

IDEA GENERATION AND BUSINESS MODELLING

DAAD – HACKATHON AUTOMOTIVE INNOVATIONS IN TUNIS Franziska Böhler, M. Eng.

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- Systemic Business Coach

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Megatrend Map zukunfts**Institut NEO-ECOLOGY** SILVER SOCIETY HEALTH **NEW WORK** The Megatrend Map shows the twelve Megatrends. **GENDER SHIFT GLOBALIZATION** They are the biggest drivers of change in business and society and shape our future - not just in the GREEN PRESSURE O UNIVERSAL DESIGN short term: They unfold their dynamics over decades. O HOLISTIC HEALTH NEARSHORING MINIMALISM COOPETITION The dynamic of a Megatrend is never linear or one-PROGRESSIVE PARENTING dimensional, but multi-layered and even contains NEO-NATIONALISM INDIVIDUALIZATION O DETOXING O DOWNAGING opposing currents. Megatrends influence each other COMMON GOOD and often reinforce each other's impact. The map INDIVIDUALIZATION UNGENDERED LIFESTYLE POST-GENDER MARKETING therefore also depicts the parallels and overlaps between the Megatrends. FEMTECH C LIQUID YOUTH NEO-TRIBES CANCEL CULTURE вю-воом WE-CULTURE GENDER MAINSTREAMING LIVABILITY WORK-LIFE BLENDING SLOW CULTURE DIVERSITY MINDFULNESS O DO IT YOURSELF CASUAL OFEMINISM **NEW WORK** GLOBAL PROTEST CULTURE FLEXICURITY BUSINESS ECOSYSTEMS OMNI-CHANNELING CYBERCRIME FEMALE LEADERSHIP **GENDER SHIFT** GREEN TECH HYPER-PERSONALIZATION EVERYTHING AS A SERVICE DIGITAL REPUTATION HUMAN-MACHINE INTERACTION REGIONALIZATION MEANINGFUL ECONOMY PREVENTIVE HEALTH PLATFORM ECONOMY SUPER-SAFE SOCIAL BUSINESS TRUST TECHNOLOGY DIGITAL DIVIDE MULTIGRAPHY PRO-AGING KNOWLEDGE CULTURE EVERYDAY LIFE OUTSOURCING CORPORATE CULTURE SOCIAL NETWORKS OPEN DIRECT TRADE SELF-EFFICACY SCIENCE SECURITY CORPORATE HEALTH RESONANCE GERMOPHOBIA CRYPTO-CURRENCIES HUMAN RELATIONS POST-DEMOGRAPHY POST-GROWTH CROWDSOURCING SELF-CARE MEDICAL FITNESS OPEN KNOWLEDGE URBANIZATION SOCIAL BLOCKCHAIN GLOCALIZATION GIG ECONOMY KNOWLEDGE CULTURE URBAN MANUFACTURING SIMPLEXITY CO-WORKING PLAYFULNESS GENERATION GLOBAL EDUTAINMENT MICRO HOUSING VERTICAL VILLAGES COLLABORATION FREE CREATIVITY BIG DATA O SPORTIVITY OMLINE () RESTLESS RETIREMENT PREDICTIVE ANALYTICS CONDENSED SPACES GLOBAL CITIES AUTONOMOUS DRIVING 15-MINUTE CITY THIRD PLACES SEAMLESS MOBILITY DATAISM O SILVER SOCIETY GLOBAL MIGRATION REAL-DIGITAL DELIVERY BOTS TOUCHLESS TECH E-MOBILITY GLOBALIZATION BEYOND AUGMENTED REALITY MODERN NOMADISM SELF-OPTIMIZATION ARTIFICIAL O LAST MILE CONCEPTS ZERO WASTE PROGRESSIVE PROVINCE O 24/7-SOCIETY DECARBONIZATION SECURITY HEALTH CONNECTIVITY

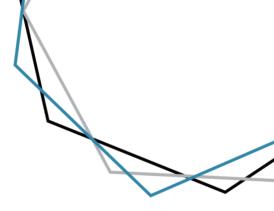
URBANIZATION

NEO-ECOLOGY

MOBILITY

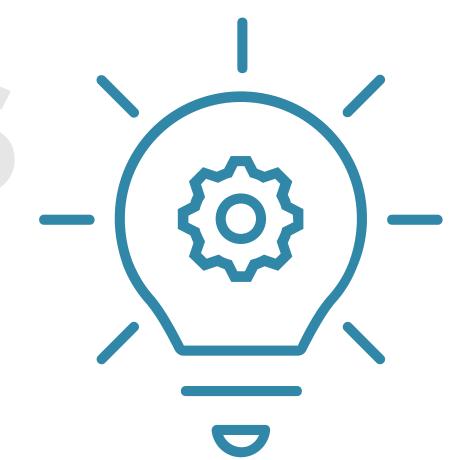
CONNECTIVITY

MOBILITY



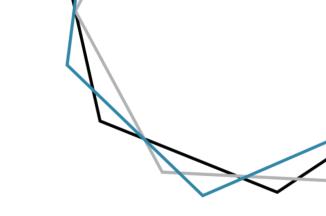


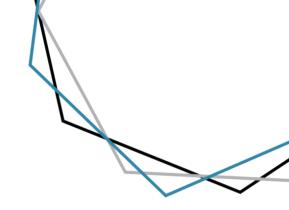
WHAT IS A BUSINESS IDEA?



"idea" + "business"

- ⇒A real business idea consists of both, a good idea but also a way to earn money or at least work "economical sustainable"
- ⇒Une vraie idée d'entreprise consiste en ces deux éléments, une bonne idée mais aussi un moyen de gagner de l'argent ou du moins de travailler de manière "économiquement durable".





WHAT MAKES A GOOD (BUSINESS) IDEA?



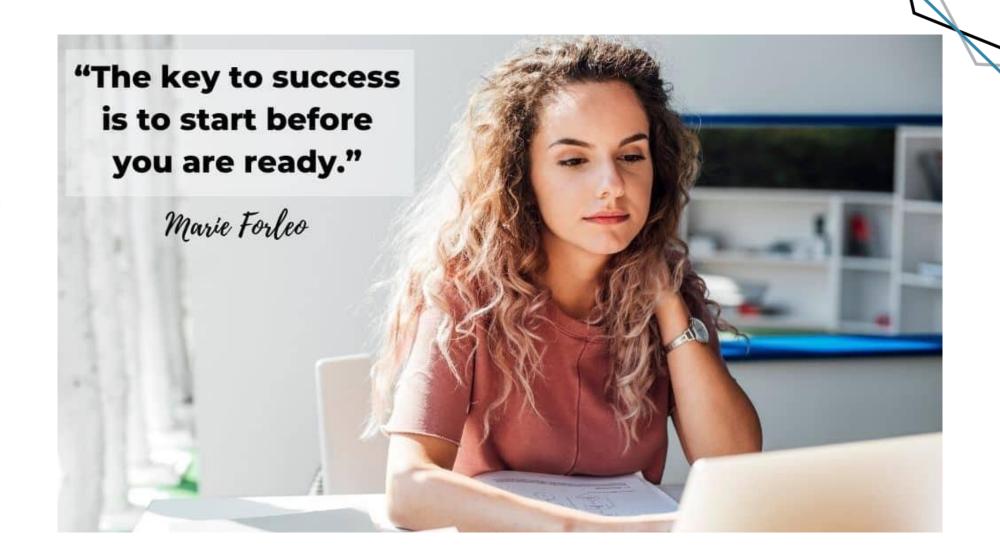
"Entrepreneurs have a mindset that sees the possibilities rather than the problems created by change."

J.GREGORY DEES



A BUSINESS HAS TO BE INVOLVING, IT HAS TO BE FUN, AND IT HAS TO EXERCISE YOUR CREATIVE INSTINCTS.





EVERYONE HAS A PLAN UNTIL THEY GET **PUNCHED IN** THE MOUTH.

