Design thinking Introduction workshop



Product design consultant







ProductBeat

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You won't need your laptops You won't need your phones Take a day off of deadlines Learn something new Keep an open mind

Slides and materials will be shared



ocay's program

9:45 (15 min) 10:00

12:00 (1 h) 13:00 (1 h) 14:00 (1 h) 15:00 (1 h 30 min)

16:45 (30 min) 17:15 (45 min) Warm-up

What is design and why is it important?

COFFEE BREAK

Journey mapping workshop

LUNCH BREAK

Design thinking process

Idea generation workshop

COFFEE BREAK

Implementing design thinking Your topics, freeform feedback + Q&A

Let's warm up





Stand up!

Take out your keys

Who are you?

What did you do over the weekend?

What is each key for?

Warm-up workshop



Tell us 3 things about yourself: 2 true things, one lie Write down which of the other people's things you think is a lie

Warm-up workshop



Neet Tony



always wanted

- Tony is a tattoo artist
- You're finally getting him to do the tattoo you
- Instruct Tony with a picture and description of your next, most beloved tattoo



Why did you come here? Have a think, write the answer on post-its



Have you ever started a project that turned out to be more complicated than you thought?



Examples?

New product? How to make a digital business grow? New customer? How to present campaign results? New processes? How to get 200 people to work towards one goal? Old processes? How to deliver new users with OOH campaigns? New value propositions? How to get a customer to trust our expertise? New competitors? How to automate a campaign booking process? New O or KR?





We'll come back to these topics



Please participate!



What does design mean to you?



Why is design



What is design actually?



How do you create successful products for humans?



What do we mean by product? Solution to a problem that works and that people care about



Let's talk about Norman doors

https://99percentinvisible.org/article/norman-doors-dont-know-whether-pushpull-blame-design/

People are weird

Especially people other than you

People never behave the way you want

All your users are free-thinking human beings

motivations, impairments, pet peeves

- They all have their own thoughts, emotions, needs and wants, interests,



What can we do?

- People are individuals and individuals are weird
- But you can research, predict and take advantage of their behavior
- You can choose a narrow user group

You can think in behaviors, roles, user groups, personality types, personas



Humans are Lemmings



Is this door a good or a bad product?





If you continue to get it wrong

and if other people continue to get it wrong

good sign that it's a really bad door



No, it's not a good door



This is so obvious... in *retrospect* when we talk about someone else's product



Our challenge for today How do we make sure our own products aren't Norman doors? Before we manufacture them?





What's the answer?





Design



Things we call design

Graphic design

Motion design

UI design

UX design

Typographic design

Information architecture

List goes on...

- What are these?
- They're all activities
- Specific fields, disciplines, vocations
- Compare to frontend development, online marketing, financial controlling...



Activities are important



But.



Some time, somewhere

- a project manager said the doors were shipped on time
- a designer said the handles are consistent with other doors
- an engineer said the doors were built to spec
- a QA person said the doors work as intended
- a CS agent who said "thank you for your feedback"
- a head of product said "Spotify's doors open this way"
- …and they're all correct, and doing good work

Activities are not enough to solve new problems



Activities are not enough to create great products


We don't deliver Shit



We deliver products that work and work for humans



What do we do when activities are not enough?



Design thinking



Many models, one



In the process of trying to define and build a successful product, you form hypotheses in all five of these areas (whether you realize you are doing so or not).

The Product-Market Fit Pyramid helps you be more explicit and rigorous about your hypotheses.

https://leanstartup.co/a-playbook-for-achieving-product-market-fit/







Have you heard of "Jobs To Be Done"?

Jobs-to-be-done describe the tasks that a product or service is carrying out.

People don't just buy products or just want to use a certain service.

They "hire" them to do a job.

Clayton Christensen



Jobs to be Done is a theory of consumer action. It describes the mechanisms that cause a consumer to adopt an innovation.



A good product is a good solution to a meaningful problem



A good product is a solution that works and that people care about



Good product has a good design



What is good





Design as a quality of a product

"This door is a shitty design"

"This site is so well designed"

"This vase has such an amazing design"



Can we break this down 2



What does it mean to have good design?



Besign

•

Π

Why we love (or hate) everyday things

60

0

By the author of The Design of Everyday Things

REVISED & EXPANDED EDITION

Maria Maria

The DESIGN of EVERYDAY THINGS

DON NORMAN





https://www.youtube.com/watch?v=PqVfLqu1l20

 \bullet

How do we know if this teapot is a good product?



Good design works for humans

On a **visceral** level On a **behavioral** level On a **reflective** level





Visceral









Behavioral





Reflectiv





Is this teapot a good product? Why?



