

Business Models

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Business Model Definition

“A business model represents a business enterprise’s essential **value creation and capture activities in reduced and abstract form**. Such models are, first of all, cognitive devices that mediate **between managerial thinking and engagement in economic activities**, and so represent complex economic environments in simplified forms, facilitating reasoning and communication to third parties. While economists work with sophisticated mathematical representations, simpler **tools** - such as lists or maps - are often employed as models in the management field. The business model, specifically, has recently gained widespread interest and application among scholars and managers as a helpful tool for both **thinking about and creating systems of value creation, delivery and capture** (Baden-Fuller and Haefliger, 2013, p. 419).“

Business Model Definition

“A business model describes the rationale of **how an organization creates, delivers, and captures value.** (...) We need a business model concept that everybody understands: one that facilitates description and discussion. We need to start from the same point and talk about the same thing. The challenge is that the **concept must be simple, relevant, and intuitively understandable,** while not oversimplifying the complexities of how enterprises function (Osterwalder and Pigneur 2010, p. 14-15).

Business models “are argued to provide the **framework for a firm to create and capture value out of an innovative idea or technological development** that by itself does not represent any single objective value... until it is commercialised in some way via a business model” (Chesbrough, 2010, p. 354).

Business Model Innovation

A business model is innovative, when **two or more business model elements are developed further to create value in a new way** (Lindgardt et al. 2009, p. 2).

Thus, business model innovations **cannot be imitated as easy as product or process innovations** (Mitchel and Coles 2003, p. 17)

Business Model Classification

Normative Corporate Policy

- Corporate legitimation: Development of vision, mission, overall concept, code of ethics

Strategy

- Building and conservation of sustainable success positions: Development of corporate, business segment and competition strategies

Business Model

- Creating and skimming value

Operative Planning

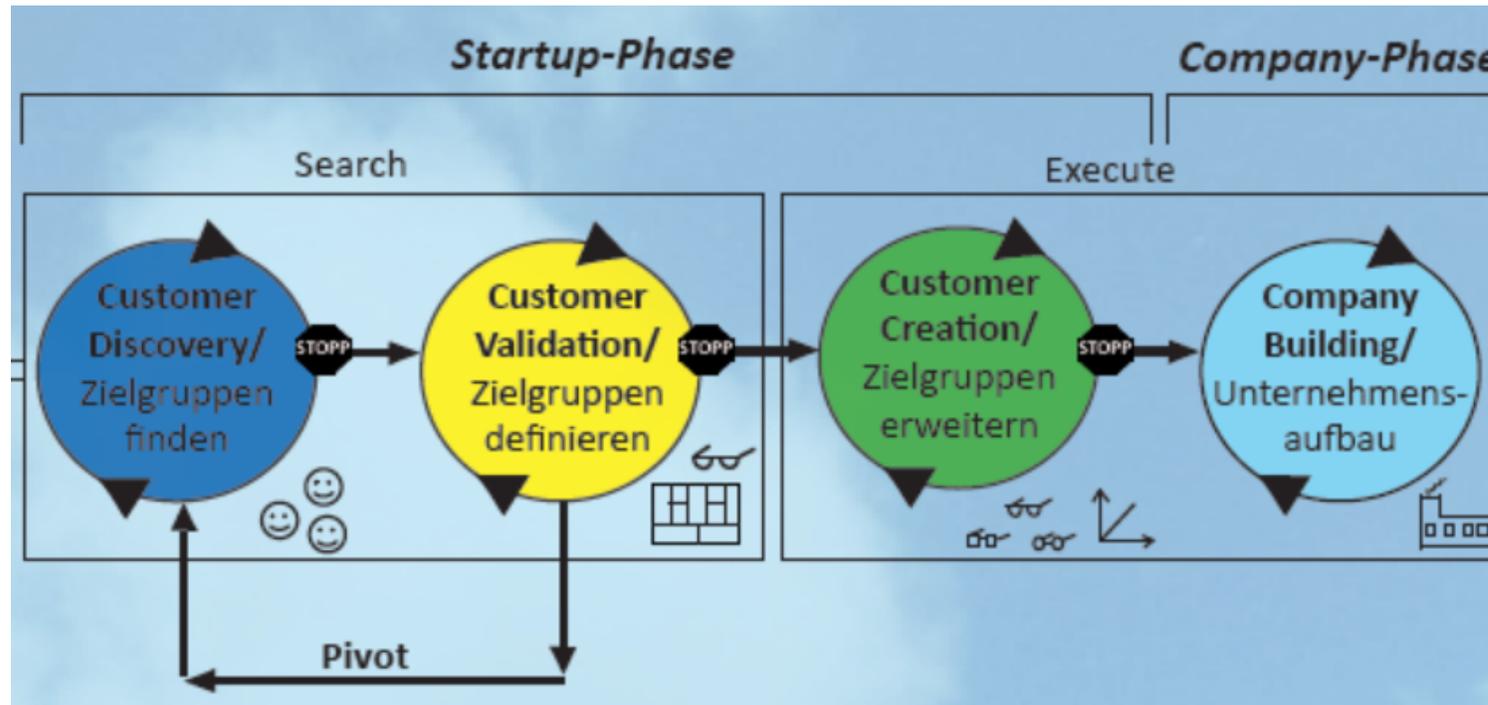
- Operative process planning and securing the solvency: Development of budgets, working processes and structures

