

SmartUp Academy

Foundations Course

Lecture 5

Business Models - 2

The SmartUp Founding Team



SmartUp
Academy



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SmartUp Academy

A program to teach the **profession** of building successful companies (...work in progress)

- The Foundations Course
 - The three pillars for a successful company:
 - Profitable
 - Fast growing
 - Modest investment
- Workshops – Specific Subjects
- **4-5 years Residency Program**



The Language of Business

Moving from Science to Business

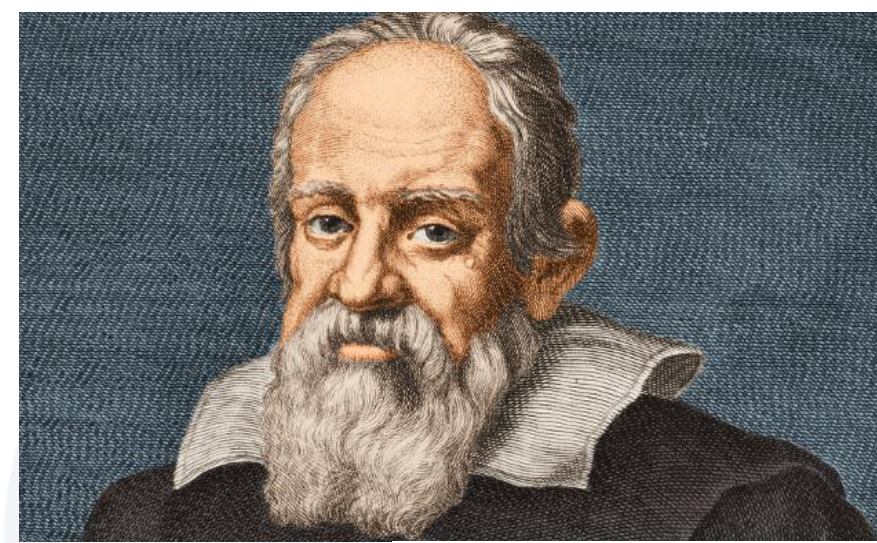
“Mathematics is the language in which God has written the universe !” Galileo Galilei 1564 – 1642

Galileo was the first to write an equation in physics, and paved the way to Newton

What is the language of business?

Money !! Models to evaluate options

Every decision has to be expressed in monetary terms



The SmartUp Business Model - Successful Companies

The three **pillars** of a successful company, and how they are measured:

- 1. Profitable** - How long does it take for the company to become profitable (cash generating), in months
- 2. Modest investment** - How much money is needed before the company starts to generate cash
- 3. Fast growing** - How long does it take to pay the investment back, in months

What is a Business Model?

In simple terms – How is your company going to make money?

- A complex combination of many parameters, from the product or service, to customer profiles, to pricing and packaging, to costs and infrastructure, and much more
- Decisions made when conceiving the Business Model are the most important decisions a company makes !!!
- Building the business model is usually an iterative process of trial and error to select, adjust, and refine all parameters
- Often times – a Pivot. A major, sometimes very expensive, reshuffle of a company's business model

Business Model Generation

Disruptive new business models are emblematic of our generation.

Yet they remain poorly understood, even as they transform competitive landscapes across industries.

Business Model Generation offers you powerful, simple, tested tools for understanding, designing, reworking, and implementing business models.

WRITTEN BY
Alexander Osterwalder & Yves Pigneur

You're holding a handbook for visionaries, game changers, and challengers striving to defy outmoded business models and design tomorrow's enterprises. It's a book for the ...

Business Model Generation

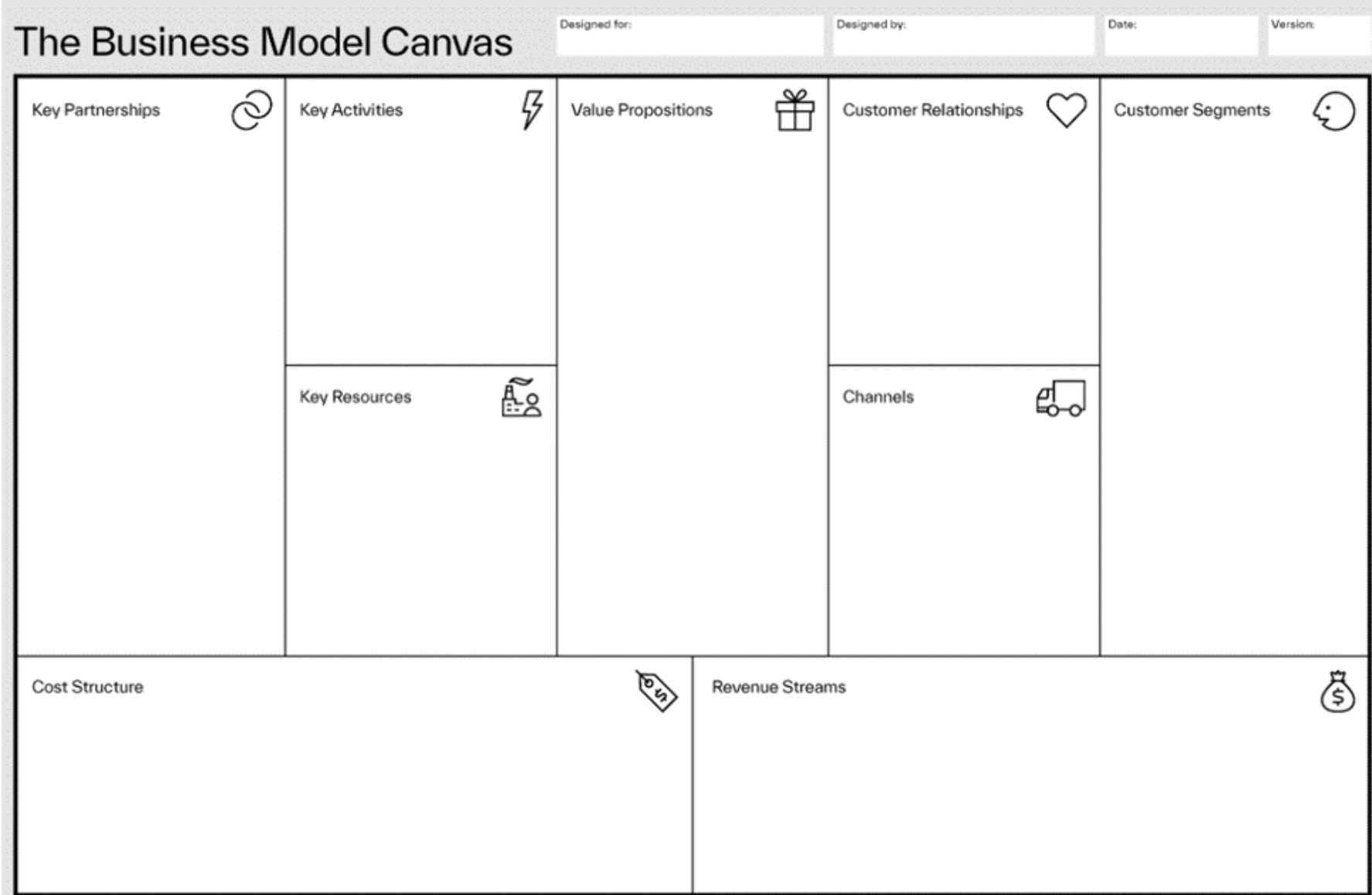
WRITTEN BY
Alexander Osterwalder & Yves Pigneur