Which design?

design of your product

The design either works or it doesn't (on a spectrum)

It is valid to talk about design as one quality of a product

user-centric

For the most part, your customers don't break down and analyse the

- Distinctions between visual, motion and usability design are not very



A good product works for humans on visceral, behavioral and reflective levels



But we also won't talk about this today



Design thinking



Design has one more meaning



We believe that good design makes the world a better place. That holds true also at this airport Therefore, we are developing the design of the Security Control. Please tell the security control official how this works for you. We are listening closely in order to make Helsinki Airport even better for us all.







515 Photos and videos















Helsinki Airport 😳 @HebinkiAirport

System failure @eurocontrol causes delays @HelsinkiAirport. Flights to and from Asia as well as domestic flights are operated as normally.

6:10 PM - 3 Apr 2018





Tweet your reply

Helsinki Alrport 😕 Ohisisinki/Viport. Due to system failure of Reurocontrol there are flight restrictions also @HelsinkiAirport. Please propare for delays, builtier.com/eurocontrol/st....





















a descent of the second





Follow

Design is a mindset





Design is an approach to problem solving



Design is the methodology of moving from a poorlyunderstood problem space to finding one solution that works great



Design as problem solver: The Gap as a problem to be solved

UX

Feature Set

Value Proposition

Underserved Needs

Target Customer



d

And how it?

And how do we do


How do we get from status **QUO** to something that works on visceral, behavioral and reflective levels for humans?



Solution space Wealth of options to ideate and test









Design is discovering and testing multiple ideas





Design is creative problem Solving



This is what we call design thinking









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d.

Customer journey mapping



d

Customer journey mapping

customer as they experience your solution

Simple framework to help you think through key moments for your



What does a journey map look like?













Why do we journey map?



To understand what's happening and learn from it



To focus on users and business value



To empathise



Choose your problem and scenario to research



Don't get stuck Write down everything your team can think of



Get your post-its ready



Key activities



Phrase as a verb i.e. "downloads the app"

The flow of steps is similar to recipe instructions

Don't be concerned with the touchpoint i.e. mobile, inperson, etc.

Don't try to list the steps of your entire product

Think from the customer's point of view







Group your customer's steps into 3-7 phases

Think of your customer's mental state over the course of the journey

Try to summarise the steps from your user's perspective, e.g. "Starting out" over "Onboarding"

If you can't think of a phase, do before/during/after a key event such as "payment"









A goal is what will proper a user from one step to the next

Write one goal per sticky and arrange them between each step to reflect that they propel a user between two steps

Goals and motivations

- Write one goal per sticky
 - This will help you understand what is happening behind the scenes. Remember, humans need inherent motivation to do things





Pain points keep a user from moving to the next step

Arrange pain points *between* the steps to reflect that they are obstacles between two steps

- Write one pain point per sticky
- t Pain points help you understand why your product or service might not be effective or work as intended in the wild 96



Assumptions and expectations



What will your customer need for a successful experience at each step?

There are things that customer will expect as a given, the assumptions.



These will often be industry-specific insights.

These should be checked often with your customer.



Emotions and feelings



Keep it simple: one-word emotions or emojis

Can be multiple emotions per step

Think about the spectrum of emotions that the customer could be feeling at each step

These should be checked often with your customer





Emotions summary



Use the emotions from your post-its to draw user's journey on the chart

Don't overthink it, it's not meant to be scientific

Repeat this exercise with customers from different target groups or personas



How did you like



Was it useful?













Can be used to model any service flow from customer perspective Maps out one customer flow - *not* a complex architecture Find pain points / areas of focus of existing solution Works for validating your new solution Works for researching status quo (when you have no solution yet)

Journey mapping



Service flows are rarely obvious and have multiple touch points Helpful as a starting point or to explain a process to others Avoids getting lost in too much detail or specifics Produces a testable journey Great team exercise

Journey mapping





d.
Solving problems s nothing new



Case study from 100 years ago

industrialism has hundreds of years of educational stories

https://youtu.be/jFG02bh6oQk?t=19s

Listen carefully the language used in the video

- Before we had apps, scrum, Slack and Trello, history of engineering and



Creating products for humans has always been complex





Case study from 100 years ago

Everything Ian said is so obvious 100 years later How do we figure this out before we manufacture our product?



The design thinking process



Design thinking is a methodology for problem solving











EXAMINE

Dig into the problem. Look at the history, the context, the objects, and (most importantly) the people involved.

UNDERSTAND

Go deeper and find patterns. Establish open questions to build on.

IDEATE

Have lots of ideas, good and bad. Don't stop at the obvious or the impossible.