Hack the Entrepreneur

JACK REACHER

Plans are worthless, but planning is everything

Dwight D. Eisenhower

US President 1948-1953, Supreme Commander der Allierten im 2. Weltkrieg

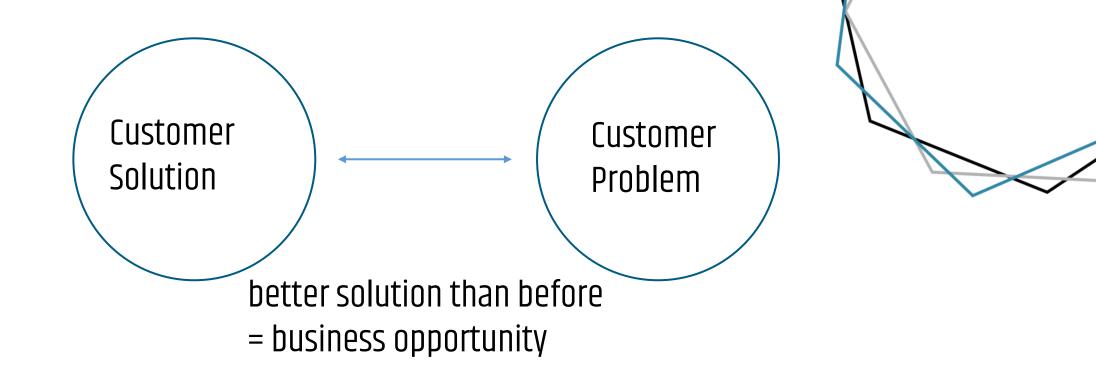


The Way To Get Started Is To Quit Talking And Begin Doing.

- WALT DISNEY





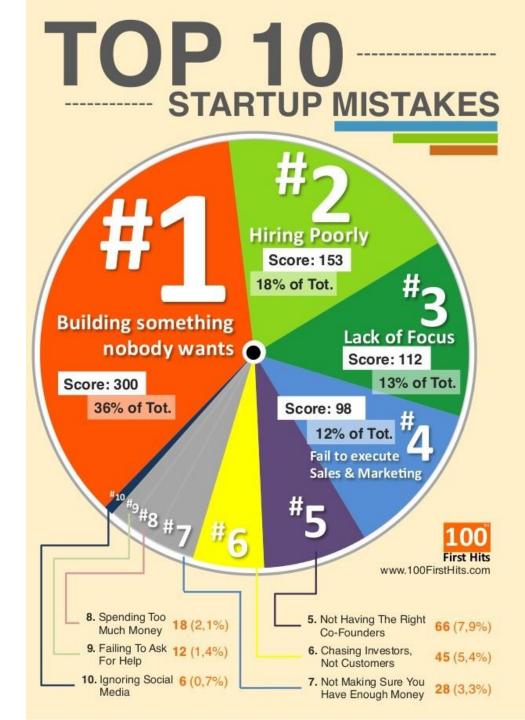


WHAT MAKES A GOOD (BUSINESS) IDEA?

GOOD BUSINESS IDEAS...

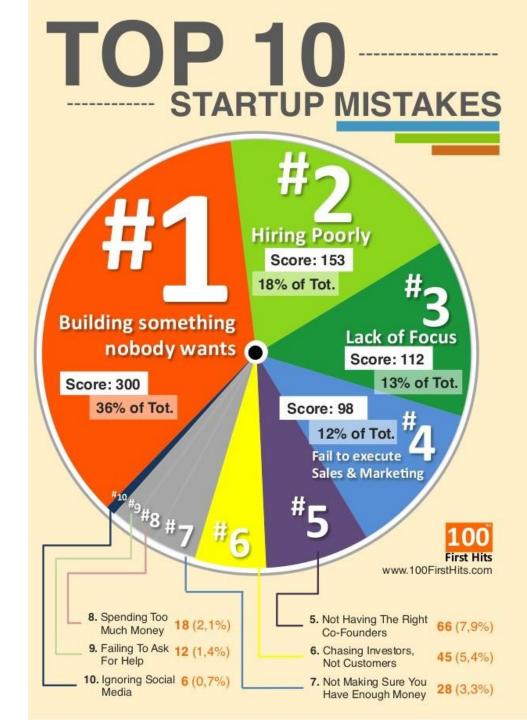
- Solve an existing problem!

 a problem exists, and you have designed a value proposition that addresses your customers' jobs, pains and gains
- Your solution is better than the one your customer currently uses!
- → Solve an existing problem better than your competitors and create products and services customers really want!
- → This is often challenging you to be "innovative"!



GOOD BUSINESS IDEAS...

- Résoudre un problème existant ! Un problème existe et vous avez conçu une proposition de valeur qui répond aux besoins, aux difficultés et aux avantages de vos clients.
- Votre solution est meilleure que celle que votre client utilise actuellement!
- → Résolvez un problème existant mieux que vos concurrents et créez des produits et services que les clients veulent vraiment!
- → Cela revient souvent à vous mettre au défi d'être "innovant"!



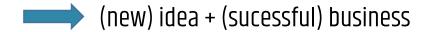
WHAT IS AN INNOVATION?

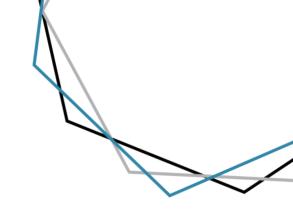
Joseph A. Schumpeter (1883 – 1950):

- The economical development is based on the process of "creative disruption"
- Production factors are to be combined in a new way, old structures are to be replaced with new ones
- this happens through innovations, driven by entrepreneurs and conquering markets

Innovations are a technical and organisational novelties that are socially acceptable, they recombine
existing production factors in a new way and they generate an economic success for the enterprise that
generates them.

(Baitsch, 2000)





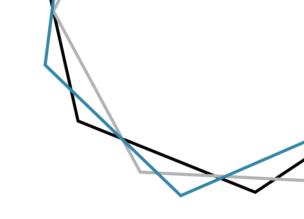
Qu'est-ce que c'est, une innovation?

Joseph A. Schumpeter (1883 - 1950) :

- Le développement économique est basé sur le processus de "perturbation créatrice".
- Les facteurs de production doivent être combinés d'une nouvelle manière, les anciennes structures doivent être remplacées par de nouvelles.
- Cela se produit par le biais d'innovations, poussées par des entrepreneurs et la conquête de marchés.
- Les innovations sont des nouveautés techniques et organisationnelles qui sont socialement acceptables, elles recombinent les facteurs de production existants d'une manière nouvelle et elles génèrent un succès économique pour l'entreprise qui les produit.

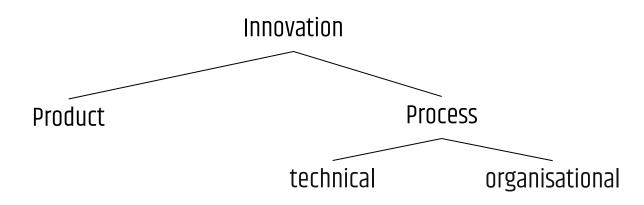
(Baitsch, 2000)

(nouvelle) idée + entreprise (prospère)



DIMENSIONS OF INNOVATION

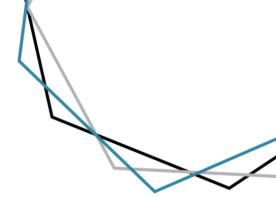
Object of the innovation:



degree of innovation: incremental vs. revolutionary / basic innovation

reason for the innovation: market-pull vs. technology-push

jurisdication: protectable vs. non-protectable



OBJECTS OF INNOVATION

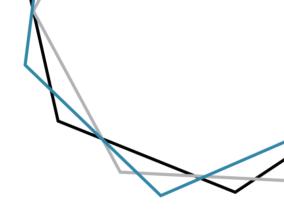
Product innovation

- New products (oat milk)
- New services (part car)

Process innovation

- New production techniques and processes (additive manufacturing)
- Novel operating concepts (McDonalds)
- New delivery/supply concepts (virtual pizzeria Milano Vice)
- New forms of organization within companies (franchising)
- New forms of cooperation between companies (just-in-time delivery)

In practice, combinations can usually be observed



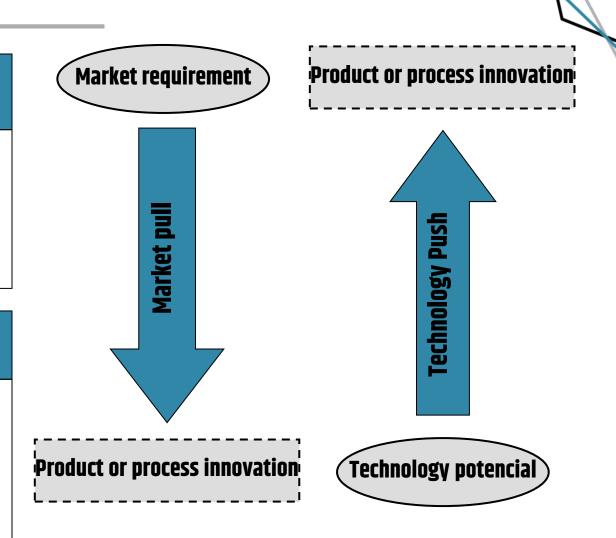
TRIGGERS FOR INNOVATION

Market-Pull-Innovation

requirement; idea comes from an identified market opportunity (target market clear)

Technology-Push-Innovation

Use of a technical potential to fulfill a latent requirement; technology-based idea (search for appropriate product-market combinations).



