



Corporate Entrepreneurship

Oliver Schneider

Chair of Management

DBS, January/February 2024

hhu

Lehrstuhl für BWL,
insb. Management



Schedule

Day		Time	Content
Saturday	January 27	9:00am – 4:30pm	Lecture with interactions
Friday	February 2	6:15pm – 9:30pm	Lecture with interactions
Saturday	February 3	9:00am – 4:30pm	Business Planning
Friday	February 9	6:15pm – 9:30pm	Business Planning
Saturday	February 10	9:00am – 12:15pm	Business Planning

Learning goals

Idea generation

- Understanding and applying Design Thinking as a method
 - Human-centered and iterative thinking
 - Different creativity techniques
 - Practical and useful tools from the design and innovation area
- Design of a product / service / concept

Business Planning

- Outlining the idea in a business plan
 - Business plan structure
 - Business plan content
 - Dos & Don'ts
- Assessing the financial business plan

Agenda

- 1 Recap & Introduction
- 2 Prerequisites for successful Design Thinking
- 3 Task
- 4 The Design Thinking process
- 5 Business Plan

Let's get started

The first assignment of today:



Get stoked!



Definition Design Thinking

There is no universal definition of Design Thinking...

According to Brown (2008, p. 86), design thinking is “a discipline that uses the designer’s sensibility and methods to match people’s needs with what is technologically feasible and what a viable business strategy can convert into customer value and market opportunity.” This definition qualifies design thinking as both a process (“methods”) and an individual-level characteristic (“sensibility”), and explicitly links design with business.

In contrast, Martin (2009) emphasizes the thinking element, defining design thinking as “the productive mix of analytical thinking and intuitive thinking” (Martin interviewed in Euchner, 2012, p. 10).

Lockwood (2010b, p. 5) states that design thinking is “a human-centered innovation process that emphasizes observation, collaboration, fast learning, visualization of ideas, rapid concept prototyping, and concurrent business analysis,” thus highlighting the application of professional designers’ espoused work process, one based on observation, visualization, and prototyping.

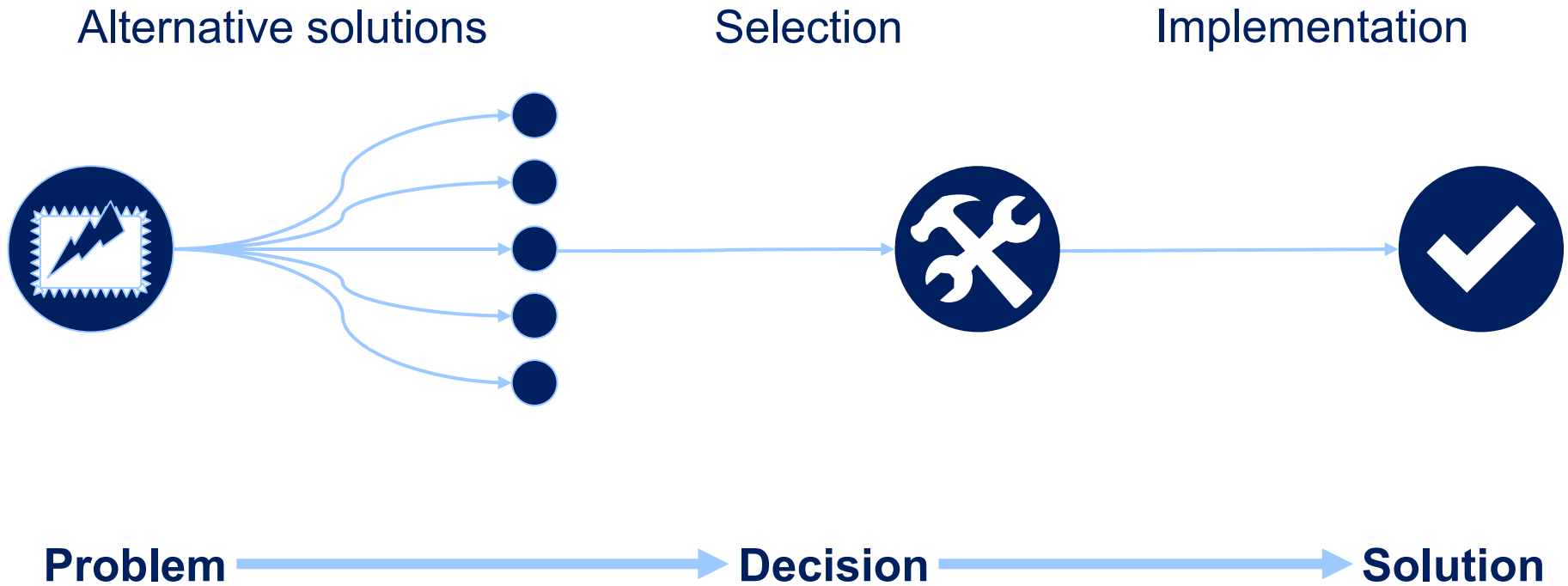


...in summary

Design Thinking is a method for solving complex problems and developing innovative ideas:

- Systematic **innovation method**
- **Focus** on **people** and **integration** of their **needs**
- **Development of innovative ideas**
- **Solving complex problems**

Common „Business Thinking“

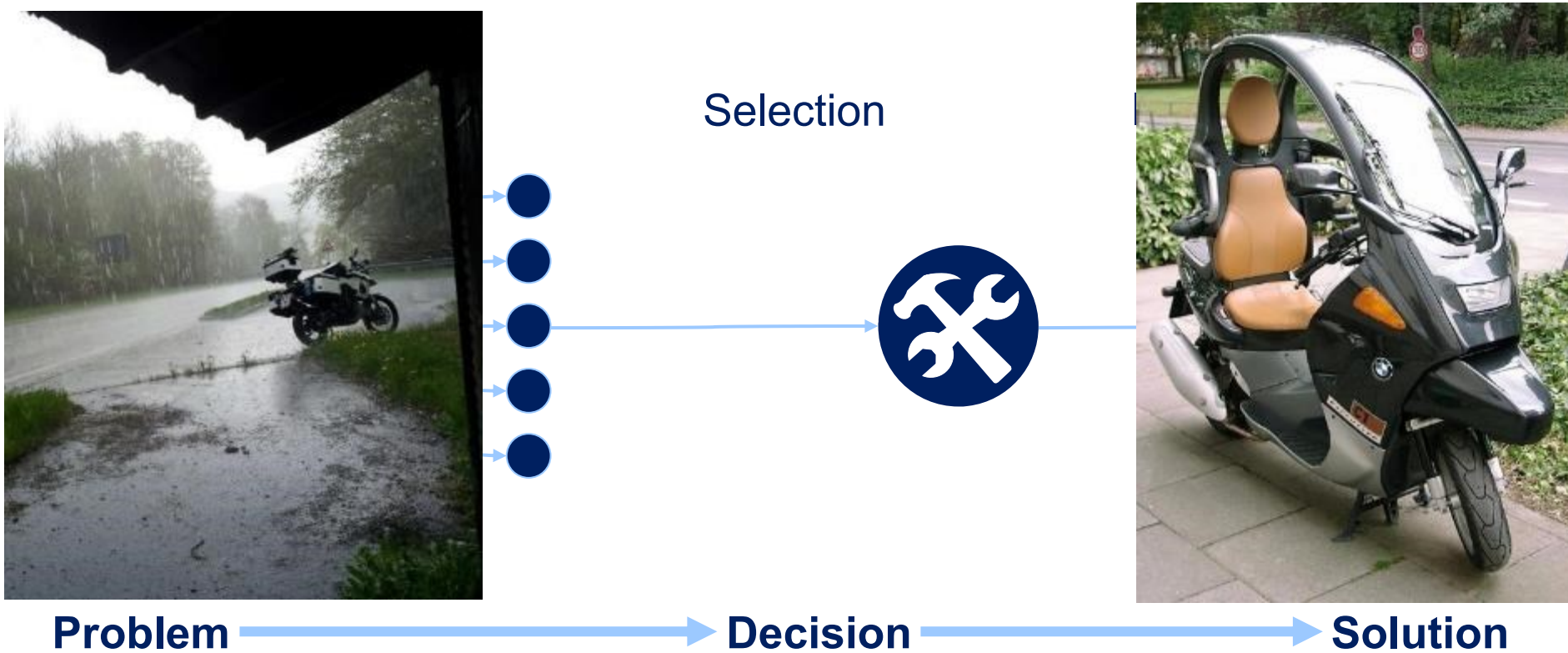


Group think converges to a single solution on a regular basis. This process is efficient, because it leads to quick decisions and solutions. However, these are often obvious solutions.