Try some things out. Make some things. Fail cheap and fast.





Empathize THE HEART OF DESIGN





Define REFRAME THE PROBLEM





Ideate BEYOND BASIC BRAINSTORMS





Prototype GET SMARTER, FASTER





1. WHAT IS OUR PEOPLE'S ATTITUDE?

One of the outstanding things about DCMN are the people working here. The atmosphere is open and collaborative and people really enjoy being at the office. Here is why:

- We say thank you
- We listen
- We approach others with empathy
- We try to understand
- We can count on each other

2. WHAT IS OUR BUSINESS ATTITUDE?

You don't have to be serious to deliver great results, but you have to be driven. DCMN's unique vibe helps us to stay successful.

- We take over the market
- We are growth enthusiasts
- We choose the greater good
- We go for the best solution

3. WHAT IS THE DCMN VIBE?

Everybody in the company feels it and everybody cherishes it.

- We don't deliver shit
- We embrace diversity
- We use our voice
- We feel free
- We have fun together



4. HOW DO WE KEEP OUR TEAM SPIRIT UP?

The key to staying successful is an awesome team. These are some key things to keep the spirit up:

- We care for each other
- We talk to each other
- Company success over personal victory!
- No blame game!



5. HOW DO WE EMPOWER INNOVATION?

Staying innovative is a challenge for any company. We love driving things forward and embracing new things. This is how we do it:

- We make time for developing crazy ideas
- We feed hunger for learning
- We stay ahead of the future
- We think beyond borders
- We take risks

6. HOW DO WE IMPROVE?

Apart from staying cutting edge, we want to get better at everything we do. Our recipe is:

- We embrace mistakes
- We appreciate feedback
- We feed back
- We are experts of learning
- We help each other succeed
- We grow consciously

1. WHAT IS OUR PEOPLE'S ATTITUDE?

2. WHAT IS OUR BUSINESS ATTITUDE?

- We take over the market

- We go for the best solution

3. WHAT IS THE DCMN VIBE?

- We don't deliver shit



4. HOW DO WE KEEP OUR **TEAM SPIRIT UP?**



5. HOW DO WE EMPOWER **INNOVATION?**

- We stay ahead of the future

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3. WHAT IS THE DCMN VIBE?



4. HOW DO WE KEEP OUR **TEAM SPIRIT UP?**

– No blame game!



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- We feed hunger for learning

- We take risks

6. HOW DO WE IMPROVE?

- We embrace mistakes

- We appreciate feedback

- We are experts of learning



the act or practice of using your mind to consider design



https://www.dropbox.com/work/DCMN_Team/Product/Reading

Gavin Ambrose Paul Harris









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The design process

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Stage 4 – Pretotype Resolving solutions.

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Themes of thinking

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Information gathering

When conducting research, information can be classified into two outegories: quantitative and cualitative. These help define the size of a target market and its

share-elerioites.

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Design is a process that turns a brief or requirement into a finished product or design solution.

Design is an iterative process and design thinking is present in each stage of the journey from client brief to finished work.

produced for any given brief and these can differ widely in levels of creativity, practicality and budget.

Different solutions can be an differ widely in levels of creativity,



can be identified:

Within the design process, seven steps













Let's go through each step with examples



Stage 1 – Define Establishing what the problem is.

This is the first stage in any design process and almost always involves generating or receiving a design brief.





1. Define

Define the problem

- Question the brief
- Reframe and rewrite
- Ensures shared understanding
- Gets stakeholders/customers/coworkers on the same page
- Helps you course correct yourself along the way









Checklist:

Do you understand what the client is asking for? Does the client understand what they are asking for? Do you agree on the definition of terms? Does the brief have any flaws? Can you manage client expectations?









Product Overview: What is the scope of the project?

The web app will function as an online curated marketplace for candidates and companies. Companies can discover and engage with pre-screened and actively looking talent, while talent can compare job offers from selected companies. Also, talent receive guidance and advice from a Talent Advocate of Try Catch as well as the online tutorials / video's / articles in the platform. The platform will need to integrate with the companies' (applicant tracking) systems.

The product design process will entail style, look and feel, branding manual, wireframes, UI/UX, user testing / prototyping (inVision), pixel perfect design, translating these designs in user stories and coordinating with development.

Objective: What is the product's purpose?

The product enables talent to discover the company they'd like to work. for and get hired by these companies. Companies can hire actively looking high guality talent.

Target User: Who is going to use this?

