideate a collection of creative ways to tackle the problems defined
- Consolidate into a potential solution plan for implementation
- 根據行動陳述或設計大綱，構思大量想法
- 構想一系列創意方法，解決定義了的問題
- 歸納成一項潛在的解決方案，於將來實行

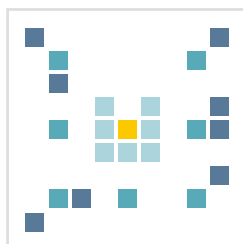




## Methods 方法



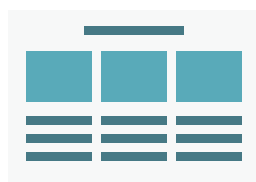
**Nominal Group Technique** ⬇  
名義群體法



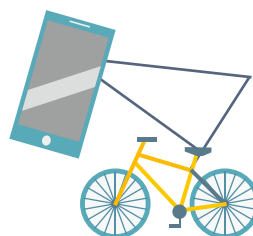
**Lotus Blossom**  
9x9 方格陣



**Draw It, Build It** ⬇  
繪畫與建造模型



**Mini Storyboard** ⬇  
迷你故事板



**Cross-pollination**  
連結概念

### Tips 小貼士

#### Brainstorming rules 「大腦震盪」規則

##### **Defer judgement** 延後批判

Avoid ruling out ideas too early - they can be revised later 不用太早排除想法，可稍後修改

##### **Be creative** 鼓勵創意

Encourage wild ideas before taking them back to executable plans 先盡情發揮創意，容後再實現執行

##### **Be responsive** 積極回應

Build on each others' creativity 於他人的想法上再建立補充

##### **Focus on the topic** 聚焦主題

Don't stray away or go off on the tangent 避免離題或打岔

##### **One conversation at a time** 每次集中討論一個話題

Discuss your ideas one by one 先討論完一件事才討論別的

##### **Be visual** 視覺具體

Suggest your ideas with sketches or visuals 以手繪或圖象解釋你的想法

##### **Go for quantity** 以量取勝

Come up with more ideas instead of drilling deep into one 構思大量想法，不鑽入個別方案

# Nominal Group Technique

## 名義群體法

In the beginning of the Develop phase, you can take some time to come up with possible solutions as the first step. The Nominal Group Technique allows everyone in the group to share their ideas, clarify thoughts and rank the priorities.

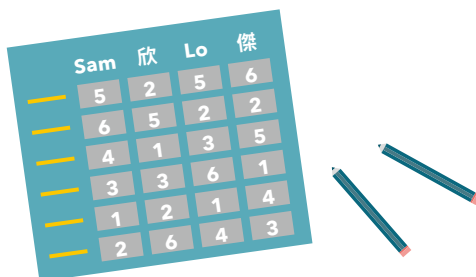
「構想」階段之始，你可以先花時間發展大量可行方案。名義群體法讓小組內所有人都可以分享自己構思，釐清想法，再排列優次。

### Outcome

A list of discussed ideas ranked by priority.

### 成果

列出討論過的想法，並排列優次。





## Lotus Blossom 9x9 方格陣

Lotus blossom is a quick ideation method to generate a wide range of ideas using a 9x9 grid. The goal is to push the envelope and come up with variations. We place our action statement at the centre and generate 8 different ideas in the boxes directly surrounding it. We then copy each of the 8 ideas to the centre of the outer matrices, and spin off 8 further ideas from each of them. The exercise ends when all blanks are filled.