Common „Business Thinking“

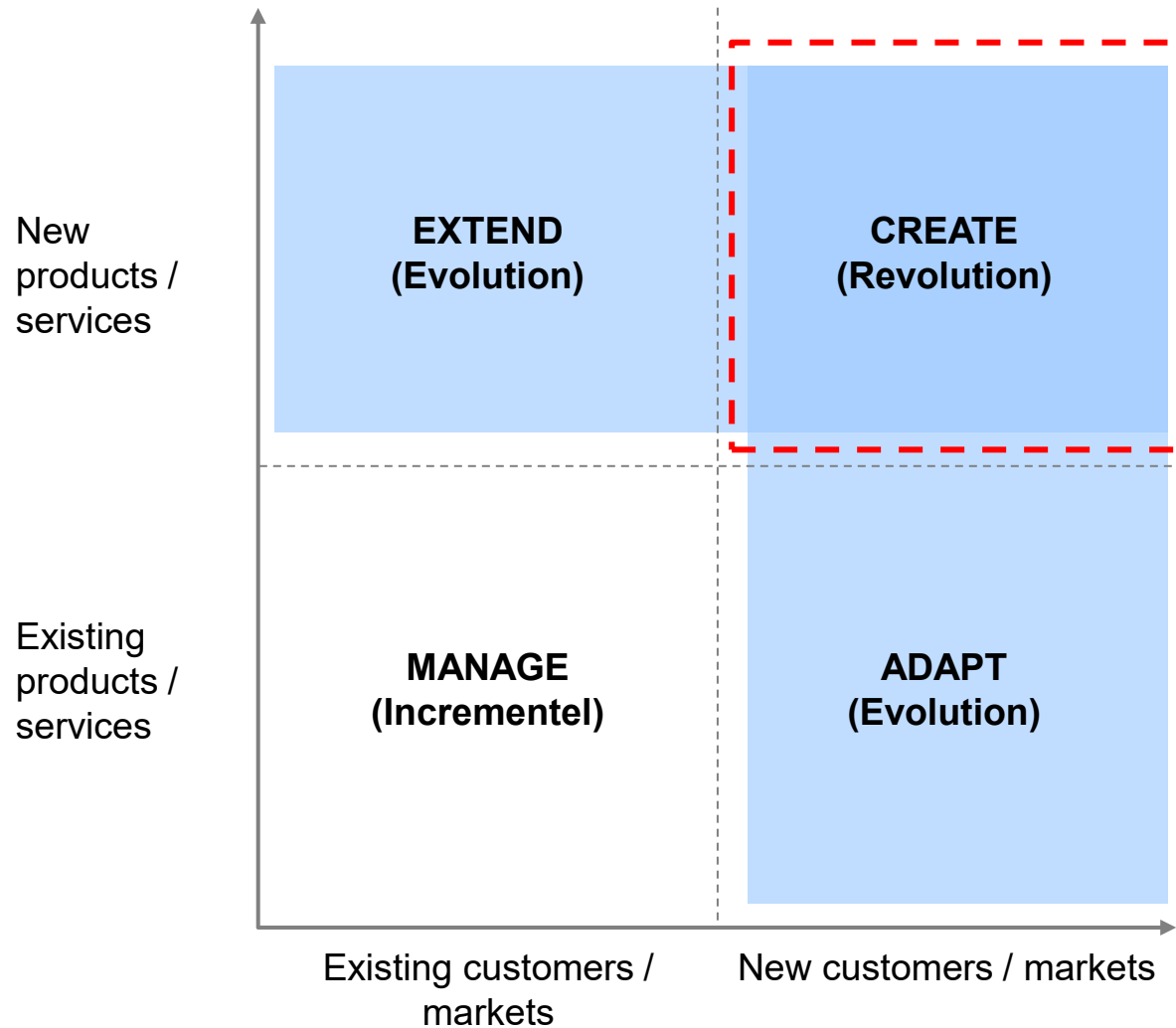


Common „Business Thinking“

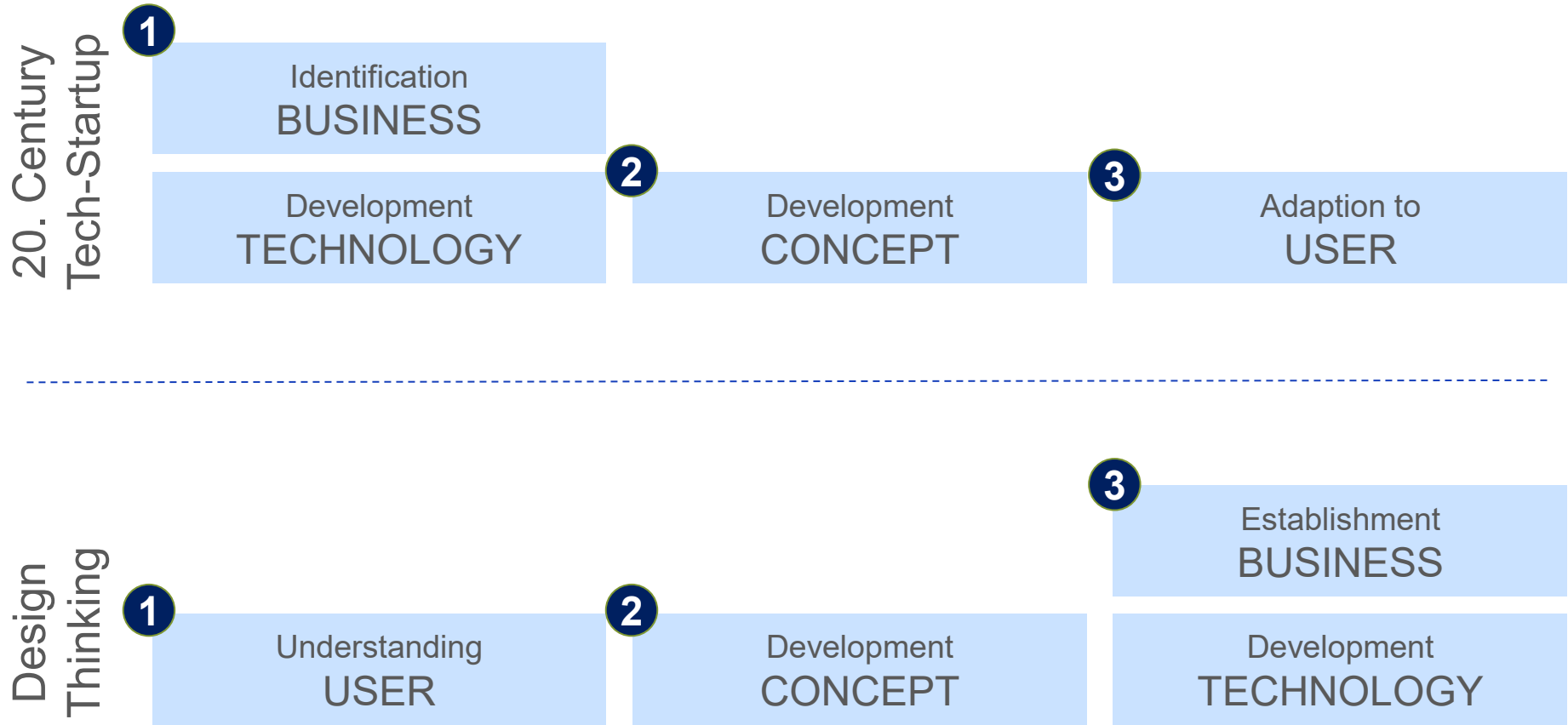


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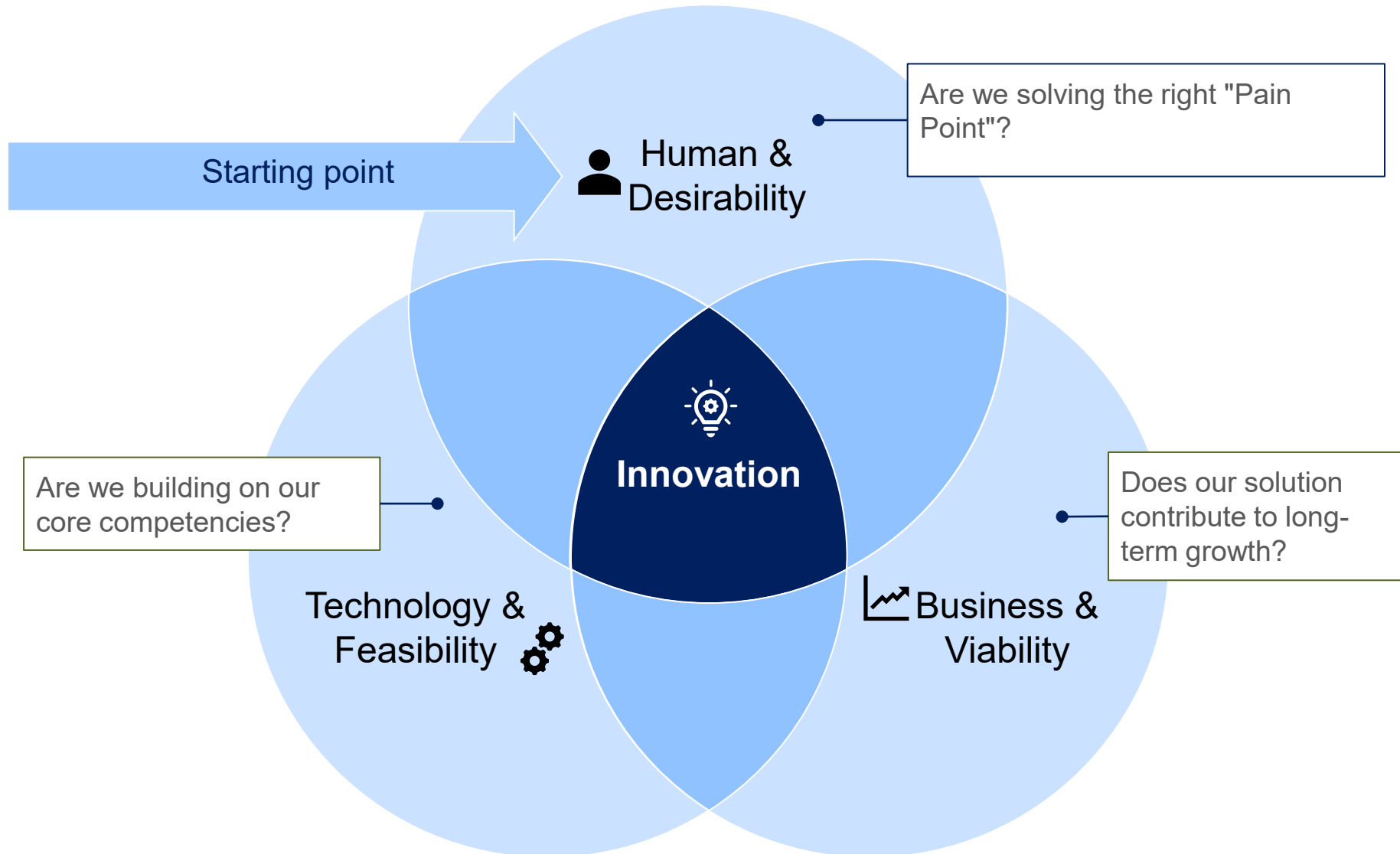
Design Thinking is an approach for disruptive innovation



A new approach for developing businesses



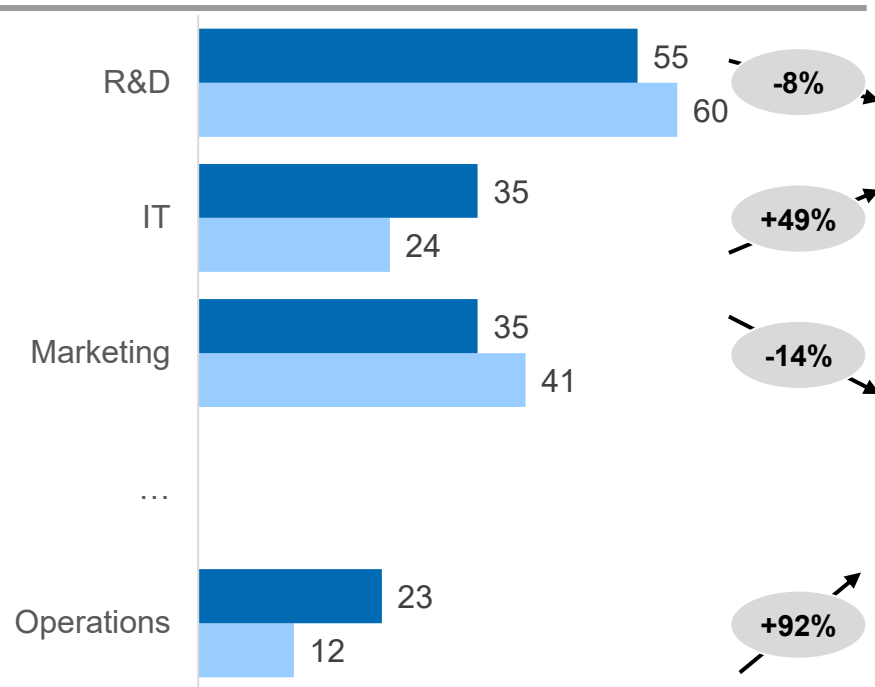
How Design Thinking generates value and takes human needs as a starting point



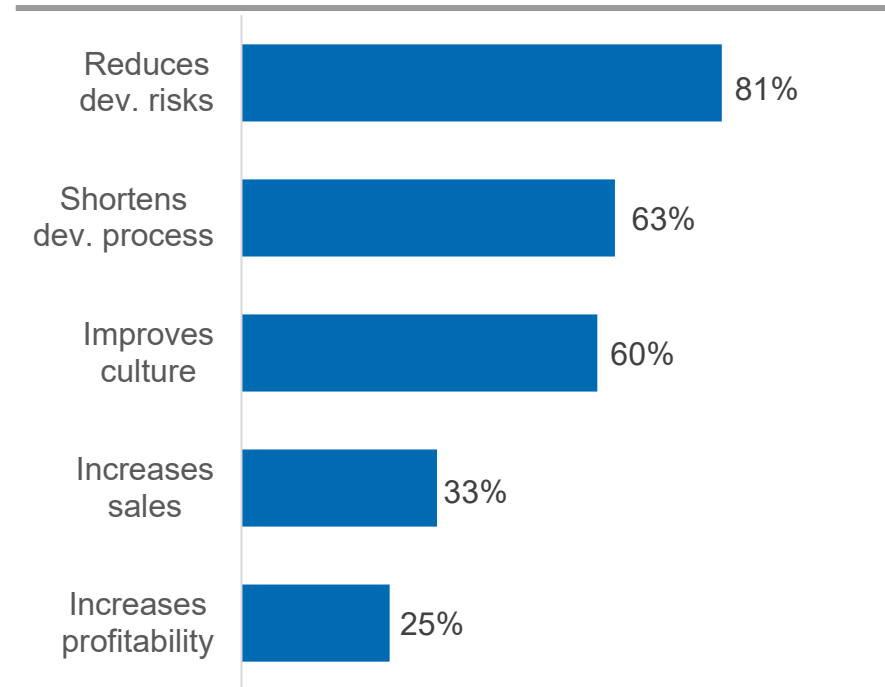
Design Thinking: Implementation Practices in Organizations

2015 2021

Application, % of agreements



Impact, % of agreements

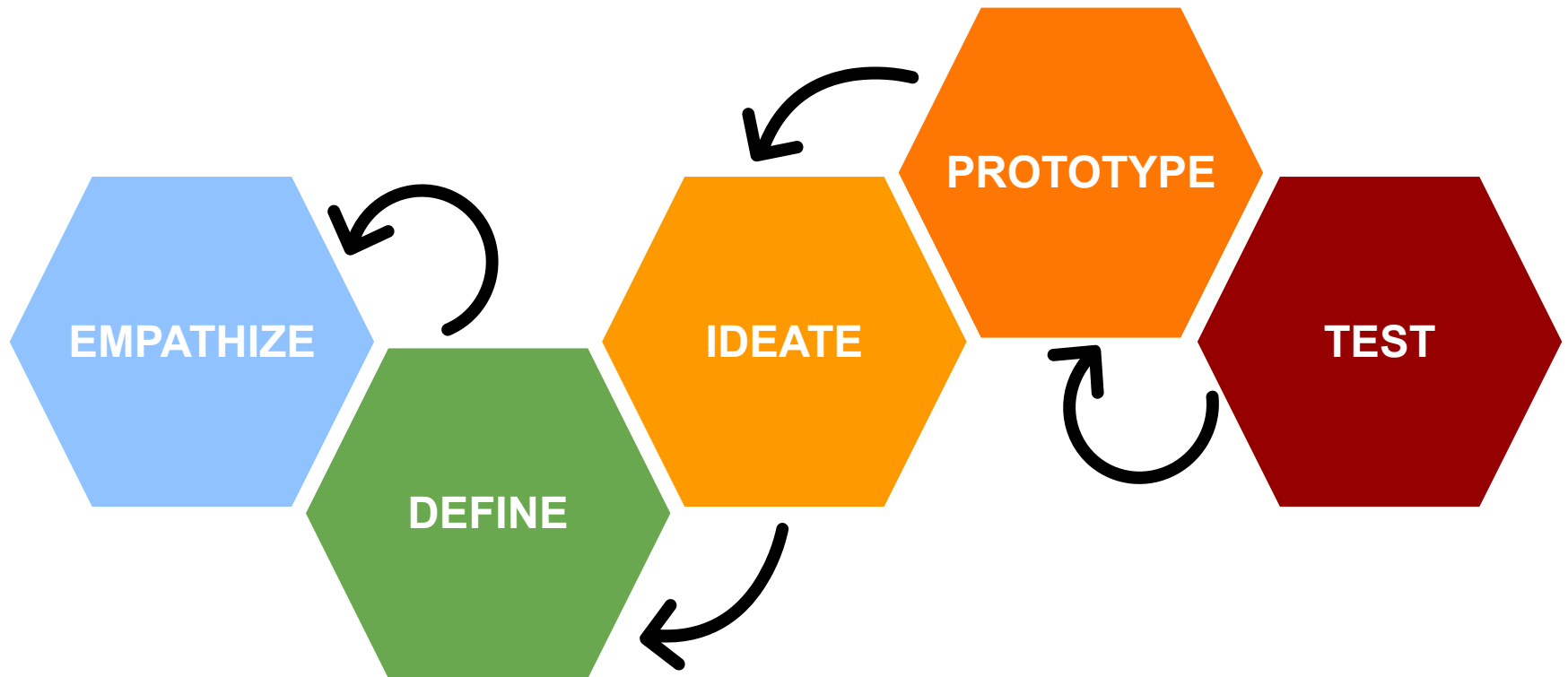


Broader application of Design Thinking with clear link to business KPIs

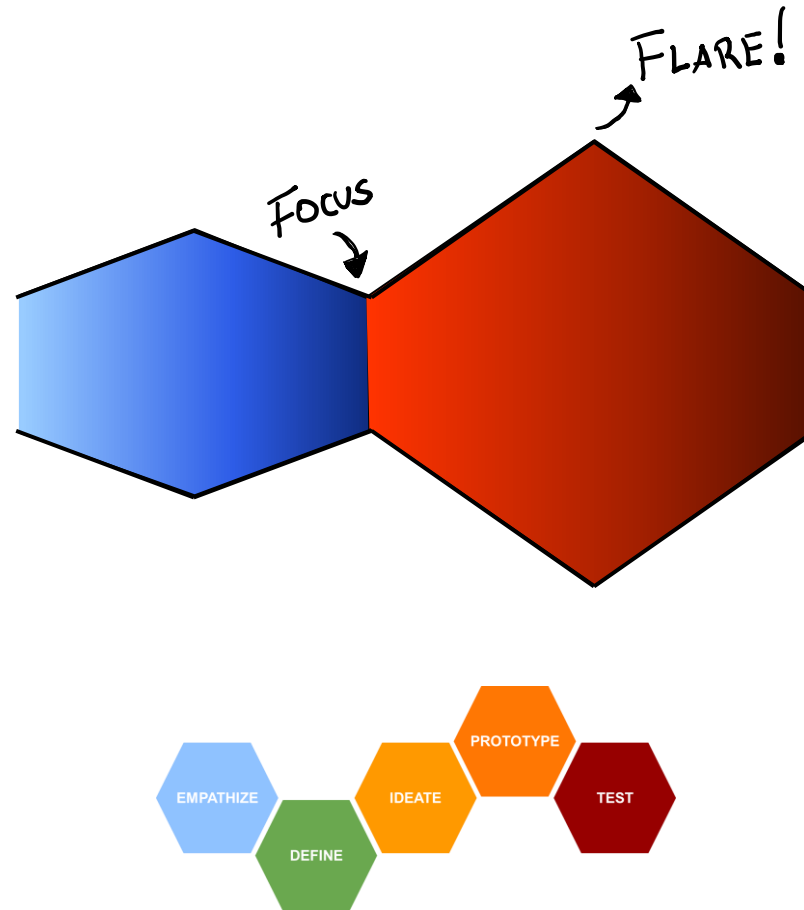
Design Thinking – The Design Thinking process