Schuh, 2002

CREATIVE TECHNIQUES TO GENERATE IDEAS

Systemic-analytical techniques

Mostly given initial solution, which is then varied and recombined

- Morphological box/morphological matrix
- Functional analysis
- Problem solution tree

Creative-Intuitive Techniques

New solutions found independently of existing ones

- Charette
- Brainstorming
- Synectics abstraction and analogies

Numerous hybrid forms:

- Brainwriting
- Stimulus word analysis association technique
- De Bonos thinking hats

CHARETTE

Goal: Many ideas in a short time in four thematic blocks.

Material: posters, moderation cards, markers, adhesive dots

What is to be done?

- Select 4 topics together
- Divide into groups, each group works on each topic, changing every 10 minutes.
- Add as many ideas as possible for each topic use moderation cards to do this
- The group may also discuss and collect ideas together!

Don't judge - just do it!



Brainwriting (10-3-3 Method)

Aim: To refine ideas, to have even more ideas and to think creatively.

Material: Brainwriting posters, moderation cards, markers and adhesive dots

What to do: Each participant takes a poster and enters three ideas from "their" Charette topic area, then moves on to the next poster and develops the ideas entered there in the first column, then moves on until everyone is back at their original idea.

Silence is golden!



IDEE 1:	IDEE 2:	IDEE 3:	

RATING IDEAS: CLUSTERING TECHNIQUES

Objective: Initial pre-selection of interesting ideas

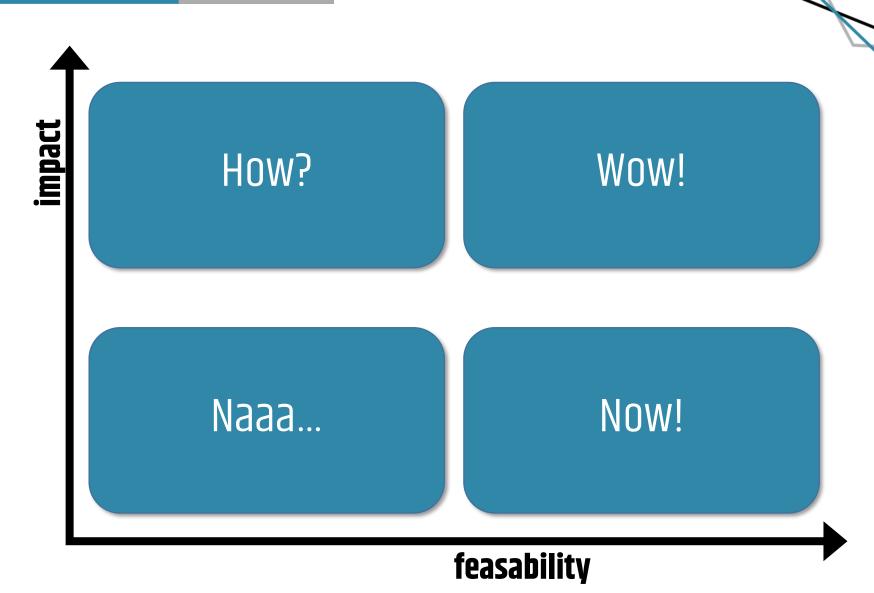
Material: Idea cluster matrix, moderation cards, pens, sticky dots.

What to do? Everyone chooses 3 ideas and arranges them on the matrix! Sticky dots are given for the "Dark Horse" and the "Most Socially Valuable Idea".

DARK HORSE = deliberately daring / disruptive idea



IDEA CLUSTER - EVALUATION



FROM BUSINESS IDEA TO BUSINESS MODEL

WHAT IS A BUSINESS MODEL?

"A business model describes the rationale of how an organization creates, delivers and captures value."

Consists of three components & three questions have to be answered during the creation process:

What value can I bringt to my customers and partners? = Value Proposition

How can I do that? = Value Architecture

How can I earn money? =Revenue Model



Qu'est-ce qu'un modèle d'entreprise?

"Un modèle d'entreprise décrit la logique de la manière dont une organisation crée, délivre et capture la valeur."

Il se compose de trois éléments et trois questions auxquelles il faut répondre pendant le processus de création :

Quelle valeur puis-je apporter à mes clients et partenaires ? = Proposition de valeur Comment puis-je le faire ? = Architecture de la valeur Comment puis-je gagner de l'argent ? = Modèle de revenu



EXAMPLE 1: IKEA

Value proposition

Immediate purchase of furniture in stores, no waiting for delivery, extraordinary design at reasonable prices

Value architecture

Customer is involved in creating the value: logistics from the shop to his/her home and the assembly

Revenue model

Through high volume of sales, production in bulk is possible and furniture can be produced at very low costs per unit



EXAMPLE 2: ADDITIVE DRIVES

- German start-up from Freiberg, Saxony
- 3D-Printing of electric motor components (esp. windings for electric motors) from highperformance copper for automobile industry

Customer Problem:

"...high demands on individual components. Conventional electric motor manufacturing processes quickly reach their limits; optimized geometries for electric motor functionality often cannot be attained. This leads to painful compromises in performance and efficiency."

Start-up Solution:

"...using 3D printing to manufacture copper coils. The higher copper content in the electric motor reduces losses and improves the thermal coupling of the winding. A 45% performance increase was registered when our copper coils were used in a racing motor."



Additive Drive Business Model:

Value proposition

Immediate high-performance copper components for electric motors, increasing performance

Value architecture

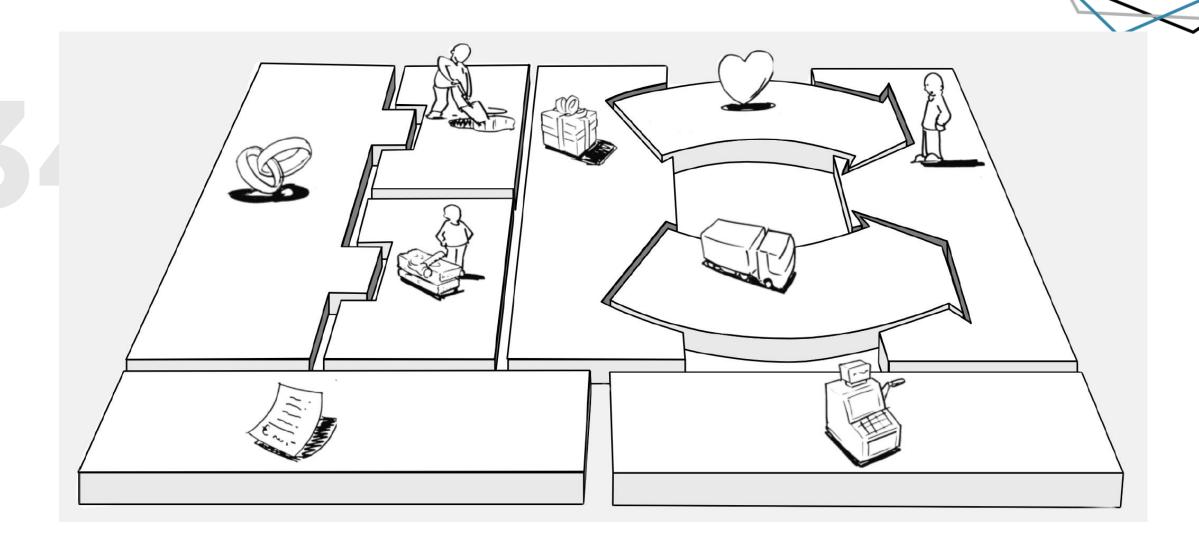
Additive Manufacturing instead of winding wire through bending and welding tools

