Why Design Thinking?
What is the critical function of toilet paper?
The more experience you have, the less likely you are to change your behavior.
we got stuck...
We spend so much time teaching people how to answer questions that we often neglect to teach them how to ask them.
WICKED PROBLEMS

noun | wik-id | prob-luhm

a problem that is **difficult or impossible to solve** because of
- incomplete,
- contradictory, and
- changing requirements

that are often difficult to recognize
Developing a new skillset...

Creativity
Innovation can’t be automated.

Pattern Interrupt
Flexibility to identify and adopt different perspectives.

Forbes
Leadership Survey: Over 77% Of CEOs Are Looking For These Two Critical Skills

Chris Westfall  Contributor @ Careers

Top 10 skills of 2025

- Analytical thinking and innovation
- Active learning and learning strategies
- Complex problem-solving
- Critical thinking and analysis
- Creativity, originality and initiative
- Leadership and social influence
- Technology use, monitoring and control
- Technology design and programming
- Resilience, stress tolerance and flexibility
- Reasoning, problem-solving and ideation

Developing a new skillset...

"Leaders will be blindsided if they rely only on their past experience or expertise when making decisions."

1. Be a catalyst, not a planner
2. Trust and let go
3. Be an Explorer
4. Be Courageous
5. Be Present
6. Live Values with Conviction

Leadership qualities necessary for the digital era
We asked survey respondents to identify the leadership traits most critical to success in digital transformation.

- 71% Adaptability
- 48% Curiosity
- 47% Creativity
- 43% Comfort with ambiguity

Source: Leadership in the Digital Era survey, n=1,090
Mindsets

- Be Human Centred
- Be Collaborative
- Re-Frame
- Navigate Ambiguity
- Play Deliberately
- Be Curious
- Make Tangible
- Take Action
- Be Reflexive
- Be Resilient
What is a Mindset?

• A characteristic mental attitude that determines how you will interpret and respond to situations

• Design attitude as ‘expectations and orientations, one brings to a design project’
  (Boland and Collopy 2004:9)

• Configurations of cognitive procedures
  (Gollwitzer 1991)

• -> do I want to do x?
• -> do I believe that I can pull it off?
Garbuio et al. (2018) emphasise the importance of design cognition, including the cognitive acts of framing, analogical reasoning, abductive reasoning and mental stimulation. They find that teaching thinking modes and mindsets is more effective than teaching processes and demonstrating tools, which are often not easily transferable to other domains.
Human-centred

Ground and frame your thinking and doing in the view of humans, their needs, context and feedback.
Curious

Explore knowledge, novel possibilities and experiences to learn and make sense of the world.
Reflexive

Be able to stand back and critically question own assumptions and actions, their impact on others and ways for improvement.
Navigate Uncertainty

Deal comfortably with ambiguous and complex situations.
Collaborative

Believe in working together toward a shared purpose and solution; be effective in the service of the team's purpose
Resilient

Withstand or recover from difficult conditions and be hopeful and confident about outcomes.
Take Action

Initiate activities and getting things done to improve situations.
Play deliberately

Choose open, joyful and fun approaches to tasks over being excessively serious about knowledge creation and diffusion.
Make Tangible

Externalize information, ideas and concepts by activating all human senses.
Mindsets

Be Human Centred
Be Collaborative
Navigate Ambiguity
Re-Frame

Be Reflexive
Play Deliberately
Be Curious

Be Resilient
Make Tangible
Take Action
CONTEXT MATTERS
MIND THE GAPS
“We need to be more human! That is our competitive advantage.”

Dr Vivian Ming
Neuroscientist and AI Expert
Potential barriers to empathy work:

- reality is complex
- there are different perspectives
- perception is limited
- subject to conscious / unconscious self-deception
- no direct access to latent needs
design thinking?
“… a way of finding human needs and creating new solutions using the tools and mindsets of design practitioners. It’s a methodology and using it we can address a wide variety of personal, social and business challenges in creative new ways.”

— David Kelly (IDEO & Stanford d.school)
3 slides
design thinking

Ask yourself two questions:
Who are we designing for?
What do they need*?
Determine what your customer needs, and work backwards.

Jeff Bezos
WORKING BACKWARDS
“Most companies write the software, they get it all working, and then they throw it over the wall to the marketing department, saying ‘here is what we built, go write the press release.’ That process is the one that’s actually backwards.”

Jeff Bezos
The 5 Questions

Working Backwards Questions

Who is the customer?
What is the customer problem or opportunity?
Is the most important customer benefit clear?
How do you know what customers need or want?
What does the customer experience look like?
• Focus on the customer need
• The customer quote is key
• Leap into the future: Think BIG
• Avoid jargon
• Say it simply and clearly
Press Release

We will optimize the customer experience to enable enhanced accuracy in Buy-Box pricing to facilitate increased rapidity and elevated confidence in purchase decisioning by cross-border retail customers.
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Amazon makes it easier for international shoppers to decide what to purchase by showing them the total landed cost of an item. Total landed cost includes all taxes, duties, and shipping costs.
• Include both customer FAQs and stakeholder FAQs
• Include the hard questions
• Share your Press Release early to gather questions
Visuals

- Rough idea – rough drawing
- Match fidelity to maturity of your idea
- Don’t be afraid to be provocative
- Create discussion
It’s a conversation starter to achieve **clarity** and **customer focus**.
Babies need an average of about 3,800 disposable diapers across seven sizes in three years, and remain in a size anywhere between a few weeks to several months. A baby might need just one box of size 1 diapers but need as many as eight boxes of size 4 diapers. To complicate matters, weight — and not age — is the best predictor of a baby’s diaper size.