Process: Human-centered and iterative



Process: Focus and flare



Design Thinking – An example for successful design thinking – the toothbrush for children

Why toothbrushes for children are thick

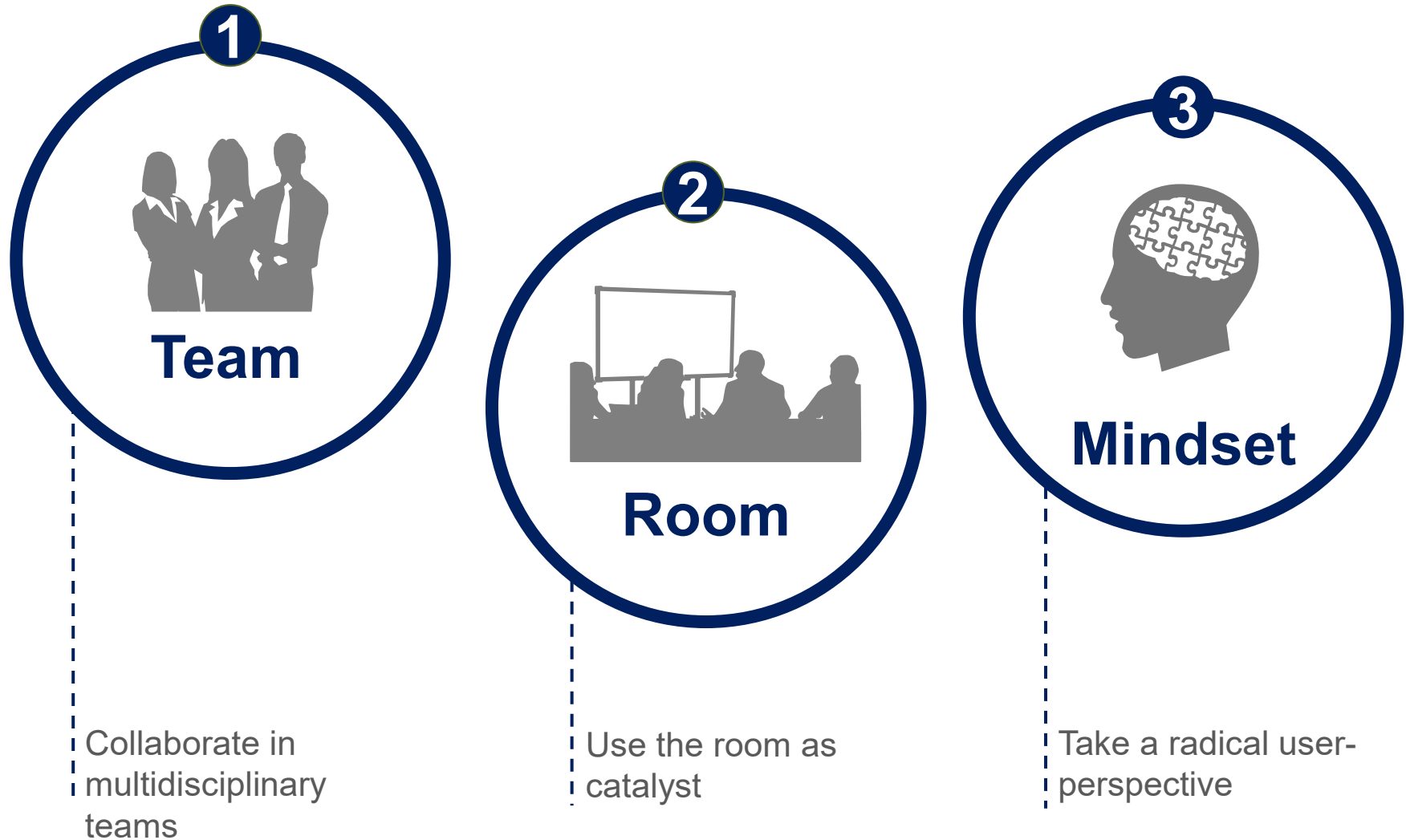
- Before 1996 toothbrushes for children were small and thin
- Oral-B and IDEO wanted to overhaul the design
- Oral-B and IDEO conducted field studies and watched children brushing their teeth
- Children hold toothbrushes in their fist and not with their fingers
- This simple insight lead to a completely new toothbrush design: "the squishy gripper"
- Today, all children's toothbrushes have thick and soft handles



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For successful Design Thinking 3 basic requirements should be fulfilled



For successful Design Thinking 3 basic requirements should be fulfilled

1 Team

Overview:

- Diverse/heterogeneous teams
- Team members are experts in one discipline
- Optimal team size of 4-6 persons

Inherent diversity:

- gender
- ethnicity
- sexual orientation

Acquired diversity:

- Education
- Experience

Personality diversity:

- introvert/extrovert
- exploring/executing
- task/people orientation

2 Room

Room for collaboration:

- Options for standing and walking around to stimulate creativity
- Materials like bar tables, white boards, flipcharts and post-its
- White boards and post-its can help visualize different ideas with colors
- For remote teams: Use online collaboration tools which allow simultaneous work on the same virtual white-board or document

Such a room works as a storage location for knowledge where all ideas can be stored

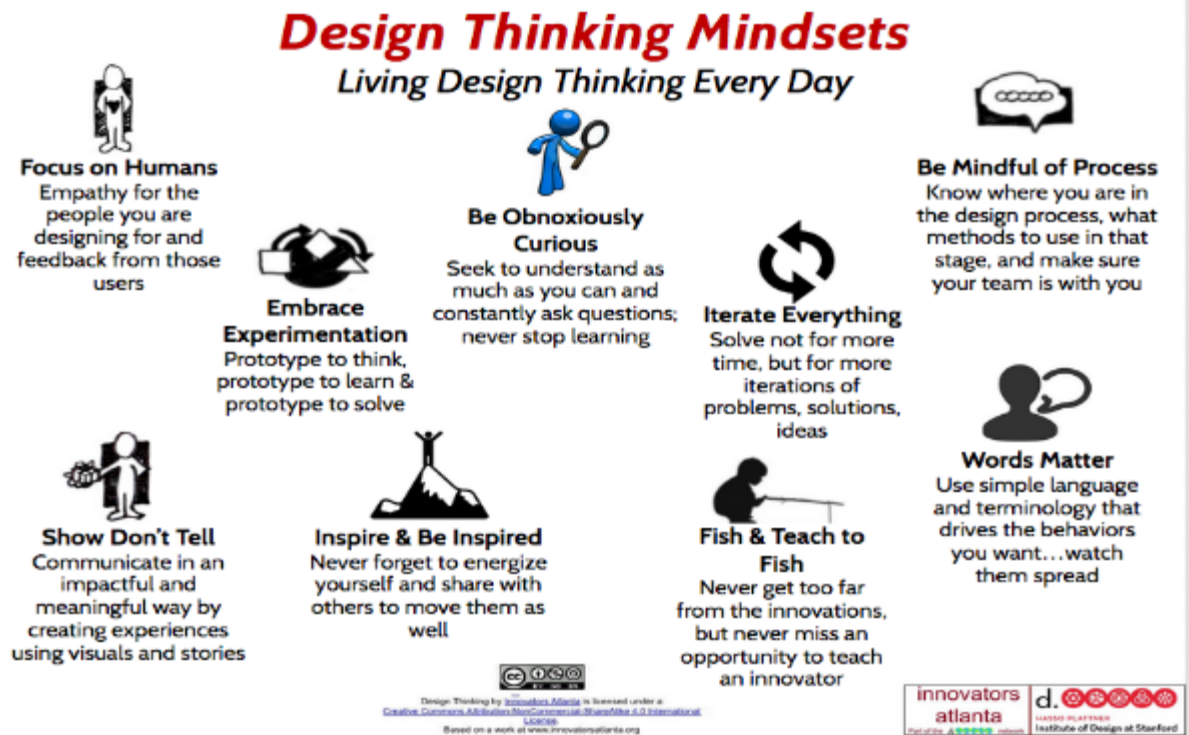
For successful Design Thinking 3 basic requirements should be fulfilled

3 Mindset

The right Mindset:

- Trust in the Design Thinking process
- Be open for crazy and different ideas
- Don't judge. Build upon others' ideas.
- Learn from mistakes and continuously improve

Optimal results can only be achieved with the right mindset



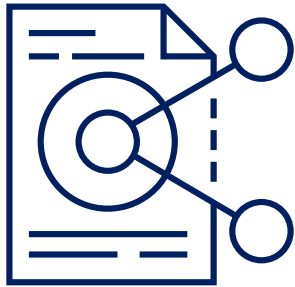
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Improve the sustainability of your day-to-day work

Task: Design Thinking



Hands-on case along the Design Thinking process

Improved sustainability of your day-to-day work

- As a team of two members, you pass through the steps of the design thinking process to acquire a creativity method valuable for developing business ideas.
- You don't need to assume a different role, but be yourself
- As a team you have decided to **improve** the **sustainability** of your **day-to-day work**.
- You can take different pain points as a starting point for this: What annoys you or strikes you personally? At what point during your day-to-day work, e.g., commuting, working, meetings, breaks, etc. is a lot of pain created (this can pertain to yourself or your company in general).
- Find THE pain point in your work context and develop a suitable solution (implementable as a business plan):
 - Derive the problem you want to solve
 - Be creative and collect ideas that might pose solutions
 - Build and test a prototype
 - At the end, every group presents their results

To accredit your learning progress, we ask you as a team of two members to prepare an essay-type business plan until April 19, 2024

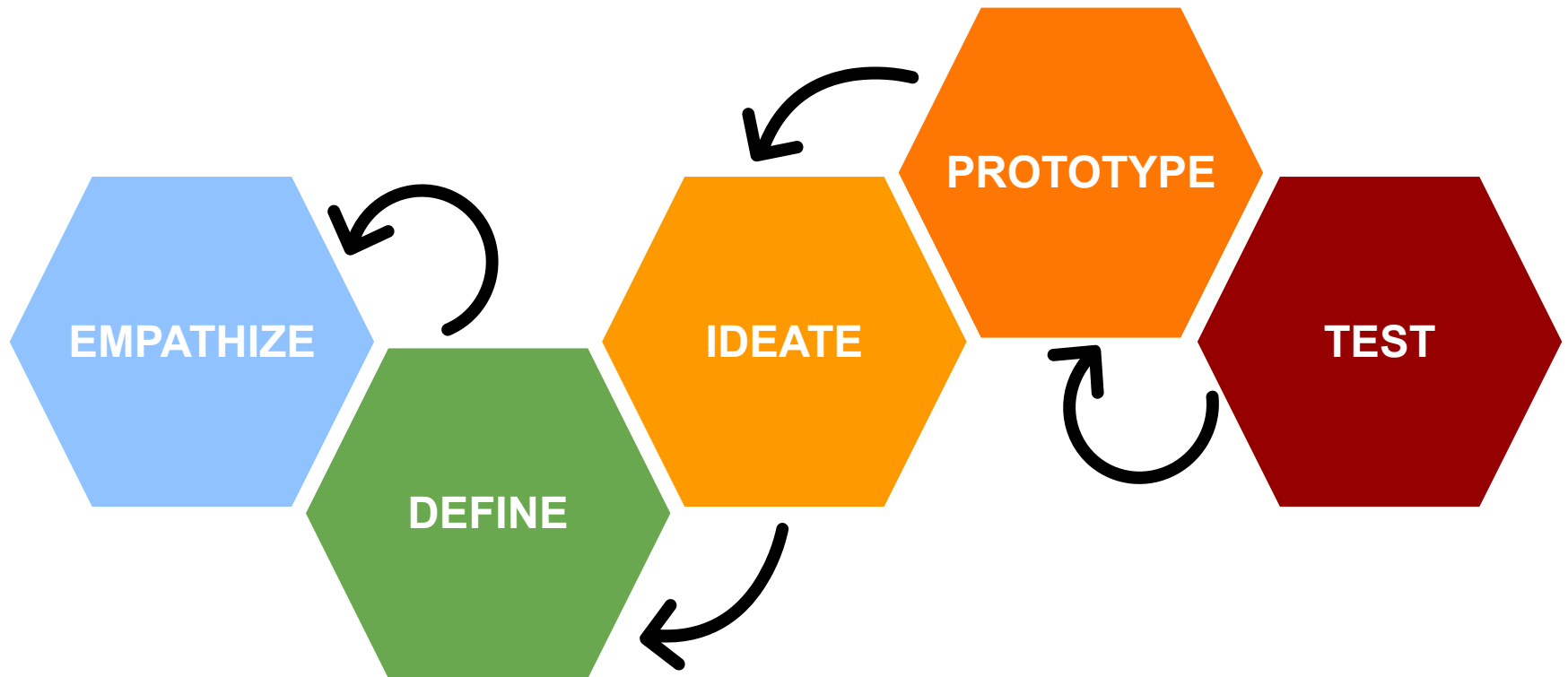


- **Task:** Please select a well-known, established corporation or your current company and develop a business for an identified new business idea. The business idea should either be an innovative solution for an existing business area of the focal corporation or a novel solution satisfying an unmet demand relevant to the focal corporation. It can relate to the idea developed during the course but does not need to.
- **Scope:** Starting with a problem statement, the business idea should be detailed in a written business plan. The business plan should contain an executive summary and address all structural components of a business plan – as discussed during the course – in a balanced way.
- **Deliverable:** ~20 pages written content (cover page, table of contents, list of references, etc. are additional); DinA4 with 2.5cm margins; Times New Roman; font size 11; 1.5 times line spacing; English language
- **Sources and references:** required, plagiarism will be checked – violation will be considered severely
- **Teams:** the team assignment will take place on **03.02.2024**.
To Do: Please discuss with your MBA peers and prepare a proposal.
- **Deadline and submission:** **19.04.2024** as PDF and DOCX via E-Mail to oliver.b.schneider@hhu.de

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Process: Human-centered and iterative



Understanding the user...

