

# AI in Finance

## Big Data Analytics



Tamkang  
University

# Business Models of Fintech

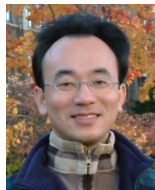
1081AIFBDA04

TLVXM2A (M2449) (8497) (Fall 2019)

(MBA, DBETKU) (3 Credits, Required) [Full English Course]

(Master's Program in Digital Business and Economics)

Tue, 2, 3, 4, (9:10-12:00) (B1012)



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Tamkang University

<http://mail.tku.edu.tw/myday>

2019-10-01



# Course Schedule (1/2)



Week	Date	Subject/Topics
1	2019/09/10	Course Orientation on AI in Finance Big Data Analytics
2	2019/09/17	AI in FinTech: Financial Services Innovation and Application
3	2019/09/24	ABC: AI, Big Data, Cloud Computing
4	2019/10/01	Business Models of Fintech
5	2019/10/08	Event Studies in Finance
6	2019/10/15	Case Study on AI in Finance Big Data Analytics I
7	2019/10/22	Foundations of AI in Finance Big Data Analytics with Python
8	2019/10/29	Case Study on Financial Industry Practice I
9	2019/11/05	Quantitative Investing with Pandas in Python

# Course Schedule (2/2)



Week	Date	Subject/Topics
10	2019/11/12	Midterm Project Report
11	2019/11/19	Machine Learning in Finance Application with Scikit-Learn In Python
12	2019/11/26	Deep Learning for Financial Time Series Forecasting with TensorFlow I
13	2019/12/03	Case Study on AI in Finance Big Data Analytics II
14	2019/12/10	Deep Learning for Financial Time Series Forecasting with TensorFlow II
15	2019/12/17	Case Study on Financial Industry Practice II
16	2019/12/24	Deep Learning for Financial Time Series Forecasting with TensorFlow III
17	2019/12/31	Final Project Presentation I
18	2020/01/07	Final Project Presentation II

# **Business Models** **of** **Fintech**



**FinTech**

# Financial Technology



# Financial Technology

## FinTech

“providing  
financial services  
by making use of  
software and  
modern technology”

# Business Model

# Definition of **Business Model**

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

# Definition of Business Strategy

**A business strategy**  
**is**  
**a long term plan of action**  
**designed to achieve a particular goal**  
**or set of goals or objectives.**

# Financial Services



# Financial Services



# Financial Revolution with Fintech

## A financial services revolution

### Consumer Trends



1. Simplification



2. Transparency



3. Analytics



4. Reduced Friction

# FinTech: Financial Services Innovation



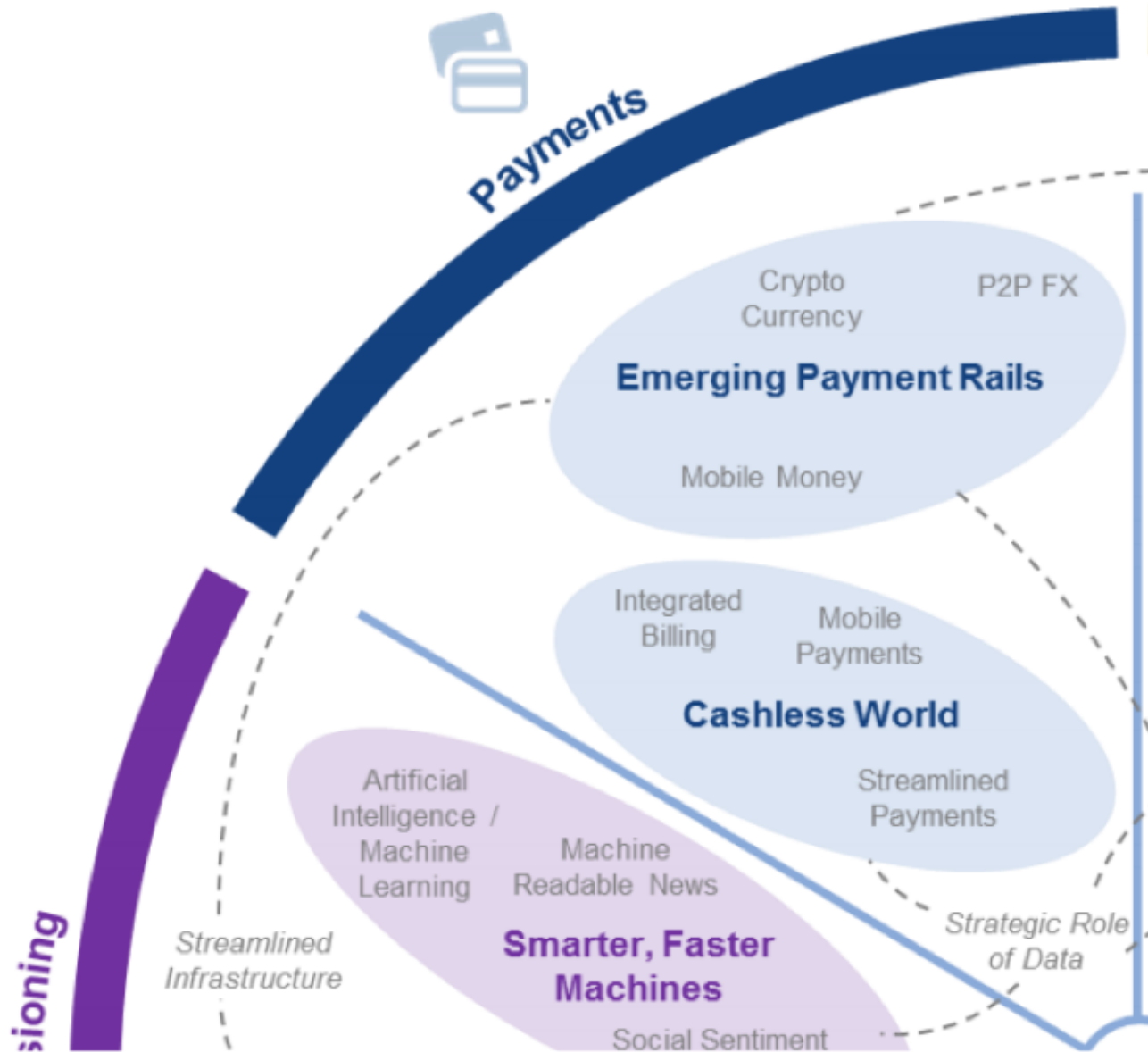
# **FinTech:**

## **Financial Services Innovation**

- 1. Payments**
- 2. Insurance**
- 3. Deposits & Lending**
- 4. Capital Raising**
- 5. Investment Management**
- 6. Market Provisioning**