Revenue model

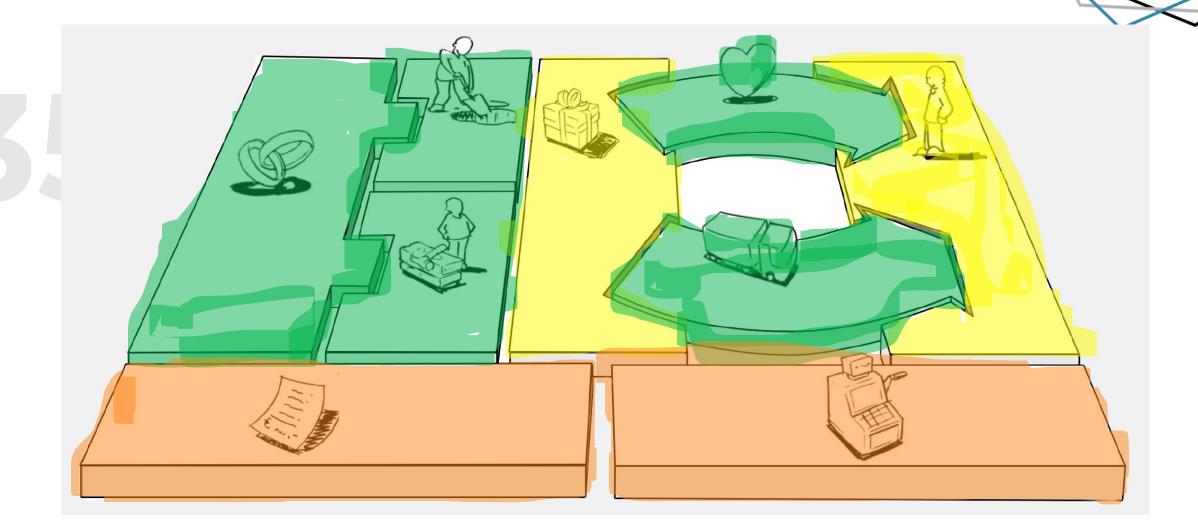
Manufacturing on order, aiming for long-term contracts



BUSINESS MODEL CANVAS



BUSINESS MODEL CANVAS



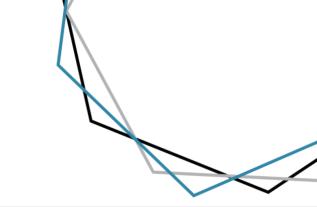
CUSTOMER SEGMENTS

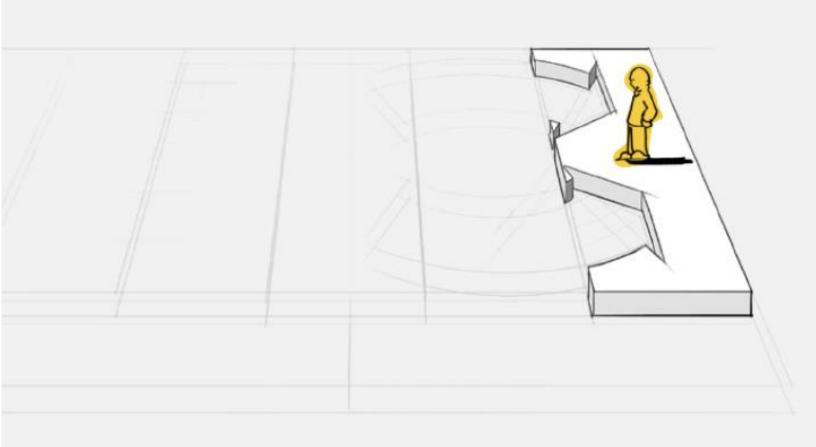
Who is your customer? How can they be characterized into groups of people or organizations? Wo is your most important customer?

Customer segments can feature...

- Mass markets
- Niche markets
- B2B / B2C
- (Multi-Sided) platfom businesses

Attention: customers are always the ones that PAY!





CUSTOMER SEGMENTS

Additive Drives:

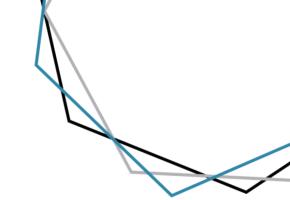
Manufacturers of High-performance electric motors

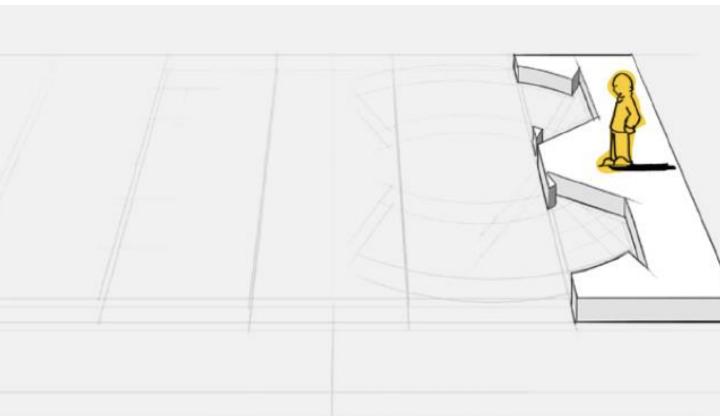
Ikea:

young middle-class people looking for cheap but also stylish furniture Single people not living at home. Newly married couples. Families with the youngest child under six. Older married couples with dependent children.

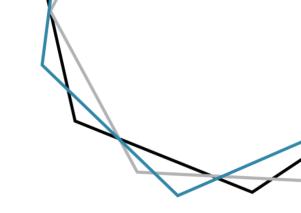
Common mistake:

"everyone is our customer"





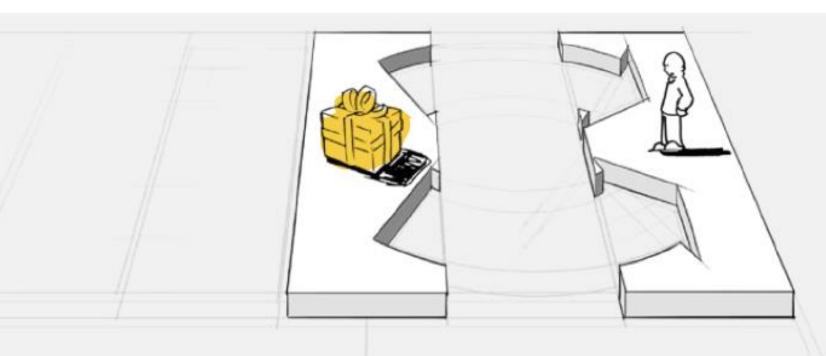
VALUE PROPOSITION



What unique value do you offer to your customer? Which customer needs are you satisfying?