EMPATHIZE



Understand the user
human centered



Observation
Interview
Role-playing
Desk Research

Empathize with the user and understand their needs

Target: Understand the task context: Exchange experiences and expectations, **identify conflicts**, realize contradictions, **identify unsolved problems or needs**

Why: A better **understanding of users and customers** implies better problem solutions which lead automatically to better products, services and processes

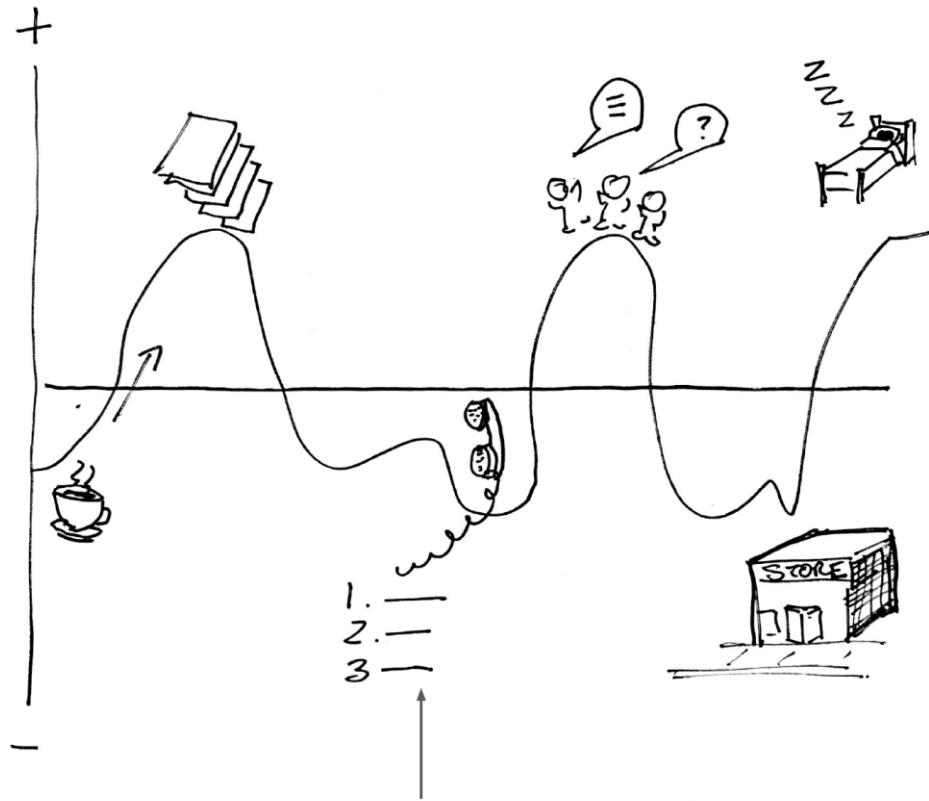


Task for Empathize:



- Use your preferred techniques (feel free to use more than one), e.g., interview each other reg. your challenges in your post corona working day.
 - Ask for explicit & underlying reasons
 - Listen to stories
- Take notes on (virtual) post-its/shared document reg. the problems and needs you have detected
- Structure your insights together as a team
- Prioritize the topics by assigning three (virtual) points per team member to each post-it / need

Lassen Sie uns beginnen



* Be visual and add short descriptive notes for each moment too.

Your “day in the life” map might look a bit like this.*

Focus on extreme users

EMPATHIZE



What could help to understand the problems, pain points or needs of the customer?

- What do you like about the sustainability of your day-to-day work?
- What is your problem with the sustainability of your day-to-day work?
- How often does that problem occur per day/week/...?
- What are the must-haves if you would be able to improve the sustainability of your day-to-day work?
- What would be nice to have if you would be able to improve the sustainability of your day-to-day work?
- What brand or design do you like (in case the focus is product-related)?
- What lifestyle do you like?
- Ask 5 times why
- Ask for examples or stories



Defining the problem...

DEFINE



Filter out the problem statement
create clarity from complexity



Problem Statement
Post-its
User Profiles
User Journeys

Find the exact problem statement

Target: Find the right **problem statement**. First of all, we need to define based on the identified needs what exactly the problem is that needs to be solved. If multiple problems are identified, select one.

Why: The exact problem definition helps to **reduce initial complexity** and create clarity. At the end of this phase, it should be clear **what exactly the problem is**.



Tasks for Define:



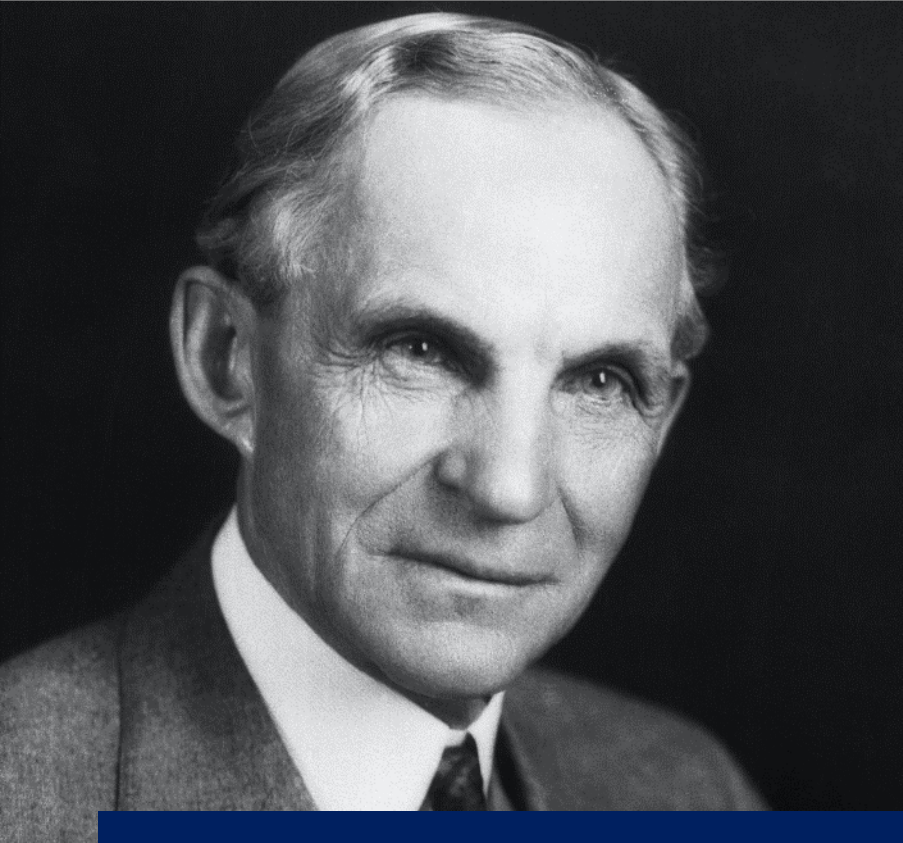
- Consolidate your findings from the first step in a problem statement
- First, write down who your user is, their specific need and why they have it
- Then write down your problem statement in the form of „Person A needs B because C (when D at E)“.
- Share the problem statement with your partner and get feedback

What does this girl need?

DEFINE



Defining the problem...



“If I had asked people what they wanted, they would have said faster horses.”

Henri Ford

Ford Motor Company, Founder & CEO

Defining the problem is closely connected with identifying the underlying need

Define

Create clarity from complexity

Problem Statement (25 Minutes)

Think about the problems and missed opportunities you discovered in the interview. Together, formulate a problem statement and be sure to include all the important information (Who, What, Where, When and Why).

Example:

Person(s) A needs B because of C (when D at E).

My client needs a way to address, [need/problem] in a way that gives him [meaning/emotion] because [insight].

How-might-we (5 Minutes)

Now use your formulated problem statement and turn it into a how-might-we question. Be sure to include your target audience, a user-centric problem, and the value that will be created.

Sample wording:

How might/can we support/help/raise awareness.... so that?

Examples for a Problem Statement

Version 1

User:

Teenager

Need:

To eat healthy food

Insight:

Certain nutrients are necessary for physical and cognitive health and development

Version 2

User:

14 years old in new school

Need:

To feel socially accepted when eating healthy food

Insight:

Because in her crew, a social risk is more dangerous than a health risk

Find the right idea...

IDEATE



Generate ideas
radical collaboration



Brainstorming
Brainwriting
Mindmaps
Sketches

Solve the defined problem innovatively with radical ideas

Target: Develop **radical ideas** through collaboration, which solve the defined problem

Why: The combined knowledge from diverse teams should be used to find the best solution and foster creativity of all participants



Tasks for Ideate:



30 min

- Brainstorm ideas based on your problem statement. For instance, create a mindmap which structures your ideas and reflects your viewpoints
- Be open for creative ideas. Think "outside the box". Don't search for the perfect idea, write down everything that comes to your mind
- Present your ideas to your partner. Then, assess the ideas and decide which to pursue further.

Creativity method: Brainstorming

Radical collaboration

Brainstorming

Focus on your problem statement and your HMW question from the previous exercise.

You have 20 minutes to brainstorm as many ideas as you can that solve your problem.

Flare! Ideas are allowed to be wild - there are no bad ideas! Draw or sketch your ideas and collect them.

If you get stuck, ask yourself:

How could I accomplish the exact opposite of what I actually want to accomplish?

What solutions can I think of that would cost at least 1 million euros? Could I make them less expensive?

What would it look like if it needs to be operational tomorrow?

Choose best ideas

Now select the best ideas. Each person can give three points. The idea with the most points wins (if two or more ideas win, there will be a runoff).

Creativity method: Random words

Target: Using random words you can try to generate as many novel ideas as possible. Random words help the brain make a mental leap and leads you on a new path mentally. This can help generate new combinations and links: Ideas.

How the method works:

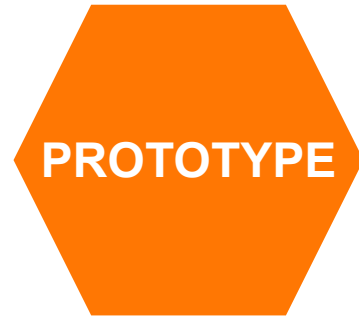
1. Formulate a written question.
2. Select a random word using a random number generator and generate ideas using this random word with regard to your question.

Tip: Look for ideas based on adjectives which describe the word (Example: Tree; Adjectives: steadfast, old, green, changing,...)

Get started: Use the seconds hand of your watch (or cellphone) as a random numbers generator.

1. Television	12. Ladder	23. Vacation	34. Clove	44. Easter egg	55. Dog
2. Suitcase	13. Mouth	24. Tea	35. Diary	45. Politician	56. Bottle
3. Handball	14. Tin can	25. Bucket	36. Knife	46. Bicycle	57. Radio
4. Doctor	15. Zebra	26. Spoon	37. Schnitzel	47. Bird	58. Ocean
5. Ship	16. Label	27. Shoe	38. Ghost	47. Blouse	59. Safe
6. Sun	17. Beer	28. Rhino	39. Wooden	49. Apple	60. Pen
7. Currywurst	18. Wool	29. Spaghetti	Board	50. Cashier	
8. Bracelet	19. Mop	30. Telephone	40. Crocodile	51. Pepper	
9. Tulip	20. Concert	31. Lamp	41. Cigarette	52. Coffee cup	
10. Hedgehog	21. Mountain	32. Copier	42. Fuel	53. Fireworks	
11. Computer	22. Rope bridge	33. Cloud	43. Photo	54. Zoo	

Make ideas tangible...



Idea is tangible and
can be experienced
show, don't tell



Sketches
Paper Prototypes
Lego
Mock-ups
Storyboards

Transform the idea into a tangible prototype that can be experienced

Target: Fast **Implementation of ideas into a first prototype**, to make them **tangible** and help **experience** them

Why: Tangible prototypes that can be experienced are easy to test. In addition, you are forced to deal with their **functionality** and think in terms of the final product – this supports the **identification of hick-ups** and further idea generation (iterative process)



Task for Prototype:



- Build a prototype from paper, draw a sketch (on paper or digital, e.g., in Powerpoint)
- Draw a storyboard or the customer journey in case it is a service
- Present the prototype to your partner to get feedback and improve
- Document your results and implement the feedback

Interaktive Aufgabe - Prototype

Show – don't tell

Prototyping

Focus on the idea for which you want to create an initial prototype.

This can be a physical model that shows your solution.



It can also be a storyboard in which you briefly present your solution. – e.g., use the whiteboard



Test for faster learning...



TEST



Test ideas
fail early, fail often



User tests
Tests during daily life
Feedback

Test your prototype to further improve your product

Target: Test your ideas to get **feedback from users early on** and integrate it. This is not about selling your idea, but about learning. From learning and failing, you can derive what customers want and how the prototype can be further developed. Through **observing customer reactions to the prototype**, their interactions with it and asking their opinion, the idea can be continuously improved.

Why: By testing ideas early on, bugs and problems can be identified and mended



Tasks for Test:



20 min

- Finally, present your prototype to the group
- Think beforehand about what feedback would be useful

Test

Fail early, succeed sooner

Pitch Preparation

Prepare a short oral presentation explaining the problem and how you solve it with your solution prototype. You can think about what areas/features you would like to get feedback on. You should not talk for more than two minutes.

Tip:

Don't be vain. You don't need to sell or defend your idea. You want to get honest feedback to improve it.

Pitch

We will hear several pitches and give feedback:

What do we like about the prototype?

What don't we understand directly?

What stands out to us?

After receiving feedback, the solution designer presents her/his two biggest learnings from the feedback.

This is not about selling – This is about getting honest feedback



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What is a Business Plan?



“A written document that describes the current state and the presupposed future of an organization.”

Honig & Karlsson (2004), JoM

What do these stakeholders look for in a business plan?

1

Bank



Funding decisions are dominated by financial considerations - little consideration is given to entrepreneurial capabilities or opportunity characteristics

2

Venture Capitalist



Funding decisions are also significantly influenced financial issues, but in addition emphasis is given to the entrepreneurial team and market characteristics

3

Business Angel



Funding decisions are based financial and market issues (similar to Venture Capitalists) with a slightly larger emphasis on the entrepreneur.