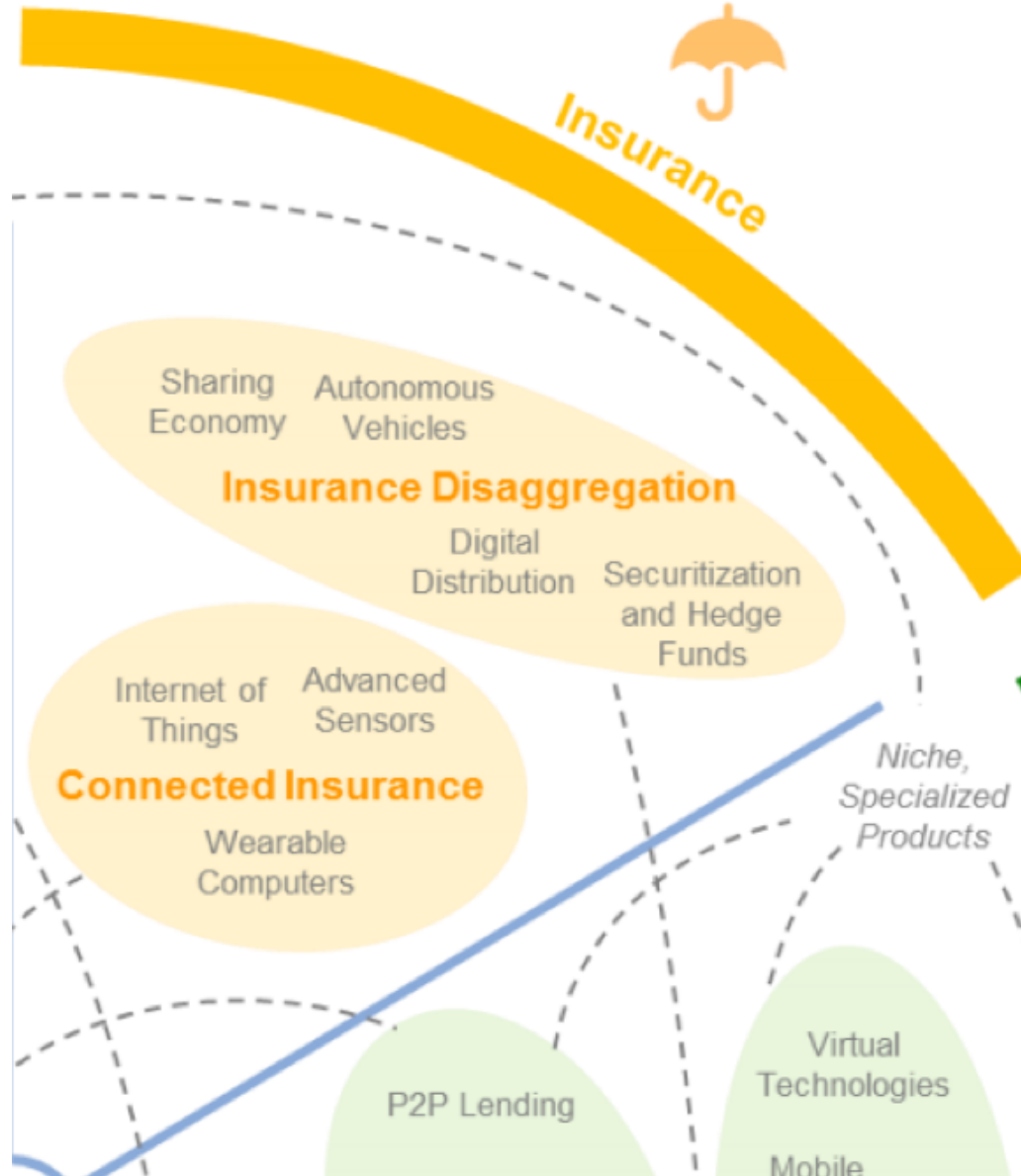
1

# FinTech: Payment



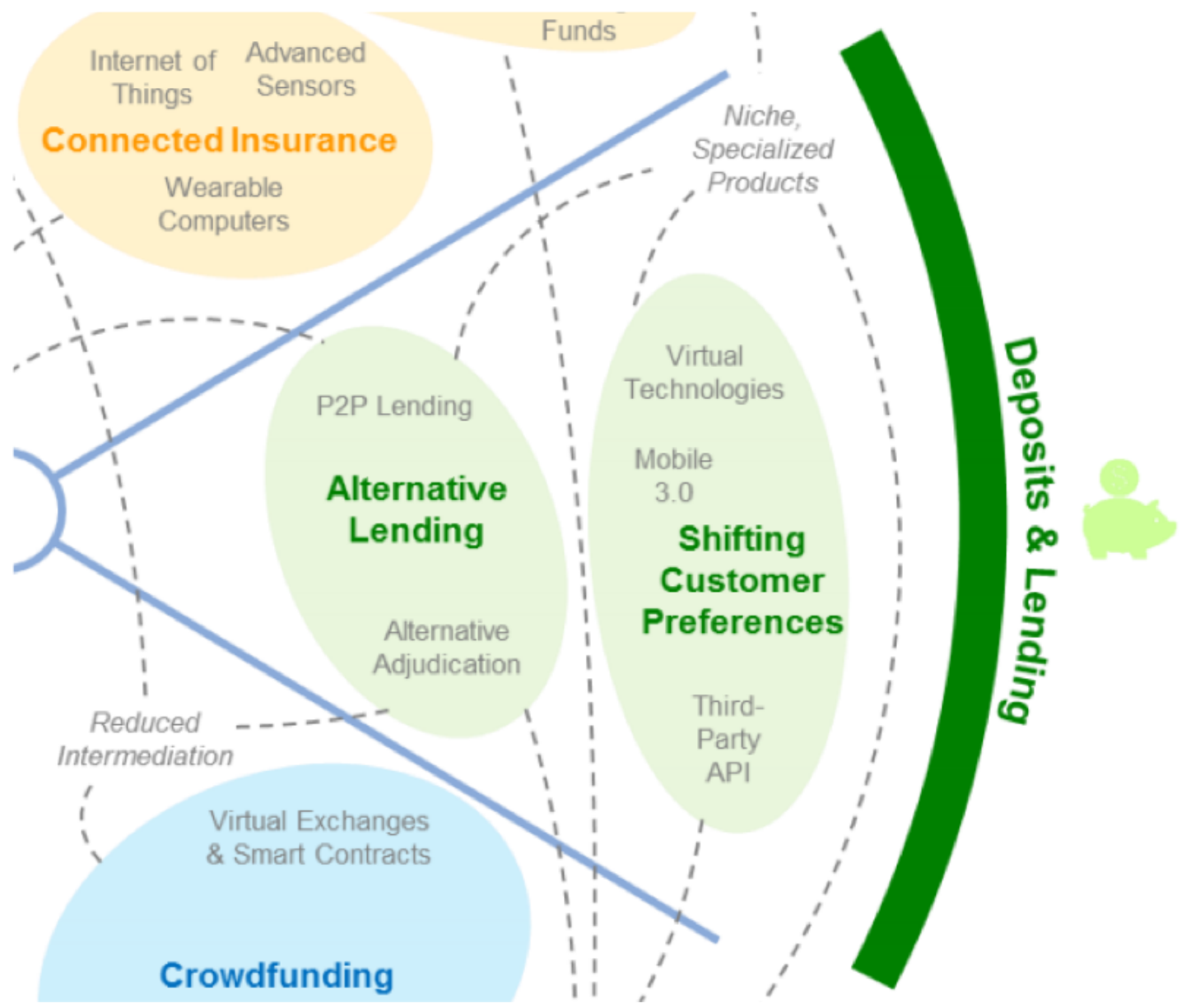
# 2

## FinTech: Insurance



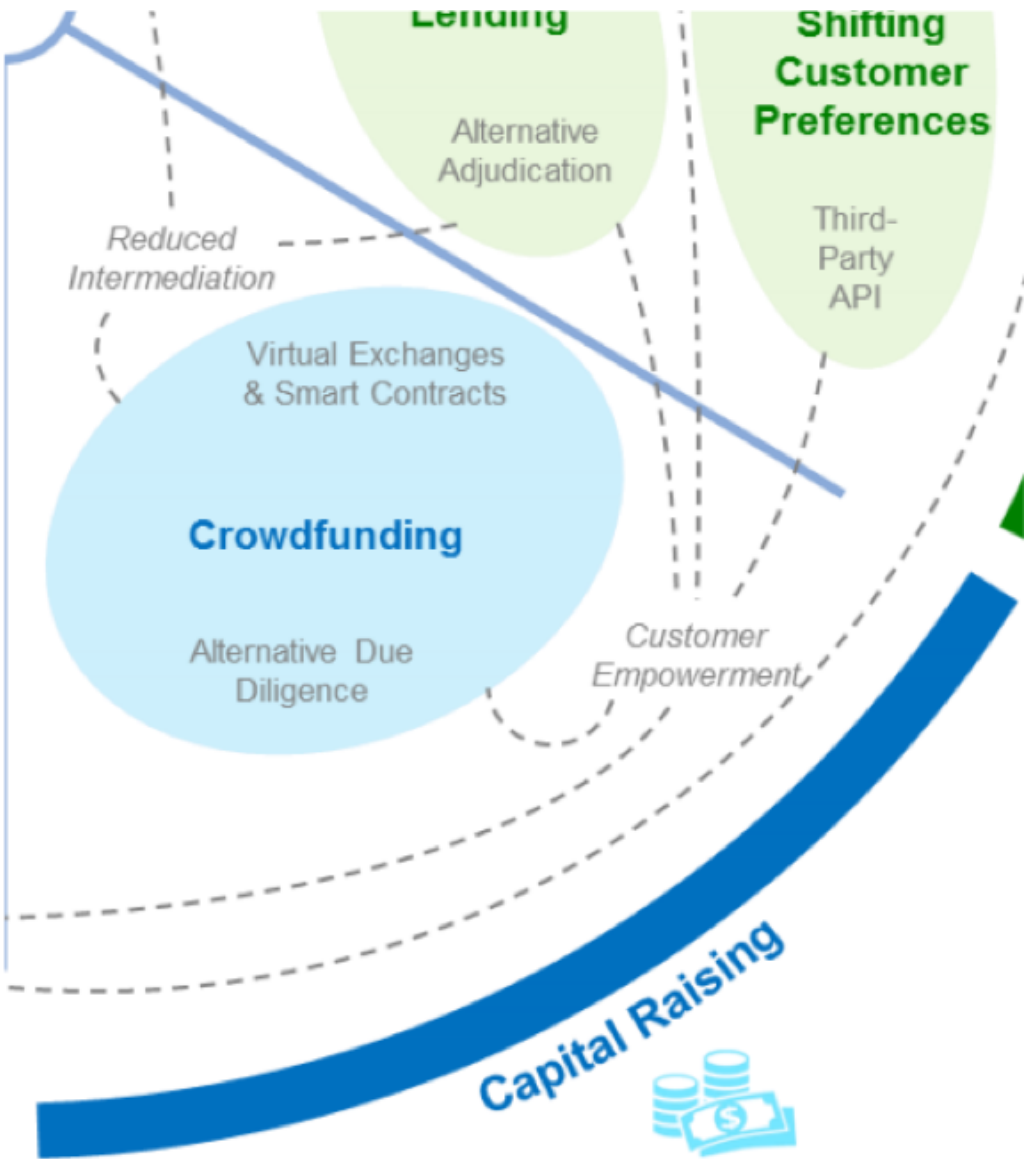
# 3

# FinTech: Deposits & Lending



# 4

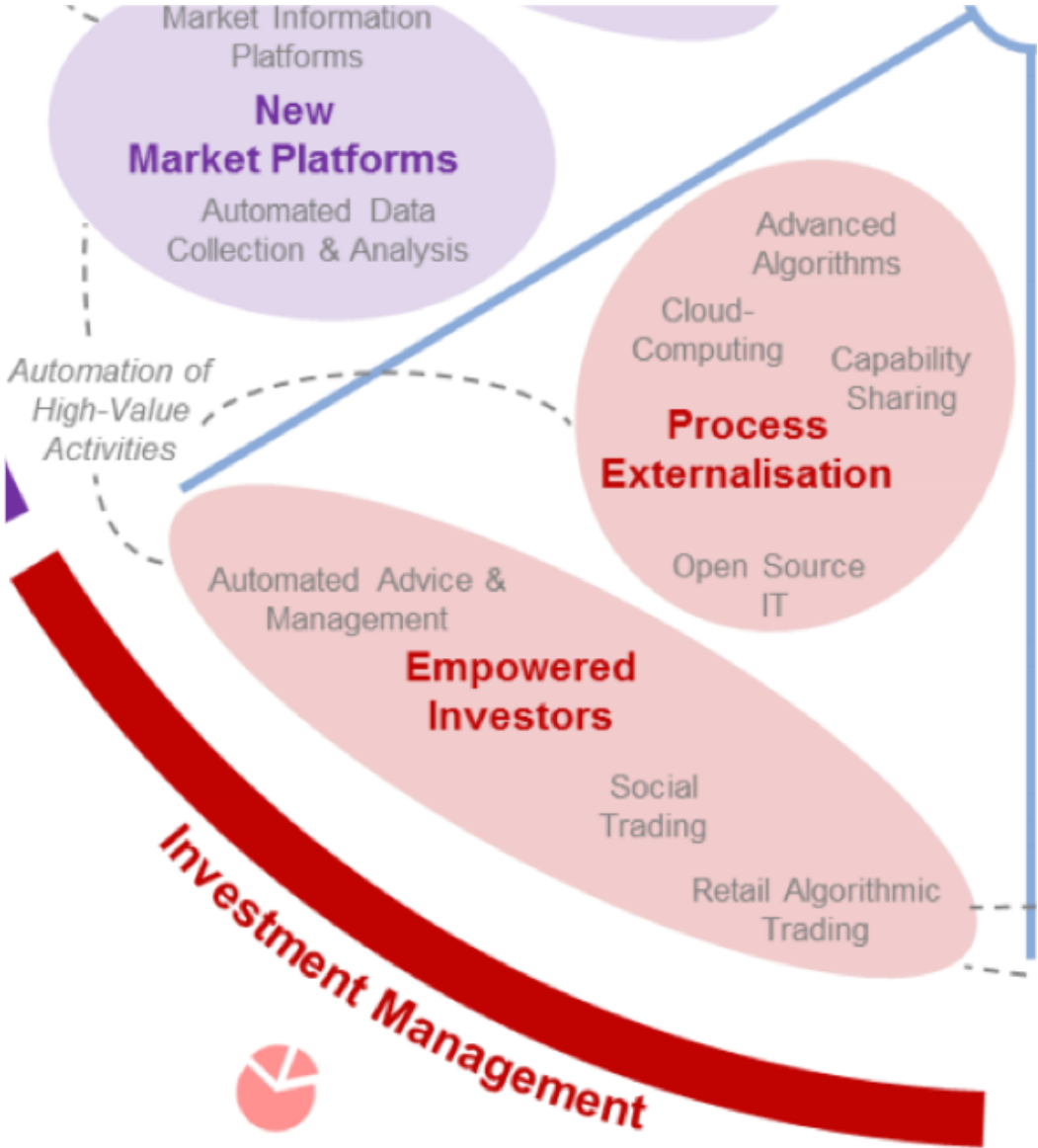
# FinTech: Capital Raising





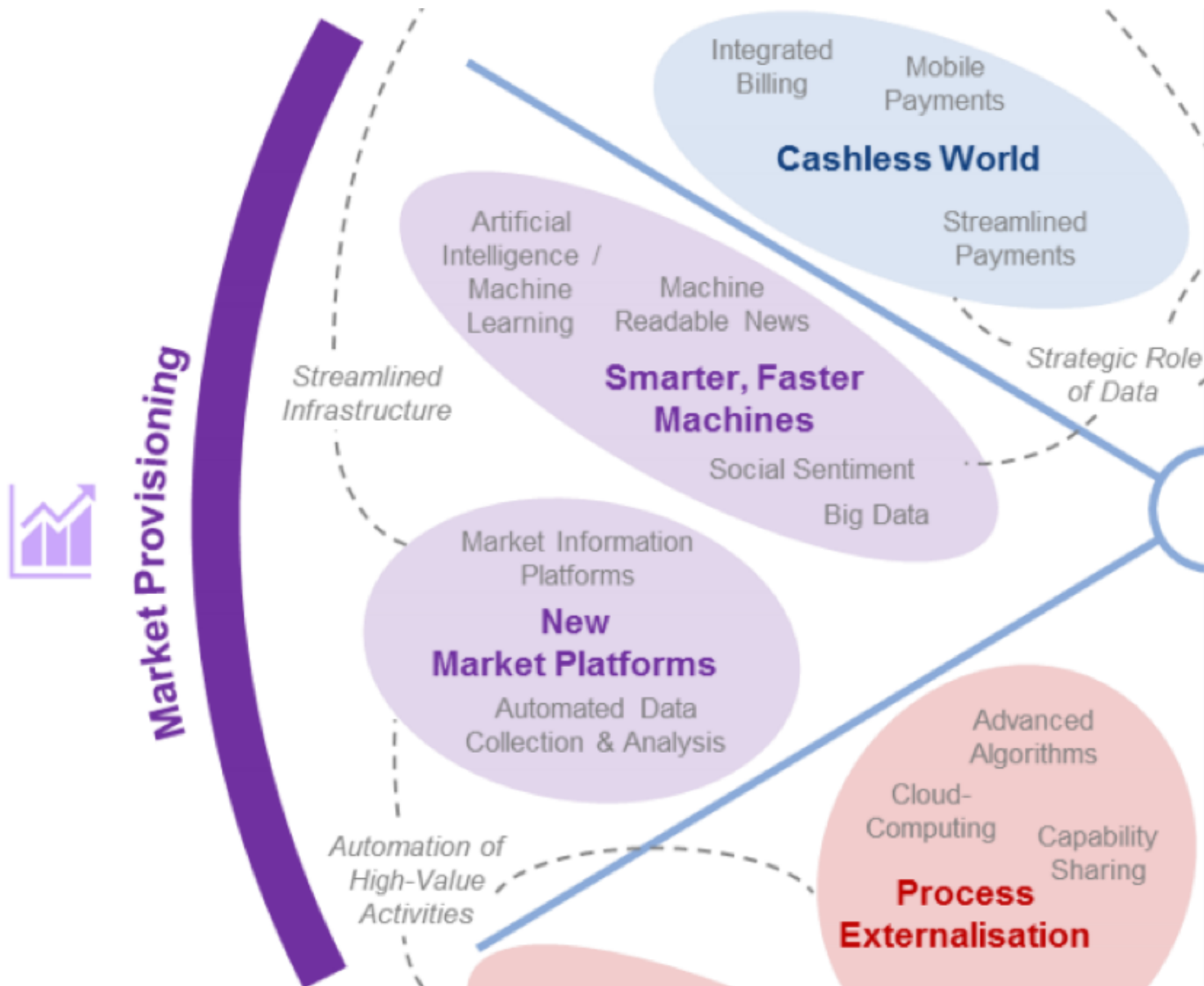
# 5

# FinTech: Investment Management



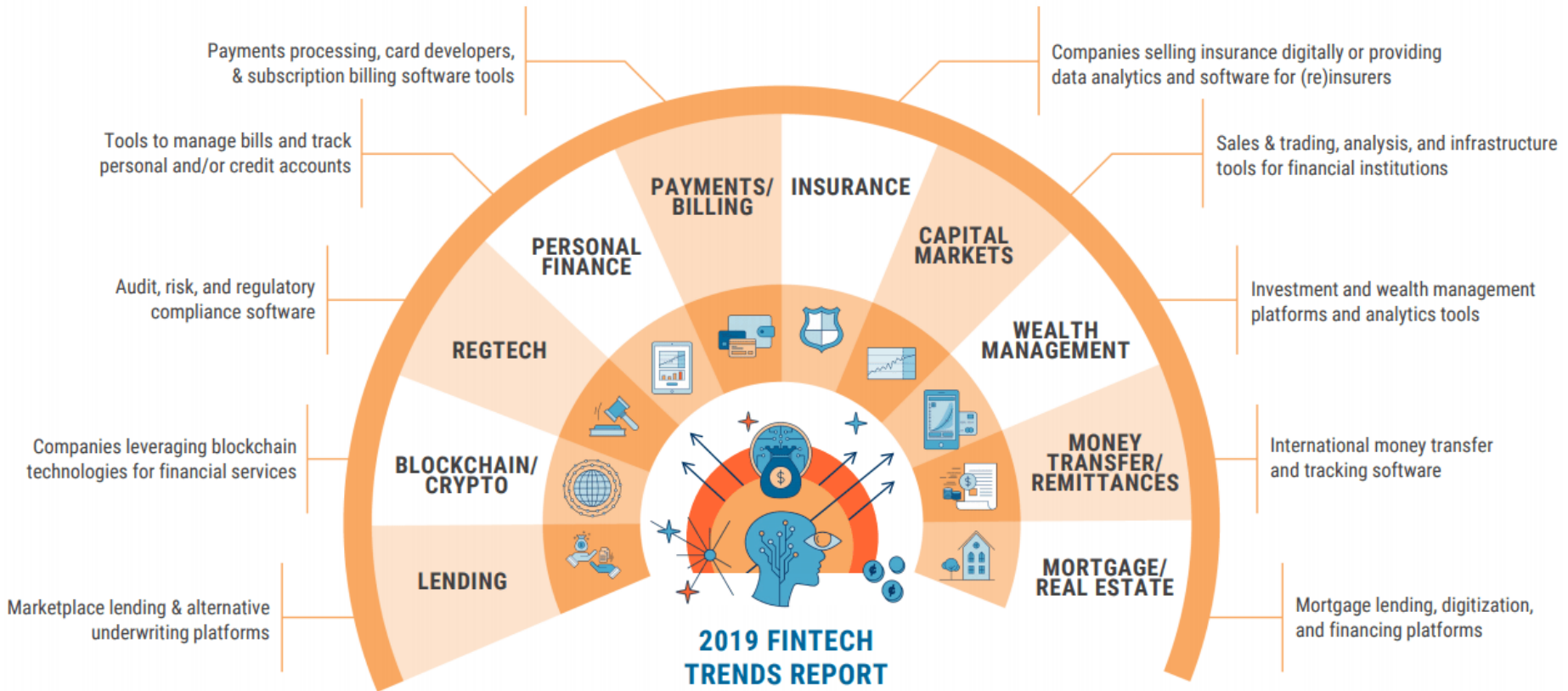
# 6

# FinTech: Market Provisioning

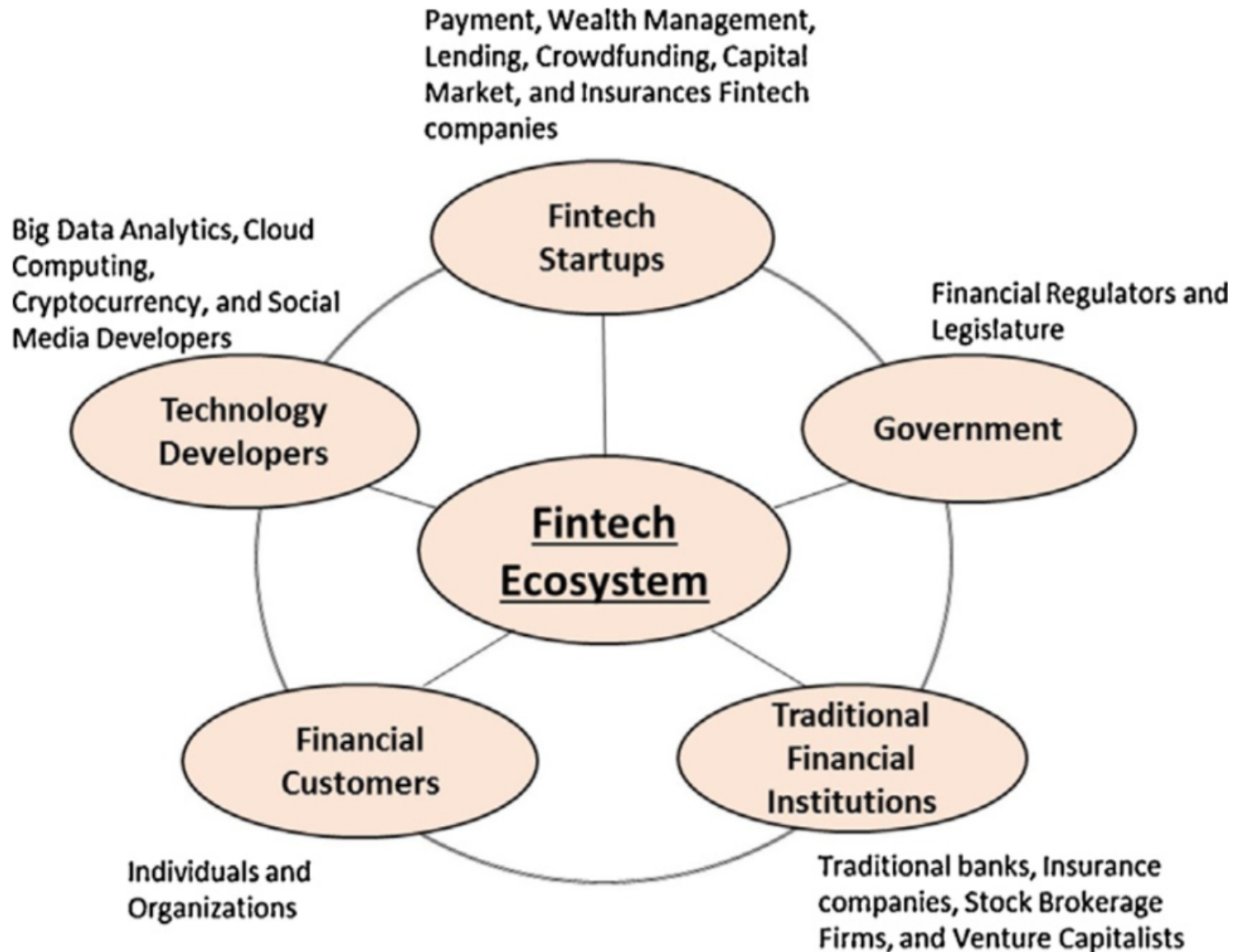


# 2019 FinTech Trends Report

## WHAT THIS REPORT COVERS



# Five Elements of the Fintech Ecosystem



# **Fintech Business Models Innovation**

# The Future of Financial Services

## Industry Leaders

- Oversight, guidance and thought leadership from **16 C-suite executives** and **25 strategy officers** of global financial institutions



## Innovators

- In-person and phone interviews with **100+ innovative new entrants** and **subject matter experts**