Source: Schallmo (2013), p. 42; following Bieger, T.; Reinhold, S. (2011), p. 26.

Business Model Characteristics

- Increase of strategic flexibility and focus (Pohle and Chapman, 2006, p. 38)
- Enable agile reaction to market or competitor changes (Linder and Cantrell, 2000, p. 14)
- Understand the company activities better (ibid.)
- Avoid plagiarism through competitors (Lindgarth et al., 2009, p. 2 et seq.)
- Better differentiation to competitors and competitive advantage (Pohle and Chapman, 2006, p. 35; Lindgarth et al., 2009, p. 3 et seq., Teece, 2010, p. 2 et seq.); Magretta, 2002, p. 7)
- Cost reduction (Pohle and Chapman, 2006, p. 35)

Lean Startup Process



Lean Business Model and Lean Canvas

The Lean Canvas (Maurya, 2013) was developed out of the Business Model Canvas from Alexander Osterwalder and Yves Pigneur (Osterwalder and Pigneur 2011). It shows and tests the business model in three dimensions:

1. Problem/Solution-Fit: What is a must-have? Who pays for it? Is it viable?
2. Problem/Market-Fit: Are people really interested in our minimum viable product?
3. Scaling: How do we scale up?

Basic Principles in Lean Canvas

- Write it down in 15 minutes and use keywords
- No worries about blank areas
- Present time – no future scenarios necessary
- Customer in the center – every variation in the customer segments causes changes in the Lean Canvas

<p>Problem</p> <p>Top 3 problems</p>	<p>Solution</p> <p>Top 3 features</p>	<p>Unique Value Proposition</p> <p>Single, clear, compelling message that states why you are different and worth buying</p>	<p>Unfair Advantage</p> <p>Can't be easily copied or bought</p>	<p>Customer Segments</p> <p>Target customers</p>
	<p>Key Metrics</p> <p>Key activities you measure</p>		<p>Channels</p> <p>Path to customers</p>	
<p>Cost Structure</p> <p>Customer Acquisition Costs Distribution Costs Hosting People, etc.</p>		<p>Revenue Streams</p> <p>Revenue Model Life Time Value Revenue Gross Margin</p>		

PRODUCT

MARKET

The Lean Canvas

Source:

Maurya, A.
2010, Running Lean, p. 45,
URL

[http://tapp.nl/appsterdam/RunningLean\(2010\).pdf](http://tapp.nl/appsterdam/RunningLean(2010).pdf), last

request 20
February 2018

Lean Business Model Canvas

1. Problem and Customer Segments

Problem/task of potential customers to solve/accomplish

Existing alternatives to solve the problem / to accomplish the task for early adopters.