CO-CREATED BY
An amazing crowd of 470 practitioners from 45 countries

DESIGNED BY
Alan Smith, The Movement



Business Model Canvas



Business Model Canvas

The Business Model Canvas consists of nine essential parts:

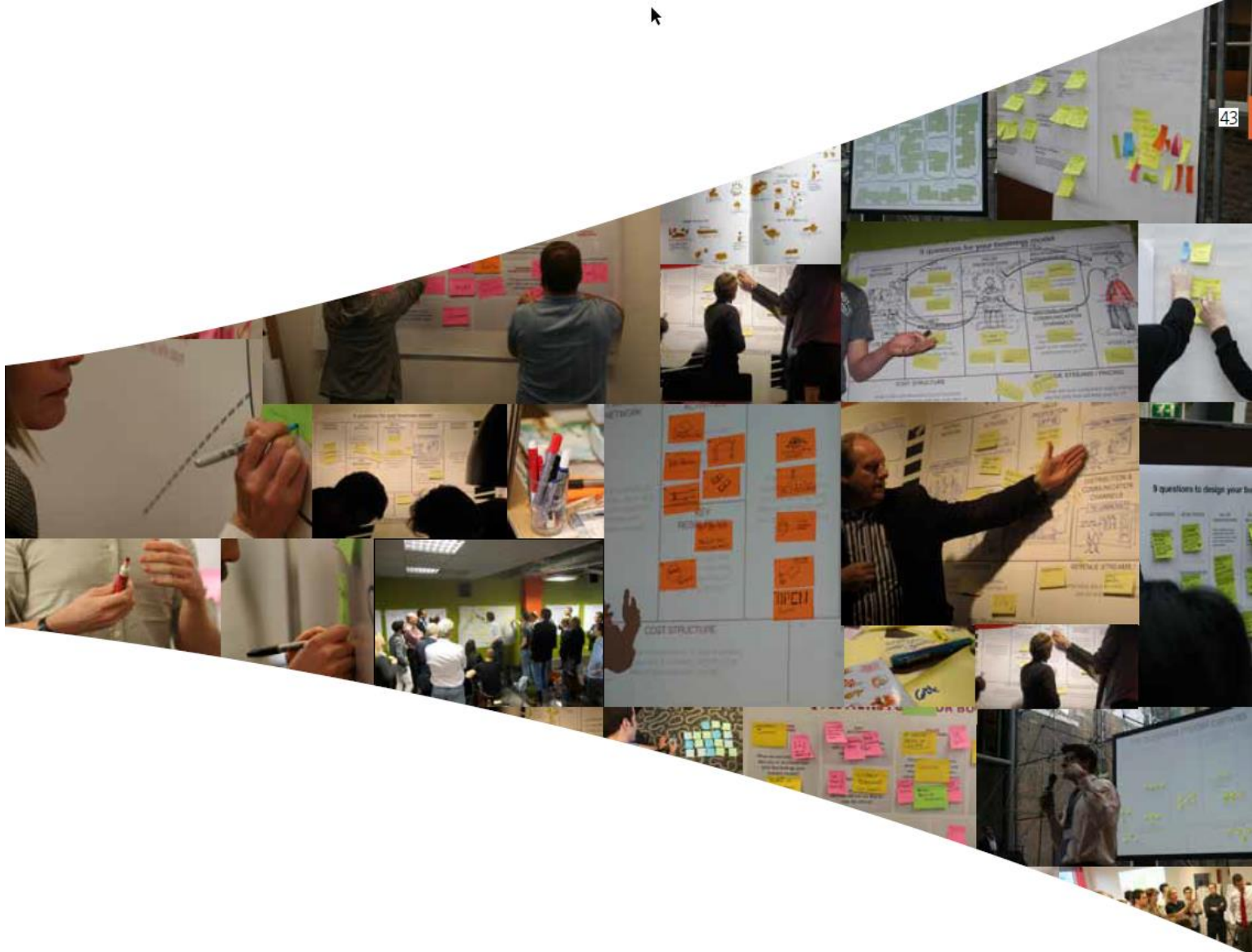
1. Value Proposition
2. Customer Segments
3. Revenue Streams
4. Cost Structure
5. Key Resources
6. Channels
7. Customer Relationships
8. Key Activities
9. Key Partners