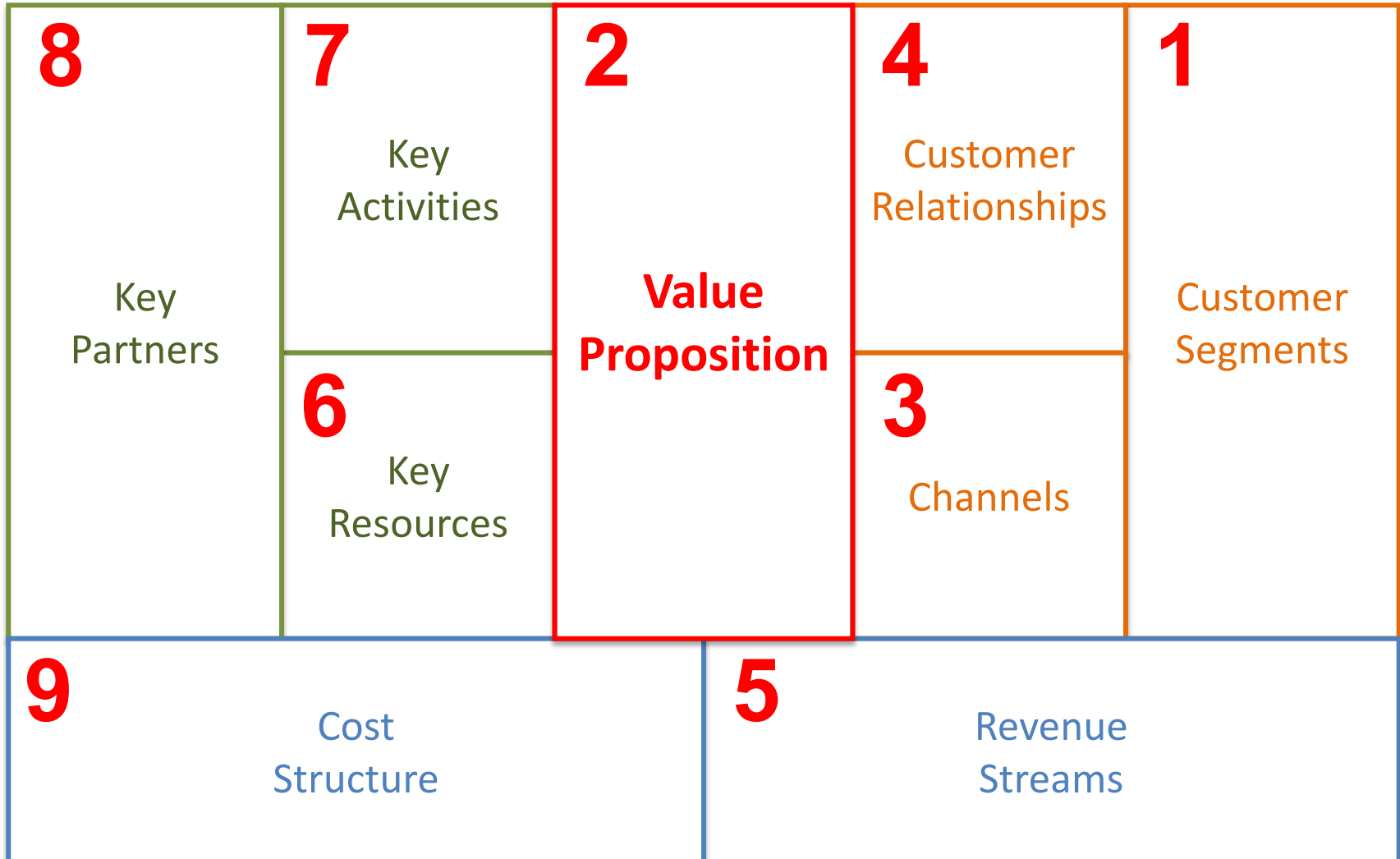


# Business Model

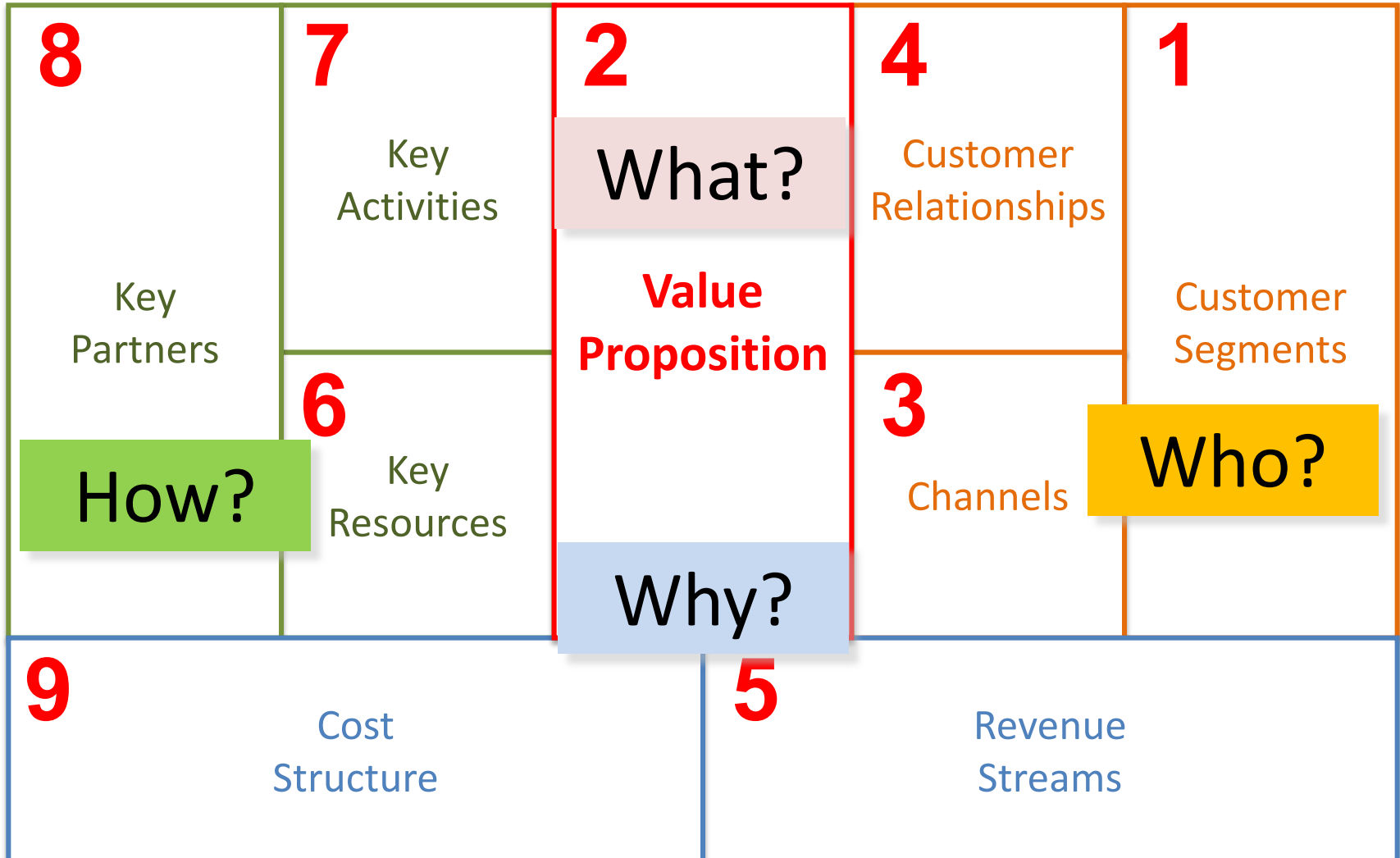
**Value**



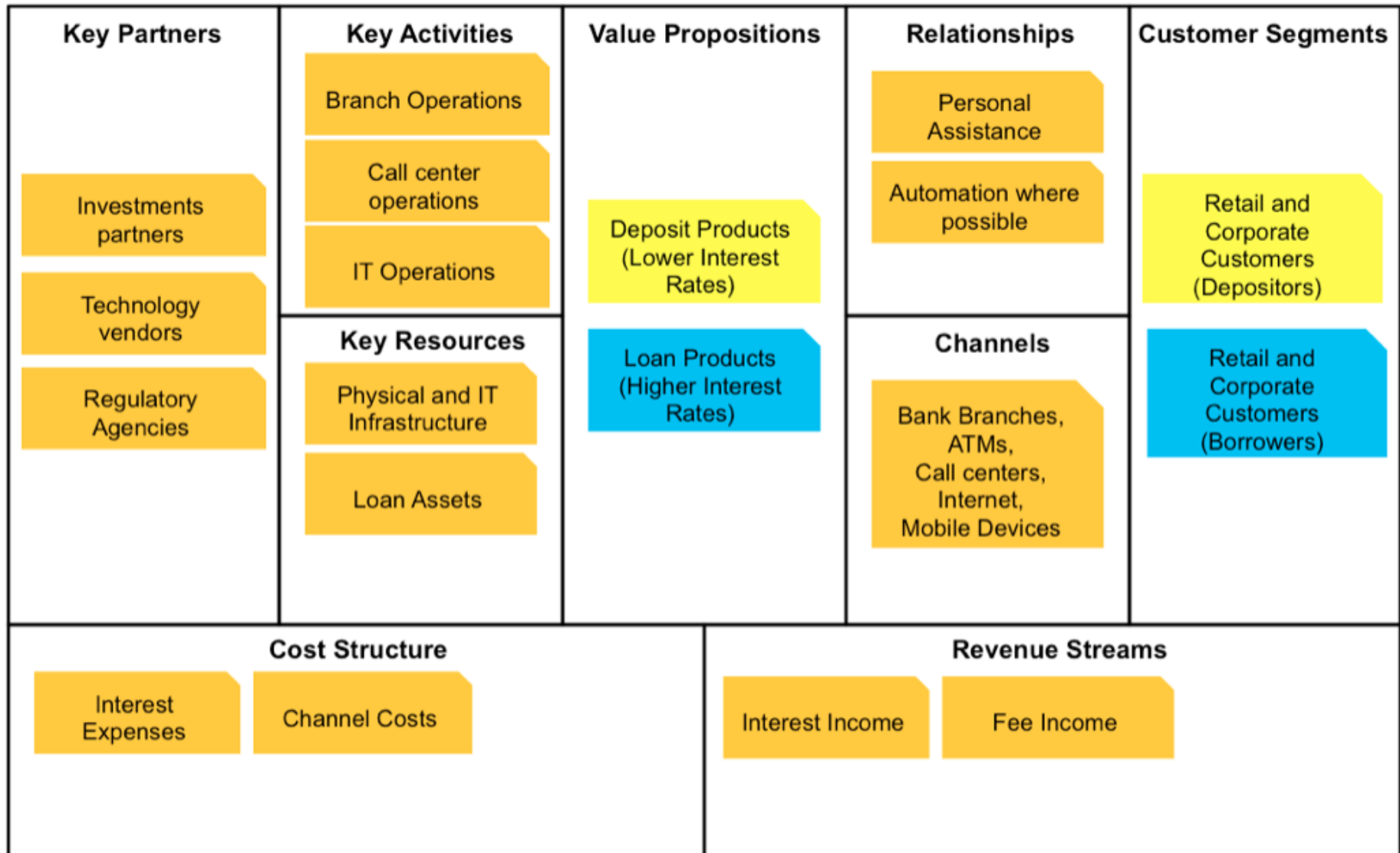
# Business Model



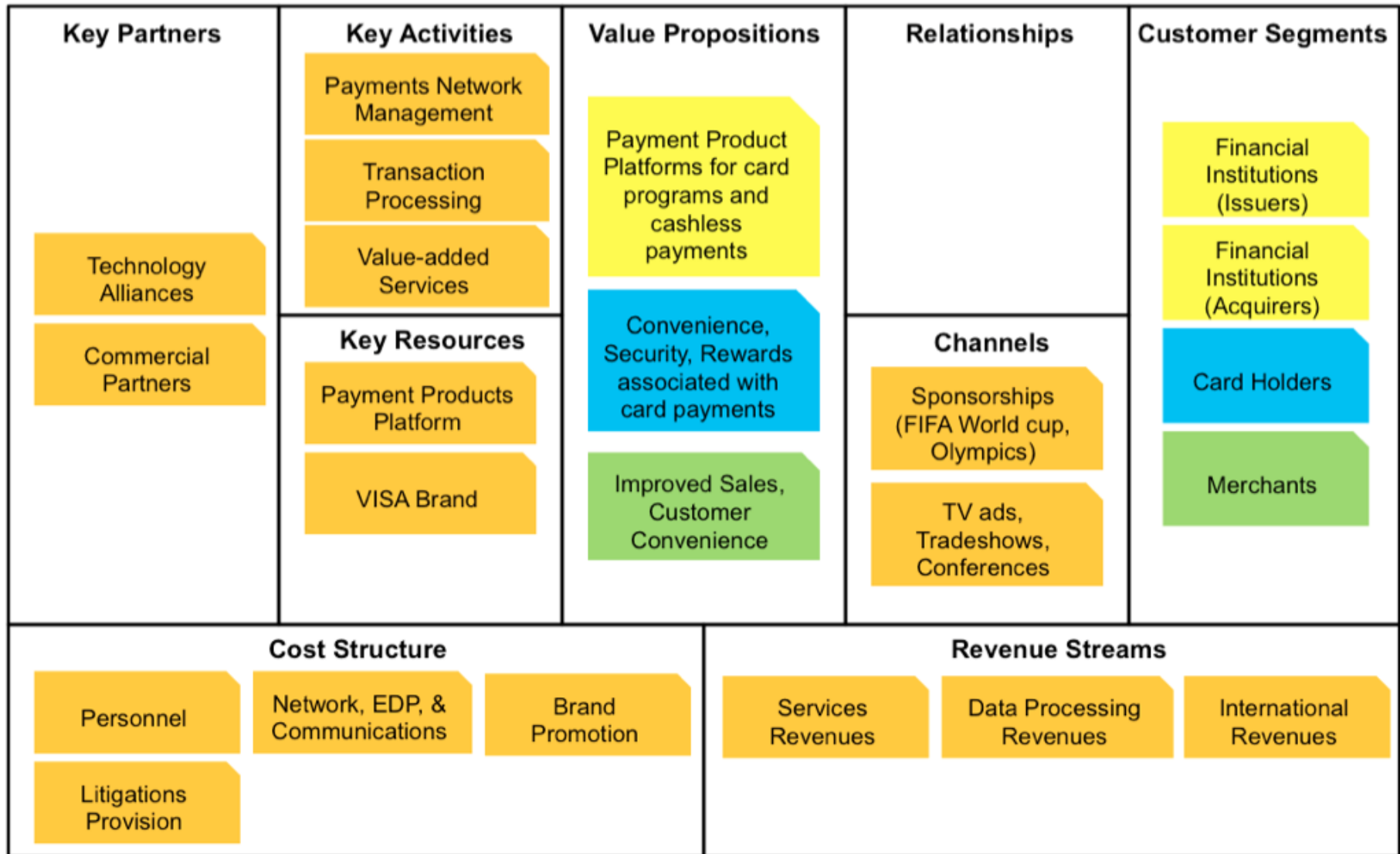
# Business Model



# Business Model of Banking companies



# VISA – Leader in Global Payments Industry



# Apply Pay Business Model



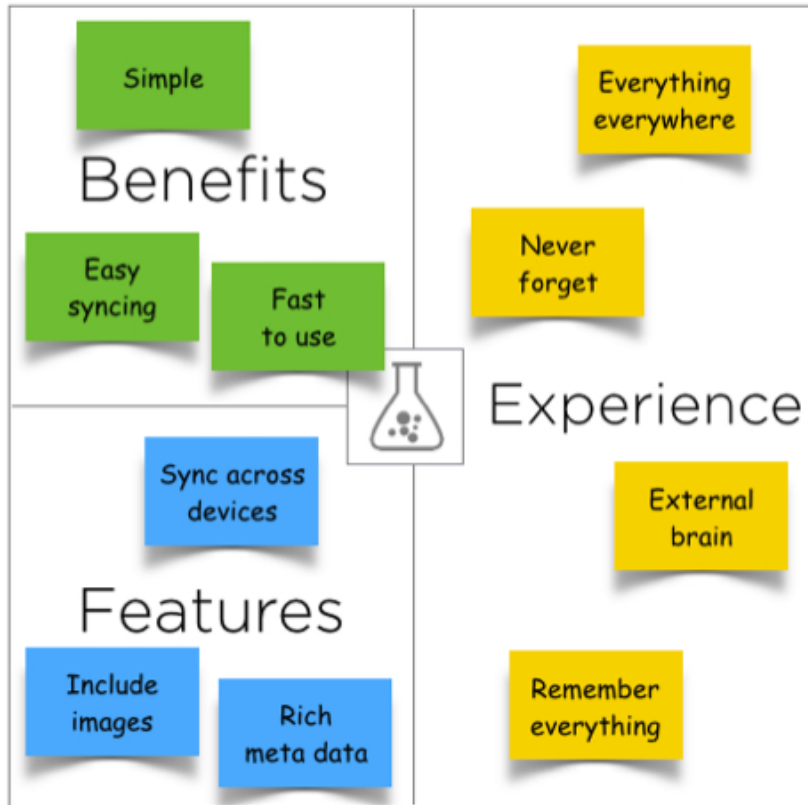
## Apple Pay



# Value Proposition

# Value Proposition Canvas

## Product



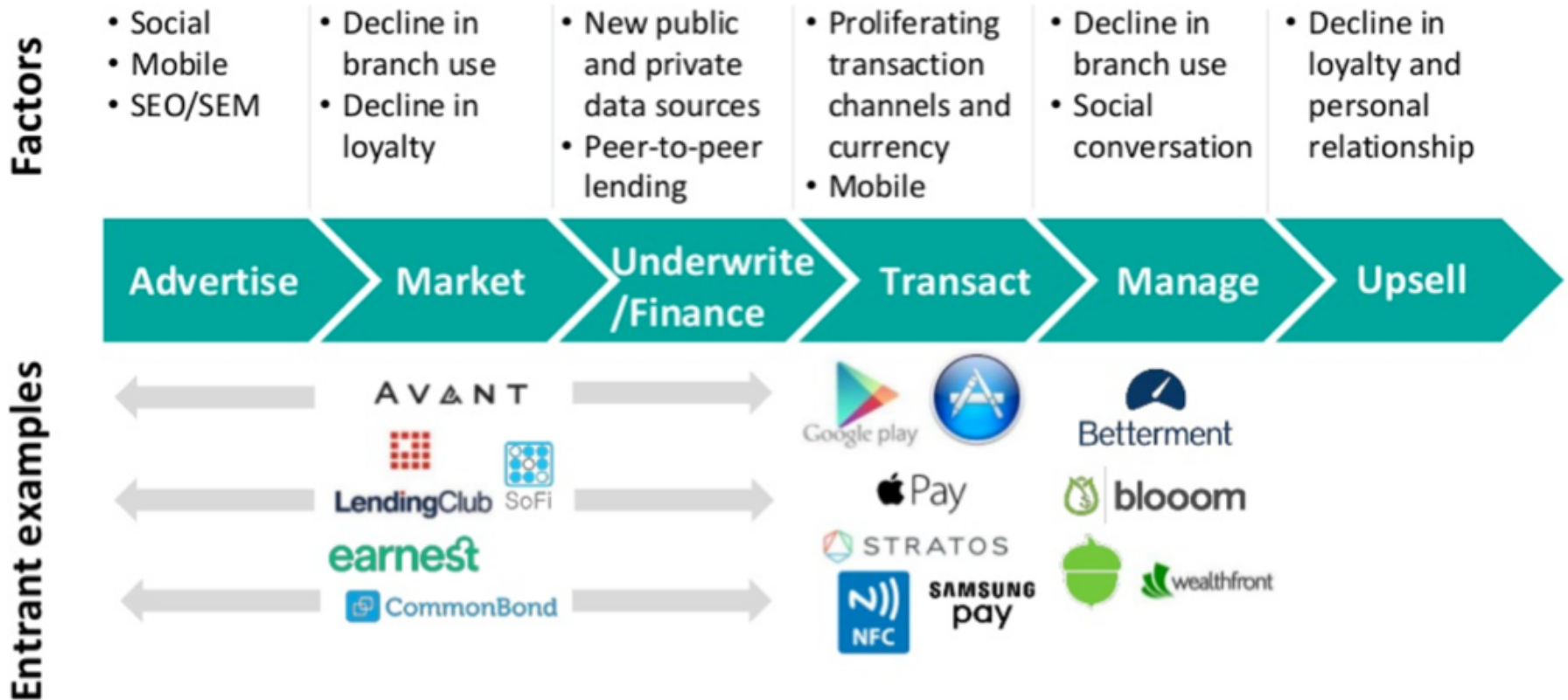
Company: **Evernote**  
 Product: **Online notes**  
 Ideal customer: **Mobile professionals**

## Customer



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# Financial Value Chain





# **Business Models Innovation**

# Why Business Model Innovation

Target Market

Revenue  
Mechanism

Value  
Proposition

Value Network  
(Ecosystem)