2. Customer Segments and Early Adopter

With the these problems in mind, get really specific. Really narrow down the distinguishing characteristics of your prototypical customer. Your objective is to define an early adopter - not a mainstream customer. As an example, Mauryas product, CloudFire, was a photo and video sharing service targeted at parents. Further refinement made him define his early adopters as “busy moms with kids under the age of 3”. You may identify other product/service users behind that (e.g. blogging platform: customer = blog author, user = reader)

Lean Business Model Canvas

3. Unique Value Proposition (UVP): Why are you different and deserve attention (particularly from early adopters)

- Benefit after using product/service
- Service example for designing a Curriculum Vitae (CV): Instead of „professional designed patterns“ or „stunning and outstanding CV“ use „Snatch your dream job“.
- UVP Formula: Instant Clarity Headline = End Result Customer Wants + Special

Period of Time + Address the Objections

- Example: We deliver your pizza hot and fresh in 30 minutes or you don't have to pay.
- High Level Concept: Quick pitch of your business idea which reminds the audience of existing business concepts.
- Examples // Youtube: Flickr for video; Aliens (Film): Jaws in space; Dogster: Frierster for dogs

Lean Business Model Canvas

4. Solution

- Three most important features to solve the problem or accomplish the task.
- No final solution needed, just note ideas and come into contact with potential customers. Combine the problem and the solution as late as possible.

5. Channels

- Free vs. paid
- Inbound vs. outbound
- Manual vs. automated
- Direct vs. indirect
- customer loyalty first, referral marketing programmes second

Lean Business Model Canvas

6. Revenue Streams

- Planned revenue streams
- Pricing - Validation starts with first payment. Compare your minimum viable product with prices of existing solutions.

7. Cost Structure

Seed capital for MVP (minimum viable product) definition, customer research, production and marketing.

8. Key Metrics

Performance measurement for business progress and discovering potential problems in the customer lifecycle.

Lean Business Model Canvas

Pirate Metrics (Dave McClure)

- **Acquisition:** How do users find your planned service/product? Acquisition is the conversion of a visitor to an interested person. Example: In case of a flower shop the visitor enters after looking through the shop-window. In case of a website the visitor stays on the registration homepage several minutes and discovers the content.
- **Activation:** Do users make a pleasant experience? Example: If the shop visitor finds a messy shop behind the window, he was not very pleased. He has expected a well-assorted choice of flowers and would be pleased, if he found so. In case of a website the visitor expects more details of your UVP after the registration (e.g. product presentation or further interesting content).
- **Retention:** Do users come back? Retention scales the customer loyalty. Example: Amount of repeatedly shop visits or special clicks on the website, e.g. for reusing the offered service.
- **Revenue:** How does your planned service/product earn money? This key performance indicator measures payments. Example: Amount of flower payments or service subscriptions.
- **Referral:** Do users refer to your service/product? Pleased customers lead new visitors to our product/service. Example: A customer recommends a shop visit to a friend. The website user could share his product or service experiences with his/her social media contacts. Or users could benefit from affiliate or referral programmes.

Lean Business Model Canvas

9. Unfair advantage

An unfair advantage is what your competitors cannot copy or buy.

Examples:

- Insider information
- Expert's recommendation (e.g. from professionals, influencers or celebrity testimonials)
- A dream team
- Personal authority