However, these nine building blocks are all interconnected:

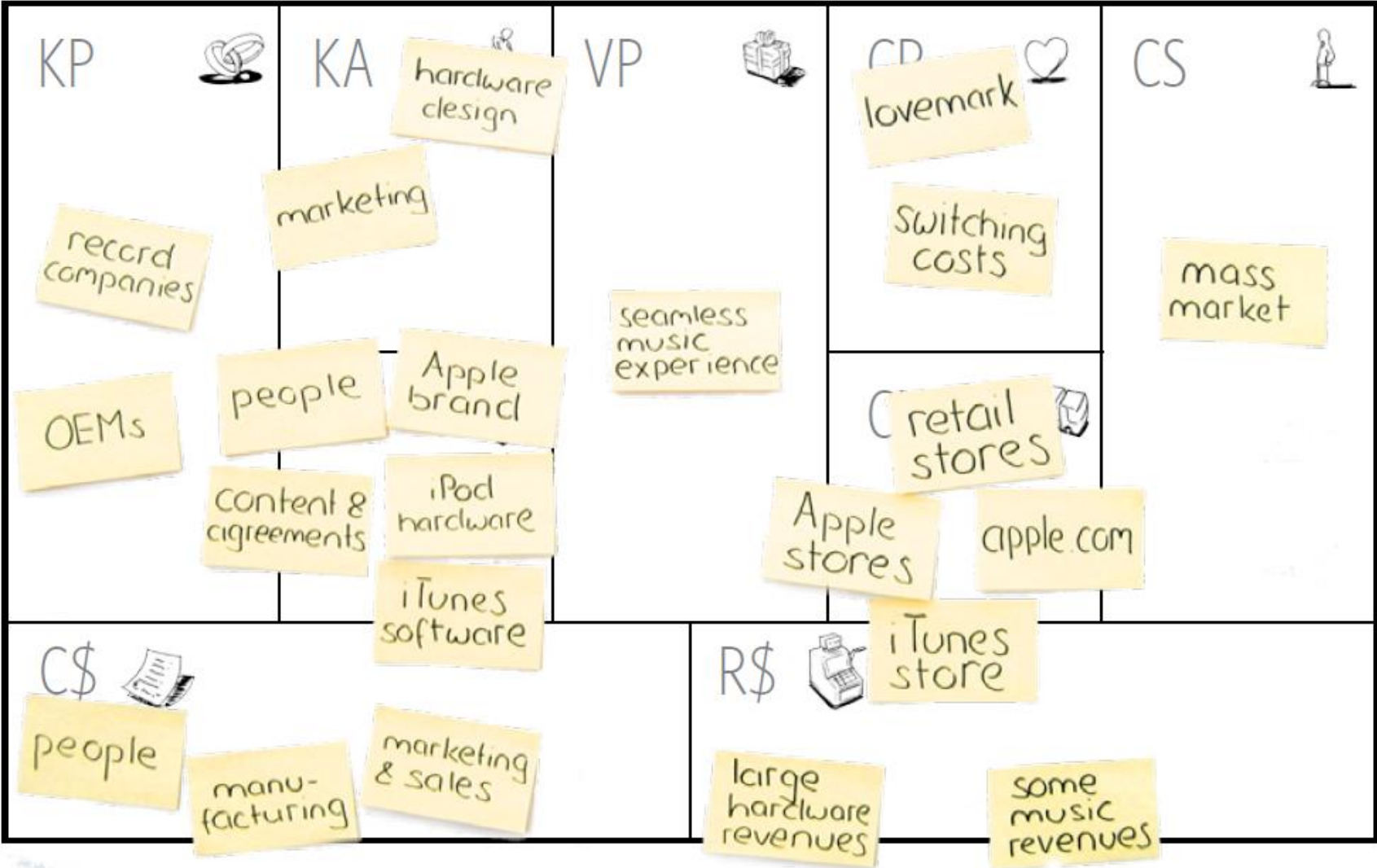
- Value Proposition \leftrightarrow Pricing
- Pricing \leftrightarrow Customer Segments
- Cost Structure \leftrightarrow Pricing

How do you model these dependencies? And how do you measure and compare alternatives?

Business Model Canvas



Business Model Canvas



The SmartUp Business Model

- The SmartUp Business Model is a spreadsheet that models how your business evolves over time, based on your assumptions
- The SmartUp business model is a powerful tool for analyzing and evaluating business options like: pricing models, price, customer segments, payment terms, CAC – Customer Acquisition Cost, timing of hiring, and many more
- The same model, if done properly, is then used for tracking company operations and performance

The SmartUp Business Model - Successful Companies

The three **pillars** of a successful company, and how they are measured:

1. **Profitable** - How long does it take (in months) to become profitable (in cash generation terms)
2. **Modest investment** - How much money is needed before the company becomes profitable
3. **Fast growing** - How long does it take (in months) to pay the investment back

The SmartUp Business Model

- In every business model there are two sections that evolve over time
 - Income, or sales, or revenues
 - Expenses
- Subtracting the Expenses from Income yields Profits (or Loss)
Profits (Loss) = Income – Expenses
- Income is usually modeled and tracked by the different sources of income:
 - Products – a line per product, or family of products
 - Services, consulting
 - Other, depending on the company