Value Chain

Competitive  
Strategy

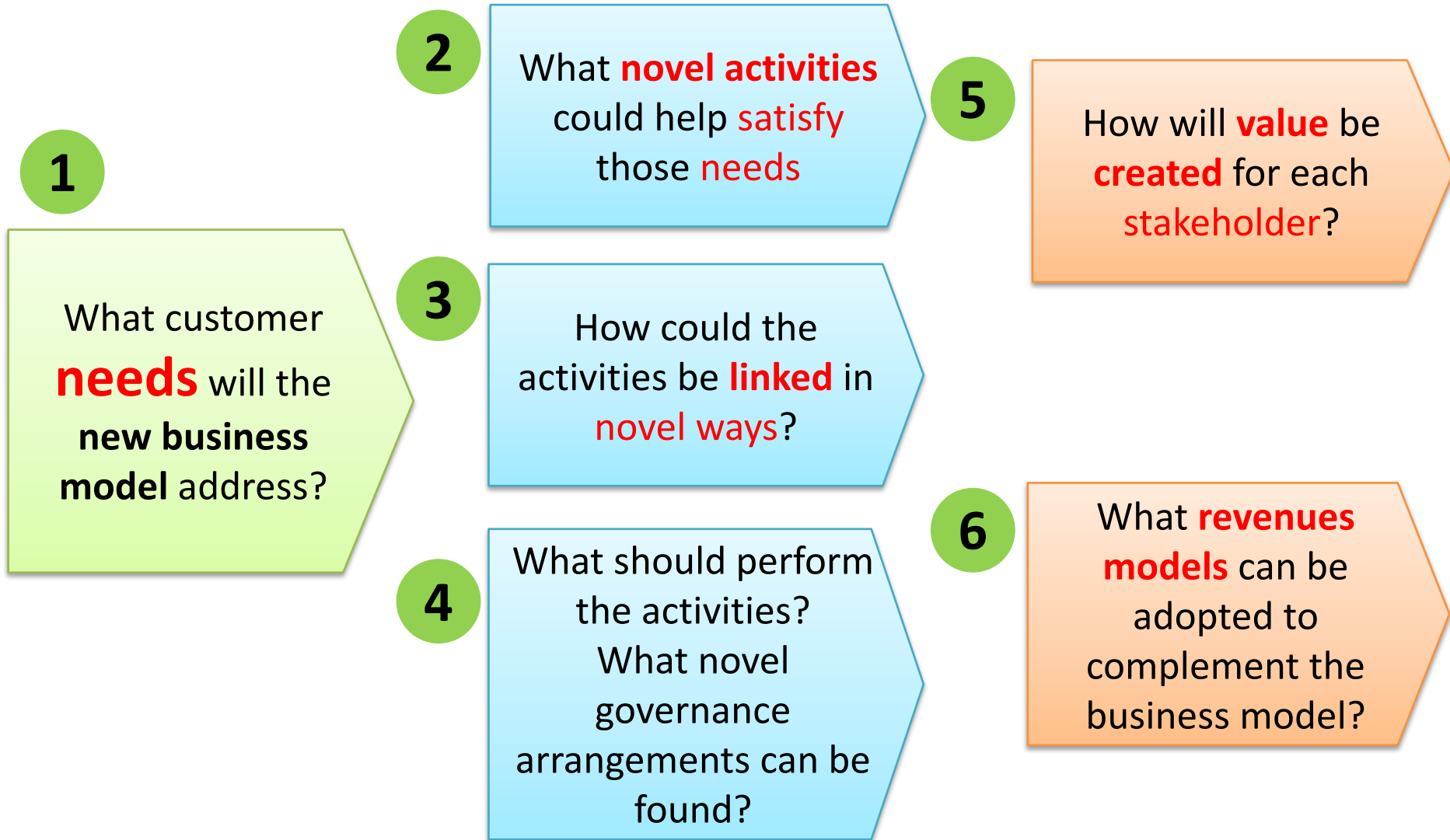
# Business Model Innovation

**Adding new** activities

**Linking** activities in **novel** ways

**Changing** one or more parties  
that perform any of the activities

# Business Model Innovation



# Digital goods

- Goods that can be delivered over a digital network
  - For example: music tracks, video, software, newspapers, books
- Cost of producing first unit is almost entire cost of product
- Costs of delivery over the Internet very low
- Marketing costs remain the same; pricing highly variable
- Industries with digital goods are undergoing revolutionary changes (publishers, record labels, etc.)

# Types of E-Commerce

- Three major types of e-commerce
  - Business-to-Consumer (B2C)
    - Example: BarnesandNoble.com
  - Business-to-Business (B2B)
    - Example: ChemConnect
  - Consumer-to-Consumer (C2C)
    - Example: eBay
- E-commerce can be categorized by platform
  - Mobile Commerce (m-commerce)

# E-commerce

## Business Models

1. E-tailer
2. Transaction broker
3. Market creator
4. Content provider
5. Community provider
6. Portal
7. Service provider

# Business Models of the Future

BUSINESS MODEL	DESCRIPTION	EXAMPLES
SUBSCRIPTION	Takes a product/service traditionally purchased on an ad hoc basis and locks in repeat customers by charging a subscription fee	NETFLIX, APPLE MUSIC
FREEMIUM	Users pay for product/service with their data rather than their money, then are charged to upgrade to a full offer	SPOTIFY, LINKEDIN, DROPBOX
FREE	Involves selling personal data or 'advertising eyeballs' harvested by offering consumers a free product/service	GOOGLE, FACEBOOK
MARKETPLACE	Provides a digital marketplace that brings together buyers and sellers in return for a transaction/placement fee or commission	eBAY, iTUNES, APP STORE, UBER, AIRBNB
ACCESS-OVER-OWNERSHIP	Provides temporary access to goods/services traditionally only available through purchase; includes 'sharing economy' disruptors	ZIPCAR, PEERBY, AIRBNB
HYPERMARKET	'Brand bombing' using sheer market power and scale to beat competition, often by selling below cost price	AMAZON, APPLE
EXPERIENCE	Disrupts by providing a superior experience, for which people are prepared to pay	TESLA, APPLE
PYRAMID	Recruits an army of resellers and affiliates who are often paid on a commission-only model	AMAZON, MICROSOFT, DROPBOX
ON-DEMAND	Monetises time and sells instant access at a premium; includes taking a commission from people with money but no time who pay for goods/services delivered by people with time but no money	UBER, OPERATOR, TASKRABBIT
ECOSYSTEM	Sells an interlocking and interdependent suite of products/services that increase in value as more are purchased, creating consumer dependency	APPLE, GOOGLE

Source: Digital Intelligence Today, Syzygy/WPP 2015



# Understanding **Business Model**

- **Business Model**
- Revenue Model
- Business Strategy
- Business Strategy and Information System Alignment

# Definition of **Business Model**

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# Definition of Business Strategy

**A business strategy**  
**is**  
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# Business

- “the activity of providing goods and services involving financial, commercial and industrial aspects.” (WordNet 2.0)

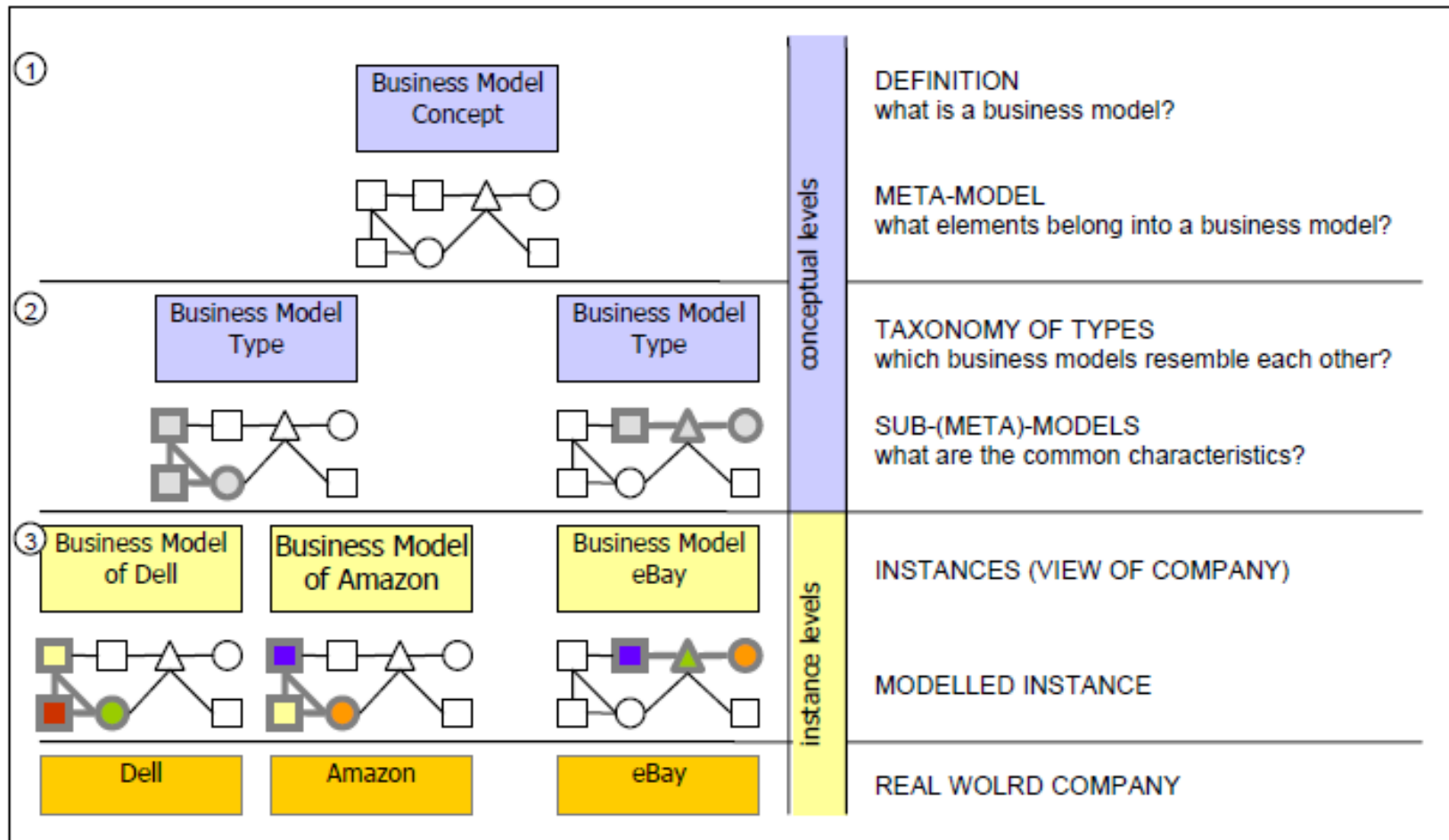
# Model

- “a simplified description and representation of a complex entity or process.” (WordNet 2.0)

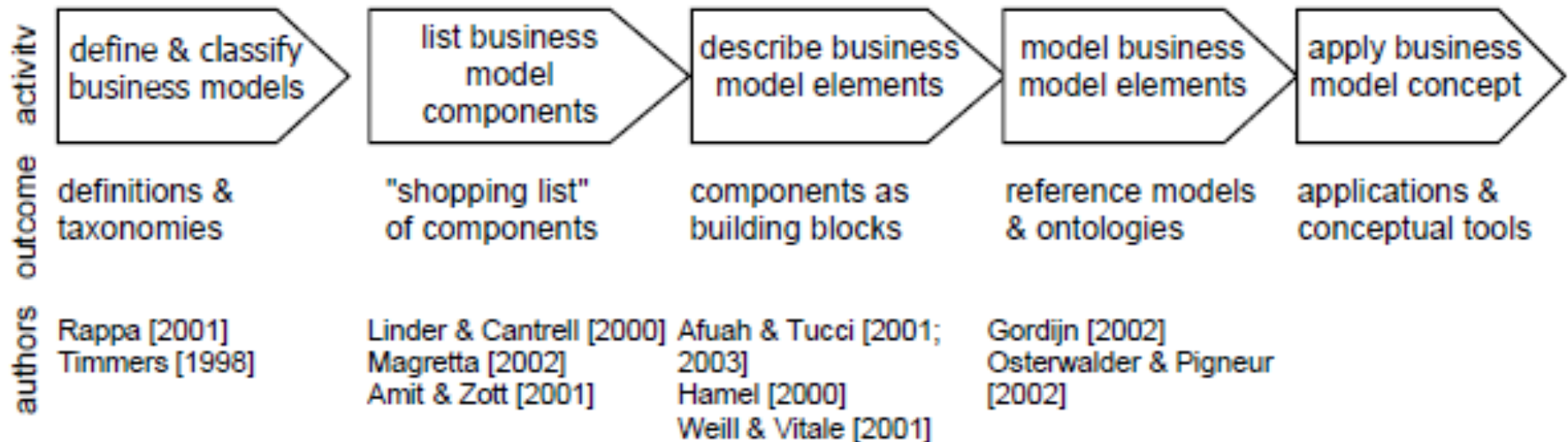
# Business Model

- A business model is a **conceptual tool** containing a set of **objects, concepts and their relationships** with the objective to express the **business logic** of a specific firm.
- Therefore we must consider which **concepts and relationships** allow a simplified description and representation of **what value is provided to customers, how this is done** and with which **financial consequences**.

# Business Model Concept Hierarchy



# Evolution of the Business Model Concept





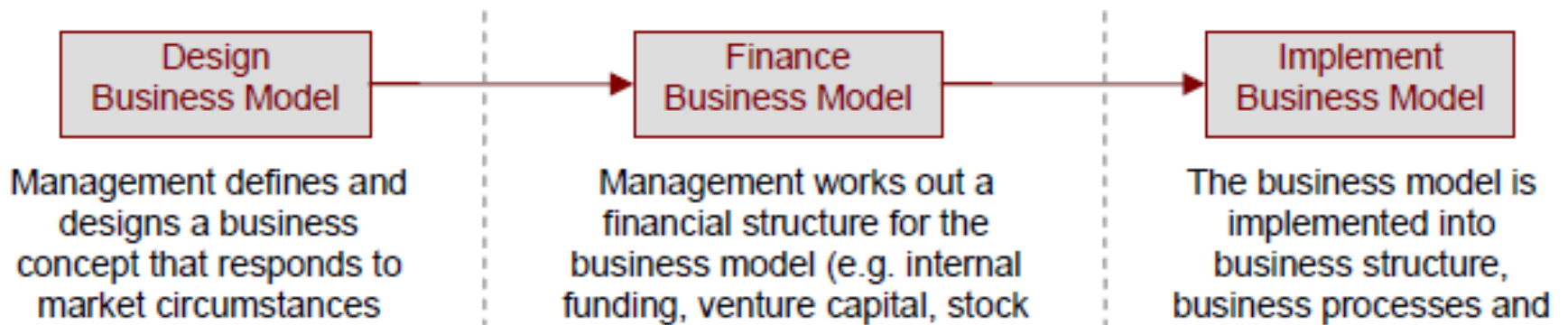
# Business Model vs. Business Process Model

- Business Model
  - a view of the firm's logic for creating and commercializing value
- Business process model
  - how a business case is implemented in processes

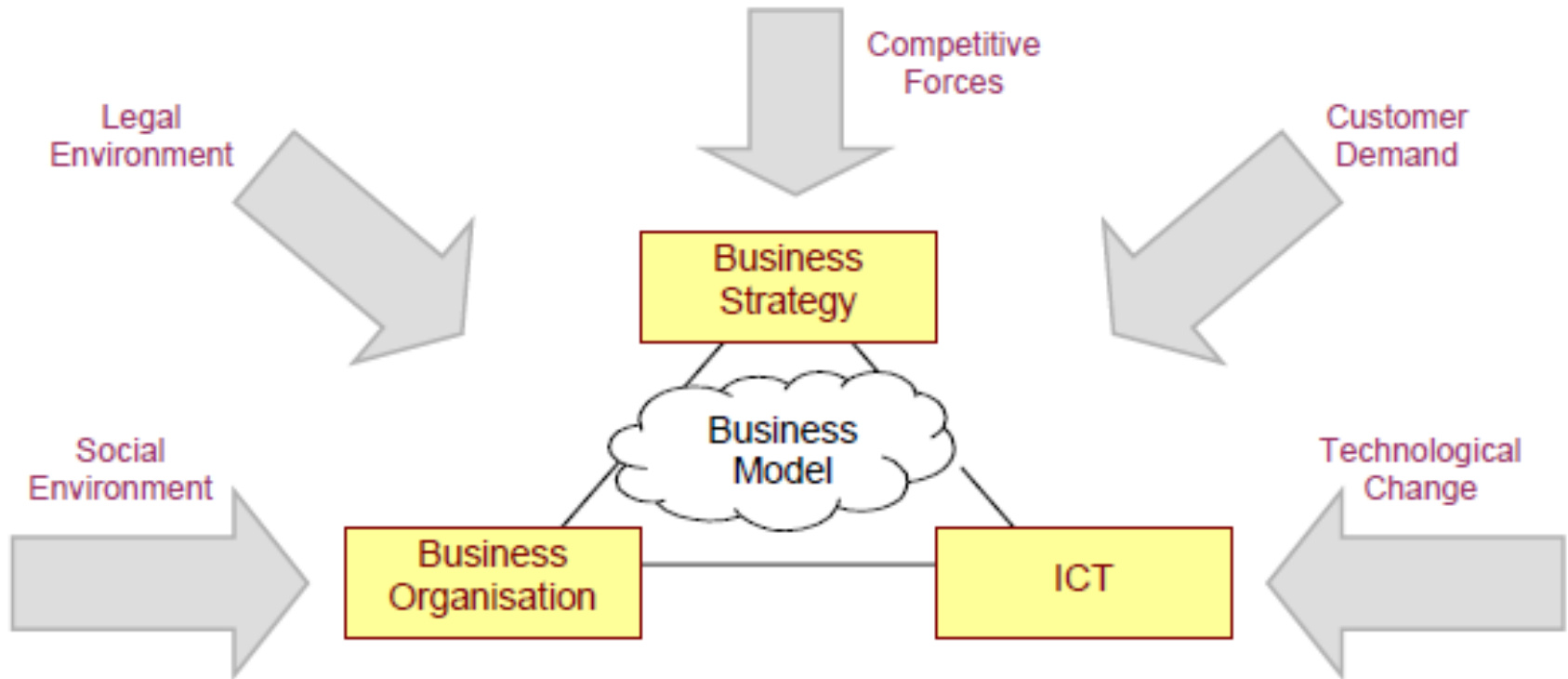
# Business Model vs. Strategy

- Business Models
  - a system that shows how the pieces of a business fit together.
  - an abstraction of a firm's strategy
- Strategy
  - includes competition

# Implementing Business Models



# The Business Model's Place in the Firm



# Nine Business Model Building Blocks

Pillar	Business Model Building Block	Description
Product	Value Proposition	Gives an overall view of a company's bundle of products and services.
Customer Interface	Target Customer	Describes the segments of customers a company wants to offer value to.
	Distribution Channel	Describes the various means of the company to get in touch with its customers.
	Relationship	Explains the kind of links a company establishes between itself and its different customer segments.
Infrastructure Management	Value Configuration	Describes the arrangement of activities and resources.
	Core Competency	Outlines the competencies necessary to execute the company's business model.
	Partner Network	Portrays the network of cooperative agreements with other companies necessary to efficiently offer and commercialize value.
Financial Aspects	Cost Structure	Sums up the monetary consequences of the means employed in the business model.
	Revenue Model	Describes the way a company makes money through a variety of revenue flows.