Predominantly male computer programmers, ranging from 20 till 45 years old, living in Europe (sometimes America's and Asia) that are open for a new job and adventure in (most of the time) a new country. On the other hand, at the company side, it will be mostly female. recruiters, that are responsible for hiring multiple developers per year. These women live in Western Europe, are in their 20s or beginning 30s, communicative, broad social networks and feel important.

Distribution: Where will it be sold?

Europe for companies, global for talent.

End Use: How will this product primarily be used?

By recruiters looking to fill specific roles that they're having a hard time with. By talent that wants a quick and easy solution to see what's available in the market. Eventually this will all be mobile.

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Key Features / Benefits: What features are must haves?

Sign up for both sides. Rich developer and company profiles. Ability to track multiple hiring process for candidates. See matches job < > talent (both sides) Browse candidates. Integrate with ATS (applicant tracking system) of company Communicate with Talent Advocate of Try Catch (talent) Communicate with Account Managers of TC (company) Notifications (new jobs, new match, interview requests accepted, etc.)

Design Language: What is the mood / feeling of the design?

Simple, clean, new, trustworthy, joy, exciting, tech. Light and sometimes colorful.

Extremely easy to use, honest in communication and helpful when things are unclear.

Competition: What other products will it be competing against in the market?

USHired.com Vettery.com

ΕU Honeypot.io Workshape.io

Freelance Toptal.com Upwork.com

- What kind of employer do we want to be?
- What questions do we want applicants to have answered by our web site?
- What do we want to show of DCMN?
- What do we want applicants NOT to concentrate on?
- What kind of company will DCMN be in 9 months when our ideal applicant completes their trial period?
- What kind of applicants do we want to reach?
- What kind of applicants do we NOT want to focus on?
- What is our application process like?
- What other web sites do a good job of communicating similar concepts?
- What other web sites have the kind of look and feel that would work for us?
- What feedback did we frequently get from the old web site?
- What feedback do we now frequently get from the new web site?
- Do we have presentations, social media pages, posters or any other deliverables that do a better job at communicating the important things we should also have on the web site?







Briefing checklist

A good brief should explain what problem we're looking to solve, and for whom. It should touch on the following topics:



Who is this for? Who are the users?

Why are we doing this?

Why is this the most important problem to tackle at this point?



What could go wrong when tackling this?



Is all of this essential, or could we split this and solve one problem at a time?



Why do our users want this? What's the benefit for them?

When this is done, how will users' experience be different from before?

Which metrics do we want to improve with this? E.g. conversion rate, usability, user delight?

What is the root cause? Is it clearly explained in the brief?





WHOD - Comparies who are perpornance-driver (A/D survey, 1-4m, not poor the , when a) - ... have never dose TV before, grew from Sigiel advertising - 50-150% budget pr TU is convinced by purpose WHAT Problems are it solving - Sotured with add trease - ing apprilt to get sitting pricing and 5) performance numbers for TV X-high minimum Ludger) Gaccess to spearl discome & rehard of Dan -D love prices WHAT? - Automates (media dening) -Dexpectation of performance Lood generation tool palation

1) Planny Optimatedon logic 3) Bodeing with chamels TV ads on all 7) VISITORS + new customer







Stage 2 – Research **Collecting background information.**

Once the brief has been defined and agreed, a designer starts to search for information that can be fed into the creative process at the ideate stage. This research can be either quantitative, with hard statistical numbers about the size and composition of target user groups, or qualitative, with information about what that user group buys or consumes and what their lifestyle is like. It may be pertinent to build a mental model of a typical user in order to enable the design team to obtain a good feel for what would appeal to them. This includes factors such as education, career, holiday destinations, musical tastes, aspirations and so on.

Research Ideate Prototype Select Implement Learn Define





2. Research

Understand the problem

Get familiar with the entire problem space Am I the first one to look at this problem? Probably not Get some data. Interview people. Talk out loud, act stupid, be curious







Checklist

Do you have feedback from previous projects? Do you have a statistical composition of the user group? Do you understand the target market? What is the education level of the user group? What is the typical lifestyle of the user group? What are the aspirations of the user group?



