- Network impact
- Community
- Existing customers
- Search engine optimisation

<p>Top 3 problems</p> <ul style="list-style-type: none"> • International voice calls are very costly • No online video chat available • No quickest way of sharing files between online users 	<p>Solution</p> <ul style="list-style-type: none"> • Make voice/video calls using internet • Make file sharing easy using skype 	<p>Value Proposition</p> <ul style="list-style-type: none"> • Make free international calls using Skype 	<p>Unfair Advantage</p> <ul style="list-style-type: none"> • Have a working peer to peer file sharing system available (<u>Kazaa</u>) 	<p>Customer Segments</p> <ul style="list-style-type: none"> • Users who want to make voice/video call via internet • Users who want to make low cost international calls (calls to mobile and landline) • Users who want to share digital documents faster
<p>Existing alternatives</p> <ul style="list-style-type: none"> • Using emails for sharing files • Making voice calls using telecom platform 	<p>Key Metrics</p> <ul style="list-style-type: none"> • Key Action : Users making calls using Skype • X number of registered Skype users 	<p>High-level pitch</p> <p>Use Skype for free with better sound quality than your regular phones</p>	<p>Channels</p> <ul style="list-style-type: none"> • Skype.com • Preferred partners program • Word of mouth marketing by users 	<p>Early adopters</p> <ul style="list-style-type: none"> • Users who frequently make international calls
<p>Cost structure</p> <ul style="list-style-type: none"> • Application development and maintenance • Website development and maintenance • Marketing 		<p>Revenue streams</p> <ul style="list-style-type: none"> • Revenue from Preferred Partners 		

Lean Canvas
Example *Skype*
Multunus; URL
<http://www.multunus.com/blog/2016/03/business-model-case-study-skype/>, last request 20 February 2018

Business Model Inspiration from Industry 4.0

From Kaufmann (2015, p. 12 et seq.) with Gassmann's (2013) classification

Cyber-physical (smart) products

- Customer: New customers for the linkage
- Value proposition: New data for e.g. reduction of shutdowns
- Value Chain: Changed commodities or materials could lead to a changed value chain.
- Revenue Mechanism: Higher prices through new products, acquisition of new customer segments



Picture Source:
<https://www.trendmicro.com/us/iot-security/special/153>

Business Model Inspiration from Industry 4.0

Smart Services

- Customers: New customers through new data services.
- Value proposition: Data services can increase the usage and the availability of the products.
- Value chain: The monitoring of machine data can lead to better development, production and service processes in the own company.
- Revenue mechanism: Data services and new customers lead to additional revenues.



Picture Source:

<https://www.geekbuying.com/item/H9-WiFi-Doorbell---White-370106.html>

Business Model Inspiration from Industry 4.0

Open Source Concepts

- Customers: Customers profit from lower prices of components compared to conventional products. The product is being improved by the the community and is independant on development cycles of corporates.
- Value chain: Changed and shorter product development, better product/market-fit
- Revenue mechanism: Fremium (free basic versions, chargable premium versions)



Business Model Inspiration from Industry 4.0

Customized Product

- Customer: New Customer segments with individual demands can be addressed.
- Value Proposition: More individual demands could be fulfilled so that the customer loyalty increases.
- Value Chain: The process chain has to be well automated, so that the product is been manufactured with acceptable costs.
- Revenue mechanism: Through product individualisation the company can achieve higher prices.



Picture Source:

<https://www.trendhunter.com/slideshow/customized-products>

Business Model Inspiration from Industry 4.0

Individual spare part concepts

- Customers: New customers can be addressed through an individual spare part concept.
- Value proposition: Shorter shutdowns of machine manufacturing systems when it is possible to produce spare parts through 3-D printing technology instead of waiting for spare parts delivery or technician service.
- Value Chain: Through 3D printing the spare parts process changes.
- Revenue mechanism: For quicker available spare parts the company can charge higher prices because shutdowns and loss of sales can be reduced.