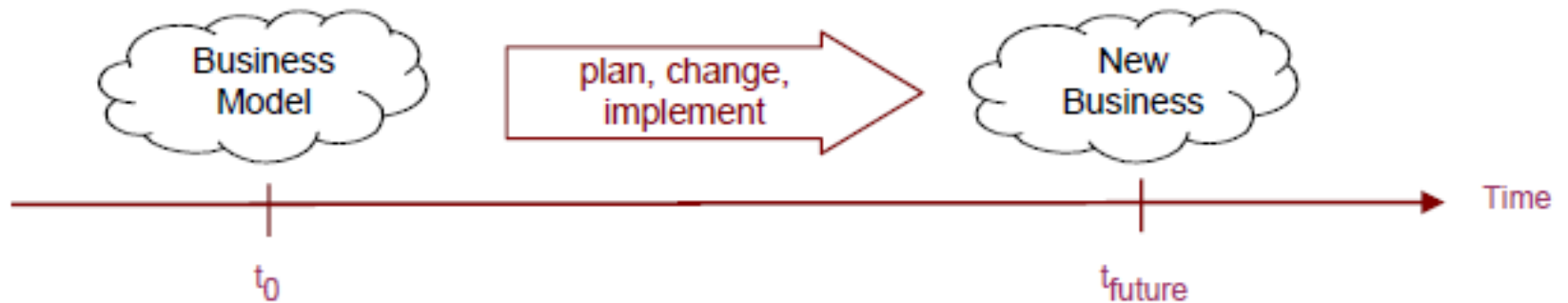
# Domains Addressed in Business Models

Business model ontology	Stähler 2001	Weill and Vitale 2001	Petrovic, Kittl et al.	Gordijn 2002	Afuah and Tucci 2003	Tapscott, Ticoll et al. 2000	Linder and Cantrell 2000
Value Proposition	value proposition	Value Proposition, strategic objective	Value Model	Value offering	Customer Value		value proposition
Target Customer		Customer Segments		Market Segment	Scope		
Distribution Channel		Channels	Customer relations model				channel model
Customer Relationship			Customer relations model				commerce relationship
Value Configuration	Architecture		Production Mode	e3-value configuration	connected activities, value configuration	b-webs	commerce process model
Capability		Core competencies, CSF	Resource Model		capabilities		
Partnership	Architecture	e-business schematics		Actors	sustainability (team-up strategy)	b-webs	
Cost Structure				Value exchange	cost structure		
Revenue Model	Revenue Model	Source of revenue	Revenue Model	value exchange	pricing, revenue source		pricing model, revenue model

# Domains Addressed in Business Models (cont.)

Business model ontology	Hamel 2000	Mahadevan 2000	Chesbrough and Rosenbloom 2000	Magretta 2002	Amit and Zott 2001	Applegate and Collura 2001	Maitland and Van de Kar 2002
Value Proposition	Product/market scope	Value stream	Value proposition	What does the customer value?	Transaction component	Product and Services offered	Value proposition, assumed value
Target Customer	Market scope		Market segment	Who is the customer?		Market opportunity	Market segment
Distribution Channel	Fulfillment & support, info & insight			How can we deliver value at an appropriate cost?		Marketing/sales model	
Customer Relationship	Relationship dynamics					Brand and reputation	
Value Configuration	Core processes	Logistical stream	Structure of the value chain		Architectural configuration	Operating model	
Capability	core competencies, strategic assets					Organization and culture, management model)	
Partnership	suppliers, partners, coalitions		Position in the value chain		Transaction component	Partners	Companies involved in creating value
Cost Structure			Cost structure	What is the underlying economic vale?			
Revenue Model	pricing structure	Revenue stream		How do we make money in this business		Benefits to firm and stakeholders	Revenue Model

# Planning, Changing and Implementing Business Models



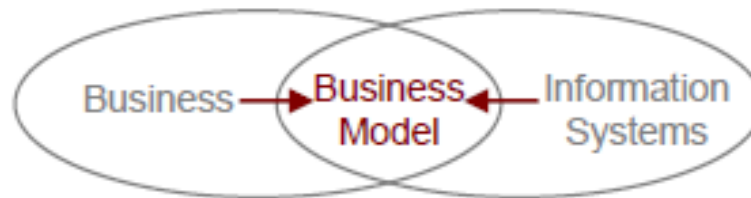
The management analyzes the current business model's adequacy to environmental pressures and designs a new business model

The new business model becomes a goal to achieve and guides planning, change and implementation



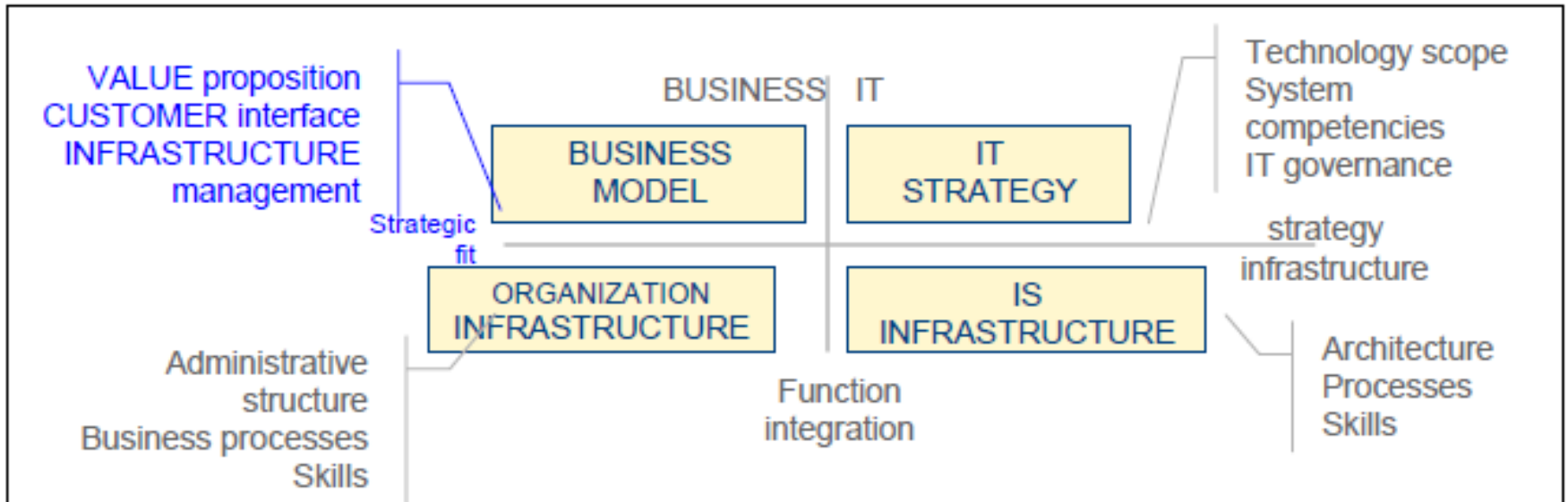
# Business Strategy and Information Systems Alignment

Managers are aware of the use of Information Systems to realize goals, exploit opportunities and obtain competitive advantage



Information Systems support the company's business model and are targeted on areas that are critical to successful business performance

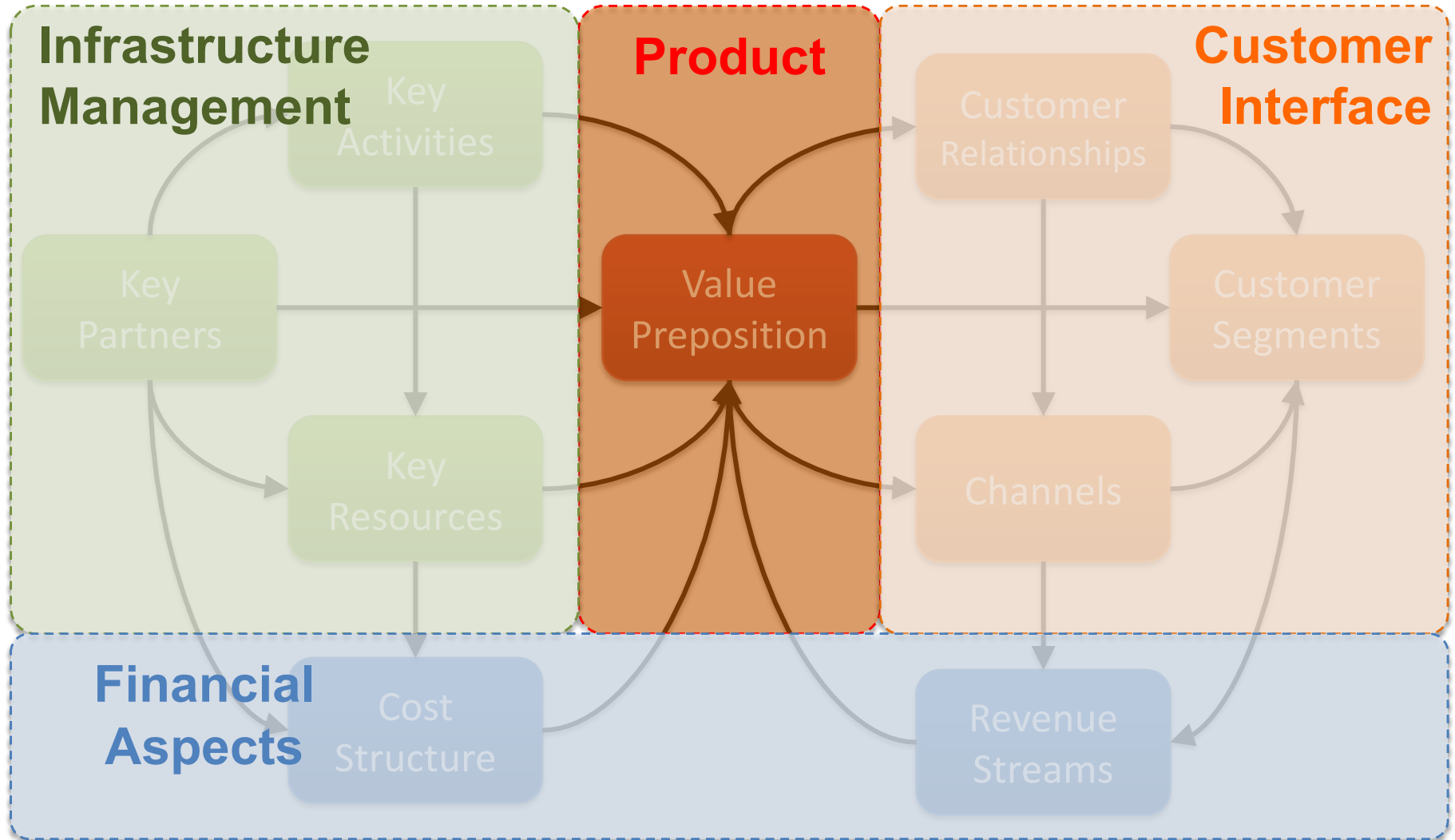
# Business and IT/IS Alignment



Adapted from [Henderson and Venkatraman 1999]

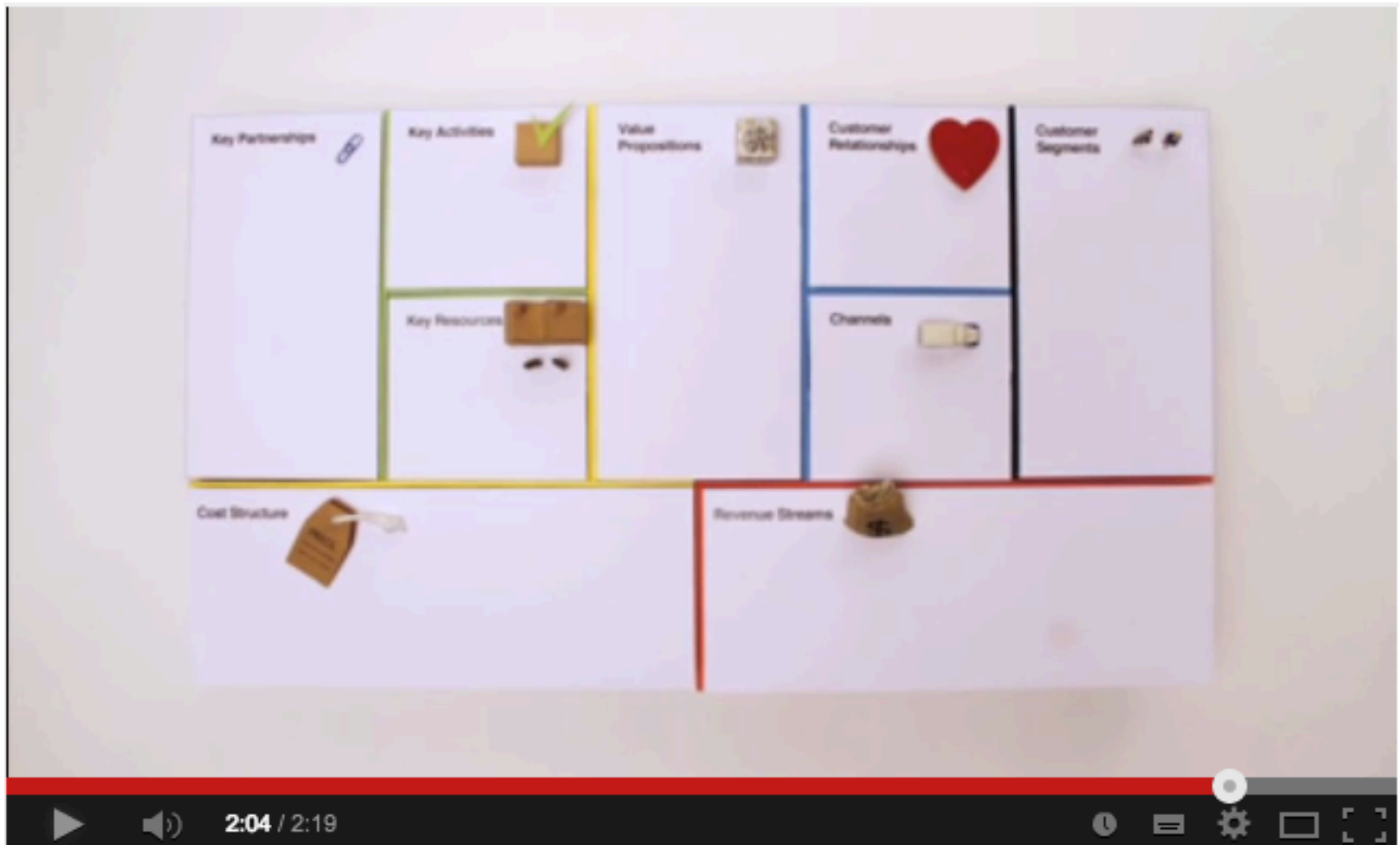


# Business Model Canvas

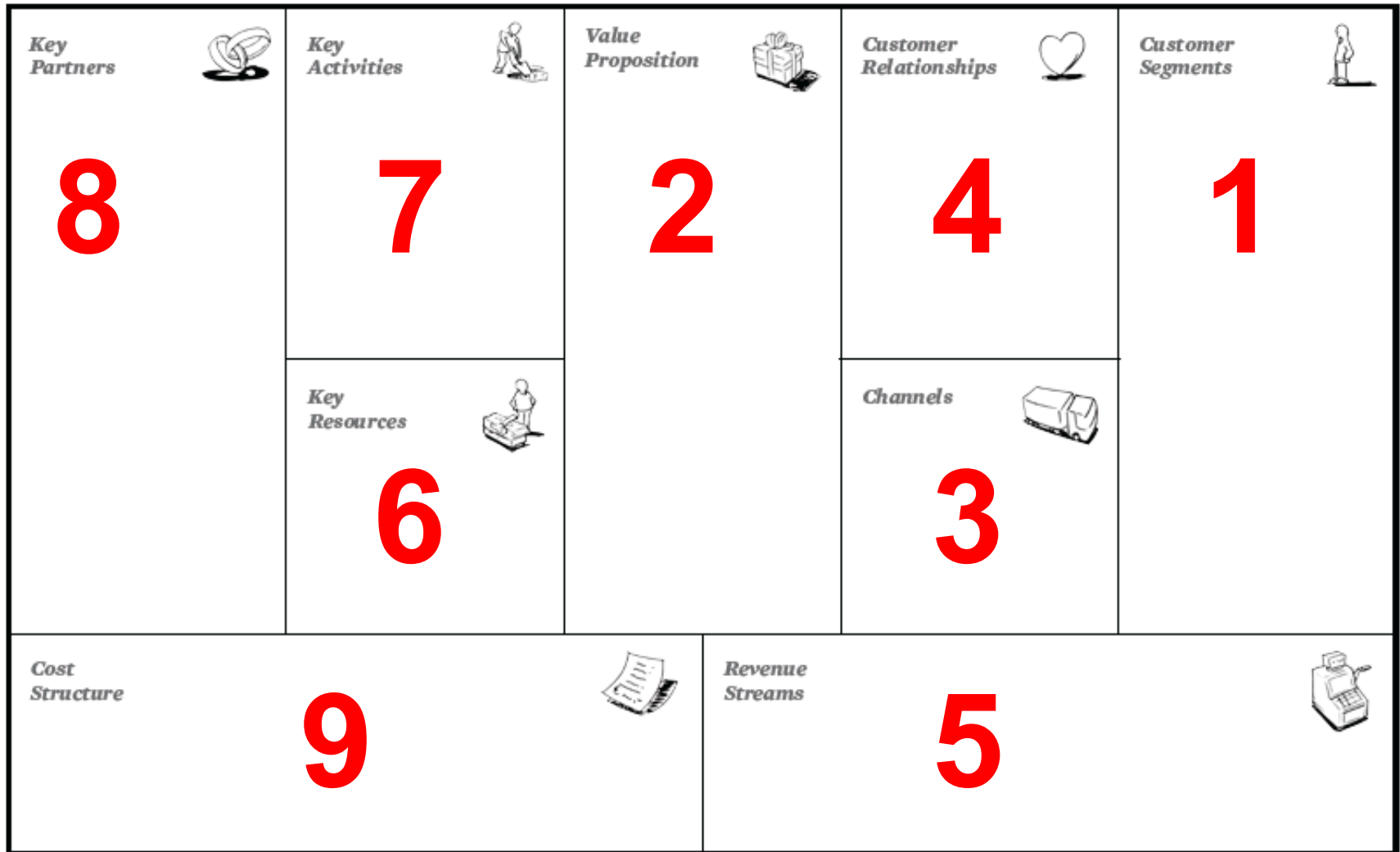


Source: [http://nonlinearthinking.typepad.com/nonlinear\\_thinking/2008/07/the-business-model-canvas.html](http://nonlinearthinking.typepad.com/nonlinear_thinking/2008/07/the-business-model-canvas.html)  
<https://www.youtube.com/watch?v=QoAOzMTLP5s>