Trending Top Ten Topics - Contacts after booking

Request After Booking	% Δ Last 7 Days 🖕	Last 7 Days	Δ Last 7	% Δ Last 30 Days	Last 30 Days	Δ Last 30
Address of Station	↑ 60%	16	6	↑ 31%	47	11
Refund Status	↑ 40%	7	2	↓ 5%	20	-1
Refund Request	↑ 11%	10	1	↑ 35%	35	9
More info needed of customer	no change	12	0	↑ 6%	54	3
Change Request - NR	↓ 30%	33	-14	↑ 2%	154	3
Belgium - Any Station / Domestic Trains	↓ 30%	7	-3	↓ 41%	29	-20

1,856 # Contacts after booking

Define

Research





				No article										
				No payment			Stolen credit card info							
		Take Bills	Faulty Product	No and or manay	Haracool through chail	Robbed	Personal lefte	Suspected abuse	No trust on talking to strangers	Unsafe meet up	Trust other's info	Trust other's Interdiging	Other	
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PH	Ustar@Augilian	19	1%	1%	18	176	18	0%	0%	2%	18	18	43	
PH	Appler	08	FN	175	78	178	18	18	78	18	18	19	EN .	_
m	Uster	0%	28	18	0%	175	0%.	0%	0%	15	08	05	0%	
PK	Ustart&Replier	0%	0%	15	0%	175	15	0%	0%	15	0%	0%	0%	
PH	Asplar	(%	15	(%	(%	(%	(5)	0%	(%	1%	15	15	(%	
TOTAL	Unter	18	38	45.	38	196	28	0%	78	396	2%	28	3%	
NOTAL.	Unterlählepiller	2%	45.	15.	25	176	2%	15.	25	2%	2%	15.	25.	
10584	Aspler	25	9%	10%	25	196	15	1%	75	15.	576	15	6%	







Stage 3 – Ideate Creating potential solutions.

During the ideate stage, the design team draws on the research gathered and the constraints established during the define stage. This information is used to create ideas with which to tackle the design brief.











3. Ideate

Be creative

Be analytical

Steal ideas

Generate ideas

Don't censor ideas





141 **C**



C








Checklist: Do you understand the brief? Do you have sufficient research information? Which methods will be used for idea generation?







Stage 4 – Prototype **Resolving** solutions.

The ideate stage generates a variety of potential solutions to the design brief. Prior to selection, it may be necessary to further work up the most promising of these solutions. This will allow particular aspects to be tested and will provide a better basis for comparison at the selection stage. In such cases a prototype can be created.











4. Prototype

"Build a facade of the experience"

Time to fail!

Test your most promising ideas

Don't fall in love; discover what works

Remember status quo vs desired state?

you're trying to mock up the desired state in comparison to status quo

Use Marvel, 3D printer, a survey, PowerPoint... anything goes









Checklist: Are all potential solutions Do all potential solutions require prote What elements will the prototype test? What functionality will the prototype h



Are all potential solutions worth even prototyping?

styping?			
?			
ave?			









E -	748.4	+	- P			and a
View	Toom	Add Slide	Play	Keynote Live	Table	Chart







N30627 \$109.95



Pulling a double? Feel are hold ahead when you to 23 pt y: 4 sheel for preate

Meets ASTM F 2412-11, ASTM F impact and compression salely Sip-resistant outsole tested and which meets or exceeds a result conditions, and 0.5 for oilylaiet a Durable mesh, suede, and emit Lace-up closure.

Gusseled tongue heips keep de Steel toe designed with a wide-fi toe cap for protection in hazardo Heel pull tab.

Padded tongue and collar.

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New Balance WID622 \$109.95 \$99.95



- Putting a double? Feet are A-okay with the long day ahead when you lace into the New Balance® WIDE?? steel toe sneaker.
- Meets ASTM F 2412-11, ASTM F 2413-11, 175
 and C/75 impact and compression safety
 standards
- Stip-resistant outsole tested under ASTM F 2913-11, which meets or exceeds a result of for dry and wet conditions, and 0.5 for onyte and scepy conditions.
- Durable mesh, suede, and synthetic upper materials.
- · Lace-up closure



Now, on to people's favourite place to start

Select Rationale

For god's sake don't start here



Stage 5 – Select Making choices.

The select stage is the point at which one of the proposed design solutions is chosen for development. The key decision criterion is fitness for purpose: does the design meet the needs and goals of the brief, and will it effectively communicate to the target audience to achieve those aims? The winning design is typically that which most closely meets the design brief, or a significant part of it. It may not be possible or desirable to meet all the requirements of a brief within a single design. For example, market segmentation increasingly calls for different marketing and design solutions for different segments.





5. Select

Now is the time to pick one over the others You've now gained intimate knowledge on problem space As well as solution space

- how different solutions perform
- how difficult they are to implement
- what problems you didn't think of before prototyping
- Go back to your problem definition and use all available data and understanding



Be tough also on your favourite ideas (They might get their time to shine some other day)



Checklist:

Does the design meet the defined needs of the brief? Does the design resonate with the target audience? Can the design be produced on time and on budget? Are there other factors to take into account? Has the client signed off the design?