The SmartUp Business Model

- Expenses are usually divided into three categories
 1. Sales expenses, direct expenses per sale
 - Cost of producing and delivering the product (think shoes, bread, cars)
 - Cost of selling the product
 - CAC – Customer Acquisition Cost
 - Sales cost – salespeople salaries, commissions, distribution (stores, resellers...)
 2. Stable expenses – expenses that are not related to each sale, usually include salaries of Management, Engineering, Marketing, etc., and then overhead of operations like rent, legal, cloud computing, etc.
 3. One-time big expenses, like building a lab, or building a manufacturing facility or a warehouse
- The SmartUp Business Model is an operational cashflow model, NOT the accounting Profit & Loss (P&L) standard report

The SmartUp Business Model

- Every model is based on assumptions, like time to market, pricing, Customer Acquisition Cost, sales growth rate, and many more
- The assumptions must be stated clearly, and used **EXPLICITLY** in the model, as parameters
- The purpose of the model is to test different values of these parameters to see the impact they have on the business
- A big benefit of the “Branding First” methodology, is that by actively talking to many types of prospects, the company can test various assumptions before developing the product

Business Model Key Questions

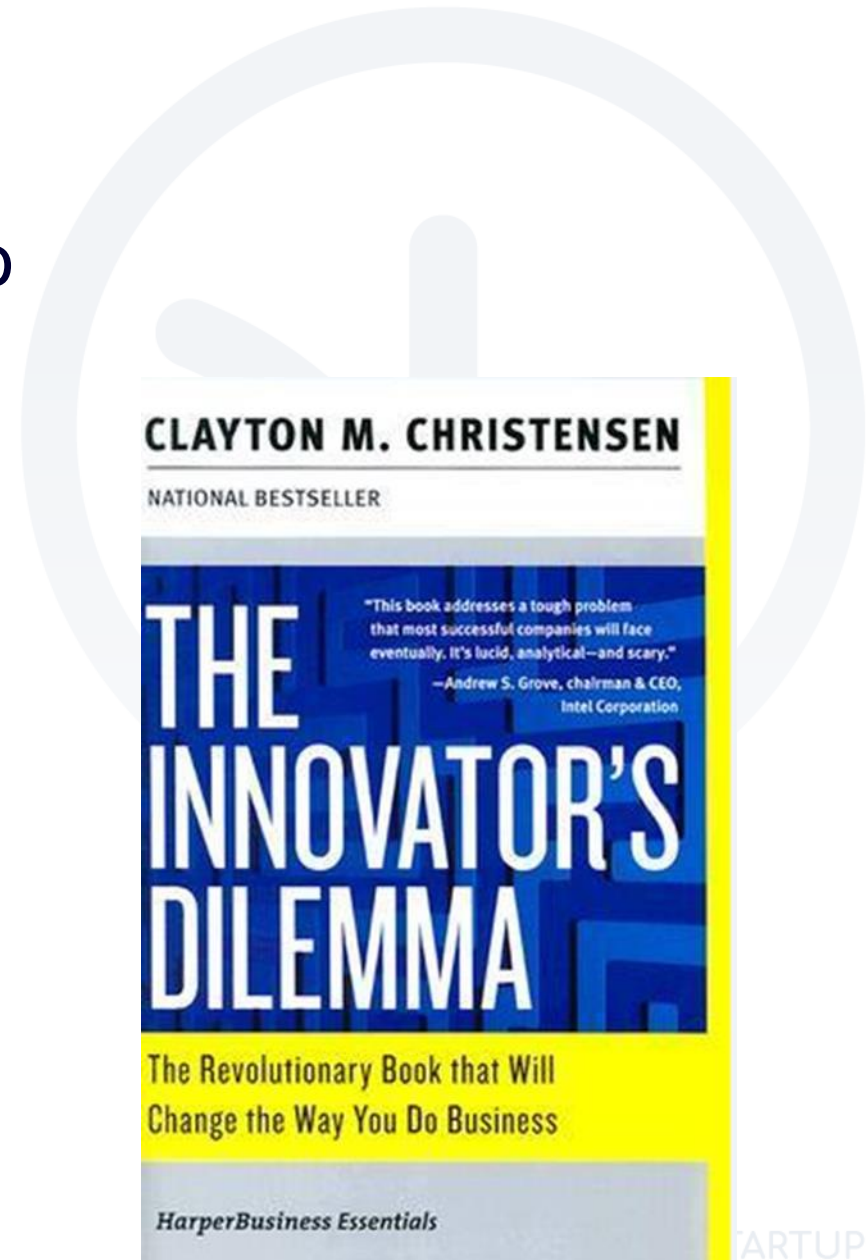
Instead of the nine elements of the Canvas concept, it is easier to try to answer the following “W+H” questions

1. Who are the users?
2. Who pays the money?
3. Why do they pay, or not pay?
4. What exactly do they pay for?
5. Where do they pay?
6. How much do they pay?
7. When do they pay?
8. How do they pay?

And many more questions....

Recommended Reading

- What happens when a company wants to introduce a new product
- “The Innovator’s Dilemma”
- A deep and revealing analysis of why highly successful entrenched companies miss new emerging technologies and trends and lose market share to new upstarts



Recommended Reading

The Innovator's Dilemma

- Clayton Christensen's initial research was done on the hard disk drive industry, the business research model equivalent to "fruit flies" in genetic research
- Any ideas why entrenched companies fail?
- Would Tesla beat the rest of the car industry?
- Is Intel out of the game, losing its lead?
- Would Nvidia take over the server processor industry?



Clayton Christensen – Videos

Clayton Christensen (1952 – 2020) was an American academic and business consultant who developed the theory of "disruptive innovation", which has been called the most influential business idea of the early 21st century. Christensen introduced "disruption" in his 1997 book The Innovator's Dilemma. Christensen was awarded a Rhodes Scholarship and spent two years studying applied econometrics at Oxford University, then did an MBA and a Doctorate at Harvard, where he later became a professor at the Business Administration school of Harvard (HBS)

Clayton Christensen (The Innovator's Dilemma) on How to ...