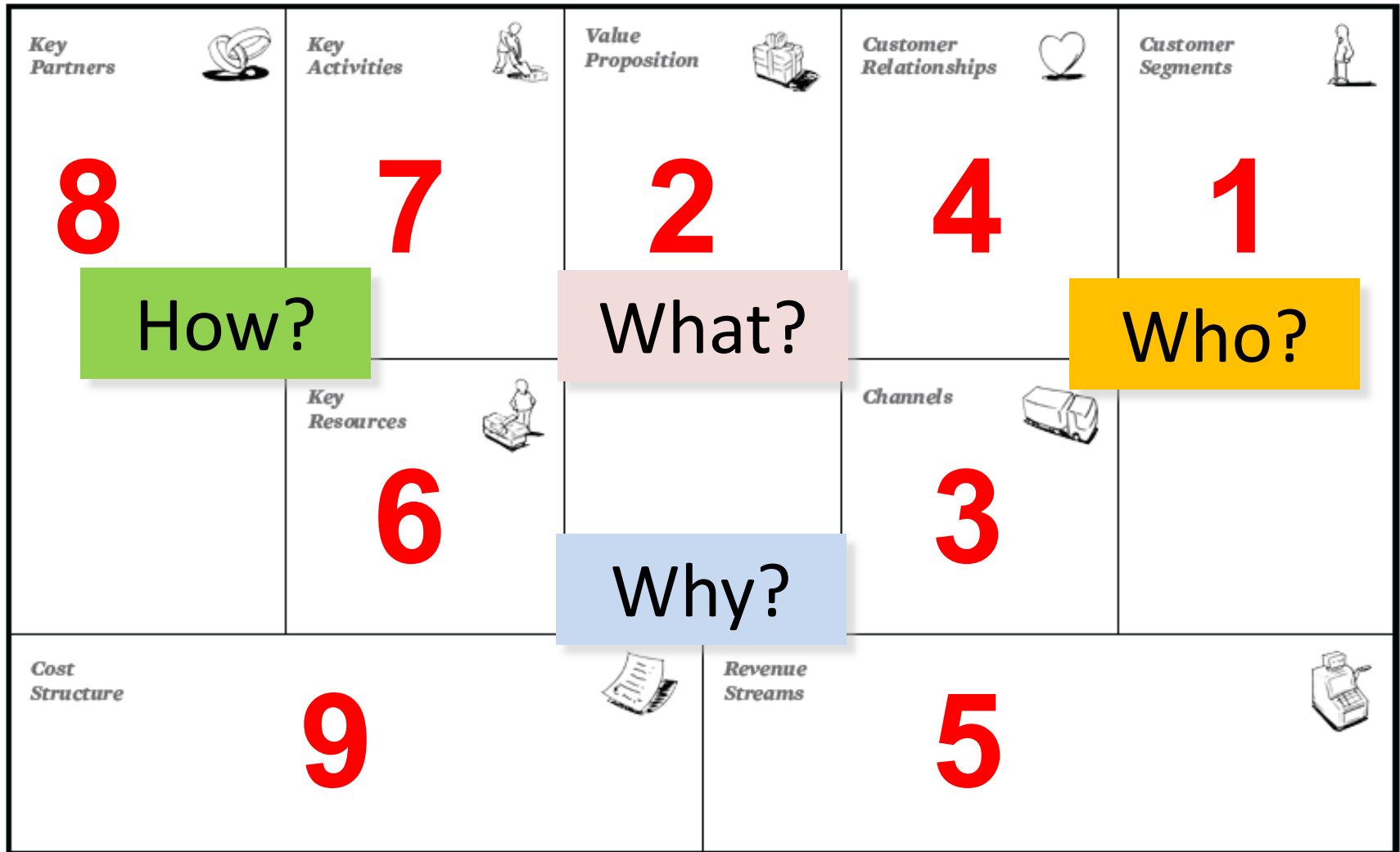
# Business Model Canvas Explained



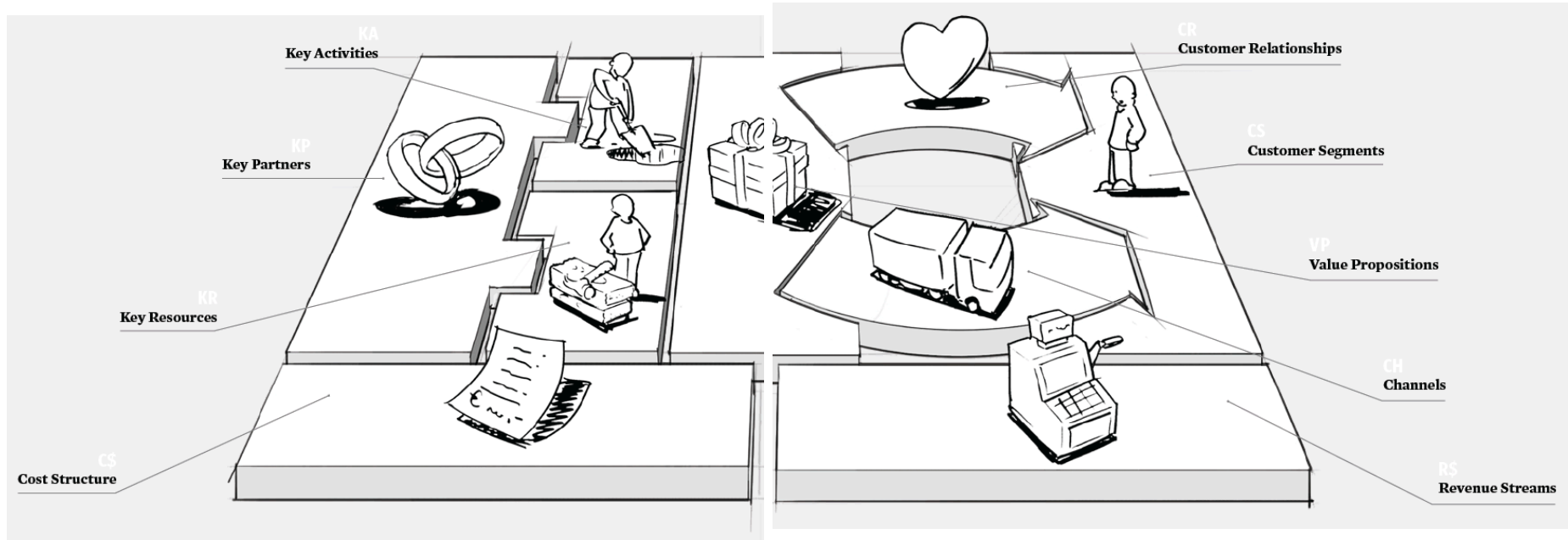
# The 9 Building Blocks of Business Model



# The 9 Building Blocks of Business Model



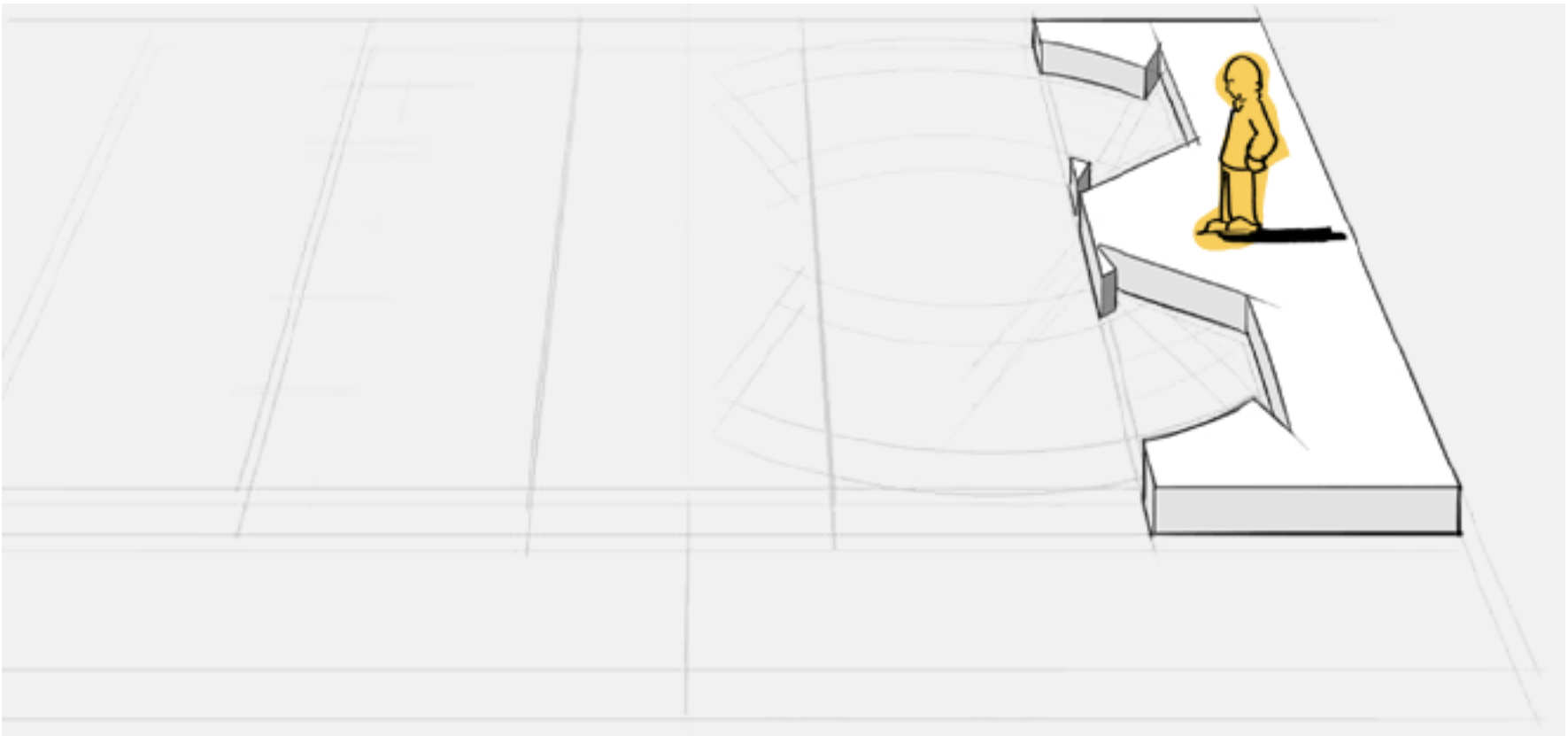
# The 9 Building Blocks of Business Model





# 1. Customer Segments

Defines the different groups of people or organizations an enterprise aims to reach and serve



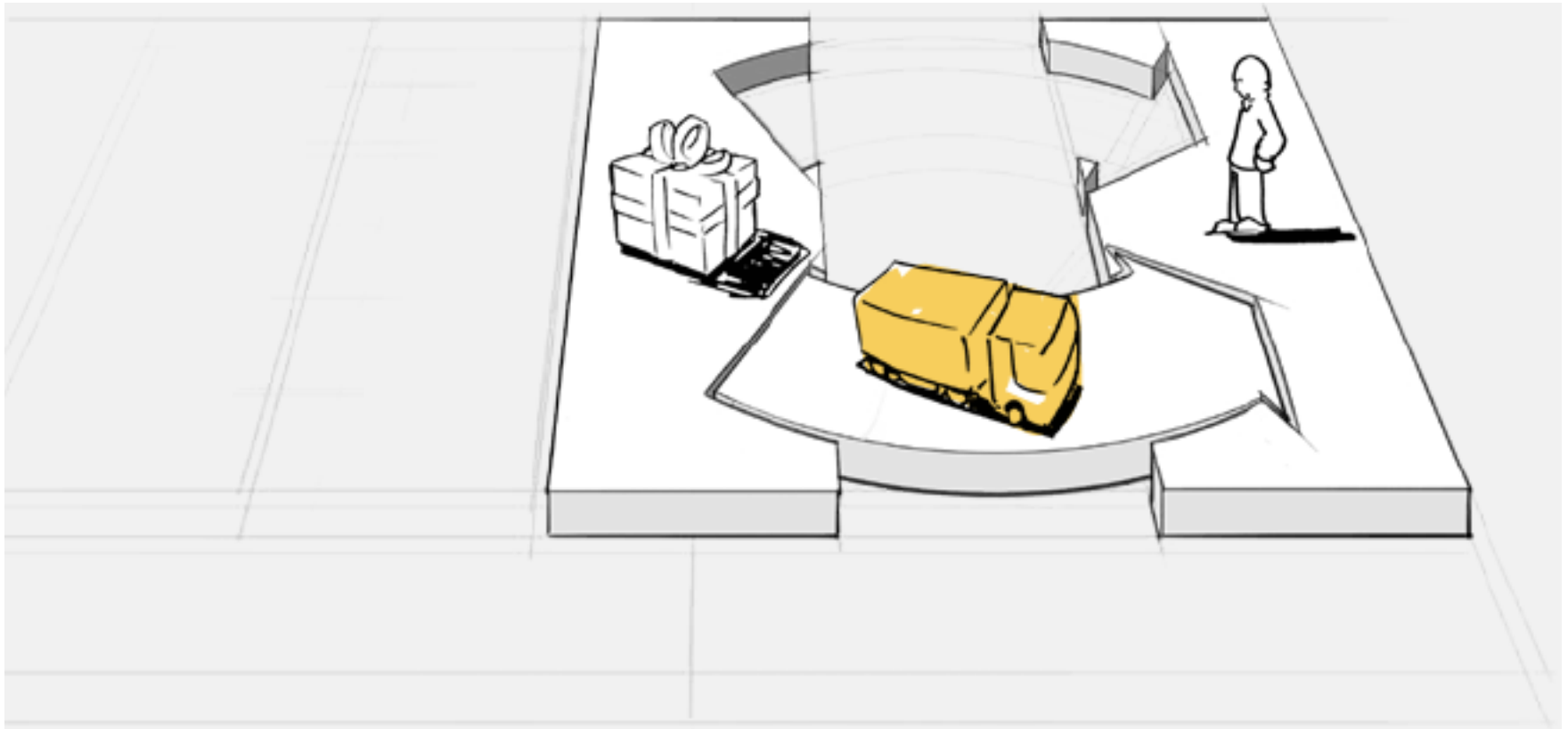
## 2. Value Propositions

Describes the bundle of products and services that create value for a specific Customer Segment



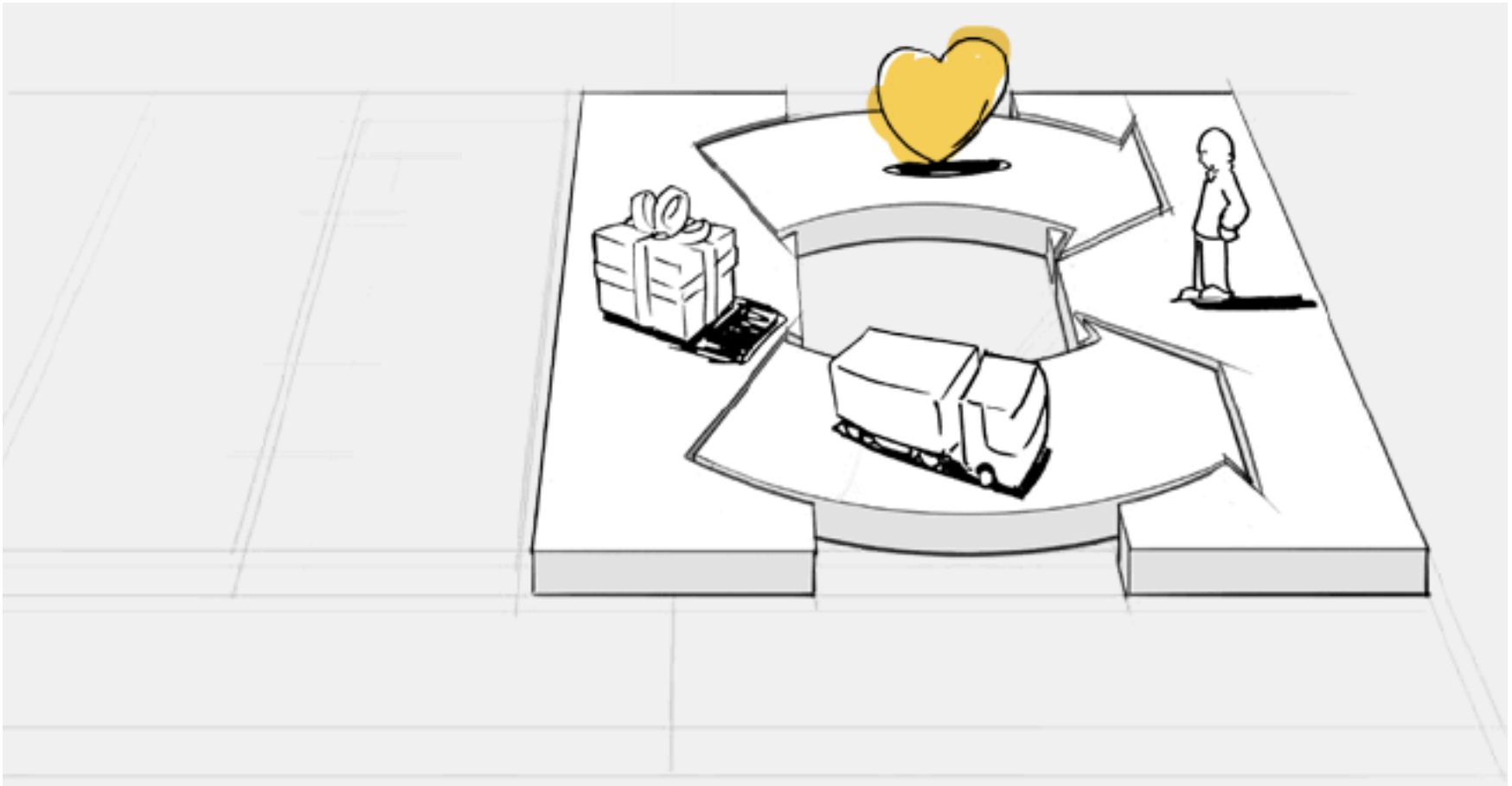
# 3. Channels

Describes how a company communicates with and reaches its Customer Segments to deliver a Value Proposition