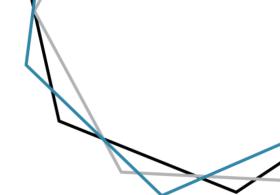
Value can be generated through

- innovation
- Better performance
- Better prices
- Risk reduction
- Availability, adaptability, usability
- Design or brand
- Time saving



= reduction of costs or increase of turnover / gain

VALUE PROPOSITION



Additive Drives:

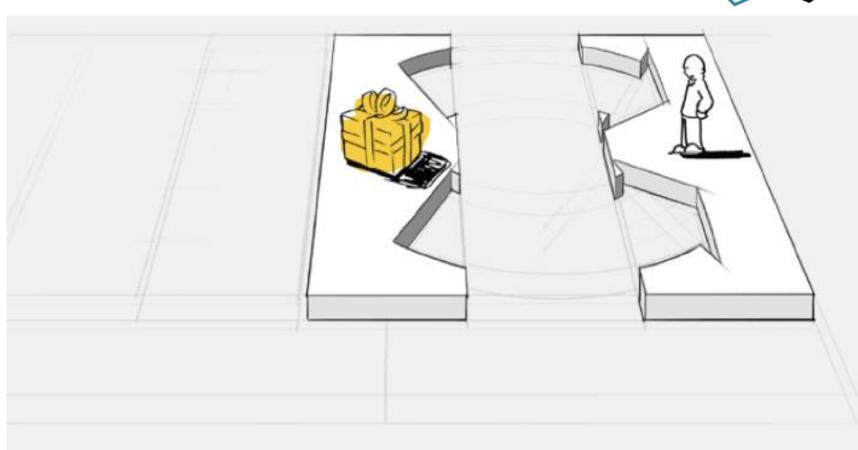
Immediate high-performance copper components for electric motors, increasing performance

Ikea:

Immediate purchase of furniture in stores, no waiting for delivery, extraordinary design at reasonable prices

Common mistake:

Listing product/service instead of value



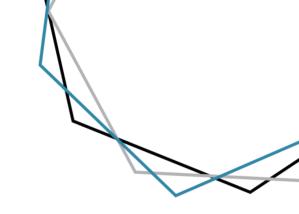
CHANNELS

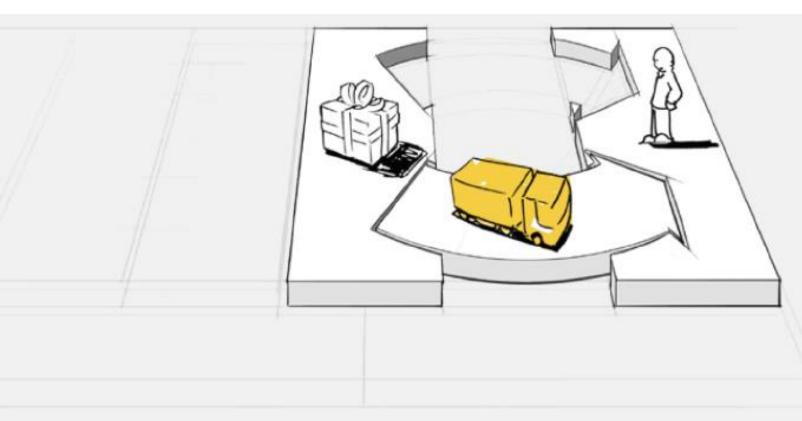
How do you deliver your unique value to your customers and how do they know about you? Through which channels that your customers want to be reached? Which channels work best?

Channels can be direct (owned channels) or indirect, (through partners):

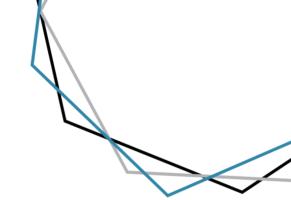
- Sales team
- On-/Offline shop
- Affiliates / whole salers
- Marketing strategy

Common mistake: being unprecise and / or not considering the costs





CHANNELS



Additive Drives:

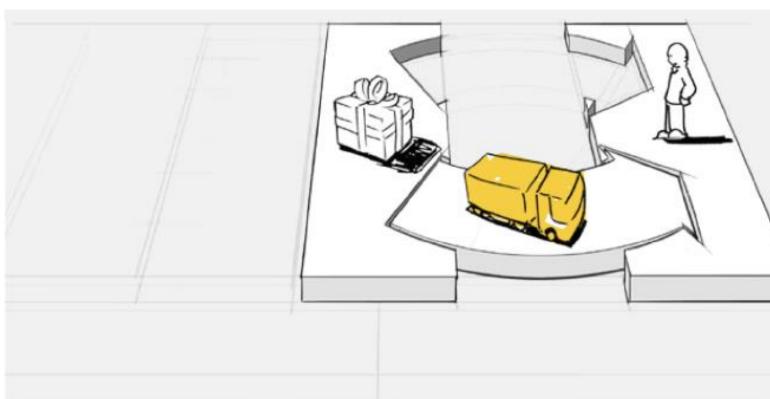
Direct or third-party contacts, networking, linkedin, website, automotive fairs Sales Team goes to customer for personal meeting

Ikea:

Physical store and printed catalog print and media advertising events, promotions, and community outreach campaigns

Common mistake:

Listing all kinds of marketing / sales options randomly



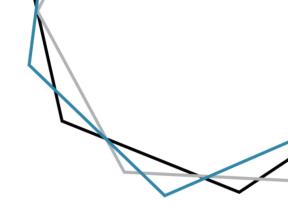
CUSTOMER RELATIONS

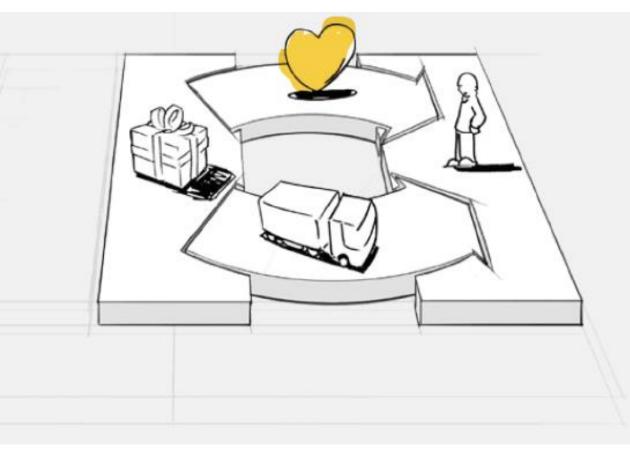
How do you interact with your customer? What relationship that the target customer expects you to establish?

Customer relationships can be...

- Personal / individual contact vs. impersonal
- Self-service vs. customer service
- Automated contact (through customer portal) vs. Human interaction
- Formal / informal?
- Communities
- Co-creation
- Short / long term







CUSTOMER RELATIONS

Additive Drives:

Personal and direct, co-creation during the feasibility studies, mostly formal, "one face to the customer"

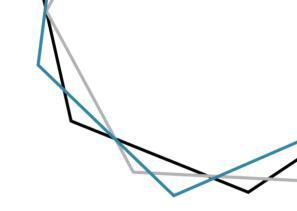
→ customer relationship is crucial for the success of the business

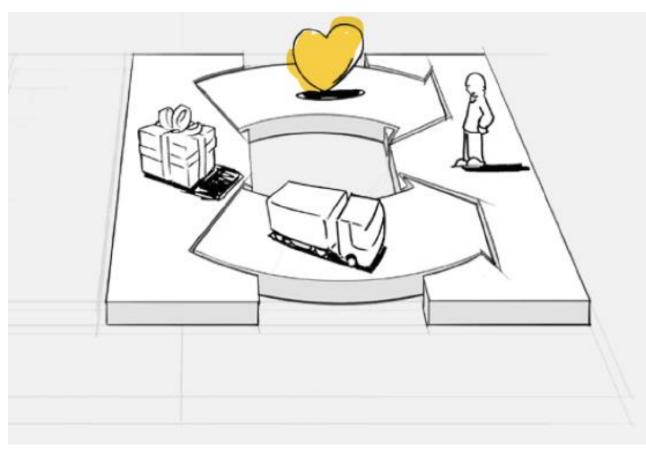
Ikea:

Informal, direct through staff members at Ikea but also multiple indirect online channels and app, focus on customer service

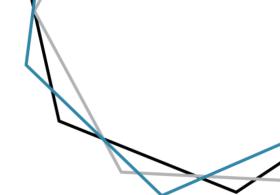
Common mistake:

Not considering the estimated amount of customers you have to be able to communicate with, not thinking customer-oriented (costly!)