Usability Study

Test key questions in your hypothesis



Technical Review Make sure it can be built

https://designsprintkit.withgoogle.com/methodology/phase4-decide

Stakeholder Review Get feedback from leadership

Sprint Conclusion: Recap and Next Steps



Stage 6 – Implement Delivering the solution to the design brief.

During this stage, the designer passes the design artwork and format specifications to those who will be supplying the final product. This might be a printer, web builder or fabricator. This moment provides a good opportunity to confirm the production specifications such as print quantity and what you expect to receive. For example, a printer is usually given some leeway to account for set-up in the different steps of the the print process. This means an order for 100 flyers may not result in the receipt of 100. It may be more or may be less. By double-checking, everyone is clear about the level of expectation, and what the client expectations are.



Learn



6. Implement

Get it done Stay focused Pay attention to detail





Learn



Stage 7 – Learn Obtaining feedback.

The final stage in the process involves learning from what has happened throughout the design process. This is a feedback stage during which the client and design agency might seek to identify what worked well and where there is room for improvement.



learning from what has happened



7. Learn

we actually solve the problem??

Are stakeholders happy with the results?

What could be improved?

Do we need another iteration round?

Did we find new issues to work on?



How did we identify the problem in the first place? Is it now resolved, did

161



d.

Idea generation



d

Today we will ideate a new product



Choose a problem for your team



We have already identified, defined and gained intimate knowledge about a problem



But you don't know the solution



Take one A4 Fold it in half 3 times Give me 8 ideas You have 6 minutes



Pitch your ideas within teams: max 20 sec per idea



Review and find your team's most effective idea based on fitness for purpose in 4 minutes



Take one solution Develop a product pitch Draw a storyboard from user perspective A4, 8 steps, 10 minutes



Present!



What would you do next?



That's right: prototype!!!





Another day though









d.

Interpretations of cesign thinking











EXAMINE

Dig into the problem. Look at the history, the context, the objects, and (most importantly) the people involved.

UNDERSTAND

Go deeper and find patterns. Establish open questions to build on.

IDEATE

Have lots of ideas, good and bad. Don't stop at the obvious or the impossible.



Try some things out. Make some things. Fail cheap and fast.





Empathize THE HEART OF DESIGN





Define REFRAME THE PROBLEM





Ideate BEYOND BASIC BRAINSTORMS





Prototype GET SMARTER, FASTER







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SKETCH

H DECIDE

1

PROTOTYPE

VALIDATE

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PROCESS & COLLABORATION FROM A DESIGNER PERSPECTIVE

PROBLEM SPACE

UNDERSTAND THE PROBLEM

DOUBLE DIAMOND DESIGN PROCESS

SOLUTION SPACE

> FIND A SOLUTION TOGETHER




Early feedback from customers

Continuous Improvement

Eliminate Waste

Do the **RIGHT** thing. Not do the thing right.

Early validation of assumptions

Focus on outcome, not output

Maximize business value

Small slices of value for the customer

Stop starting. Start finishing.

MVP Mindset

AGILE PRINCIPLES

Learning culture

- Stop and reflect
- Get early feedback
- Fail early and often
- Work at a sustainable pace

Work with constraints: timeboxes, Work in Progress limits

- Working collaboratively, iteratively, in parallel
- **Cross-functional &** co-located teams
- Transparency
- Avoid Handoffs

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Transparency

Avoid Handoffs

The general mindset remains the same



How do we identify the problems we













Design thinking teaches you how to solve a problem right



How do we know we're solving the right problem?



Share of categories by incident type (weighted by country)								
Prob_segmen	Mobil	Vehic	Electr	Other	Jobs a	Property	No/Blank	
Incident	42%	13%	19%	16%	5%	4%	0%	
Intent	26%	26%	20%	14%	5%	4%	5%	
Perception	18%	20%	5%	5%	5%	5%	41%	

Share of categories by incident type									
Count of Unique_sk		Cat							
Country	Prob_segm_T	Mobil	Vehic	Electr	Other	Jobs a	Property	No/Blank	
AR	Incident	30%	12%	28%	25%	4%	0%	0%	
AR	Intent	18%	34%	19%	15%	4%	4%	6%	
AR	Perception	6%	14%	2%	4%	2%	2%	71%	
🗆 CO	Incident	35%	14%	17%	25%	8%	2%	0%	
со	Intent	13%	23%	19%	31%	7%	2%	5%	
со	Perception	10%	17%	4%	1%	6%	10%	53%	
🗆 ID	Incident	39%	19%	16%	20%	2%	4%	0%	
ID	Intent	26%	36%	17%	11%	1%	5%	3%	
ID	Perception	21%	30%	2%	4%	2%	2%	40%	
🗆 IN	Incident	54%	10%	15%	10%	8%	4%	0%	
IN	Intent	31%	22%	20%	10%	8%	4%	6%	
IN	Perception	21%	17%	7%	5%	9%	9%	33%	
🗆 PH	Incident	19%	13%	37%	25%	1%	5%	0%	
PH	Intent	22%	12%	32%	24%	1%	3%	6%	
PH	Perception	13%	10%	14%	10%	4%	3%	48%	
🗆 PK	Incident	43%	12%	27%	7%	6%	5%	0%	
РК	Intent	27%	20%	25%	15%	7%	3%	2%	
РК	Perception	13%	15%	9%	12%	9%	3%	40%	