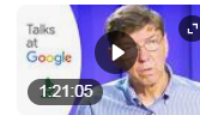
Clayton Christensen (The Innovator's Dilemma) on How to Build a Disruptive Business | Startup Grind. 150K views · 8 years ago ...more ...

YouTube · Startup Grind · 1 Mar 2016

Startup 10 key moments in this video

www.youtube.com > watch

[Where Does Growth Come From? | Clayton Christensen ...](#)



Clayton Christensen is an award-winning Harvard Business School professor and author of five books, including The Innovator's Dilemma, ...

YouTube · Talks at Google · 9 Aug 2016

www.youtube.com > watch

[Clayton Christensen: Disruptive innovation](#)



In the first of his lectures for Saïd Business School, Clayton Christensen explains his theory of disruption, drawing on examples of ...

YouTube · Saïd Business School, University of Oxford · 19 Jun 2013

10 key moments in this video

www.youtube.com > watch

[Clay Christensen: Principles of Innovation & Measuring Success](#)



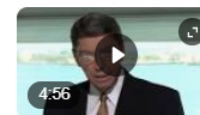
Harvard Professor Clayton Christensen examines historic disruptive innovations, how they affected accessibility for the masses and describes ...

YouTube · Stern Strategy Group: Speaking & Advisory and PR · 30 Mar 2015

10 key moments in this video

www.youtube.com > watch

[Understanding the Job](#)



... job makes improving the product easier. Clayton Christensen, professor at Harvard Business School talks about the job to be done.

YouTube · Edward Capaldi · 31 Mar 2016

www.youtube.com > watch

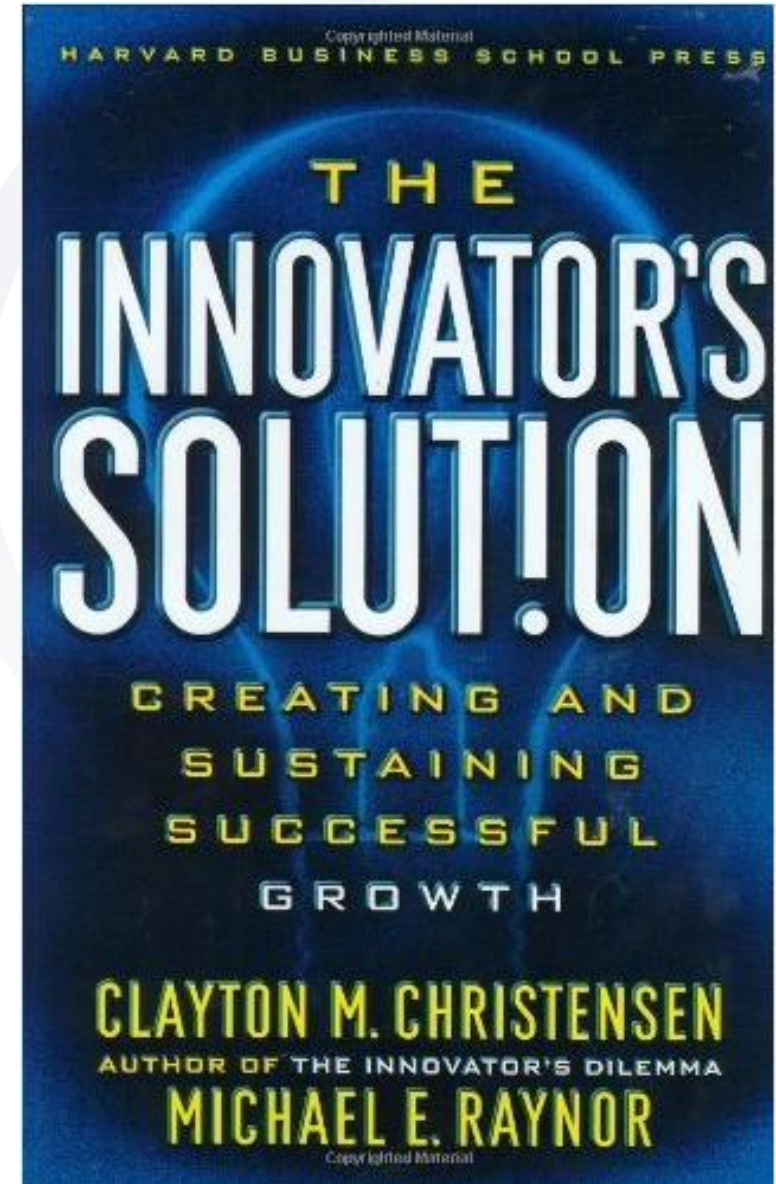
[Clayton Christensen: The process of research](#)