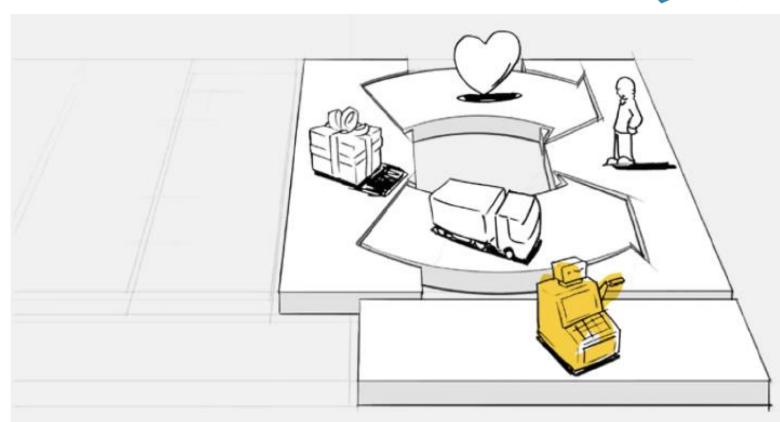
REVENUE STREAMS



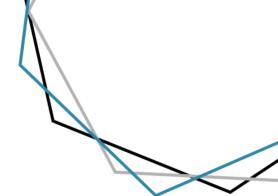
Revenue / turnover that is generated through the business model...

Can be achieved through:

- Sales of goods / services per product
- Fees
- Abonnements
- Rent
- Licences
- Transaction fees
- Advertisement



REVENUE STREAMS



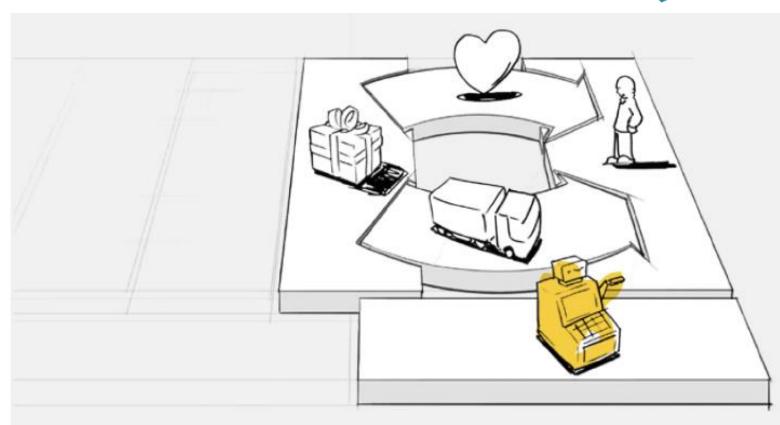
Additive Drives:

Manufacturing on order, aiming for longterm contracts, feasibility-studies first, then bulk orders

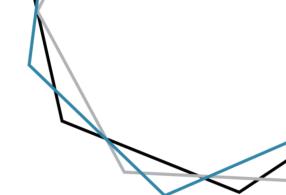
Ikea:

Sales of products Franchise fees

Through high volume of sales, production in bulk is possible and furniture can be produced at very low costs per unit



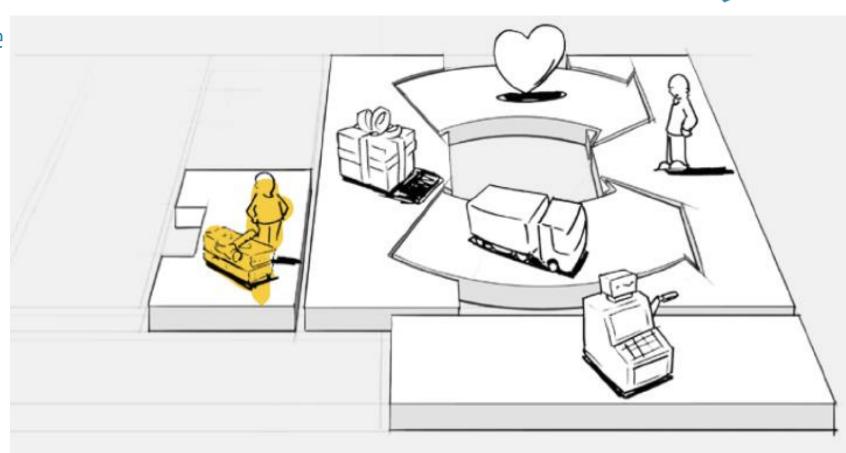
Key Resources



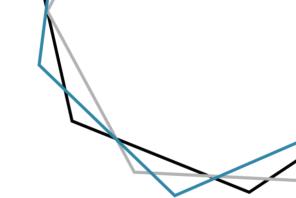
What resources do you need to create and deliver the value to your customer.

Resources can be...

- Physical (infrastructure)
- Intellectual (know-how)
- Human (staff)
- Financial (funding)



KEY RESOURCES



Additive Drives:

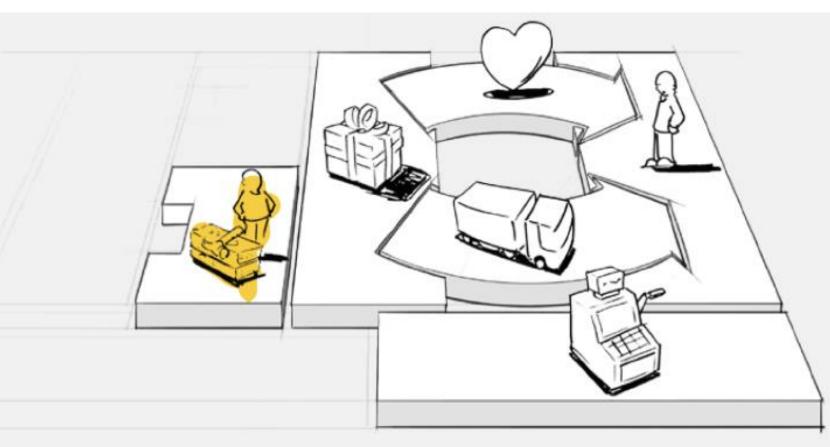
Founder team, patents and scientific knowledge, small production site, highend additive manufacturing engine, network of possible customers, money, car for business trips,...

Ikea:

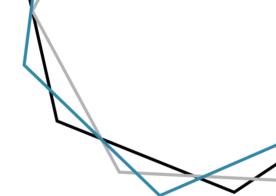
Suppliers network for bulk production, brand, stores, designers, staff, distribution infrastructure / partners

Common mistake:

Not considering the whole value creation process – important key resources are missing.



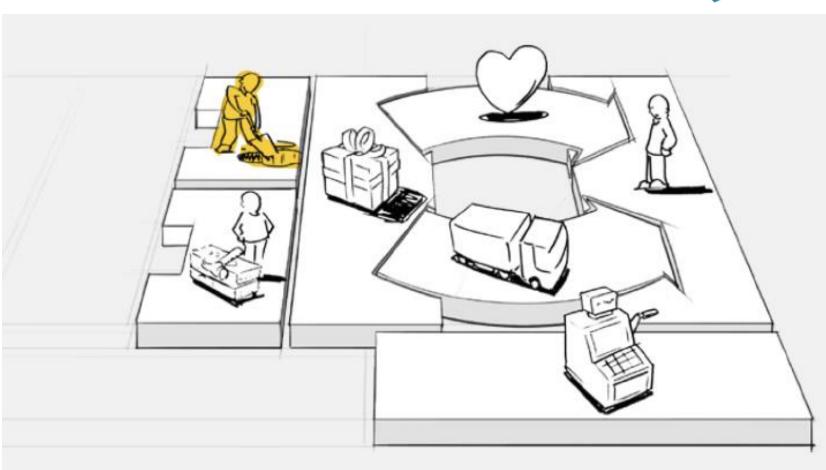
KEY ACTIVITIES



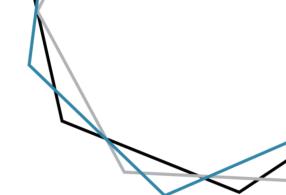
Which activities are vital to deliver the value proposition?

Activities can be...