Business plan: backbone for pitching, updating, & negotiating with pot. investors, shareholders & strategic partners, as well as for internal planning and steering.

Business Plan – Structure

1. **Executive Summary**
2. Business Model
3. Market & Competition
4. Goals, Strategy & Implementation-Plan
5. Product & Service
6. Marketing & Sales
7. Management, key personnel,
organization
8. Chances & Risks
9. Revenue, Liquidity & Budget Planning

- Typical elements/content of a business plan
- Can and should be adjusted to the situation/characteristics of each business (content & sequence)



Executive summary – key content to address

Business Plan Chapter	Important Aspects for Executive Summary
1. Business Idea & Business Model	<ul style="list-style-type: none">▪ What is the current market issue/problem?▪ Which customer needs a solution for that issue/problem?▪ What is the business idea/ product/ USP?▪ How does the business model look like?
2. Market & Branch	<ul style="list-style-type: none">▪ Which market branch does the company belong to?▪ Which markets does the company aim for?▪ How high is the potential (growth & size) of the markets?
3. Marketing	<ul style="list-style-type: none">▪ Which marketing measures are planned?▪ How is the pricing policy of the business constructed?▪ Which ways of distribution should be used?
4. Founding Team, Management and Organization	<ul style="list-style-type: none">▪ Which persons are part of the founding team?▪ What are the highlights of there CV's?▪ Which network is at the founder's disposal?▪ How are primary tasks separated on each team member?
5. Realization Planning	<ul style="list-style-type: none">▪ When is the product/ service ready to publish?▪ When is the market entry planned?▪ Which milestones are reached or will be reached soon?
6. Financial Planning	<ul style="list-style-type: none">▪ What is the planned revenue & profit for the next 3-5 years▪ What is the required capital and Return on Investment?

Executive summary: objectives and selected typical mistakes

Objectives

- Present condensed version of the business plan (max. two pages)
- Convince reader of the business idea: decision to invest/cooperate is often made while reading the business plan
- Proof the legitimacy and opportunity of the business model in a well-founded and plausible manner
- Explain objective, i.e., why is business plan shared with the reader

Selected typical mistakes

- Information is not also included in the main part of the business plan
 - Do not add extra content
- Important aspects are missing
 - Include all relevant aspects
- Executive Summary is too long
 - Be as concise as possible!
- No independent document
 - Double check the text!
- Generation via „copy & paste“ of single parts
 - Revise the document!

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This chapter should give an overview of the business model

Description of the Company & Goals

Business idea & business model

- Identified customer need
- Planned product(s)/service(s) to create value
- Required activities to address customer need

Market environment

- Covered markets
- Addressed branch

Business Model

- Unique Selling Point / Value Proposition
- Strategic positioning
- Value Chain (partners, channels, customers)
- Expansion strategies (product & market)

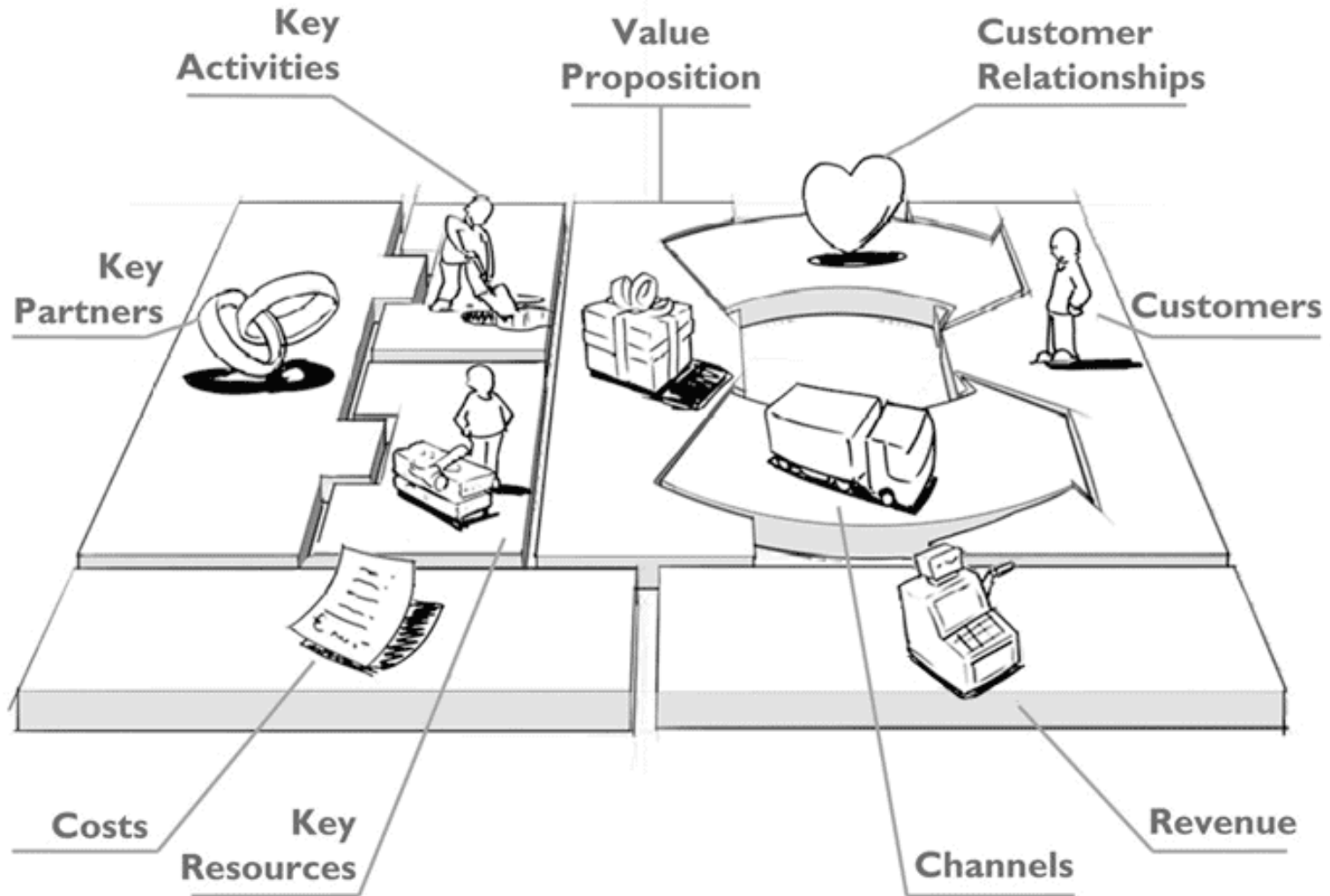
Company Profile

- Purpose, long-term & short-term goals
- Legal form, location(s), founding date

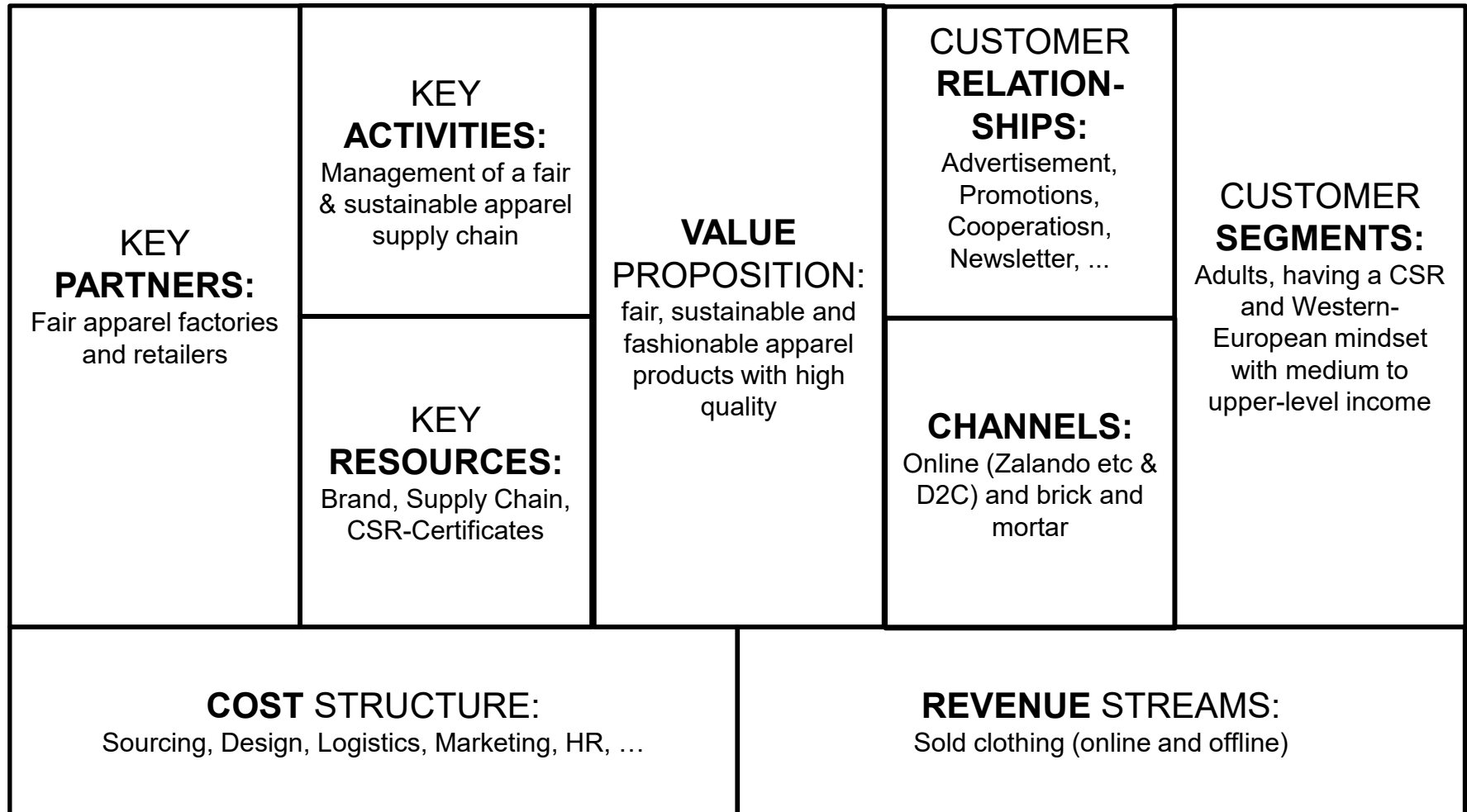
Typical Mistakes

- Second executive summary
- Too detailed
- Unprecise formulation of goals & USP
- Planned strategy cannot be realized with planned resources
- No information on how core competencies can be secured
- Negligence of growth potential
- Very high dependency on few selected partners

"Business Model Canvas" by Osterwalder as a basis for developing and visualizing business ideas



„Business Model Canvas“ – Example: ARMEDANGELS



Value proposition – General structure and examples

Tips



General structure: **To** (target segment & need) our (brand) **is** (concept) **that** (point of difference)

- Short!!!
- Unique
- Memorable
- Reflecting the core business values
- Credible
- Relevant
- Flexible (room for growth and changes)
- Guiding (for future marketing decisions)

Example 1



“For consumers who want to purchase a wide range of products online with quick delivery, *FIRM* provides a one-stop online shopping site. *FIRM* sets itself apart from other online retailers with its customer obsession, passion for innovation, and commitment to operational excellence.”

Example 2



For athletes in need of high-quality, fashionable athletic wear, *FIRM* provides customers with top-performing sports apparel and shoes made of the highest quality materials. Its products are the most advanced in the athletic apparel industry because of *FIRM*'s commitment to innovation and investment in the latest technologies.

Example 3



For individuals who want the best personal computer or mobile device, *FIRM* leads the technology industry with the most innovative products. *FIRM* emphasizes technological research and advancement and takes an innovative approach to business best practices - it considers the impact our products and processes have on its customers and the planet.

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This chapter should contain a comprehensive analysis of the target market

Key elements

Objective & scope

- Proof that a market exists for the business idea
- Analysis of the total market and the respective targets segments within the market

Market assessment

- Market potential: min and max market volume (in units and/or value)
- Market volume: current or future sales potential in a specific target segment/market

Requirements

- Relevant, reliable, robust and specific facts
- Scope: customer needs & market: size (actuals & forecasts), shares, competitors and suppliers
- Source: internet research, reports, interviews complemented with assumptions and estimates

Typical Mistakes

- Unrealistic or unclear assumptions to derive the market volume/growth
- No information on recent developments, i.e., within branch, for comparable products, pot. substitutes

Example: market volume estimation

Relevant questions

Example: German car market



1. What is the population of the country in scope?
2. For how many individuals in that country is the product in principle of relevance?
3. What proportion of this group actually buys the product?
4. How many items of the product does an average individual buy per year?

82,000,000 People live in Germany

50,000,000 Drivers licenses in Germany

30,000,000 Owners of a car in Germany

0.08 New cars per year per customer



2,400,000 New cars per year in Germany

Branch, market and target segments

Description

Branch

- Example: automotive industry
- Relevant information: external development (laws, standards, politics, negotiated agreements of company etc.)