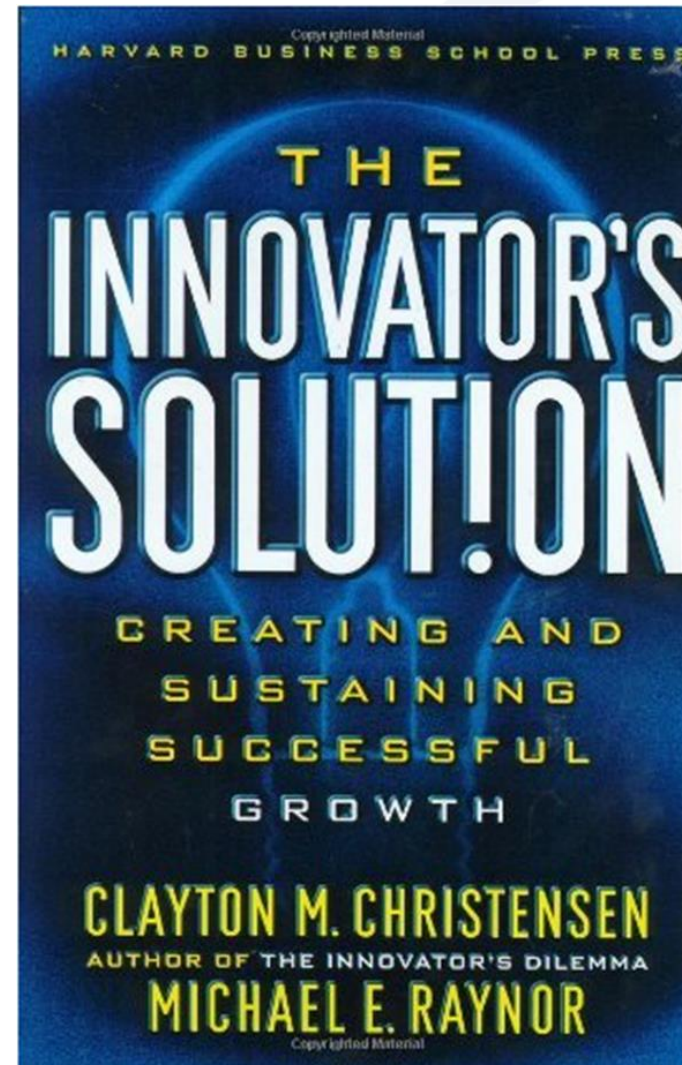
In his third lecture for Saïd Business School, Clayton Christensen looks at the process of research and explores the complexities involved ...

Recommended Reading

The authors identify the forces that cause managers to make bad decisions as they package and shape new ideas and offer new frameworks to help create the right conditions, at the right time, for a disruption to succeed. This is a must-read for all senior managers and business leaders responsible for innovation and growth, as well as members of their teams.



The Innovator's Solution פתרון החדשנות



Recommended Reading

After years of research, Christensen and his co-authors have come to one critical conclusion: our long held maxim--that understanding the customer is the crux of innovation--is wrong. Customers don't buy products or services; they "hire" them to do a job. Understanding customers does not drive innovation success, he argues. Understanding customer jobs does. The "Jobs to Be Done" approach can be seen today in some of the world's most respected companies.

WALL STREET JOURNAL BESTSELLER

Competing Against Luck

THE STORY of INNOVATION
and CUSTOMER CHOICE

**CLAYTON M.
CHRISTENSEN**

Taddy Hall, Karen Dillon,
and David S. Duncan

Pricing Models

Pricing is one of the most critical elements on the road to profitability !

How do companies or service providers set their prices?

They all use some frame of reference !!

1. Price compared to competitors (same? up? down?)
2. Based on the value it brings to customers (B2B, medical procedures, ...)
3. Enough to pay the bills and make some money
4. Two to five times the cost to produce the product

Pricing Models

How do companies or service providers set their prices?

They all use some frame of reference !!

5. Regulated pricing (taxi cabs, milk, eggs,)
6. As much as customers are willing to pay

Different prices can be set based on:

- Different market segments pay different prices. How?
- Positioning
 - Premium (Lexus, Infinity, Acura)
 - Value (i.e. cheap) (Toyota, Nissan, Honda)
 - Etc.

Different Prices for Different Market Segments



What are the average prices for:

- A Dress
- A Hairdresser
- A Makeup artist

To go to an opening evening at the theater



What are the average prices for:

- A Dress
- A Hairdresser
- A Makeup artist

To be the bride at your wedding

Different Prices for Different Market Segments

How do lawyers charge?

- By the hour, actually by the 10 minutes – for commercial clients, for family feuds, or for consultations
- Retainer – customary in long term business services
- By project – for standard, well-defined tasks - notary, filings
- Percent of the deal – buying or selling real estate, M&A transactions, going public
- Success fee – Entrepreneurial attitude. Part of the compensation. Ambulance chaser. Class actions

Different Prices for Different Market Segments

How do dentists charge?

- By procedure – annual checkup, filling, root canals, etc.
- Why don't dentists charge more when a patient suffers a lot of pain?

Different Prices for Different Market Segments

מוצר שופרסל ☆



קפה נחם שופרסל
200 גרם | שופרסל

₪ 15.50

7.75 ש"ח ל-100 גרם



קפה נחם עלית
200 גרם | עלית

₪ 19.90

9.95 ש"ח ל-100 גרם



קפה נחם עלית
50 גרם | עלית

₪ 10.20

20.4 ש"ח ל-100 גרם



קפה נחם אספרסו 57
100 גרם | DAVIDOFF

₪ 24.90

24.9 ש"ח ל-100 גרם



קפסולות קפה ג'יו תערובת
טריאסטה
55 גרם | קפה ג'יו

₪ 16.90

30.73 ש"ח ל-100 גרם

Customer Segment – Middle Class Buyer



Hisense - 65" Class U6 Series Mini-LED QLED 4K UHD Smart Google TV

[Hisense](#)



Hisense 65-Inch Class U6 Series Mini-LED ULED 4K UHD Google Smart TV (65U6K) - QLED, Full Array Local Dimming, Dolby Vision IQ , HDR 10+, VRR Game Mode Plus, 240 Motion Rate, Alexa Compatibility

[Visit the Hisense Store](#)

4.1 ★★★★★ 1,265 ratings | [Search this page](#)

300+ bought in past month

\$569⁹⁹

Or \$33.65 /mo (24 mo). Select from 1 plan

✓prime Two-Day

Pay \$47.50/month for 12 months, interest-free upon approval for Prime Visa

24 months - \$807.60

THE SMART WAY TO BUILD A STARTUP

Customer Segment – Very Poor Neighborhood

Furniture rentals – Rent a TV

Hisense - 65" Class U6 Series Mini-LED QLED 4K UHD Smart Google TV

[Hisense](#)



Rental Payment Options: [Weekly](#) ▼



\$31.99 per week*

In Stock

Online Only ⓘ

New

[View All Inventory](#) ▶

Renewal Rate: Details	\$31.99 per week*
Number of Payments:	74
Total Cost To Own:	\$2,367.26
Same as Cash Price:	\$1,230.98

Customer Segments – Individual or Business?