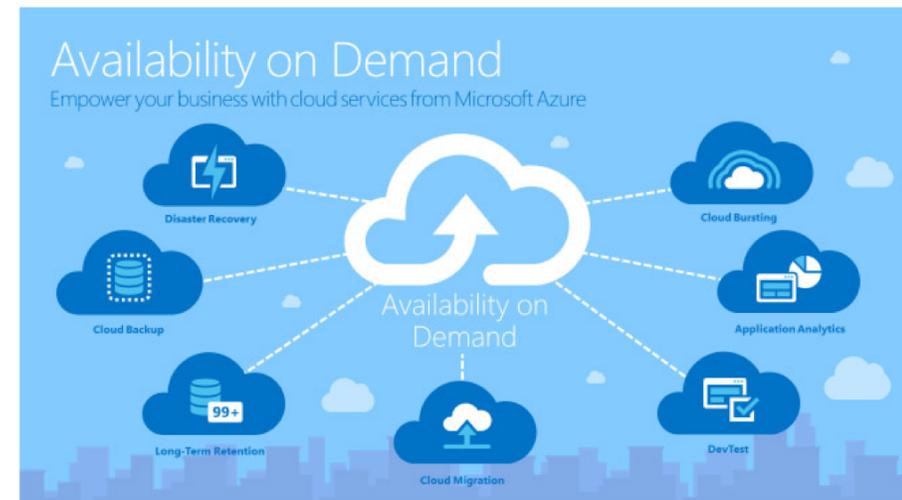


Picture Source: https://www.grubster.de/3d-drucker/makerbot-replicator-85773?sPartner=Google&gclid=Cj0KQCQiAiKrUBRD6ARIsADS2OLiYh6n-if8BivsV-cvqvixCRzFXm6ID75KkVK8Gdt-DrTgRVZYhZ9gaAryLEALw_wcB

Business Model Inspiration from Industry 4.0

Availability on demand

- Customers: Instead of purchasing machines, customers buy production services on demand, so the manufacturing risk merges to the producers. This is interesting for customers who need a low capital commitment (e.g. startups).
- Value proposition: The value proposition increases availability and the customer only has to call the service when it is necessary.
- Value chain: The value chain expands from only production to production service operations.
- Revenue mechanism: New revenues through services on demand (but with that new production risks come as well).



Picture Source:

<https://www.fusecollaboration.com/technologies/azure/availability-on-demand>

Business Model Inspiration from Industry 4.0

Marketplace

- Customers: The marketplace addresses different participants of the value chain. They use services from logistics, production, services and development.
- Value Proposition: The marketplace allows the cooperation between market participants in real-time.
- Value chain: It includes potentially all participants of the value chain.
- Revenue mechanism: Revenues occur through individual market participants who use basic features of the marketplace and offer their services based on incurred data.



More Patterns of Business Model Innovation (Gassmann et al. 2017)

Key Words	Short description	Example
Add-on	Additional charging of options	Business software, customizations
Affiliation	Success oft he partner = own success	Urban Sports Club
Aikido	Use the force of an opponent against the opponent.	Complex software products (e.g. Microsoft) vs. Software as a service (e.g. Signavio)
Auction	The highest-bidder (customer) or lowest-bidder (producer, service provider) wins.	Liquidation auctions (bstock)
Barter	Exchanging products or services	Pay with a tweet to all of your friends
Cash Machine	Cash conversion cycle, build-to-order strategy	Early payments of customer leads to negative current assets during the product production
Cross Selling	Service offerings with additional purchases to optimize the customer relationship	Kentucky Fried Chicken in a Shell gas station
Crowdfunding	Funding a project or venture by raising many small amounts of money from a large number of people, typically via the Internet	Startnext (german crowdfunding plattform), kickstarter
Crowdsourcing	Customers, experts and amateurs paticipate in the development process or certain tasks	The Pebble Smartwatch

More Patterns of Business Model Innovation (Gassmann et al. 2017)

Key Words	Short description	Example
Customer Loyalty	Incentive for long-term loyalty	Amazon prime
Digitalization / Digitisation	Sensing as a Service; Buying and selling „internet-of-things“ data (SenseCloud)	52° North's Sensor Web Technology
Direct Selling	Leaves out the intermediaries.	Casper (Mattress delivery)
E-Commerce	Transparency and cost reduction through online retailing	Zalando
Experience Selling	Brand-building	Red Bull
Flatrate	Unlimited consumption for fixed price	Sipgate
Fractionalized Ownership	Percentage ownership in an asset. Rights, income sharing, priority access and/or reduced rates.	Hapimag (holiday residence rights)
Franchising	Authorization granted by a government or company to an individual or group enabling them to carry out specified commercial activities	Anytime Fitness
Freemium	Free Basic and chargeable premium versions	LinkedIn