- Research & delivery
- Production
- Customer service / relations
- Networking
- Testing and collecting customer feedback
- Logistics
- Marketing / Sales



KEY ACTIVITIES



Additive Drives:

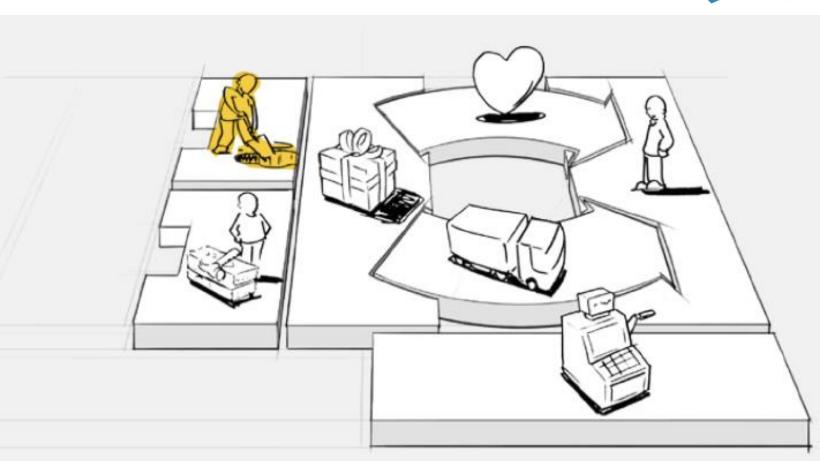
Find first customers, build up production site, make feasibility studies, negotiate contracts, networking, refining of production for high-end product, finding investors,...

Ikea:

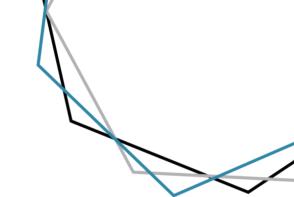
Designing and selling furniture, managing sustainability demands, opening up new stores, lots of marketing for a strong brand

Common mistake:

Not considering the start phase of your business – what do you need to do to get started and have your first customers?



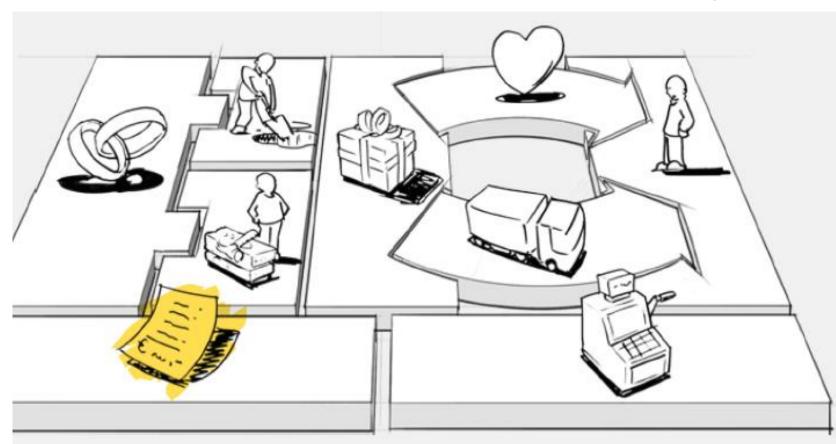
COST STRUCTURE



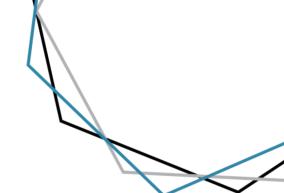
What cost is caused by the chosen business model?

Cost structures can be classified in:

- Fixed / variable costs
- Economies of scale or scope



COST STRUCTURE



Additive Drives:

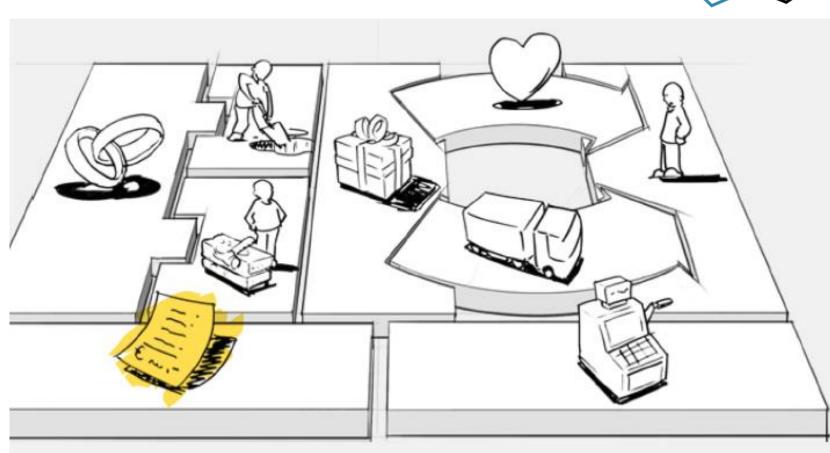
Materials (copper)
Machinery (additive manufacturing site)
Rent (production site)
Staff and founders team salary
Fair / exhibition fees
Energy costs

Ikea:

Manufacturing / bulk buying
Design, staff and stores, marketing

Common mistake:

Listing all the costs that come through your mind instead of focusing on key costs and how they are created

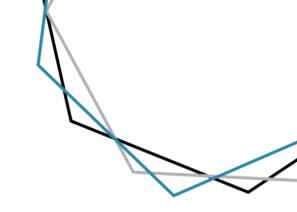


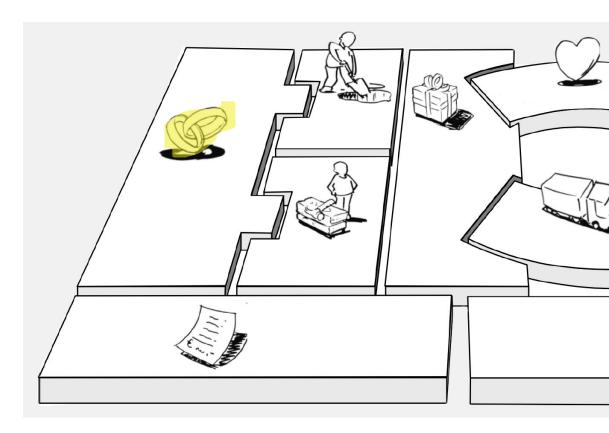
KEY PARTNERS

Partners that are vital for the business model Who are your key partners/suppliers?

- Suppliers
- Network partners
- Investors / Bank associates
- Sales partnerships
- Marketing agencies
- ..

What are the motivations for the partnerships?





KEY PARTNERS

Additive Drives:

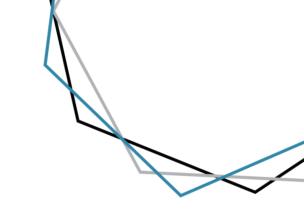
Suppliers
Technology partners (additive manufacturing)
Automotive network university

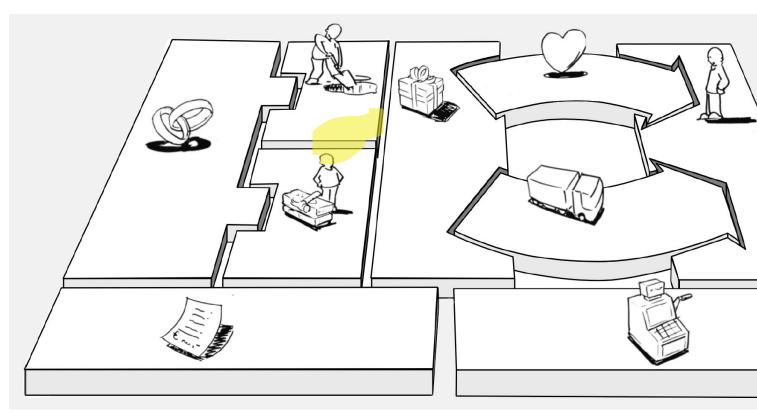
Ikea:

Designers, manufacturers, delivery partners

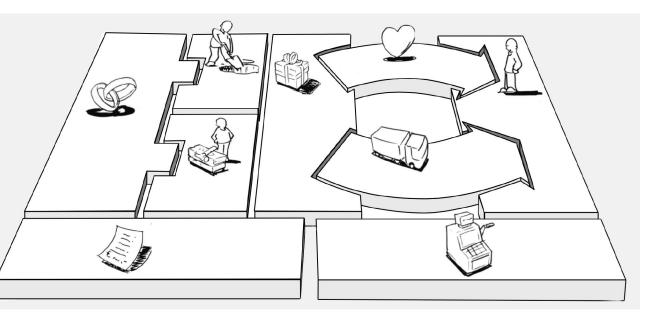
Common mistake:

Sometimes your partners are your customers – please check!