Bike Policies	↑ 56%	14	5	↑ 4%	56	2
Group Booking	↑ 25%	10	2	↓ 22%	52	-15
Can I buy at the station?	↑ 23%	16	3	↑ 113%	66	35
More info needed of customer	↑ 19%	19	3	↓ 16%	85	-16
Address of the Station	no change	26	0	↑ 20%	107	18
Payment Options	no change	9	0	↓ 2%	40	-1
Age of Travellers	↓ 19%	13	-3	↑ 76%	51	22

Contact Languages



Provider Distribution - Top 15

unclear Movelia Trenitalia Renfe other (Smaller Providers) Other (Smaller Providers) **Travel Provider** Baltour Eurolines BlablaCar BlablaCB SNCB Raileasy Flights Megabus Page 1/2

Decision-making



What really matters?

- Treat decision-making as identifying what works best for a given problem Reach consensus by demonstrating what works
- Just because 80 % people in your team voted for something doesn't mean it solves users' problem
- Just because your boss likes something it doesn't mean it solves users' problem
- A product developer who goes by opinion, their own or someone else's, is an irresponsible one



What is your discussion culture?



"Hike it"

"Andi likes it"

"I think it works"

"Does this work?"

"Does my user think it works?"

"Can we test if it works for her?"



When discussion culture fails



Collect all the potential issues and worries

Let each individual write as many as they wish, in peace

Distribute them along this scale

Try as hard as you can to put items as far to the right as possible



Paralysis by analysis



Timeboxing





How many cans and bottles of Coca Cola products will be consumed in the US next year?

10 MIN ANSWER

1 DAY APPROACH

1 WEEK APPROACH







https://designsprintkit.withgoogle.com/methodology/phase4-decide



Heatmap Voting Visually indicate the winning idea



Combat group think or follow the leader

https://designsprintkit.withgoogle.com/methodology/phase4-decide





Technical Review Make sure it can be built



Everyday mindset



Do it vs not do it



Do it vs not do it



Focus of everyday conversations

Separate problems from solutions Accept multiple possible solutions Discovery over creativity Testing over argumentation What works, works Your users won't change: empathise and reorient yourself



Embrace mindset Build from there



mplementing design thinking



What about real life?





What do I *actually* do in each step?

There is no one answer to this But designer's toolbox looks like this: http://www.designkit.org/methods





Design sprint

Design thinking approach distilled into an intensive 3-day sprint http://www.gv.com/sprint/ Practical tips on methods and steps: https://designsprintkit.withgoogle.com/







Dead ines



Implement Delivery







Deadlines make failure an unviable option



Commit to each step

Don't skip ahead Don't start from 5 Don't skip learning Don't reverse the order



Schedule time for each step explicitly Yes, learning as well




Choose user-centric ceremonies

Analyse data or do a discovery workshops over decision-making meetings

Get feedback from users over coworkers

Test the solution over asking for an opinion on solution



Schedule explicit ceremonies for each step



Choose the tools that make it easy



Surface each step in your project management



Formalise your process in tools or guidelines





Agile methods

Develop in small increments: cheaper and easier to accept failure

- Break large problems down to smaller ones with agile tools
- Estimates over deadlines

Working products over specification

Measurement over judgement



Guiding principles



Design thinking is not for everyone



Design thinking is not for every project



Design thinking is not for scaling up an existing solution





Solutions first?



Guess the design thinker



d.

I find out what the world needs. Then, I go ahead and invent it.

I never did anything by accident, nor did any of my inventions come by accident; they came by work.

Just because something doesn't do what you planned it to do doesn't mean it's useless.



There's a way to do it better - find it!

and utility is success.

We don't know a millionth of one percent about anything.

Anything that won't sell, I don't want to invent. It's sale is proof of utility,





To have a great idea, have lots of them.

I start where the last man left off.

brains definitely and systematically to work.

It is astonishing what an effort it seems to be for many people to put their



I am not discouraged, because every wrong attempt discarded is another step forward.