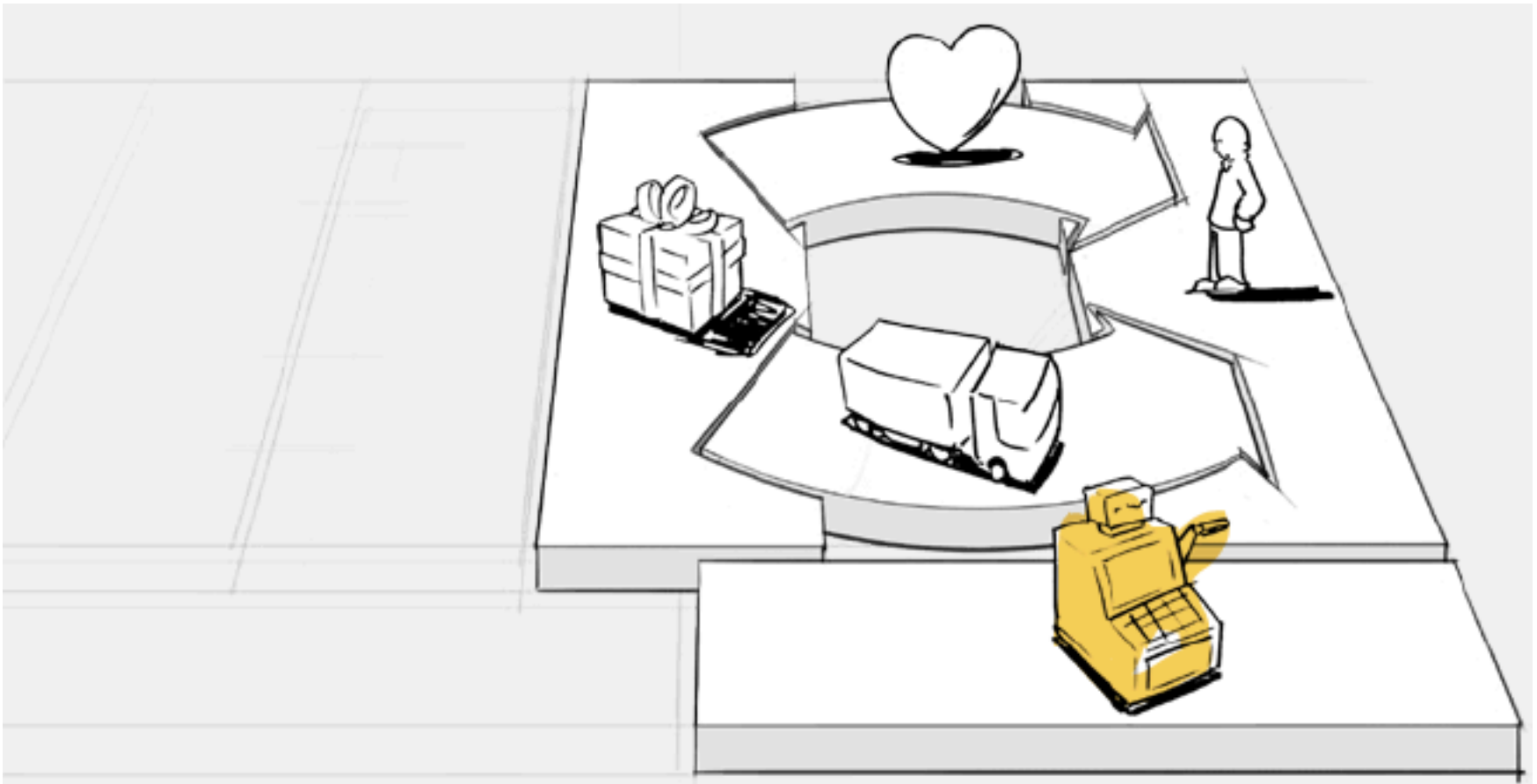
# 4. Customer Relationships

Describes the types of relationships a company establishes with specific Customer Segments



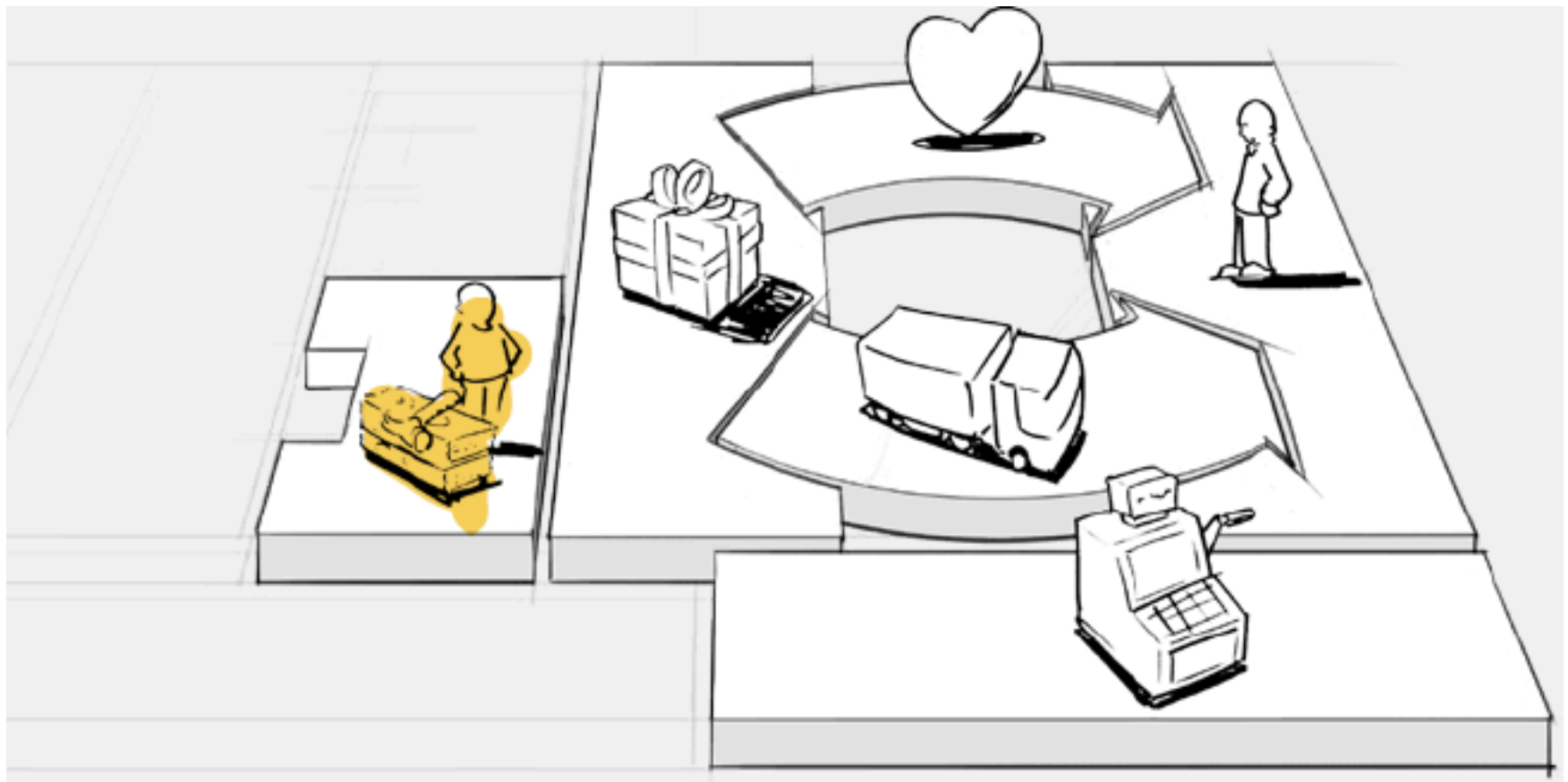
# 5. Revenue Streams

Represents the cash a company generates from each Customer Segment (costs must be subtracted from revenues to create earnings)



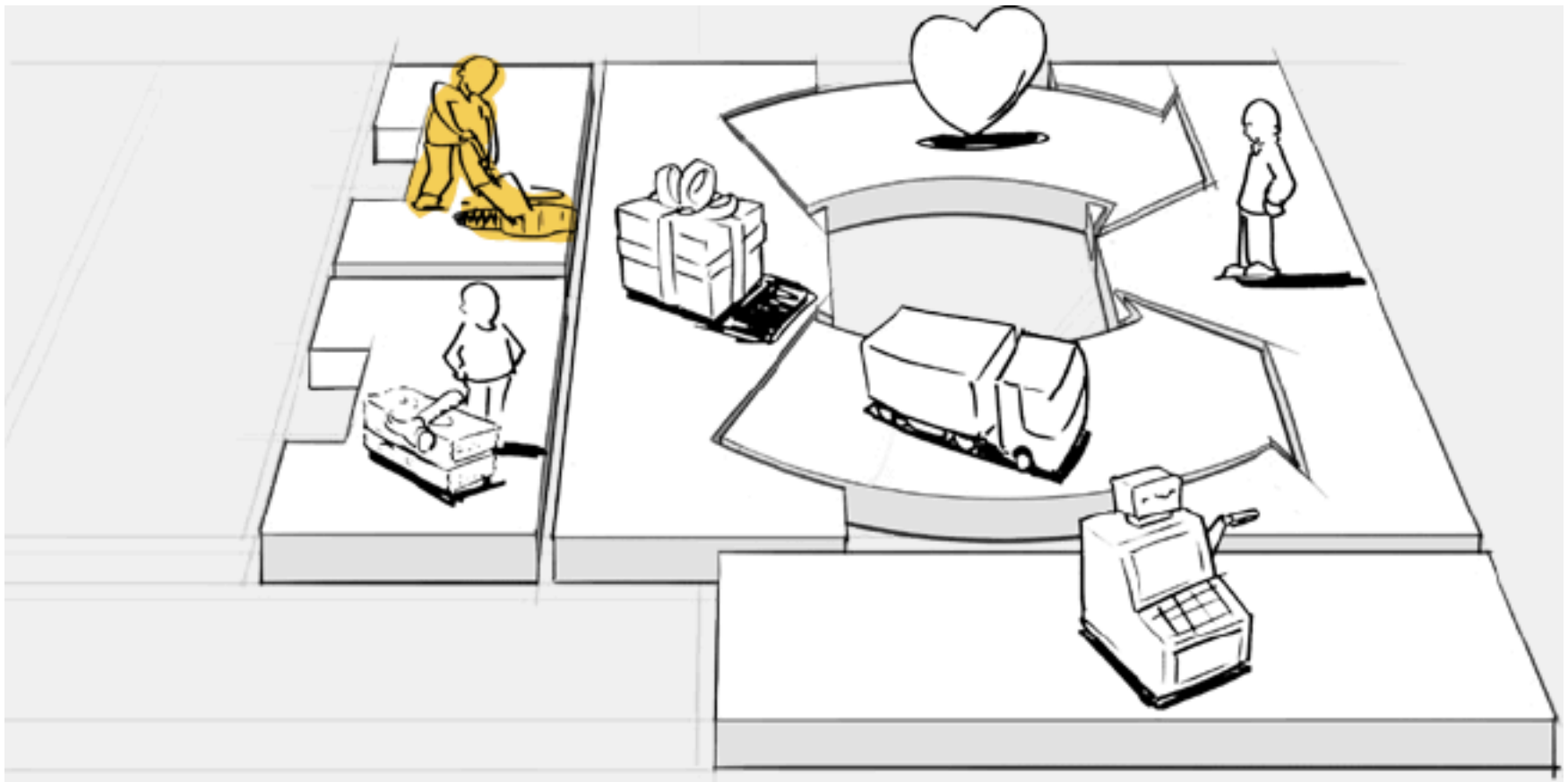
# 6. Key Resources

Describes the most important assets required to make a business model work



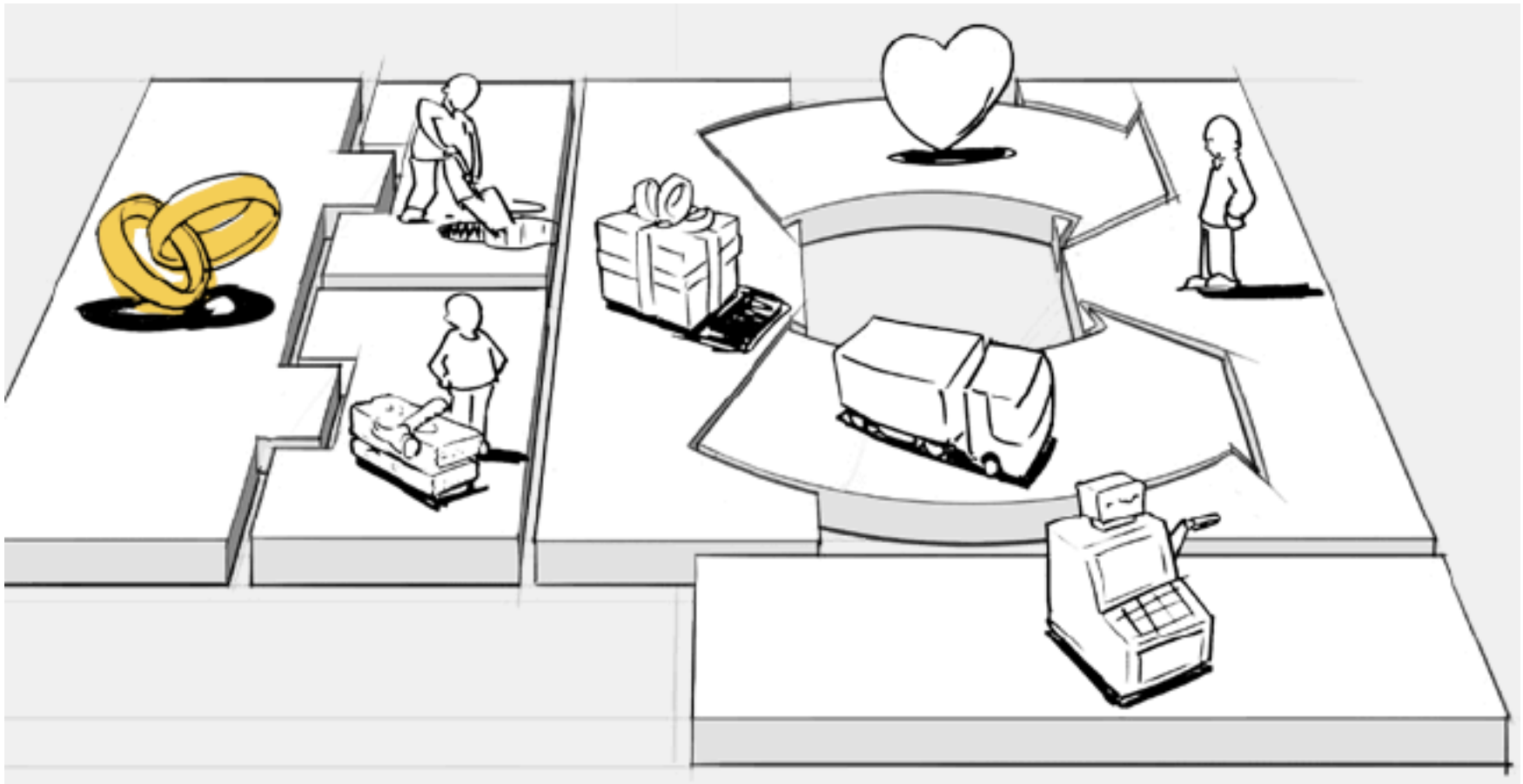
# 7. Key Activities

Describes the most important things a company must do to make its business model work



# 8. Key Partnerships

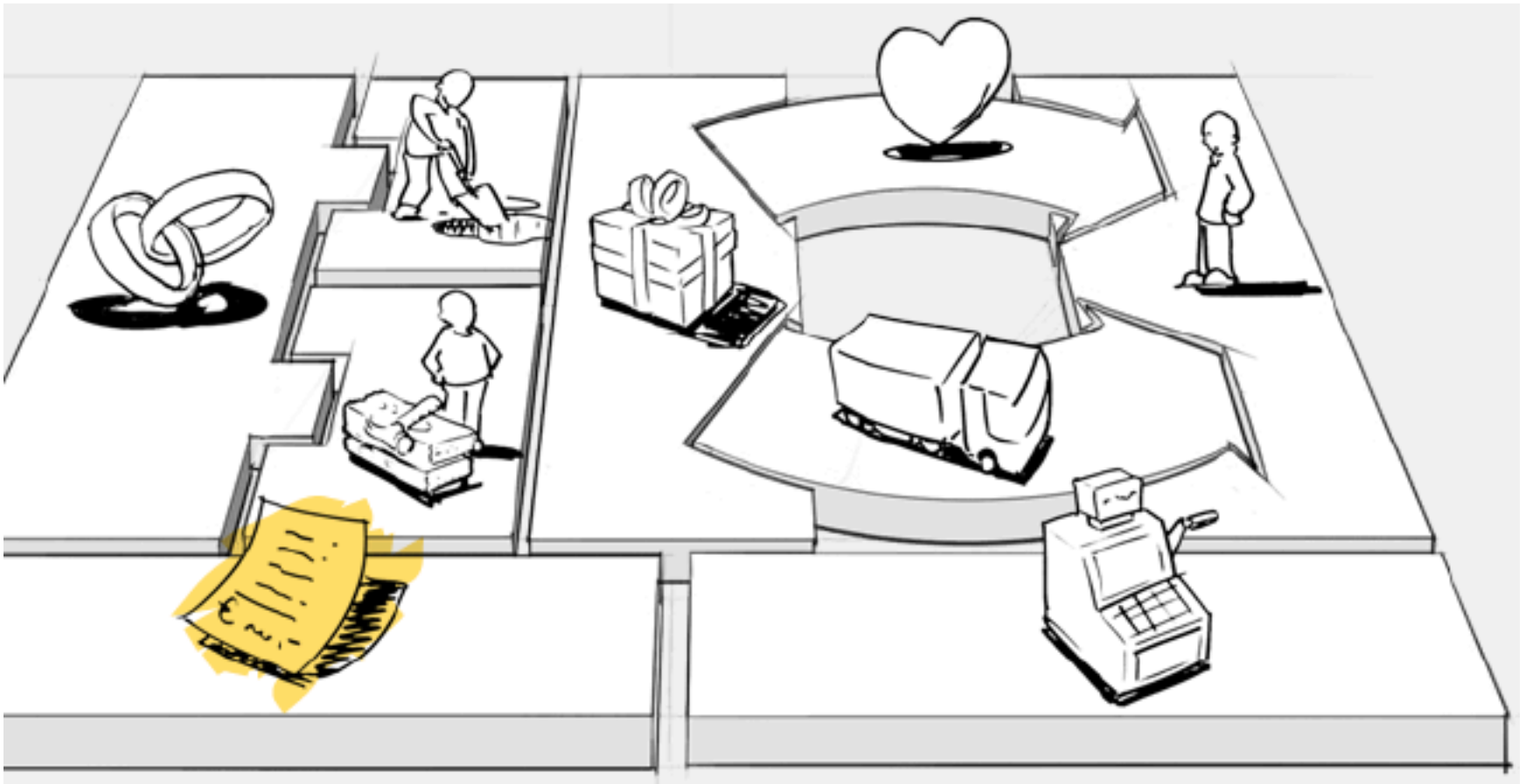
Describes the network of suppliers and partners that make the business model work





# 9. Cost Structure

Describes all costs incurred to operate a business model



# The 9 Building Blocks of Business Model

## 1. Customer Segments

- An organization serves one or several Customer Segments.