- Same exact product – How to create a difference in price?
- **Airline Tickets** – Business travelers are willing to pay more than tourists
 - The trick – Round trips with no weekend stay are much more expensive
- **Internet Access** – Businesses are willing to pay more
 - The trick – A guarantee of uninterrupted service
 - Not offering residential plans to business addresses

Different Prices for Different Market Segments

- What would your pricing philosophy be?
- The flight is about to leave in 2 hours, should the airline offer half price tickets to lure customers?
- The day before the flight, should the airline raise or lower ticket prices?
- It is 9:00 p.m. and your hotel has available rooms, would you offer last minute half price rates?
- It is 10:00 p.m. and your supermarket will close in 2 hours, would you offer big discounts on perishable produce?

Pricing Model – Small Decisions Big Impact

- Why was the US behind Europe in cell phone usage?
- There is a call connection cost between a landline number to a cell phone number (same between carriers and countries)
- In Israel (05x-) and in Europe – special area codes for cell phone numbers. In the US same area codes for both landlines and cells
- Therefore, in the USA, phone companies charged connection cost and airtime also for **incoming calls**
- Therefore, people did not give their cell phone number freely, only to a close circle of friends and family
- Therefore, it was of a lower value, and people did not use it

Pricing Model – Small Decisions Big Impact

- Phone bills – used to be:
 - By the minute
 - By distance (why?)
 - Connect fee (Bezeq to cell phones)
 - International calls
 - (Amdocs billing solutions...)
- Cell phone bills today
 - Flat fee per month, fair use, including plenty of Internet connection
- But for cell phone international packages – why?

Pricing Model – Small Decisions Big Impact

- SMS messages – a small cost per message, now included in personal use
- WhatsApp messages – FREE (how do they make money?)
- Email service – FREE (why?)
 - If sending emails was not free - How many spam messages would we get?
- Internet Connection – Used to be by connect time and MB transferred
 - If internet connection was not priced as a flat monthly fee – what would the world look like? (Netflix, Spotify, Waze, YouTube, Amazon, Google,.....)
 - What is “Net neutrality”?

SmartUp Preferred Pricing Model

- The three pillars for a successful company:
 - Profitable
 - Fast growing
 - Modest investment
- It is much easier to be profitable if prices are high
- To command high prices, a company needs to:
 - Identify market segments that will pay high prices
 - Position the company as a premium provider
- It is much harder to build a successful company by competing on price with entrenched players

Market Segments – Individual or Business?

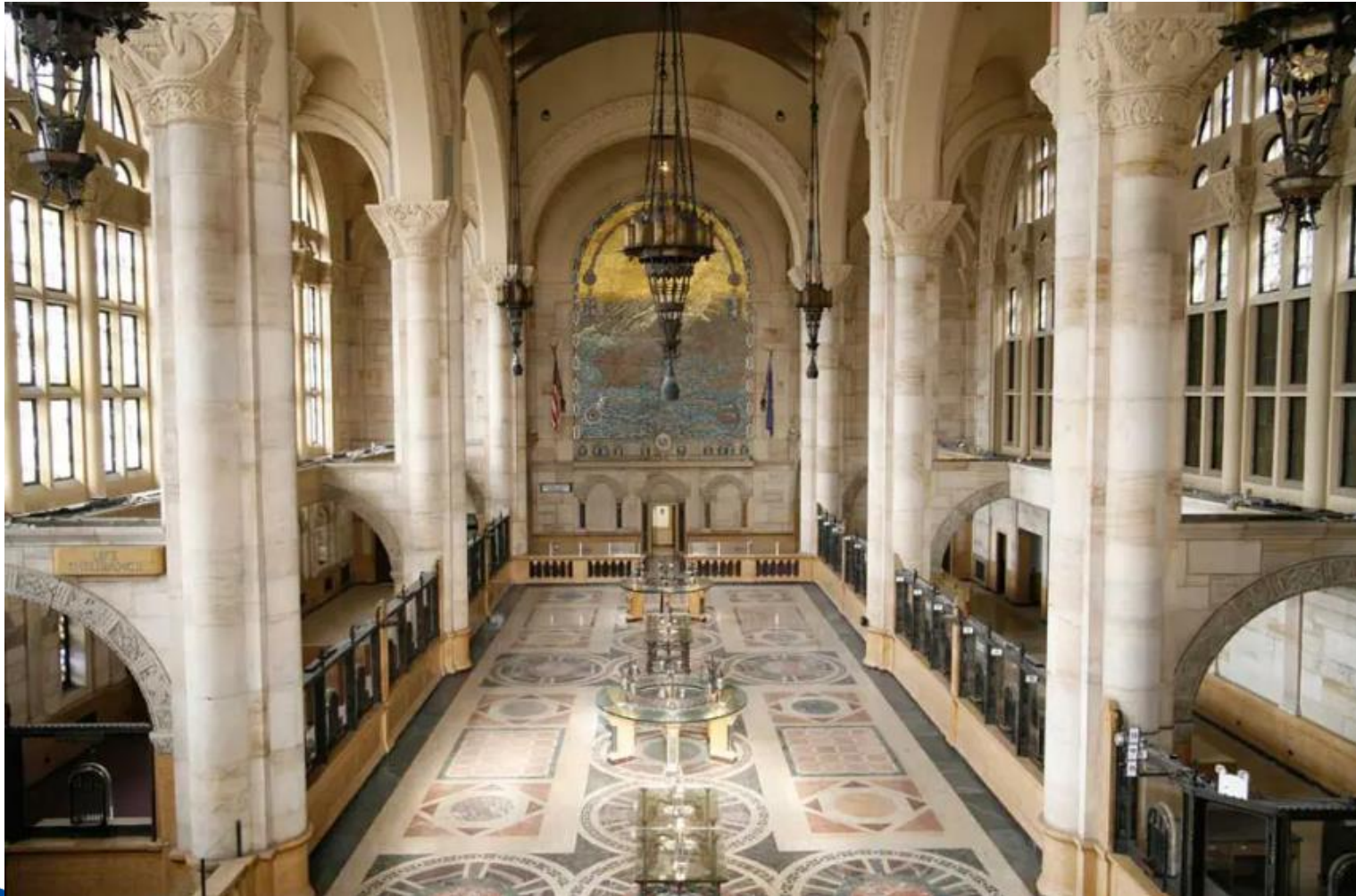
- Same product – very big difference in price. How to differentiate?
- **Zoom Communications**
 - Individual - FREE
 - Business – Starts at \$12.49/month per host
 - The trick – calls time-out after 40 minutes
- **Monday.com**
 - Individual – FREE
 - Business – starts at \$9/month per seat
 - The trick – Free is up to 2 users
- **Slack**
 - Individual – FREE
 - Business – starts at \$7.25/month per seat
 - The trick – 90 days message history