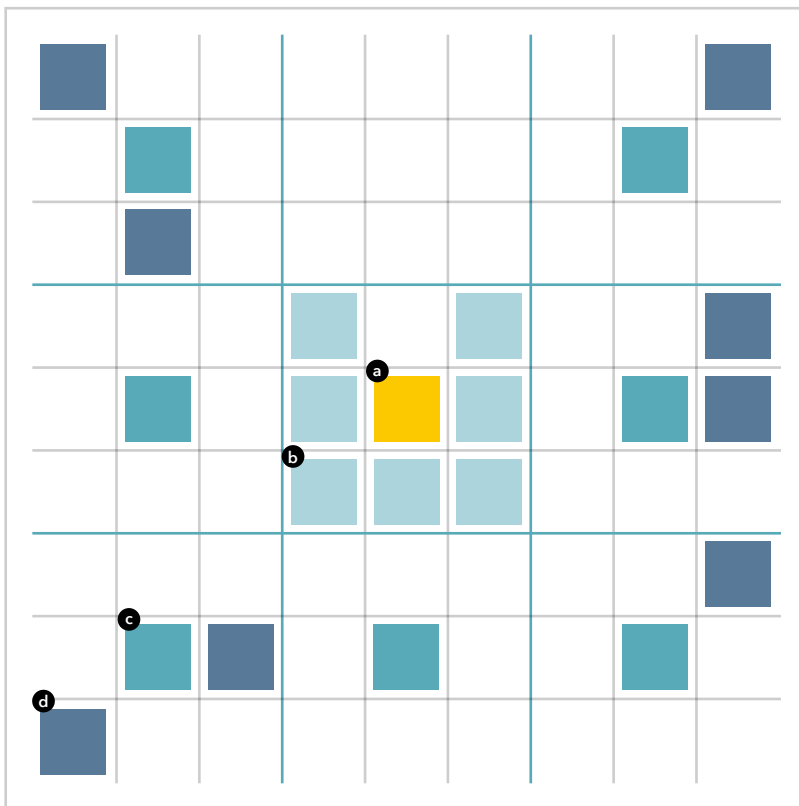
9x9 方格陣是一個刺激大家快速產生大量意念的構思方法。此方法的目標是要拓展思考，帶來多種不同想法。我們會將行動陳述放在方格陣中心位置，然後構思 8 個不同想法，寫在毗鄰的格子內。之後將這些想法分別寫在外圍 8 個方格陣的中心，再每個分別衍生出另外 8 個想法，直到將所有方格都填滿為止。

### Outcome

A completed 9x9 lotus blossom board.

### 成果

全部填滿的 9x9 方格陣。



- a** Put the action statement at the centre 將行動陳述放在中心位置
- b** Develop 8 ideas from the core 從中心發展出 8 個想法
- c** Copy the 8 primary ideas to the centre of the outer matrices 將 8 個原始想法抄寫到外圍方格陣的中心
- d** Develop 8 further ideas from each of the 8 primary ideas 再根據每個原始想法，發展另外 8 個延伸想法

### Example 例子

#### Action Statement 行動陳述

How might we make our bus system more efficient through modernisation so that the profit can be increased?

我們怎樣可以讓旗下巴士網絡更有效率，藉著將系統現代化，使利潤能夠提昇？

GPS-enabled buses								Remove under-used stops
	實時位置追蹤						重整路線	
	Apps for rider to track							
			實時位置追蹤		重整路線			智能巴士
	Seat-stand ratio		Seat-stand ratio	行動陳述 Action Statement	購置新巴士		購置新巴士	小型巴士
			Re-branding	環保措施	Future transport models			
								共享交通
	Re-branding	地道文化標誌		環保措施			Future transport models	
Vehicle design aesthetics								



## Draw It, Build It

### 繪畫與建造模型

We may also use visual aids to help us express our ideas. Ideas are intangible and sometimes difficult to be described in words. You may simply sketch your idea on a piece of paper, or build a sketch model by using legos, clay, cardboards, leftover packages or anything you can access. Through that, you can visualise ideas and realise any overlooked strengths and possibilities. Describe how your concept works to your teammates and later test it out.

#### Consider:

- How it works
- How it looks
- What are the necessary components
- Why the components are where they are
- Is it possible to make things another way

You may also modify or add on each others' ideas by putting new elements in the model or drawing.

#### Outcome

Sketches or sketch models with different components illustrating your concept.