Restlessness and discontent are the necessities of progress.

I have not failed 10,000 times. I have successfully found 10,000 ways that will not work.



Thomas Edison 1847 – $\mathbf{1931}$





I never did a day's work in my life. It was all fun.







Product design consultant







ProductBeat

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Interesting cases Fordlandia Mind of an Architect Design thinking in politics: Finland is testing basic income Stoner M63 Forgotten Weapons (1300+ videos!!!) Laser discs vs VHS in the 1970s Designing cockpits for the average pilot



Learn more

Basics Design: Design thinking (ebook)

https://99percentinvisible.org/article/norman-doors-dont-know-whetherpush-pull-blame-design/

Podcast: 99 % Invisible

Muezli browser extension (get inspired and find things to steal)

Google! It's all out there!



Solutions first

MS Bob

https://youtu.be/RkU4WWEUj-Y https://youtu.be/RkU4WWEUj-Y?t=14m40s





Solutions first

ProHance Power Mouse from https://youtu.be/gBCFdvBz-j8?t=1m5s https://youtu.be/gBCFdvBz-j8?t=18m40s





You can approach anything with the design thinking mindset

Next time you feel stuck or annoyed: Did you start from a solution and not the problem? Reframe the situation: what's the status quo and what's the desired state?



Status quo bias



- Your users, coworkers, stakeholders are humans
- Desired state is hard to visualise and often seems risky
- Thought experiment:
- Flip the status quo
- Your desired state is now status quo
- Would you go back?

A real, emotional condition - humans are risk-averse





Next time you schedule a feedback session Think about scheduling a testing session instead Design is evaluated out there by users, not by internal acceptance

Opinions vs testing



5 - 6

Did you start at step 5? Don't choose before ideating Did you stop at 6? Don't just assume the problem got solved There's life before 5, there's life after 6



"Why" vs "why"

What do I say when a user/customer asks why? Two different "whys": Internal, historical vs. external rationale "Why is this text so light?" Is the only answer "It's the shade of grey in our guidelines"? Answer to the internal, *historical* "why" is not relevant Related: The five whys



Final thoughts

create everything around you

- Or didn't, and now you have a Norman door
- Don't fall in love
- Design for the world out there, not for yourself
- People are Lemmings

Keep your eyes open: Someone, somewhere used design thinking to



That's design thinking

Separate problems from solutions

Accept multiple possible solutions

Discovery over creativity

Testing over argumentation

What works, works

Don't try to change your users, change yourself



MISC SICES




- 1. Define
- 2. Research
- 3. Ideate
- 4. Prototype
- 5. Select
- 6. Implement
- 7. Learn

Empathy

- Multiple solutions
- Test and validate objectively
- Don't skip here



Value

Horizon 1:

Maintain & defend core business

Horizon 3: Create genuinely new business

Horizon 2:

Nurture emerging business

Time



Sales	Horizon 1	-
	/ Mature Business	Ra
Focus	Executing to defend, Extend, and increase Profitability of existing businesses	Res
Output	Annual planning and forecasting; Detailed plans for growth through adjacencies	Bus stra buo pla

Horizon 3

Horizon 2

Time

pidly Growing Business

sourcing initiatives to ild new businesses



siness building ategies: investment dget, detailed business ans for new ventures

Emerging Business

Uncovering options for future opportunities and placing bets on selected options

Decisions to explore: initial project plan, project milestones

Source: Baghai, Coley, White



Production / Operational Excellence









Design has a purpose

Design is more **discovery** than creativity Design thinkers are more explorers than visionaries Idea generation is important, but it's not everything Good design is measured out there in the wild Good design fills its purpose: good design works What works, works



We will talk a lot about problems and solutions today



Applications

Design thinking can be applied by anyone to anything Design thinking is often used by designers in their profession Many people with designer titles work in *creative* professions Not all creative problem solvers work as designers



Applications

Airport security control design

Product concepts

Process design

UX/UI/web/service/CX design

Architecture

Politics

Prison design

Firearms design

Anything





Today we talk about designing for humans

Design thinking is traditionally applied in human-centric fields

But at its core, it's about changing the status quo to something that works better for the intended purpose

And humans are not that different in the end...

Designing for humans



User testing

Design needs to work

Humans are weird

Humans who aren't you are VERY weird

If it doesn't work for humans, it doesn't work

Seeing your design crumble in front of your eyes is painful!

Most solutions fail





It never works until it works keep failing and iterating



Dos and don'ts for today

Problem space vs. solution space Don't fall in love with your solutions Emphatize, research, observe Be user-centric Design for the world around you (people won't change for you) Test, accept losses, fail



Design is a toolbox