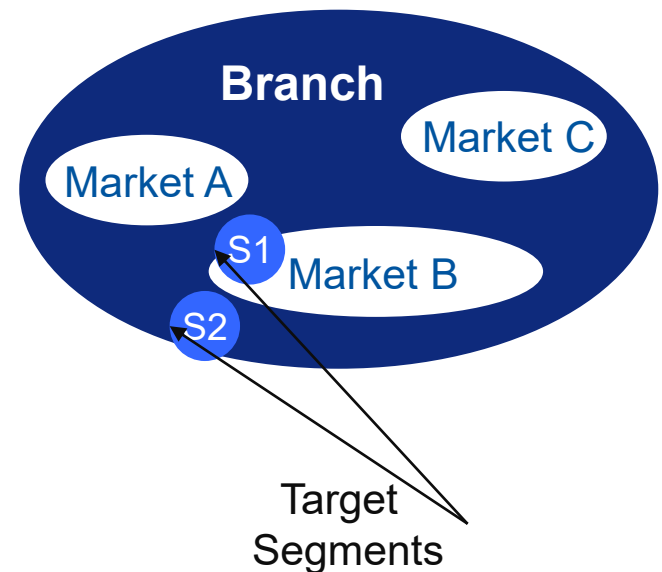
Market

- Example: electric vehicles
- Relevant information: market potential, volume and growth, characteristics of competitors, suppliers, trends and recent developments

Target segment

- Scope: entirety of potential target customers being addressed by the product
- Relevant information: Size of customer group

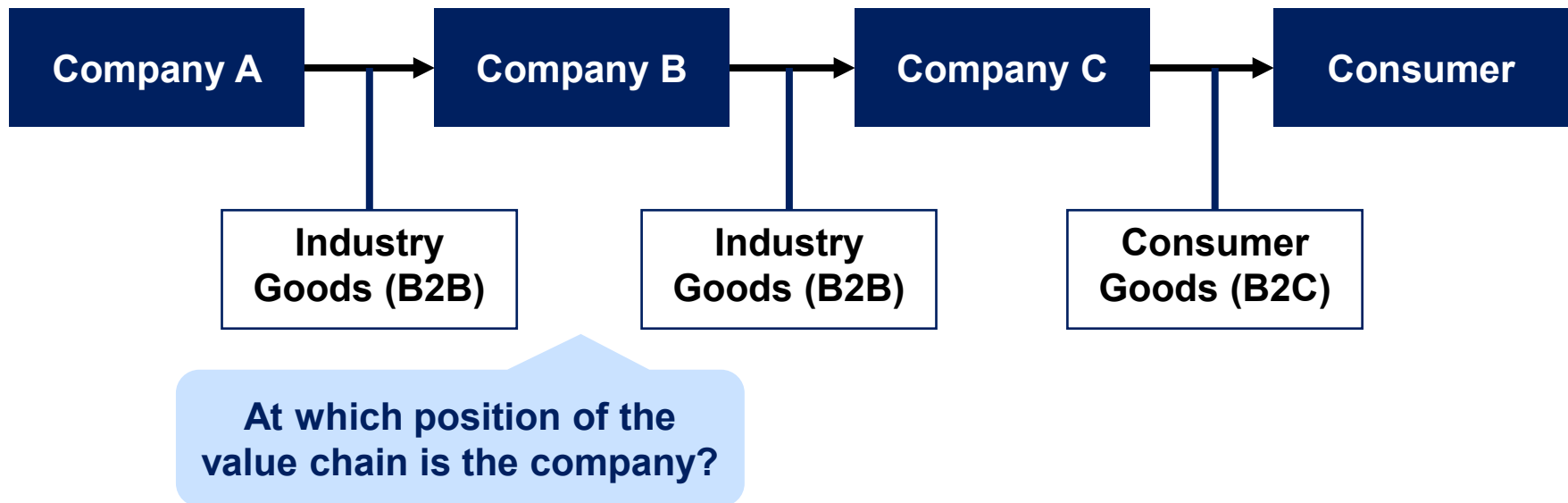
Visualization



Defining the company's position of the value chain helps segmenting the markets

Value Chain

- Provider and consumer are embedded in a combined “stream” of activities
- Provider usually have upstream value chains, which serve the company with raw materials and semi-finished products
- Products/ services are finally adding value for end-consumer



A systematic consideration of five important factors is essential for the detailed understanding of the target market

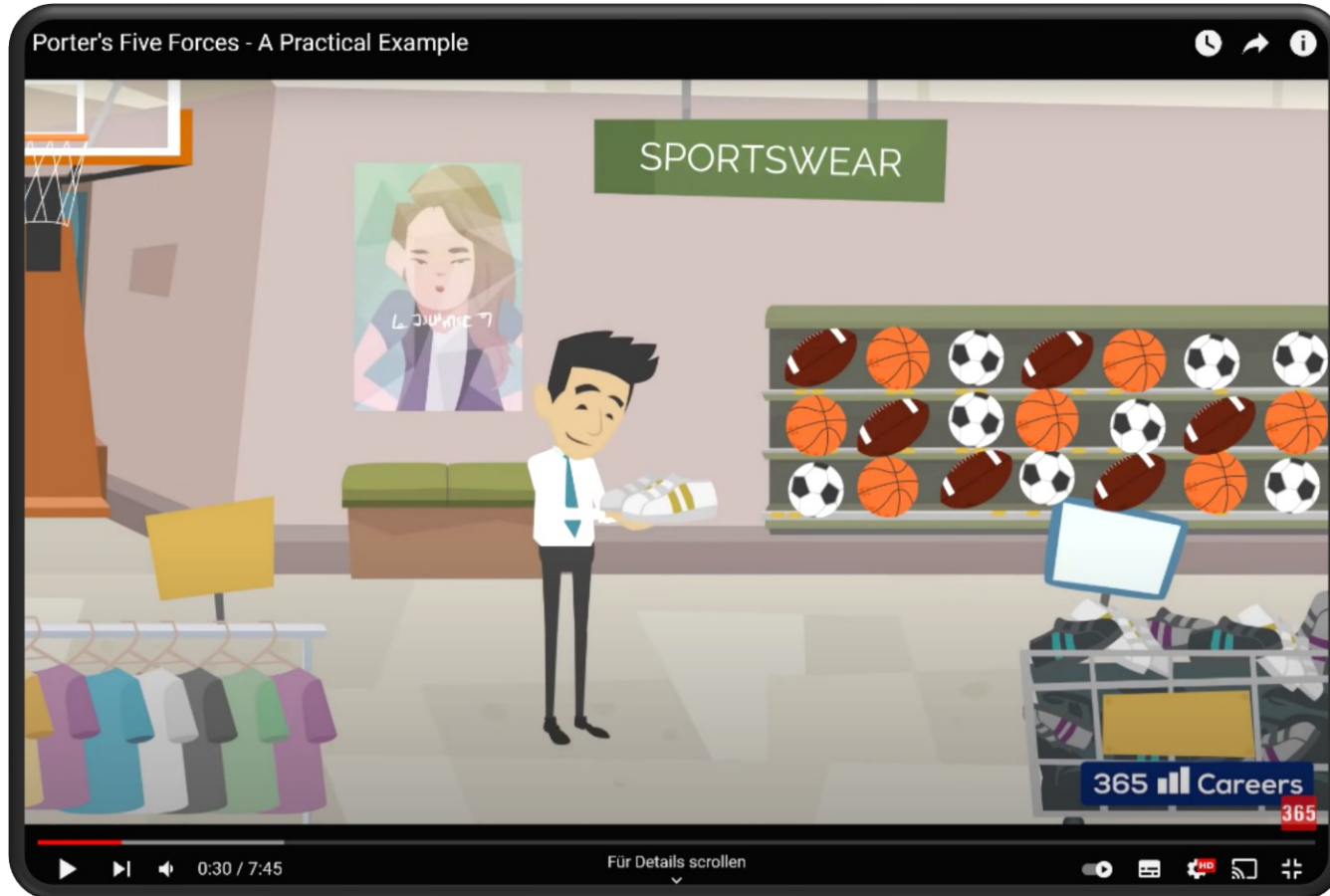


- Determination of earning power and attractiveness of the company (margin, success etc.)
- Factors might change over time
- Specific factors for each branch



The higher the threat of the five competitive factors, the less attractive is the branch and the harder it is to achieve an advantage in competition.

Porters Five Forces: A practical example



Business Plan – Structure

1. Executive Summary
2. Business Model
3. Market & Competition
- 4. Goals, Strategy & Implementation-Plan**
5. Product & Service
6. Marketing & Sales
7. Management, key personnel, organization
8. Chances & Risks
9. Revenue, Liquidity & Budget Planning



Generic strategies

Characterization

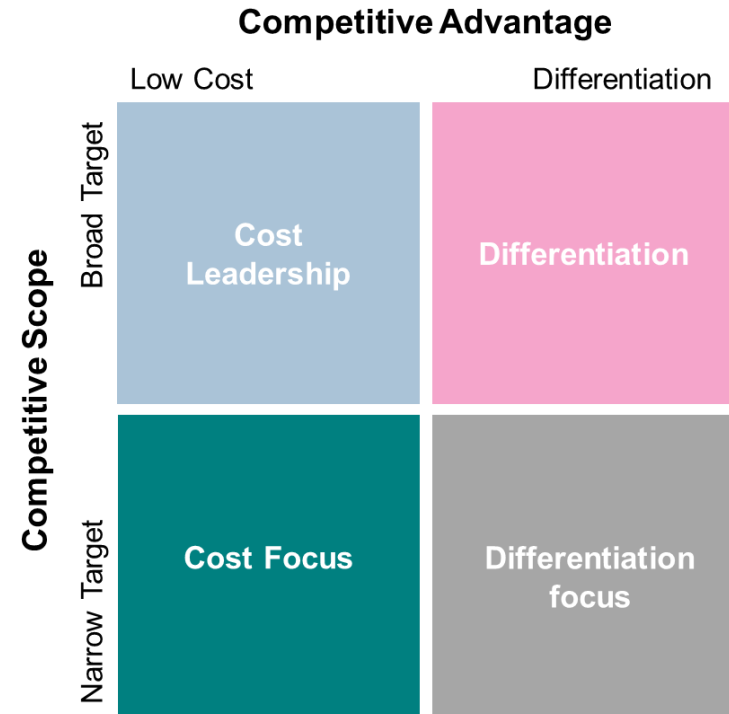
Strategy definition

- More granular than vision and mission
- Describes long-term direction of a company to attain the goals of the company.

Generic strategy types

- Have structurally lower costs than competition while offering the minimum required product value
- Have products / services different from competition in a way they are also valued by customer
- These generic strategic can be either by industry-wide or by focusing on a narrow segment

Competitive Strategies



3 Steps to reach a good realization planning for the business plan



1. Step

Planning Horizon

- Adapted to the fast pace of the idea and the imagination of the founders
- Normal time: Five years

2. Step

Classification of Sub Goals

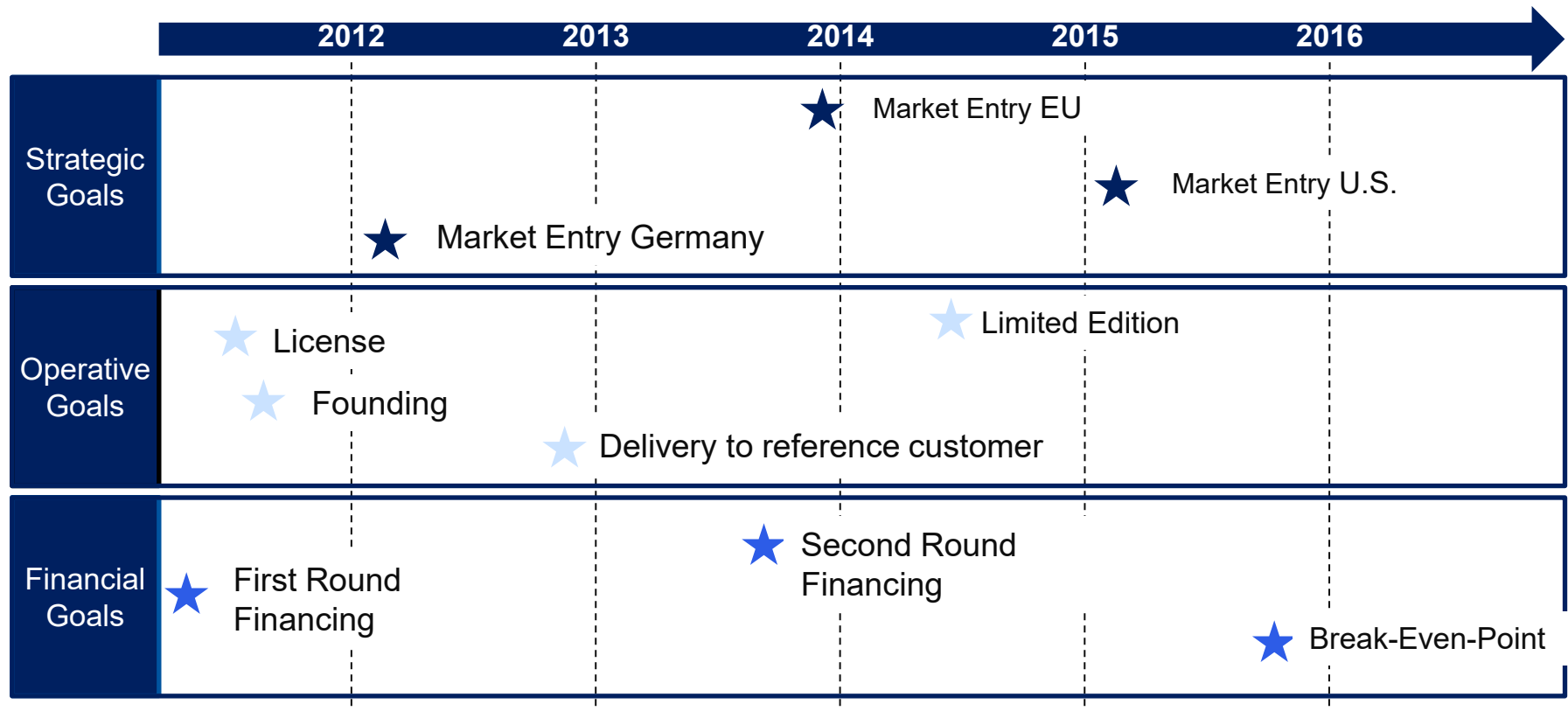
- Consistent to company goals of chapter 2
- Formulation of min five and max. 10 milestones

3. Step

Achievement of Sub Goals

- Required activities to reach the goals
- Activities in the early stage as detailed as possible, in the later stage less detailed to have a higher scope for planning changes

A visualized project plan along a timeline is a good way of portraying the realization planning



Always keep in mind the resources you require for the realization and which consequences you have to deal with in case of not reaching the goals!