With Amazon’s Subscribe & Save program, customers previously created diaper subscriptions in a specific size which was replenished until the customer decided it was time to move up a size. This meant that parents needed to anticipate the change in diaper size and either cancel their existing subscription to create a new one, or go to the Manage Your Subscriptions page to update the existing diaper subscription with the new size. This caused endless frustration for parents, added to the stress of having a new baby, and the experience ran counter to the concept of a subscription that should run smoothly with minimal touchpoints.

With the introduction of the new auto-sizing feature, customers who subscribe to diapers will be asked to provide their child’s weight, in addition to the existing child info. They will then be able to set up a single subscription that will take them through the various sizes at the right time. Customers will be notified before the next box of diapers is due to ship that it has automatically sized up — if it’s too soon, there will be a simple one-click process to keep the current size.

“I love using Subscribe & Save. But for my older child, I have had to return boxes that were one size too small, which actually increased my work load,” says Mara Steiner, who has used Subscribe & Save for her baby needs for several years. “As I expect my second child, I am very excited at the thought of having the right size diapers show up at my door each month. New parents have enough to do without having to keep calculating which size of diapers they should be buying for their baby.”

“We want parents to always have the right sized diaper for their child at the right time,” said Greg, director of Subscribe & Save. “This single subscription experience for diapers will ensure that customers can depend upon Subscribe & Save to do the work for them, and never have to worry about changing size as their children grow.”

Amazon’s Subscribe & Save ships thousands of items to their customers on a regular basis with additional discounts. With the diaper subscription service, the program has simplified the experience for new parents.

To learn more about Subscribe & Save’s diaper subscriptions auto-sizing, go to www.amazon.com/subscriptions.
design thinking

4 layers:

- a collection of tools
- supported by a process
- developing a mindset
- to practice creative confidence
design
DOing

The outcome of design DOing:

creating change agents
(individual level)

changing the way we work
(team level)

designing desirable solutions
(content level)
People
Who are we designing for?

Start with **USER NEEDS**
Place
Space
Space
Space
Process
Design Thinking Process – Looks Like

**Problem Space**
designing the right thing

**Solution Space**
designing the thing right
Design Thinking Process – Feels Like

Uncertainty / patterns / insights

Clarity / Focus

Research

Concept

Design
The Knowledge Funnel – Roger Martin

Mystery

Validity

Heuristic

Reliability

Algorithm
Trust the Process

Problem Space
- designing the right thing

Solution Space
- designing the thing right
Ways of Working

Parkinson’s Law
work expands so as to fill the time available for its completion

Use time as a positive constraint

Pareto Principle
20% of your input (time, resources, effort) accounts for 80% of the output (results, rewards).

Aim for done, not perfect.
The Business Case for Design Thinking

Source: Copyright © Design Thinking Process and Methods 4th Edition, Robert Curedale, 2018
https://doc-edu.org/product/design-thinking-process-methods-4th-edition Adapted from combining data from studies by DMI Design Index, UK Design Council, Potsdam University and Danish Design Center Design Ladder.
The Business Case for Design Thinking

Companies with top-quartile McKinsey Design Index scores outperformed industry-benchmark growth by as much as two to one.

1The envelope was set by the minimums and maximums of three independent data sets: MDI 2nd, 3rd, and 4th quartiles; the S&P 500; and a McKinsey corporate database of 40,000 companies.

McKinsey & Company
What kind of experience do you want to have?
Case Study
Talking to Humans

* develop empathy
We need electricity for radio, TV and to charge our phones.

The demand for electricity is way higher!

There are no banks, and houses can't be locked.

Money must be spent when it is earned.

People look after and respect their valuables.

Private property is maintained far better than rentals.

Existing PV panels in the area often don’t work anymore.

There is no support infrastructure to maintain panels.

Our key insight from this...
Rent-to-own model

Pay as you go

People have an incentive to look after it

Can be paid for weekly or monthly via mobile payment

Can provide higher quality products
“Our customers just don’t want to do it themselves as they don’t want to be responsible if something goes wrong.”

There are local “repairmen” in every community – we can train them to do the installations and repairs.
The Last Mile

No street names or house numbers

Customers know the most cost-efficient route home

This is not our job.
* there is always something you can improve / do differently
Why Design Thinking...?

1. User-Centred

- Explicit focus on understanding the needs and Pain Points of the ‘USER’
- Prioritizes Desirability
2. The Process

• Easy to understand
• Provides structure
• Encourages Iteration

Why Design Thinking...?
3. Collaborative

- Multidisciplinary teams mean that all parts of the business are given a voice.
- Regular engagement with and feedback from our users means that we are creating the right thing and delivering value.

Why Design Thinking...?
Why Design Thinking...?

4. Manage Risk

• Speed up innovation cycles with low-cost experimentation

• Reduce the risk of spending time and money building the wrong thing
Why Design Thinking...?

5. Creative Problem-Solving Approach

• Reinforces innovation by exploring hidden assumptions and actively seeking out new opportunities

• Generates more creative options to choose from (not just what we’ve always done)
THANK YOU