

Design Methodologies

The Double Diamond { Discover : insight into the problem → divergent thinking
Define : the area to focus upon → convergent thinking
Develop : potential solutions → divergent thinking
Deliver : solutions that work → convergent thinking

Design thinking models. human-centered

empathize → define → ideate → prototype → test.

5c model : collect . comprehend . conceptualize . create . circulate .

early stage : transforming vague problems into clear goals through research, observation, user interaction.

mid-term stage : ① explore ideas extensively ② focus on core solutions through screening criteria

later stage : verifying the actual effect of the design through concrete results such as prototypes and samples.

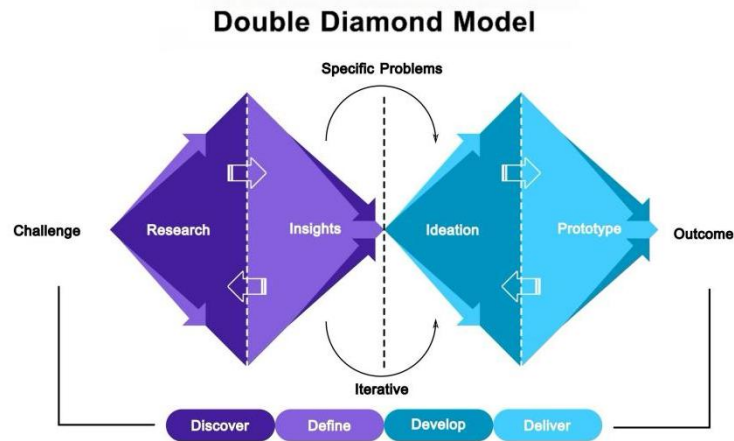
Mess / design spiggle → ordered exploration based on system methodology.
↓
rapid trial and error → obtaining feedback
→ continuous optimization.

If applied in the actual practice of interactive design for digital products

empathize : identify user's pain points in usage through user behavior analysis and scenario observation.

define : sort out the core user journey, determine the optimization priority.

ideate : draw multiple interface sketches and user flowcharts to explore different interaction logics.



Week 02 Affordance

Affordance

Lidwell, Holden & Butler ▲ connection between features and functions.
not limited to the physical world, and can be extended to the digital field

	physical affordance	digital affordance.
essence	objective properties of an object	Combination of design metaphors for virtual interface + user experience.
Perception mode	direct sensory. (touch, vision)	visual/auditory clues + associations
example	book. → read. carry. stack cup → hold. grip	APP button : click Scroll bar : drag

Jenet Murray, 'Inventing The Medium'

{

procedural

participatory

spatial

encyclopaedic.

Telling users how to use ~~use~~ → enabling users to perceive how to use it through features.
confused → symbols. behavior clues.

Speculative Design.

Anthony Dunne & Fiona Raby  is a **attitude** rather than a method.
design for what things could be like.

Phil Balagtas → is a way of presenting possibilities that helps people cope with **potential challenges** and move towards a more ideal and responsible future.

Michael Smyth → With 'tangible future scenarios' as the core, humanize the future and reveal needs, values, priorities.

Shihan Zhang → Inspire new perspectives through immersive future narratives.

	Affirmative Design.	Critical Design
goal	solve problems. strengthen current situation	identify problems. challenge the status quo
service object	industrial / commercial system	public social discussion
design positioning	process. → provide the answer	medium → raise a question
future narrative	science fiction	social fiction
final value	practical. innovative. consumption-promoting	speculation. education. promotion of discussion.

MITV

Types of invisible signals:

visual: Commercial signs. Informal signs. handwritten notes, architectural styles.

sensory: Sounds, environmental atmosphere.

social/cultural: Community/urban identity. advertisements on bulletin boards. Street jargon. public art projects.

functional: Wayfinding markers. design details for emergency protection, obscure symbols used by professionals.

psychogeography

Study the impact of the physical environment on people's feelings and behaviors.

Core claim: What determines a person's behavior in a specific scenario is the scenario itself.

Storytelling in Design.

Traditional classic case: Lascaux caves
Bayeux tapestry
Minard's map. — Complete information can be conveyed even without words.
— 'width + color' presents the changes in the strength of the French army.

Modern design case: Surfshark.
Spotify Wrapped
The Sounds of CDMX
Dumin
cross-media adaptation.
personalized narrative.

Core elements of narrative design.

protagonist. Core requirement: relatable.
type: hero, anti-hero, villain.
Key design point: let the audience identify with the protagonist. form an emotional connection.

antagonist Core function: creating conflicts to drive the development of the story.

perspective & point of view. { first person.
second person
third person

Dramatic Arc: exposition → rising action → climax → falling action → denouement.

Emotional Investment

core goal: arouse emotions (empathy, distress...) in the audience.

User Centred Design

Core definition: understanding users' needs, ways of thinking, behaviors, and integrating this understanding into every link of the design process. User first.

Core goal: By meeting users' need, create a convenient, effective, and warm experience, while bringing commercial value and competitive advantages to enterprises.

PACT

- people** specific user group. → attention to their characteristics (age, habits, abilities, needs).
- activities** specific task/action that user needs to complete.
- contexts** environment where users carry out activities.
- technologies** tools / media used by users.

user research.
experience mapping.
user dimensions



key tools and methods.

The quantified Self.

quantified self: By tracking and recording various types of personal life data, abstract self-experiences (*behaviors, states, emotions*) are converted into analyzable quantitative information.

{ Self tracking.
life logging
life caching
egocentric vision } > data-driven self-perception.

type:

{ Volume
Velocity
Variety
Value
Veracity

health, wellness: sleep time, weight,
number of steps,
calories burned,
heart rate.

life behaviors: consumption amount,
number of books read,
duration of listening to music
time spent using digital devices

data selection:

high relevance + easy collection
+ Storytelling.

Data Visualisation

Core: making complex data understandable and insightful.

Workflow: clarify the brief → process the data. → establish the editing idea
→ develop and design solutions.

{ **describe**: present the basic characteristics of the data.
compare: analyze the differences between different datasets.
analyse: mining the associative relationships between data.
explore relationships: patterns. Causality. trends behind the data.

gestalt principles: {
pragnanz.
proximity.
similarity.
closure.
continuation
common fate.

data → information → insight → story.

Interface Design.

Dieter Rams:

- innovative** → based on user needs and technical possibilities.
- makes a product useful** → taking into account ease of use and security.
- aesthetic** → consistent with product characteristics and user aesthetics.
- understandable**
- unobtrusive**
- honest** → interface feedback is consistent with the actual effect.
- long-lasting**.
- thorough** → pay attention to details.
- environmentally-friendly** → pursue sustainability.
- as little design as possible** → focus on core functions.



future trends

- hybridization
- democratization of design
- connected.

historical development:

humans adapting to products → products adapting to humans.