我們亦可以利用視覺工具表達想法。概念是無形的，有時難以用言語表達。你可以在紙上直接畫出想法，又或用積木、泥膠、咭板、回收包裝物料或任何你能找到的東西來製作模型。這個方法能將想法視覺化，讓你察覺意念中未被留意的好處和可能性。你可向組員示範概念如何運作，並於稍後進行測試。

#### 考慮方向：

- 概念如何運作
- 實體外觀
- 有甚麼必要元素
- 為何這些元素要放在該位置
- 其他製作方法的可能性

你亦可以在模型及繪畫中，提出修改或添加新元素，完善彼此想法。

#### 成果

用簡單手繪圖或有不同組件的模型，來表達你的概念。



## Example 例子

A business owner renovating his / her retail store can explain their aspiration for the future interior with a drawing or a model. He / she may even visualise how new elements could be incorporated.

一位正在翻新旗下零售店的商家，可以透過繪畫或製作模型，呈現對未來店舖室內裝潢的想像。他更可以示範新元素在店舖中的擺放方式。

### Draw it 畫圖

What is the name of your idea

為你的概念構思一個名字

The online-offline apparel store 橫跨網上及實體的服裝店

What is it?

(draw the idea; visualise the product, service or process)

它是甚麼模樣？

(把想法畫出來，呈現產品、服務或流程)



What does it do?

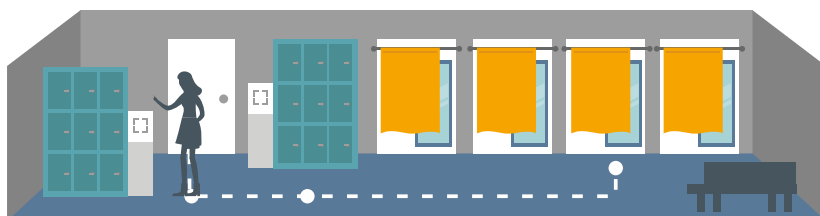
(explain the concept in a few points)

它有甚麼功用？

(列出數點解釋概念)

- People can order online before visiting
- When they arrive, just scan the QR code and they will be directed to a locker
- Their order is already in the locker, ready for them to try on in fitting room
- If the apparel looks good, they can finish the payment online and bring the products home directly
- 顧客可以在到訪前預先在網上選購
- 抵達店舖時，掃描二維碼就會指示你到指定儲物櫃
- 預先選購的服飾已在儲物櫃內準備好，等待顧客試身
- 試身後，顧客可直接在網上完成付款，將產品帶回家

### Build it 模型



# Mini Storyboard

## 迷你故事板

A mini storyboard can help you articulate the details of an intangible or abstract idea regarding user experiences and journeys. Through the mini storyboard, you can also evaluate your solution's practicality and effectiveness from the users' point of view. Use a mini storyboard to communicate ideas for apps, services, events or processes.

迷你故事板能幫助你描述抽象事物的細節，特別是用家體驗和歷程。你亦可以利用它，從用家角度來評估方案是否可行有效。使用迷你故事板來闡釋應用程式、服務、活動或流程等創新意念。

### Outcome

Finish a mini storyboard as below.

### 成果

完成以下的迷你故事板。

**What is the name of your idea**  
為你的概念構思一個名字

**Tell a simple but complete story, from problem to solution below (draw pictures in the spaces and fill in descriptions)**  
描述一個簡單但完整的故事，勾勒從難題到方案的過程 (在空格畫圖及在線上填寫文字)

Who/Problem 誰/難題	Solution 解決方案	First 首先	Next 然後	Positive Outcome 成果
<div style="background-color: #005663; color: white; padding: 5px; margin: 5px auto; width: 80%;">                     Draw this first 先畫這格                 </div>	<div style="background-color: #005663; color: white; padding: 5px; margin: 5px auto; width: 80%;">                     Then go back and fill these in 然後回來填滿這些                 </div>		<div style="background-color: #005663; color: white; padding: 5px; margin: 5px auto; width: 80%;">                     Draw this second 第二畫這格                 </div>	
Who does your idea help most? What problem does it help them solve? 你的想法最能幫助誰？它最能幫助他們解決甚麼問題？	What does your solution look like? Is it a product or service? 你的方案是甚麼模樣？是產品抑或服務？	What does your user do to start interacting with your product or service? 用家第一步如何開始與你的產品或服務互動？	What happens in the middle to help them solve their problem? 中間發生了甚麼事，幫助他們解決問題？	How does it make their life better or happier? How to achieve? 它如何改善了他們的生活？是如何達到的？
_____ _____ _____ _____	_____ _____ _____ _____	_____ _____ _____ _____	_____ _____ _____ _____	_____ _____ _____ _____