Different Prices – Different Positioning

- The **price** of anything is always
 - Within a frame of reference
 - And in the context of something
- Price and Positioning are closely linked and greatly impact one another
- The story of De Beers
 - The diamond industry at the beginning of the 20th century
 - Then came engagement rings - 1938
 - “Diamonds are forever”
 - How much to invest in a wedding ring?
 - How much is it worth?

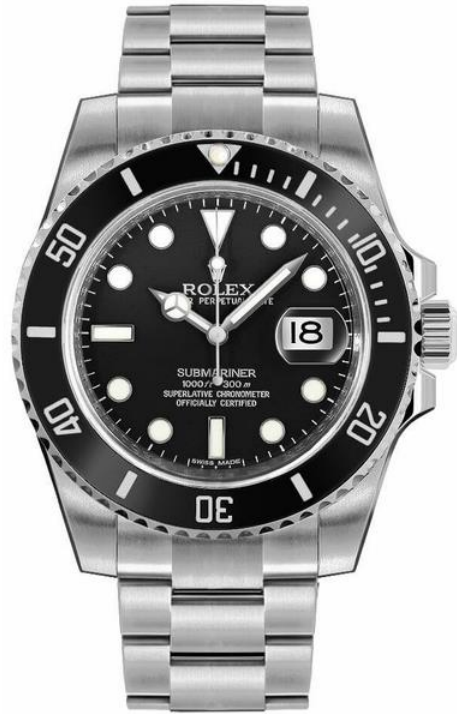
What is this building?

The interior of the Williamsburgh Savings Bank



SmartUp Business Model – Positioning

What are these?



Introducing- KIMOS

SmartUp Pricing Model - Kimos

- Kimos - The Bottle That Boils Water In 3 Minutes
- <https://www.youtube.com/watch?v=KqvZ9jlozS0>
- Sold 1,300 units on KickStarter for \$89 a unit
- Is that the right price?

**A SELF-HEATING THERMOS
THAT REPLACES YOUR HOT WATER KETTLE
ANYPLACE ANYTIME**



SmartUp Pricing Model – Kimos Competitors

5 best heated coffee mugs of 2024 to keep your drink at the perfect temperature <https://www.yahoo.com/tech/best-heated-coffee-mug-154523402.html>

Ember Ranks Amongst Fastest Growing Companies in America - Joins Inc. 5000 List
Brand makes waves in the consumer tech industry after experiencing CAGR of nearly 60% in the last three years.

ember

Ember® Drinkware



Ember Travel Mug 2 - Travel Mug 2+ with Apple Find My

★★★★★ 4.0

\$199.95 USD

Nextmug (14 oz.)

Sale ~~\$129.95~~ \$99.95 (23% Off)

Nextmug by Nextdoor SHOP ▾ DISCOVER ▾ SUPPORT ▾ REGISTER

★★★★★ 2,781 ratings from Amazon



SmartUp Pricing Model – Kimos Price Tests

- Test pricing using Google Ads on different market segments:
 - Mothers who need to make formula for their babies, outside of their home – want to boil the water to 100 degrees
 - Travelers to exotic countries who need to boil drinking water
 - Truck drivers
 - Mountain bike riders
 - Skiers
 - Etc.
- For each market segment test three landing pages at 3 price points - \$99, \$199, \$299
- Test two things at once
 - Price elasticity per market segment
 - Customer Acquisition Cost per market segment

SmartUp Pricing Model – an Example

ember

Drinkware

Baby

Discover



Ember Baby Bottle System

\$399.95 USD

Introducing the World's First Self-Warming Baby Bottle System

ADD TO CART

4 interest-free installments, or from **\$36.10/mo** with [shop Pay](#)

[Check your purchasing power](#)

The Ember Baby Bottle System warms milk or formula with the touch of a button and keeps it cool until you need it. Finally, feedings only require two things: a bottle and milk.

SmartUp Pricing Model – Intelichain