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Five aspects are relevant to describe the product / service properly

Problem/ Motivation



- Detailed presentation of the problem
- Presentation as drastic as possible based on numbers
- Derivation of customer needs

Current Solution



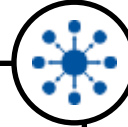
- Presentation of the current solutions and their inadequacies
- Derivation of the potential of own solution

Product Innovation



- Description of technology
- Potential of improvement in comparison to the current solution (Unique Selling Proposition = USP)

Status Quo



- Depiction of status-quo of the product
- Presentation of further steps before entering the market

Realization



- Presentation of value chain
- Depiction of yield model

The USP should be based on 3 well-known concepts

Relevance



- Description of relevant benefit for the customer (customer value)

Sustainability



- Description of sustainability of product for customer (long-term benefit)
- Description of sustainability of product for company (i.e. protection through patents)

Visibility



- The benefit should immediately be clear and finally lead to willingness to pay

Customer Benefits

- | | | | |
|-----------------|----------------------|--------------------------------|------------------|
| ▪ Costs savings | ▪ Recreational value | ▪ Potential of rationalization | ▪ Prestige Value |
| ▪ Time savings | ▪ Product quality | ▪ Maintenance advantages | ▪ etc. |

Business Plan – Structure

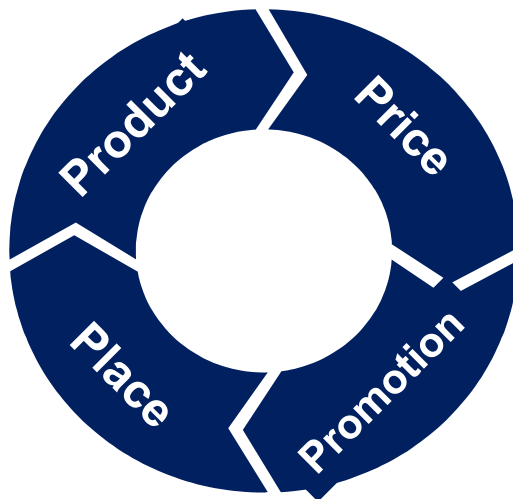
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The marketing-mix includes all activities influencing the demand

General Definition of Marketing Mix

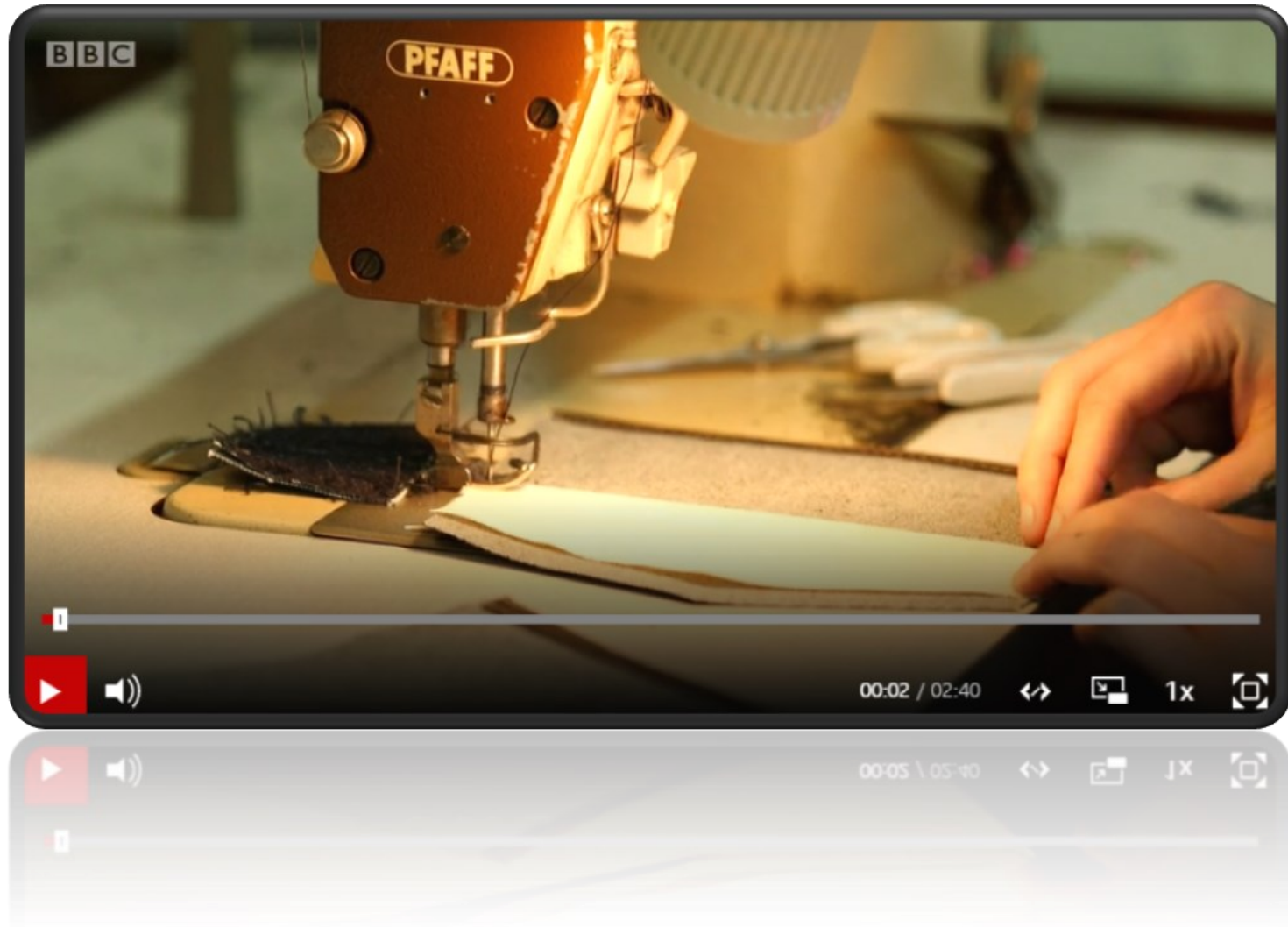
- = *Entirety of controllable tools, which can be combined to generate the desired effect and impact on the target market*
- Includes four aspects, which should be considered out of the customer perspective
- The four aspects are:



Aspects for the Business Plan

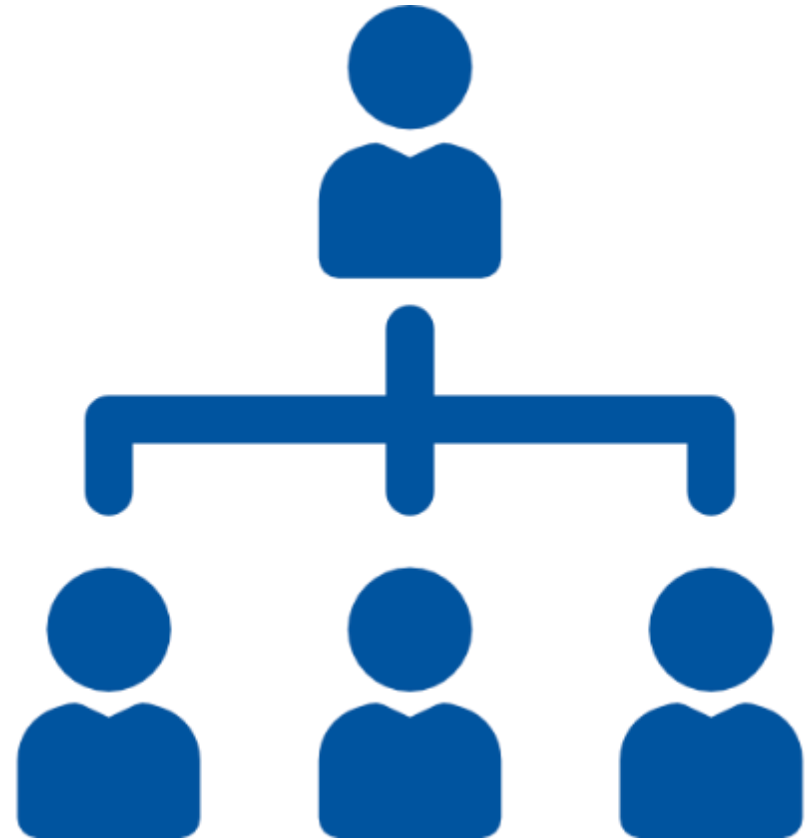
- **Product:** How is the product designed to influence the purchase decision?
- **Price:** Which pricing leads to the highest profit margin?
- **Promotion:** How can the company create attention for itself and the offered product?
- **Place:** How can the customer access the product respectively the service?

Marketing Mix example: The Hiut Denim Company



Business Plan – Structure

1. Executive Summary
2. Business Model
3. Product/ Service
4. Market & Branch
5. Marketing
- 6. Business System & Organization**
7. Management & Key Positions
8. Realization Planning
9. Revenue, Liquidity & Budget Planning
10. Chances & Risks



The structure of the company is defined by the organization and the business system

Business System



- How is the value chain of the company constructed?
- Which activities need to be fulfilled?

Organizational Structure



- How is the business system structured?
- Which subareas and sub functions does the organization include?

Legal Status



- Which legal status will serve the requirements of the organization? (e.g. financial needs, latitude)

Location



- Which location will be chosen to realize the advantages of the organization? (e.g. network, coaching, advisory board)

Company Name



- Which name should the company have?
- Why is the company name a meaningful choice?

Business Plan – Structure

1. Executive Summary
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5. Product & Service
6. Marketing & Sales
7. **Management, key personnel,
organization**
8. Chances & Risks
9. Revenue, Liquidity & Budget Planning



This chapter represents the management team and key positions

Objective

- Stakeholder get to know the skills and competencies of the team members and understand the value of each member of the company
- Stakeholder engagement and an advisory board strengthen the credibility and seriousness of the company

Content

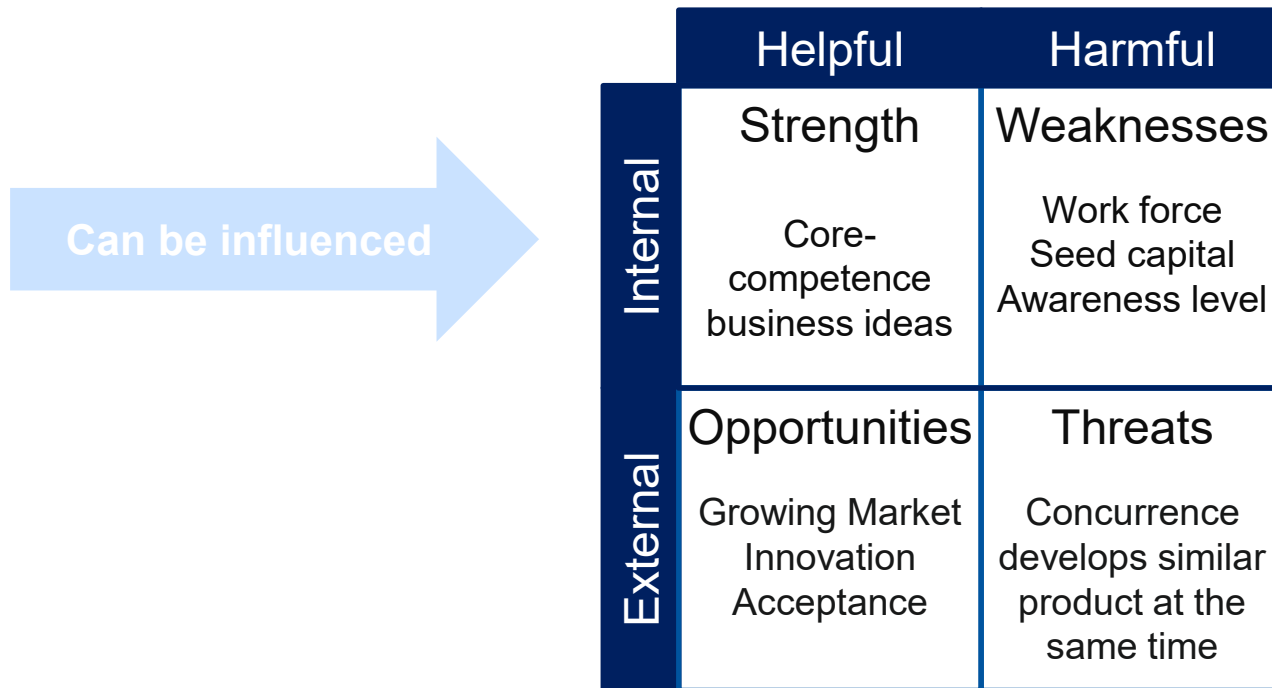
- Introduction of team members (skills, competencies, value)
- Team composition (distribution of tasks, commitment)
- Important: Relevant & complementary skills
- Internal key positions: Allocation of tasks, supplementing missing competencies, personnel planning
- External key positions: Introduction of stakeholders and the Advisory Board

Business Plan – Structure

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- 8. Chances & Risks**
9. Revenue, Liquidity & Budget Planning



Accordingly, strength, weaknesses, opportunities and threats need to be considered continuously



- Strength and weaknesses should be formulated out of the perspective of a third person (customer, partner)
- Chances and Risks should include both the macro environment (politics and economy) and micro environment (supplier and receiver)
- Suitable company strategies can be deviated from these four aspects

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- 9. Revenue, Liquidity & Budget Planning**



Objectives of the revenue, liquidity & budget planning

Obejctives

- Analyses from previous chapters are translated into concrete figures
- Should show that founders have given intensive thought to the future of the company
- Highly relevant for investors (banks, VCs, business angels) and founders
- Within the company: Identify bottlenecks and inconsistencies at an early stage and react quickly to changes
- Typical planning horizon: 3-5 years (at a monthly level for the next 2-3 years)



Selected components of a financial business plan (1/2)

Sales plan (in units per month)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Product A	0	0	0	2	1	1	0	3	4	5	4	3
Product B	0	0	1	2	2	1	2	2	3	4	5	5

Price per unit (in thousand Euro)

Product	
Product A	3
Produkt B	6

Bill o materials

	Raw Mat. A	Raw Mat. B	Raw Mat. C
Product A	1	2	1
Product B	2	3	1

Selected components of a financial business plan (2/2)

Sourcing (in units per month)*

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Raw Mat. A	2	6	5	3	4	7	10	13	14	13	10	13
Raw Mat. B	3	10	8	5	6	12	17	22	23	21	23	22
Raw Mat. C	1	4	3	2	2	5	7	9	9	8	9	9

*Assumption: Production has to start one month prior to sales. The production plan for February has to match the sales plan for March, in case no inventory is planned. Sourcing has to start one month prior start of production.