## Cross-pollination 連結概念

Cross-pollination is about borrowing ideas from other industries for our own situation. It is particularly useful to break out of established patterns of thinking and chip in novel ideas. For example, we can take reference from other companies' disruptive business models or services, and think about possible adaptations.

### Outcome

A gamechanging concept that defies traditional ways of approaching the problem in the industry.

我們可以向其他行業借鏡，參考成功方法，搬到我們的情況中。這個方法能帶領我們突破既有思考模式，加入嶄新意念。例如，我們可以向創新公司借鏡，參考其顛覆性商業模式和服務，思考如何借用到我們的情況。

### 成果

一個突破性的嶄新概念，顛覆行業內既有應對同樣問題的方式。

#### Example 例子

A community organisation is helping the elderly find caretakers in the neighbourhood. What if we borrow the concept of services like ride-sharing apps, and pair up the senior citizens with caretakers through a similar system?

有社區組織正協助長者於區內尋找照顧者。我們可以參考共享汽車等服務，利用類似系統配對長者和照顧者嗎？





# DELIVER

---

執行





# DELIVER 執行

***DELIVER your solution.  
Bring your ideas to life.  
Amplify and augment the impact.***

「執行」方案，將想法賦予生命，再擴闊加強成效

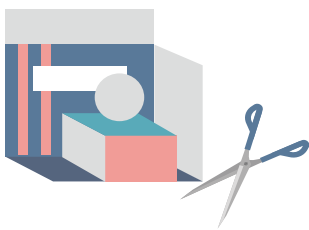
In the final stage of the Double Diamond model, we are going to consolidate our ideas and launch our solution. We will prototype, test, evaluate and revise our ideas repeatedly in feedback loops, until an optimal solution is achieved.

在雙鑽石模式的最後一個階段中，我們將會整合意念，實踐解決方案。我們會製作雛型、進行測試、評估意念和改良方案，反覆收集用家回饋，直到達致最佳方案。

## Objectives 目標

- Prototype the solution
- Test your solution with users and seek for feedback
- Refine the ideas iteratively
- Pitch you solution, garner support and prepare for launch
- 製作方案雛型
- 與用家測試方案，獲取意見
- 反覆改良想法
- 推銷方案、尋求支持及準備推出

## Methods 方法



**Prototyping**  
製作雛型



**Role-playing**  
角色扮演



**Testing and Evaluating** Ⓟ  
測試與評估



**Concept Poster** Ⓟ  
概念海報



**Pitching** Ⓟ  
推銷方案



## Prototyping 製作雛型

Prototyping is one of the best methods to realise and test your ideas before it is officially launched. In fact, many design thinking experts suggest making prototypes “early, ugly and often”, which means that you do not have to spend too much time to craft a perfect prototype.

Your prototype could be a physical model, sketches or a scenario, depending on the nature of your solution. The main purpose is to demonstrate the components and prompt you to consider which parts can be improved to meet the users’ needs.

Prototypes are also effective tool for pitching. They let the audience register to your ideas visually and see the advantages of the solution. They also let you get feedback from prospective users more effectively in order to perfect your idea.

### Outcome

Below are some common methods for prototyping.