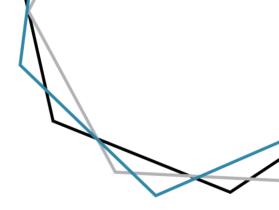




BUSINESS MODEL CANVAS







he Busine	ess Mo	odel Canvas	Designed for:		Designed by:	Date:	Version:
Key Partners	P	Key Activities	Value Proposit	ions	Customer Relationships •	Customer Seg	gments
		Key Resources	4		Channels	_	
Cost Structure			•	Revenue Strea	nms		(
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The Business Model Canvas

Designed for:

Designed by:

Date:

Version:

Key Partners	Key Activities	Value Proposit	cions	Customer Relationships 🖤	Customer Segments
	Key Resources			Channels	
		<u></u>			<u> </u>
Cost Structure			Revenue Strea	ıms	§



The Business Model Canvas

Designed for:

Designed by:

Date:

Version:

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Key Partners



Partners that are vital for the business model

- **Suppliers**
- Network partners
- Investors / Bank associates
- Sales partnerships
- Marketing agencies

Kev Activities



Which activities are vital to deliver the value proposition?

- Research & delivery
- Production
- Customer service / relations
- Networking
- Testing and collecting customer feedback
- Logistics
- Marketing / Sales

Key Resources



What resources do you need to create and deliver the value to your customer.

Resources can be...

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- Physical (infrastructure)
 - Intellectual (know-how)
- Human (staff)
- Financial (funding)

Value Propositions



What unique value do you offer to your customer?

Value can be generated through

- innovation
- Better performance
- Better prices
- Risk reduction
- Availability, adaptability, usability
- Design or brand
- Time saving

= reduction of costs or increase of turnover / gain Customer Relationships

How do you interact with your customer?

Customer relationships can be...

- Personal / individual contact vs. impersonal
- Self-service vs. customer service
- Automated contact (through customer portal) vs. Human interaction
- Formal / informal?
- Communities
- Short / long term

Channels



How do you deliver your unique value to your customers and how do they know about you?

Channels can be direct (owned channels) or indirect, (through partners):

- Sales team
- On-/Offline shop
- Affiliates / whole salers
- Marketing strategy

Customer Seaments



Who is your customer? How can they be characterized into groups of people or organizations?

Customer segments can feature...

- Mass markets
- Niche markets
- B2B / B2C
- (Multi-Sided) Platfom husinesses

Cost Structure

What cost is caused by the chosen business model?

Cost structures can be classified in:

- Fixed / variable costs
- Economies of scale or scope



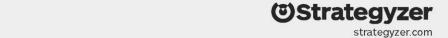
Revenue Streams



Can be achieved through:

- Sales of goods / services per product
- Abonnements
- Licences
- Transaction fees

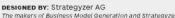




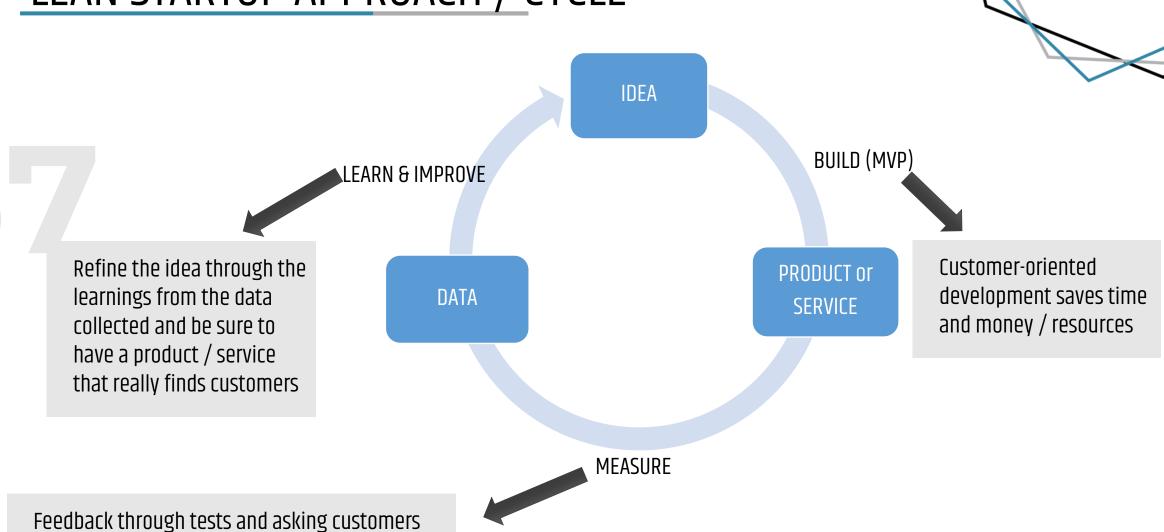






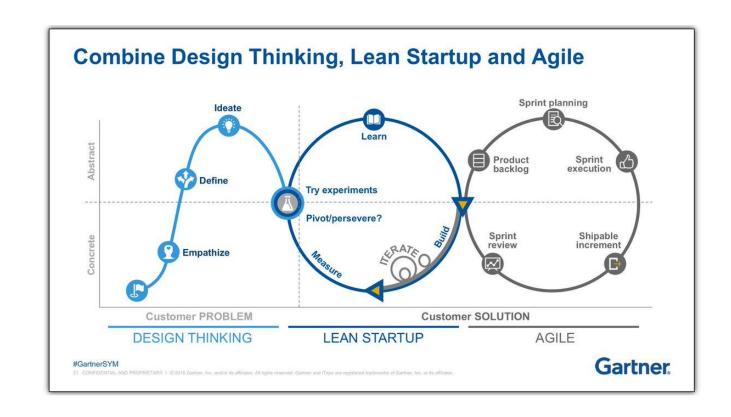


LEAN STARTUP APPROACH / CYCLE



ADVANTAGES

- It is fast and adaptable
- Working with several models / ideas at once
- A team gets mutual understanding of their idea – develops their own language within the process
- Customer and value centred business development
- Integrates in other modern tools for business development (VUCA, Design Thinking, Lean Start-up Management, Agile / Scrum, ...)



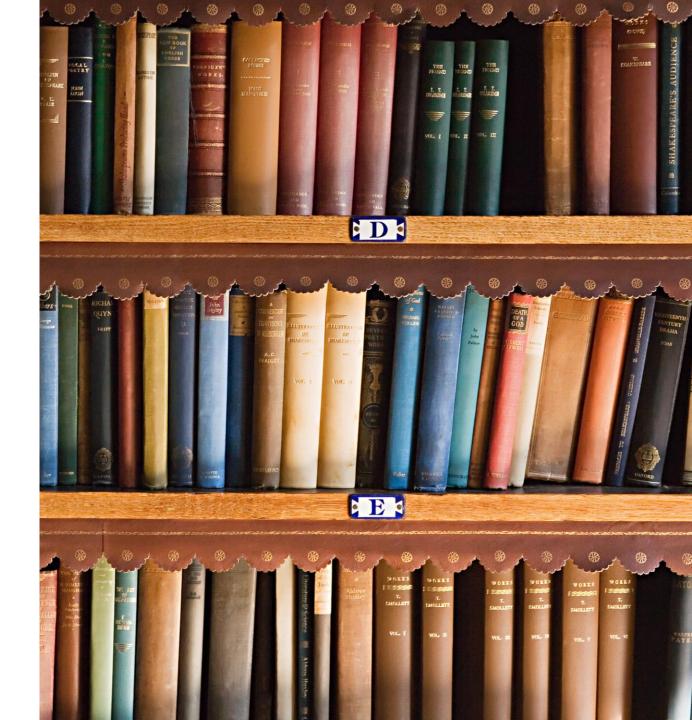
READY, NOT PERFECT!

LITERATURE

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Aulet, Bill: Disciplined Entrepreneurship

Maurya, Ash: Running Lean





ASK ME QUESTIONS \$ JOIN THE COACHING SESSIONS!

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