More Patterns of Business Model Innovation (Gassmann et al. 2017)

Key Words	Short description	Example
From Push to Pull	Decentralisation to manage local demands more flexible	Berksha fashion
Guaranteed Availability	Added service to insure the availability of products or services	IBM, Hilti
Hidden Revenue	Division of revenues and customers	Advertisements on free wordpress websites
Ingredient Branding	Brand-in-brand	Intel inside, Carl Zeiss glasses
Integrator	Added value through integration, less dependence on suppliers	Zara
Layer Player	Value Chain Segment Specialist	Pay Pal
Leverage Customer Data	Multisided usage of customer data	Facebook, Google
License	Commercialisation of intellectual property	IBM
Lock-in	Compulsatory loyalty through high switching costs	Apple, Nespresso

More Patterns of Business Model Innovation (Gassmann et al. 2017)

Key Words	Short description	Example
Long Tail	Offering of large amounts of niche products or services	Netflix, Youtube
Make more of it	Multiplication of competencies out of the core business	Amazon Web Services
Mass Customization	Customers customize prefabricated products	Product Configurator
No frills	No fancy shops or brands, just low prices	Kik, easyjet
Open Business Model	Leverage effect through collaborative value creation	Valve (game Half life)
Orchestrator	Opposite of integrator, scale effects through outsourcing and conducting value chain components	Walmart, Nike
Pay-per-use	Pay-per-use (sometimes with a minimum fee)	Car Sharing, Pay-per-Risk insurances with GPS tracking
Pay What You Want	Customer pays only his/her individual perceived charge	Noise Trade
Peer-to-Peer	Private transactions between customers	Airbnb, smava

More Patterns of Business Model Innovation (Gassmann et al. 2017)

Key Words	Short description	Example
Performance-based Contracting	Prices are calculated by the output of products or services.	Xerox (Cost-per-Page)
Razor and Blade	Low prices of the machine, higher prices of the operating resources	Kindle, Caffissimo, Gillette
Rent Instead of Buy	Temporary usage right	Bike sharing
Revenue sharing	Revenue collaboration with stakeholders and suppliers.	Apple's App Store
Reverse Engineering	Fast learning from competitors.	Rocket Internet
Reverse Innovation	Learning from simplest solutions.	Tata – Swacch – World's cheapest water purifier
Robin Hood	Take it from the rich and give it to the poor.	TOMS Shoes
Self-Service	Cost reduction through working customers.	Backwerk, Car2go
Shop-in-shop	Sharing vending space, additional offers	Deutsche Post, Bosch

More Patterns of Business Model Innovation (Gassmann et al. 2017)

Key Words	Short description	Example
Solution Provider	One-stop-agency, all-in-one offers	Otto Group Solution Provider
Subscription	Subscription of products or service	Kochbox, online newspapers
Supermarket	Hugh choice, low prices	Toys“R”Us, Staples
Target the Poor	Products for masses of poor or low-income persons.	Tata Nano (cheap car for indian people), Walmart financial services for low-income persons
Trash-to-cash	Revenues from waste.	Greenwire (Recycling of mobile phones), Emeco (Plastic chairs from Coca-Cola bottles)
Two-Sided Market	A two-sides market is an economic platform having two distinct user groups that provide each other with network benefits.	Social networks
Ultimate Luxury	Best quality product and services, higher investments, exclusivity	Lamborghini, Grand Hyatt Berlin
User-Designed	The customer as inventor	Lego Factory (3D-Modelling Programme), Amazon Kindle (Selfpublishing)
White Label	Products or services are offered without a brand for testing or for labeling through other companies	Printing-In-A-Box (Web-to-print software solutions for online printing companies)

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