- **Storyboard**

Present how users would interact with your solution in a sequential story with drawings and text

- **Model**

A 3-dimensional representation of your solution

- **Paper prototypes**

For example, a mock-up of an app interface showing the user navigation pathway

製作雛型是其中一個重要方法，在方案正式推出前，將概念化成實體，進行測試。不少設計思維專家都建議過程中要盡早製作雛型，毋須太着重外觀，而且應多作嘗試。換而言之，你不必此刻耗費大量時間去製作一個完美的雛型。

視乎你的方案種類，你的雛型可以是一個實體模型、一張草圖或一個情境。此方法的主要目的在於呈現方案中的元素，刺激你思考當中哪些元素可以改良，以更符合用家需要。

雛型亦是推銷方案時的有效工具，讓觀眾親眼目睹你的意念，掌握方案優點。它們亦讓你更有效向潛在用家收集意見，改良方案。

### 成果

以下是幾種常見的雛型類別：

- **故事板**

透過連環故事圖，以圖畫和文字呈現用家與方案的互動

- **模型**

以立體模型呈現你的方案

- **紙板雛型**

例如，可以用紙板製作手機應用程式的模擬界面，模擬用家瀏覽路徑

## Role-playing 角色扮演

If you are working in groups, role-playing would be a fun thing to try. You will act out your solution to others in a scenario, demonstrating how users would interact while articulating the details. Build makeshift props to help you communicate your ideas or build the environment where your solution would take place.

By acting out the scenario, the audience will have a clear impression and may even have questions regarding the solution. It shares your vision to others and persuades them to buy into your proposal. You may also use the previously developed personas to make the story more realistic and relevant.

### Outcome

About 3-5 minute act-out story illustrating your solution. Include characters that are relevant to the situation.

角色扮演是個有趣方式，讓進行設計思維的小組展示想法。小組將會向其他人演繹方案運作的情況，示範當中的用家互動，清晰地展示細節。你可以製作簡單道具，或搭建方案進行的場境，協助你表達意念。

透過情境演繹，觀眾會對方案有更確切理解，甚至會提出問題。它將你的願景分享出去，說服其他人支持方案。你亦可以將之前發展的用家人物誌化成角色，讓故事更能如實反映狀況。

### 成果

一個約 3-5 分鐘的情境演繹，呈現方案的實際運作，並加入相關角色。

#### Tips 小貼士

To make your story's narrative compelling, you can follow this typical story arc.

你可以參考以下典型故事情節鋪排，讓你的情境演繹更引人入勝：





## Testing and Evaluating

### 測試與評估

Share your concept or show your prototype to the users. Capture their feedback systematically in a grid to help us identify the strengths and potentials. Try to give input in all four quadrants and evaluate how well the concept performed in from different angles.





向用家分享你的概念或雛型，聆聽他們想法。將收集到的意見寫在方格陣上，有系統地分辨出概念的優點與可能性。嘗試在四格都填寫意見，從多角度評估概念。

### Outcome

Collect user feedback and sort them in the evaluation matrix below.

### 成果

將收集到的用家意見寫在以下的評估方格陣內。

 <p><b>What worked?</b> 哪些部份成功？</p>	 <p><b>What didn't work?</b> 哪些部份不成功？</p>
 <p><b>What we don't understand yet?</b> 哪些東西我們尚未清楚了解？</p>	 <p><b>What new ideas should we develop or further improve?</b> 哪些新想法可以發展或再改善？</p>



## **Concept Poster** 概念海報

Present your concept in a poster to help people understand your key propositions at a glance. This can help persuade people to buy into your idea.

以海報來呈現你的概念，讓大家一目了然，理解你的主要提議。它能幫助你整理解決方案的優點，說服其他人採納想法。

### Outcome

Finish a poster similar to the template below.

### 成果

參考以下範例，完成海報。

**Concept title 概念名稱**

*give an attractive name to your solution 為你的方案取一個吸引的名字*

<p><b>Description of the concept 概念介紹</b></p> <div style="background-color: #f5d7d7; padding: 10px; text-align: center;"> <p><i>concisely describe its key attributes 簡要地描述它的主要特點</i></p> </div>	<p><b>The target users 目標用家</b></p> <div style="background-color: #f5d7d7; padding: 10px; text-align: center;"> <p><i>can be user types or multiple users 可以用家類別或多類用家</i></p> </div>
--	--

**Tagline 標題**

*a catchy tagline to summarise the effects / benefits that it provides the users  
一句搶耳的標題來概括它為用家帶來的效果或好處*

**Drawing or collage with an explanation of key components  
手繪或拼貼圖介紹主要組成部份**

*be visual to draw audience's attention  
以具體圖像吸引觀眾注意*



## Pitching 推銷方案

Before your solution can be rolled out, you might have to seek your seniors' endorsement or companions' support. Alternatively, you might also need to look for resources. Pitching is what you need to do. Present your ideas engagingly and let your listeners understand why your plan works, its potential benefits, feasibility and viability, etc.