Personell (FTE per month)

	Jan	Feb	Mar	Apr	Ma y	Jun	Jul	Aug	Sep	Oct	Nov	Dec
CxO	1	1	1	1	1	1	1	1	1	1	1	1
Assistant	0	0	0	0	0	0	0	0	0	1	1	1
Accounting	0	0	0	0	0	0	0	0	0	0	0	0
Purchasing	0	0	0	0	0	0	0	0	0	1	1	1
Marketing/Sales	0	0	0	0	0	0	0	1	1	1	1	1
Production	1	1	1	1	1	1	1	1	1	1	1	1

**The overplus is the target goal of the profit and loss calculation,
the cash-flow calculation provides the free cash-flow (solvency)**

Profit and Loss Calculation

A)	Sales
–	B) Direct Costs
=	C) Gross profit
–	D) Personnel Costs
–	E) Personnel related Costs
–	F) Operating Costs
–	G) Consulting Costs
–	H) Marketing
–	I) Other Expenses
=	J) EBITDA
–	K) <i>Depreciations & Amortizations</i>
=	L) EBIT
–	M) Taxes
–	N) Interests
=	O) Net Profit/ Loss

Cash-Flow Calculation

A)	Sales
–	B) Direct Costs
–	D) Personnel Costs
–	E) Personnel related Costs
–	F) Operating Costs
–	G) Consulting Costs
–	H) Marketing
–	I) Other Expenses
=	J) EBITDA
–	K) Depreciations & Amortizations
=	L) EBIT
–	M) Taxes
=	N) Net Operating Profit After Tax
+	O) <i>Depreciations & Amortizations</i> ●
–	P) Capital Expenditure ●
–	Q) Interests
–	R) Working Capital Changes ●
=	S) Free Cash-Flow

Both perspectives are important for potential investors to assess the attractiveness of the business, e.g. for performing an enterprise valuation.

Determination of the enterprise value (1 / 2)



Peer Group Analysis

Company Name	Market Data			Financial Data (FY+1)			Valuation (FY+1)		
	Price (\$/share)	Market Cap (\$M)	EV (\$M)	Sales (\$M)	EBITDA (\$M)	Earnings (\$M)	EV/Sales x	EV/EBITDA x	P/E x
Micro Partners	\$9.45	\$945	\$1,070	\$268	\$76	\$47	2.5x	14.1x	22.8x
Junior Enterprises	\$5.68	\$7,100	\$9,100	\$4,136	\$778	\$412	2.2x	11.7x	22.1x
Minature Company	\$18.11	\$906	\$931	\$443	\$96	\$56	1.9x	9.7x	16.7x
Average Limited	\$12.27	\$7,730	\$8,080	\$1,949	\$528	\$294	2.6x	12.2x	22.4x
Bohemeth Industires	\$9.03	\$13,545	\$13,545	\$6,622	\$795	\$423	1.7x	17.0x	28.3x
Average							2.2x	12.9x	22.5x
Median							2.2x	12.2x	22.4x



Transaktion History

Date	Target	Transaction Value (\$M)	Buyers	Valuation		
				EV/Sales	EV/EBITDA	EV/EBIT
01/24/2017	Current Ltd	2,350	Average Limited	1.9x	9.4x	11.2x
04/19/2016	Recent Inc	6,500	Bohemeth Industires	1.4x	8.0x	12.6x
04/19/2014	Past Co	2,150	Other Group	1.3x	8.7x	12.1x
11/07/2014	Historical LLP	450	Junior Enterprises	2.3x	11.1x	13.6x
11/01/2012	Old Group	325	Minature Company	5.1x	18.8x	21.5x
10/07/2011	Dated Enterprises	150	Micro Partners	2.1x	9.3x	13.2x
Average				2.3x	10.9x	14.0x
Median				2.0x	9.4x	12.9x

Determination of the enterprise value (2 / 2): Net Present Value (NPV)

DEFINITION OF NET PRESENT VALUE

net present value
*calculate the value of future
revenue in today's dollars*



© Study.com

0:50

Assessing the financial attractiveness of a business idea

Discounted Free Cash Flow

Required input

- Free Cash Flow (FCF) p.a.
- Discount rate (r), e.g. in a business context the WACC (weighted average cost of capital)

Calculation

- Discounted Cash Flow year_n (DCF_n) = $FCF_n / (1 + r)^n$

Example

- r (WACC): 5%
- FCF year 1: 2.1 M€
- FCF year 7: 2.5 M€
- $DCF_1: 2.1 / (1 + 0.05)^1 = 2.00$
- $DCF_7: 2.5 / (1 + 0.05)^7 = 1.78$
- The 2.5 M€ in year seven have a lower present value of the 2.1M€ of year one

Comment

- Additional country risks such as higher inflation rates of target countries could be reflected in country risks premiums, which would added to the discount rate (r)

Investment assessment with DCFs

Required input

- Sum of all DCFs, e.g., from year 1 to infinity ($\sum DCF_{1 \text{ to } \infty}$)
- Cost to start/price to buy the business (C)
- Hurdle rate: min. internal rate of return (IRR) an investment has to generate

Calculation

- Derive the discount factor (r) that leads to a total sum of DCFs, which equals the costs/price (C)
- Can be done with Excel goal seek

Example

- $\sum DCF_{1 \text{ to } \infty}: 20 \text{ M€}$
- Cost: 10 M€
- Hurdle Rate: 8.0%
- IRR@Cost (10 M€): 8.5%
- $IRR@Cost (8.5\%) > \text{Hurdle Rate } (8.0\%)$
- Supportive to start/buy business

Case study: Assessing the financial attractiveness of a business idea

- You finalized the Financial Business Plan (Revenue, Liquidity & Budget Planning) for your business idea.
- You would now like to assess if you should pursue the idea from a financial perspective or not.
- **Task 1:** Calculate the “Free Cash Flows” and “Discounted Cash Flows” for the provided EBIT-ramp up (see below).
- The valuation of the business idea ($\sum DCF_{1 \text{ to } \infty}$) leads to an enterprise value of 16.5 M€. The idea would require an upfront investment of 12 M€.
- **Task 2:** Calculate the internal rate of return using the excel goal seek function and the provided Excel template and assess if you should pursue your business idea or not.
- Template: 20240208_Business Planning_DCFs.xlsx
- Assumptions: r (WACC): 5.0%, tax rate: 40%, no interest expenses, hurdle rate of 6.0%.
- Financial Business Plan (excerpt: EBIT-ramp up):

Financial Business Plan (excerpt)												
in MEUR												
Line	Y1 2024	Y2 2025	Y3 2026	Y4 2027	Y5 2028	Y6 2029	Y7 2030	Y8 2031	Y9 2032	Y10 2033	Y1/Y10	Y3/Y10
EBIT	0.4	0.6	0.8	0.9	1.0	1.2	1.4	1.5	1.6	1.6	15.9%	11.4%
Depreciation & Amortization	0.1	0.1	0.1	0.2	0.2	0.3	0.3	0.3	0.3	0.3		
Capital Expenditure	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3		
Net Working Capital	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3		

Case study: Assessing the financial attractiveness of a business idea

Enterprise Valuation												
Assumptions (for case study)												
r (WACC)												
Country Risk Premium												
risk adjusted r (WACC)	0.0%											
Perpetual growth rate (g)												
Tax rate												
Financial Business Plan (excerpt)												
in MEUR	Y1	Y2	Y3	Y4	Y5	Y6	Y7	Y8	Y9	Y10	Y1/Y10	Y3/Y10
Line	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033		
EBIT	0.4	0.6	0.8	0.9	1.0	1.2	1.4	1.5	1.6	1.6	15.9%	11.4%
Depreciation & Amortization	0.1	0.1	0.1	0.2	0.2	0.3	0.3	0.3	0.3	0.3		
Capital Expenditure	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3		
Net Working Capital	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3		
Free Cash Flow												
EBIT											#DIV/0!	#DIV/0!
- Taxes												
= NOPAT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
+ D&A												
- CAPEX												
NWC												
- Change in NWC	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
FCF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Discounted Cash Flow												
in MEUR	Y1	Y2	Y3	Y4	Y5	Y6	Y7	Y8	Y9	Y10	Sum1-10	Sum TV
	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033		
FCFs to be discounted	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Discount Factor												
Discounted Cash Flow p.a.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Discounted Cash Flow ramp-up	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Enterprise Value (EV)												
MEUR	%											
from FCF	0.0	#DIV/0!										
from TV	0.0	#DIV/0!										
Total	0.0											
EV Multiples												
Factor												
EV/EBIT	0.0 x											
EV/EBITDA	0.0 x											

Case study: Assessing the financial attractiveness of a business idea

Financial Commitment Simulation													
Assumptions													
risk adjusted r (WACC)	5.0%												
simulation r	5.0%												
Perpetual growth rate (g)	0.5%												
Tax rate	40.0%												
Financial commitment													
Enterprise Value													
in MEUR													
#REF!	Y1	Y2	Y3	Y4	Y5	Y6	Y7	Y8	Y9	Y10	Growth ra	Growth ra	
Line	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	Y1/Y10	Y3/Y10	
EBIT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	#DIV/0!	#DIV/0!	
- Taxes	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
= NOPAT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
+ D&A	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
- CAPEX	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
NWC	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
- Change in NWC	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
FCF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
Discounted Cash Flow													
in MEUR													
	Y1	Y2	Y3	Y4	Y5	Y6	Y7	Y8	Y9	Y10	Sum1-10	Sum TV	
	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033			
FCFs to be discounted	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
Discount Factor	0.952	0.907	0.864	0.823	0.784	0.746	0.711	0.677	0.645	0.614			
Discounted Cash Flow p.a.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	12.3	
Discounted Cash Flow ramp-u	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
Enterprise Value (EV)													
	MEUR	%											
from FCF	0.0	0%											
from TV	12.3	100%											
Total	12.3												
KPIs													
	Factor												
EBIT-multiple	#DIV/0!	x											
EBITDA-multiple	#DIV/0!	x											
Payback (years)	#N/A	years											

Case study: Assessing the financial attractiveness of a business idea

Enterprise Valuation - SOLUTION													
Assumptions (for case study)													
r (WACC)	5.0%												
Country Risk Premium	0.0%												
risk adjusted r (WACC)	5.0%												
Perpetual growth rate (g)	0.5%												
Tax rate	40%												
Financial Business Plan (excerpt)													
in MEUR	Y1	Y2	Y3	Y4	Y5	Y6	Y7	Y8	Y9	Y10	Y1/Y10	Y3/Y10	
Line	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033			
EBIT	0.4	0.6	0.8	0.9	1.0	1.2	1.4	1.5	1.6	1.6	15.9%	11.4%	
Depreciation & Amortization	0.1	0.1	0.1	0.2	0.2	0.3	0.3	0.3	0.3	0.3			
Capital Expenditure	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3			
Net Working Capital	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3			
EBIT	0.4	0.6	0.8	0.9	1.0	1.2	1.4	1.5	1.6	1.6	15.9%	11.4%	
- Taxes	-0.2	-0.2	-0.3	-0.4	-0.4	-0.5	-0.5	-0.6	-0.6	-0.7			
= NOPAT	0.3	0.3	0.5	0.5	0.6	0.7	0.8	0.9	0.9	1.0			
+ D&A	0.1	0.1	0.1	0.2	0.2	0.3	0.3	0.3	0.3	0.3			
- CAPEX	-0.2	-0.2	-0.2	-0.2	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3			
NWC	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3			
- Change in NWC	-0.1	-0.1	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	-0.1			
FCF	0.0	0.2	0.4	0.5	0.6	0.7	0.8	0.9	0.9	0.9			
Discounted Cash Flow													
in MEUR	Y1	Y2	Y3	Y4	Y5	Y6	Y7	Y8	Y9	Y10	Sum1-10	Sum TV	
	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033			
FCFs to be discounted	0.0	0.2	0.4	0.5	0.6	0.7	0.8	0.9	0.9	0.913			
Discount Factor	0.952	0.907	0.864	0.823	0.784	0.746	0.711	0.677	0.645	0.614			
Discounted FCFs p.a.	0.0	0.2	0.3	0.4	0.4	0.6	0.6	0.6	0.6	0.6	4.3	12.3	
Discounted FCFs ramp-up	0.0	0.2	0.5	1.0	1.4	2.0	2.5	3.1	3.7	4.3			
Enterprise Value (EV)													
	MEUR	%											
from FCF	4.3	26%											
from TV	12.3	74%											
Total	16.5												
EV Multiples													
	Factor												
EV/EBIT	38.2 x												
EV/EBITDA	33.1 x												

* Perpetual growth rate can be used to forecast the EBIT-ramp up after the in detailed modeled EBITs (of the Financial Business Plan). In our case, all EBITs after year 10. For example: EBIT of year 11 = EBIT of year 10 x (1 + 0.05) = 0.918 M€. EBIT of year 12 = EBIT of year 11 x (1 + 0.05), etc.

Case study: Assessing the financial attractiveness of a business idea

Financial Commitment Simulation - SOLUTION												
Assumptions												
risk adjusted r (WACC)	5.0%											
simulation r	6.5%											
Perpetual growth rate (g)	0.5%											
Tax rate	40.0%											
Financial commitment	12.0											
Enterprise Value												
in MEUR												
#REF!	Y1	Y2	Y3	Y4	Y5	Y6	Y7	Y8	Y9	Y10	Growth ra	Growth ra
Line	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	Y1/Y10	Y3/Y10
EBIT	0.4	0.6	0.8	0.9	1.0	1.2	1.4	1.5	1.6	1.6	15.9%	11.4%
- Taxes	-0.2	-0.2	-0.3	-0.4	-0.4	-0.5	-0.5	-0.6	-0.6	-0.7		
= NOPAT	0.3	0.3	0.5	0.5	0.6	0.7	0.8	0.9	0.9	1.0		
+ D&A	0.1	0.1	0.1	0.2	0.2	0.3	0.3	0.3	0.3	0.3		
- CAPEX	-0.2	-0.2	-0.2	-0.2	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3		
NWC	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3		
- Change in NWC	-0.1	-0.1	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	-0.1		
FCF	0.0	0.2	0.4	0.5	0.6	0.7	0.8	0.9	0.9	0.9		
Discounted Cash Flow												
in MEUR												
	Y1	Y2	Y3	Y4	Y5	Y6	Y7	Y8	Y9	Y10		
	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	Sum1-10	Sum TV
FCFs to be discounted	0.0	0.2	0.4	0.5	0.6	0.7	0.8	0.9	0.9	0.9		
Discount Factor	0.939	0.882	0.828	0.777	0.730	0.685	0.644	0.604	0.568	0.533		
Discounted Cash Flow p.a.	0.0	0.2	0.3	0.4	0.4	0.5	0.5	0.5	0.5	0.5	3.9	8.1
Discounted Cash Flow ramp-u	0.0	0.2	0.5	0.9	1.3	1.8	2.4	2.9	3.4	3.9		
Enterprise Value (EV)												
	MEUR	%										
from FCF	3.9	32%										
from TV	8.1	68%										
Total	12.0											

Goal Seek ? X

Set cell: B7

To value: 12

By changing cell: \$B\$4

OK Cancel

Based on the information provided, it seems attractive from a financial perspective to pursue the business idea, since the IRR of 6.5% > the hurdle rate of 6.0%

THANKS!