For example, innovators often do elevator pitch, i.e. to capture the attention of the listeners or potential investors within the time of an "elevator ride". You learn to summarise your ideas succinctly. Pitching can also be supported by slideshow presentation, or a poster stating your main proposition. The key point lies in the power of storytelling.

要將方案成功推出，你可能需要事先得得到上級或同儕支持，又或尋求額外資源。這個時候，你便需要向人推銷方案。你需要有趣生動地介紹方案，讓觀眾了解方案的運作方式、潛在優點、技術及財政可行性等。

例如，不少創新者都會進行「升降機推銷」，在一趟升降機旅程的限時內，有效地介紹方案，並引起觀眾或潛在投資者的注意。當中技巧是要言簡意賅地綜合方案重點。你亦可以借用投影片簡報或簡述方案主張的海報作輔助。推銷的成功要素在於敘事技巧。

### Outcome

A storytelling session with clear proposition of solution.

### 成果

清楚地以故事敘述你的方案重點。

( *Your project's title* 你的方案題目 )

is the only 是唯一的 ( *what is it* 方案性質 )

that 能夠 ( *what does it do* 方案運作 )

for 讓 ( *who is your main audience* 目標對象 )

who 可以 ( *what do they need* 目標對象的需要 )

so that 來 ( *what will they be able to achieve* 目標對象透過方案能達到的目標 )

### Example 例子

"RE/SOURCE" is the only app **that** lists out free secondhand products **for** locals **who** want to exchange unused objects at home **so that** wastage can be reduced and money can be saved.

「易搜」是唯一的應用程式，能夠列出免費的二手物品，讓本地用家可以交換家中多餘物件，來減少浪費和節省金錢。

\* You may realise that this statement corresponds to the design brief we have devised in the Define stage.

你可有發現此陳述與較早前在「定義」階段中制訂的設計大綱互相呼應？

CONCLUSION

# CONCLUSION

---

總結







# CONCLUSION 總結

***DESIGN is  
the best way to DECIDE.  
And it is an iterative process.***

設計是下決定的最佳辦法，並且是個反覆改進的過程

Congratulations! You have completed your design thinking journey and come up with a new and innovative solution to your problem! Let's get your solution up and running soon! Keep in mind the four stages we have gone through - Discover, Define, Develop and Deliver. The process is iterative and you are advised to return to earlier stages again to refine your solution after gaining new insights from testing. You may also apply design thinking in your upcoming tasks.

恭喜你完成設計思維旅程，為你的問題帶來創新解決方案！現在就將你的方案盡快實踐推行吧！記得我們經歷過的四個階段——探索、定義、構想和執行。這個過程可以不斷重覆。我們建議你在測試中獲得意見和新觀察後，不時回到較早階段，反覆改良方案。未來，你亦可以將設計思維應用到不同工作上。

## Design Thinking for Different Sectors

This guidebook is just a generic starter for everyone to get in touch with this creative problem-solving method. We have provided an overview of the stages and some common tools. For those who are looking for more specific guides on applying design thinking in their particular environment, here is a suggested roadmap for you.

## 設計思維應用到不同界別

這本手冊只是個簡單介紹，讓大家初步認識這個創意解難方法。我們概括地介紹了各個階段的流程和常用方法。假如你希望將設計思維應用到特定行業場景，可以參考以下建議路線圖。

### Suggested routes 建議路徑

#### Business Innovation

e.g. to create a new product

#### 商業創新

例如：創造新產品



#### Public Innovation

e.g. to revamp a public facility

#### 公共創新

例如：革新公共設施





## Tech Innovation

e.g. to create a new application

## 科技創新

例如：開發全新應用程式

Card Sort  
User Journey Mapping

User Personas  
Devising Design Brief

Cross-pollination  
Draw It, Build It

Prototyping  
Pitching

## Healthcare

e.g. to improve hospital services

## 康健醫療

例如：改善醫院服務

User Journey Mapping  
Photo Safari

"How might we..."  
Stakeholder Mapping

Lotus Blossom  
Mini Storyboard

Role-playing  
Pitching

## Education

e.g. to help relieve teachers' stress

## 教育

例如：紓緩老師壓力

Interview / Shadowing  
Card Sort

Stakeholder Mapping  
Devising Design Brief

Lotus Blossom  
Draw It, Build It

Role-playing  
Concept Poster

## Service Design

e.g. to offer new services catering changing needs

## 服務設計

例如：因應轉變需要，提供新服務

User Journey Mapping  
Interview / Shadowing

User Personas  
Devising Design Brief

Cross-pollination  
Mini Storyboard

Role-playing  
Pitching

## Reference 參考資料

(in alphabetical order 按英文字母次序排列)

IDEO	<a href="https://www.ideo.com/">https://www.ideo.com/</a>
NESTA	<a href="https://www.nesta.org.uk/">https://www.nesta.org.uk/</a>
Stanford d.school	<a href="https://dschool.stanford.edu/">https://dschool.stanford.edu/</a>
UK Design Council	<a href="https://www.designcouncil.org.uk/">https://www.designcouncil.org.uk/</a>

First print run in March 2020

© 2020 Hong Kong Design Centre 香港設計中心 | All rights reserved 版權所有 不得翻印

Hong Kong Design Centre continues to equip different sectors with more design thinking knowledge through workshops and publications. Stay tuned!

## About Hong Kong Design Centre

Hong Kong Design Centre (HKDC) is a non-governmental organisation, and was founded in 2001 as a strategic partner of the HKSAR Government in establishing Hong Kong as an international centre of design excellence in Asia. Our public mission is to promote wider and strategic use of design and design thinking to create business value and improve societal well-being, with the aim of advancing Hong Kong as an international design centre in Asia.

## About Institute of Design Knowledge

To work towards HKDC's goal of advancing design thinking in Hong Kong, the Institute of Design Knowledge (IDK) serves as a learning platform offering specialised training on the topics of innovation, design management, and creative leadership. IDK courses provide professional resources to help executives and business leaders thrive in the dynamic market by prompting them to explore, develop and sustain innovative approaches in the workplace.

## About DTBase

Initiated by the Institute of Design Knowledge, DTBase is a social media platform of information and inspiration on Design Thinking, Innovation & Creativity.

香港設計中心將會繼續透過工作坊及出版等，為各行各業帶來更多設計思維知識。大家記得密切留意！

## 關於香港設計中心

香港設計中心為於 2001 年成立的非政府機構，擔當香港特別行政區政府的策略伙伴，以推動香港成為亞洲區內享譽國際的設計之都為目標。公共使命是推動社會更廣泛和具策略性地運用設計及設計思維，為業界創造價值及改善社會福祉，旨在推動香港成為亞洲區內的國際設計中心。

## 關於 Institute of Design Knowledge

設計知識學院旨在建立廣闊的學習平台，提供涵蓋創新、設計管理及創意領袖等議題的專業培訓，貫徹香港設計中心啟迪香港設計思維的使命。IDK 為行政人員及商界領袖提供專業培訓及資源，鼓勵他們在職場上探索、發展和持續實行創新方案，於瞬息萬變的市場中長足發展。

## 關於 DTBase

DTBase 是由設計知識學院建立的社交媒體平台，分享設計思維、創新與創意的資訊。

### Keep in touch 保持聯絡

Don't forget to follow us on social media!  
記得追蹤我們的社交媒體！

Hashtag **#DTGetHandsOn**

Share your design thinking product with us  
跟我們分享你的設計思維成果



**Institute of Design Knowledge**



**dt.base**



**www.idk-hkdc.org**

**www.hkdesigncentre.org**