## 2. Value Propositions

- It seeks to solve customer problems and satisfy customer needs with value propositions.

## 3. Channels

- Value propositions are delivered to customers through communication, distribution, and sales Channels.

## 4. Customer Relationships

- Customer relationships are established and maintained with each Customer Segment.

# The 9 Building Blocks of Business Model

## 5. Revenue Streams

- Revenue streams result from value propositions successfully offered to customers.

## 6. Key Resources

- Key resources are the assets required to offer and deliver the previously described elements...

## 7. Key Activities

- ...by performing a number of Key Activities.

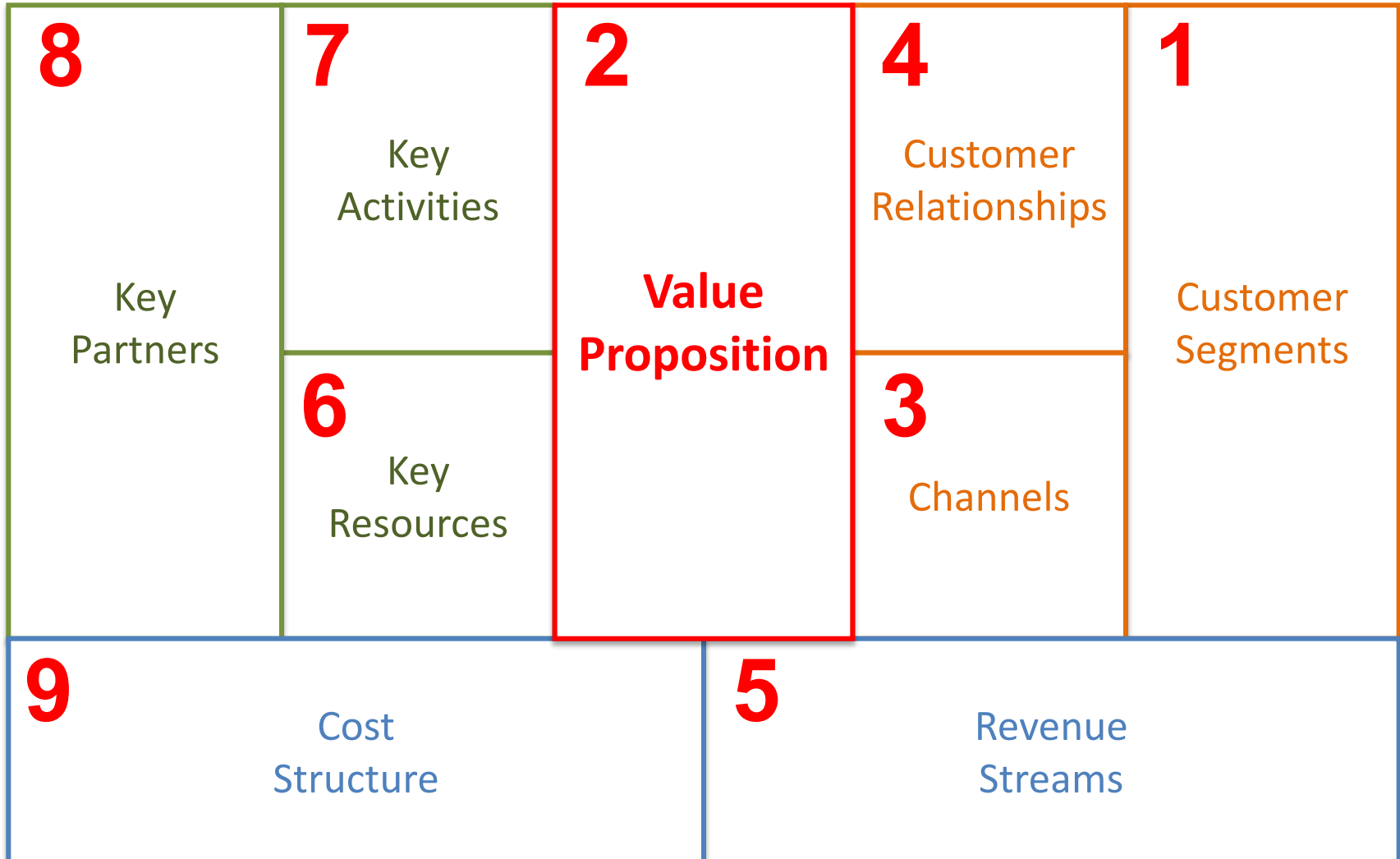
## 8. Key Partnerships

- Some activities are outsourced and some resources are acquired outside the enterprise.

## 9. Cost Structure

- The business model elements result in the cost structure.

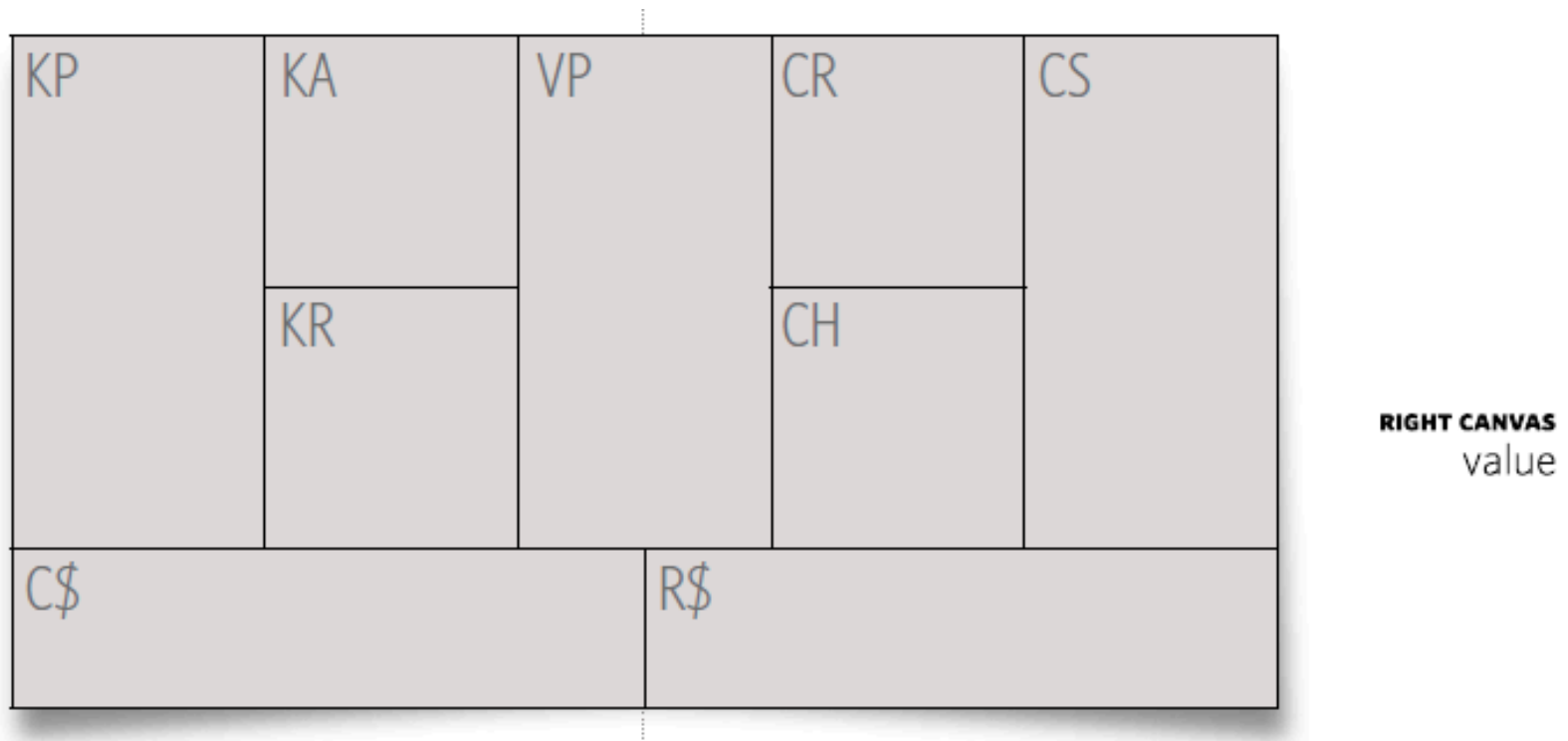
# Business Model



# Business Model Generation



# Business Model Generation



**Production and Logistics**

Anything beyond content creation is outsourced to readily available service providers.

**Differentiation**

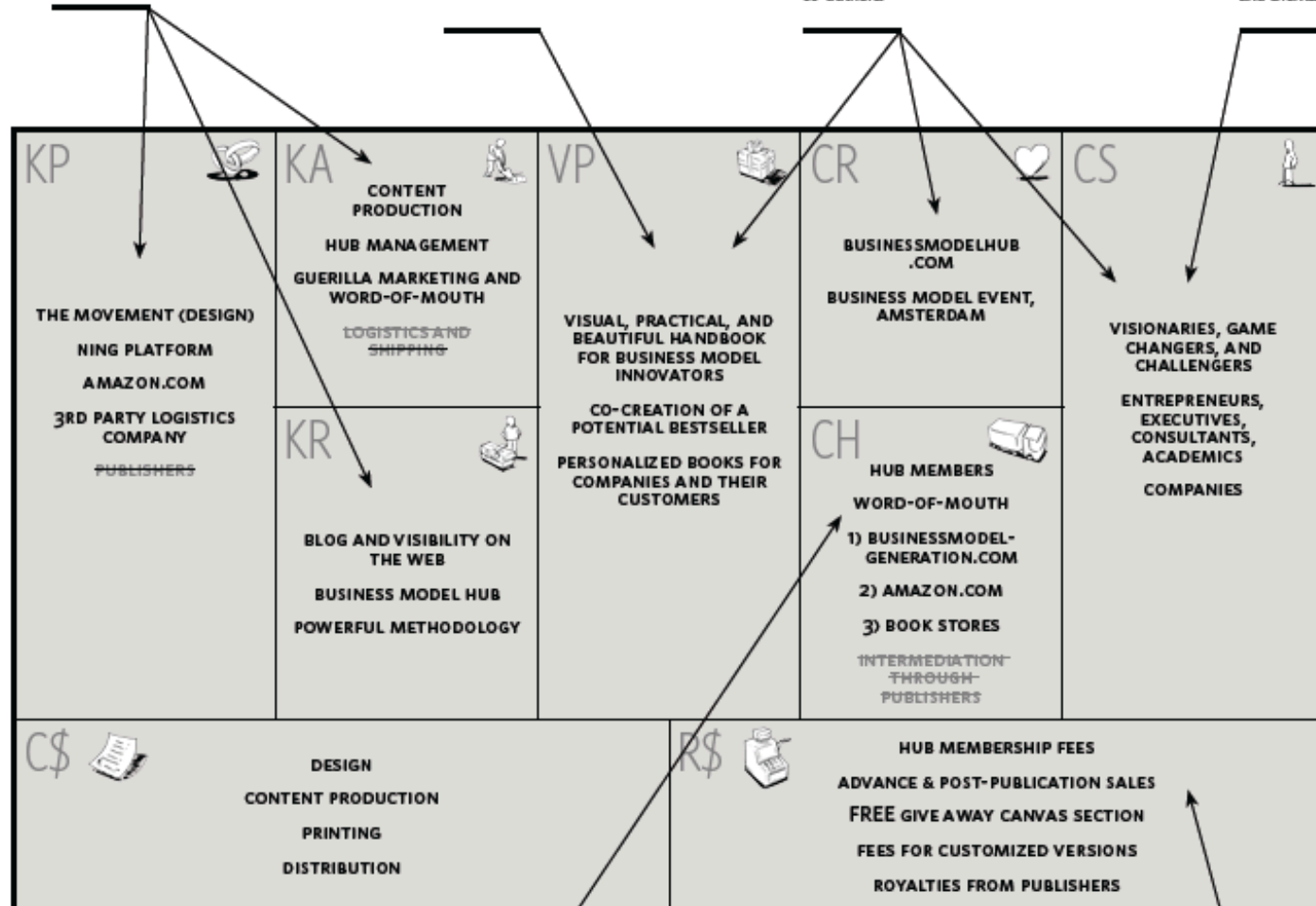
An entirely different format, business model, and story for the book makes it stand out in a crowded market.

**Community**

The book is co-created with practitioners from around the world who feel ownership thanks to attribution as contributing co-authors.

**Buyers**

Paying customers are not only readers, but co-creators and companies that want customized books for their employees and clients.



# THE CANVAS OF BUSINESS MODEL GENERATION

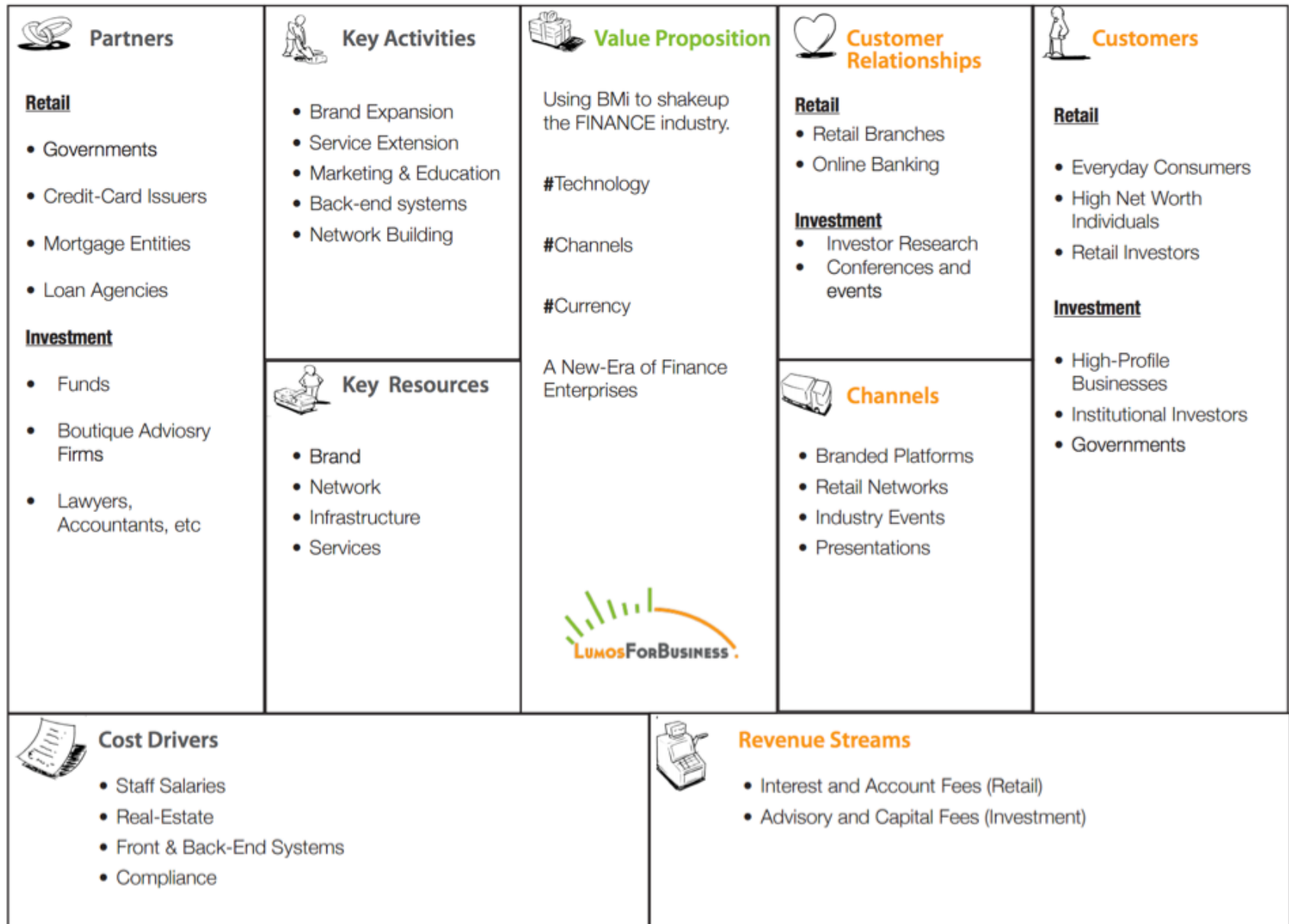
**Reach**

A mix of direct and indirect Channels and a phased approach optimizes reach and margins. The story of the book lends itself well to viral marketing and word-of-mouth promotion.

**Revenues**

The book was financed through advanced sales and fees paid by co-creators. Additional revenues come from customized versions for companies and their clients.

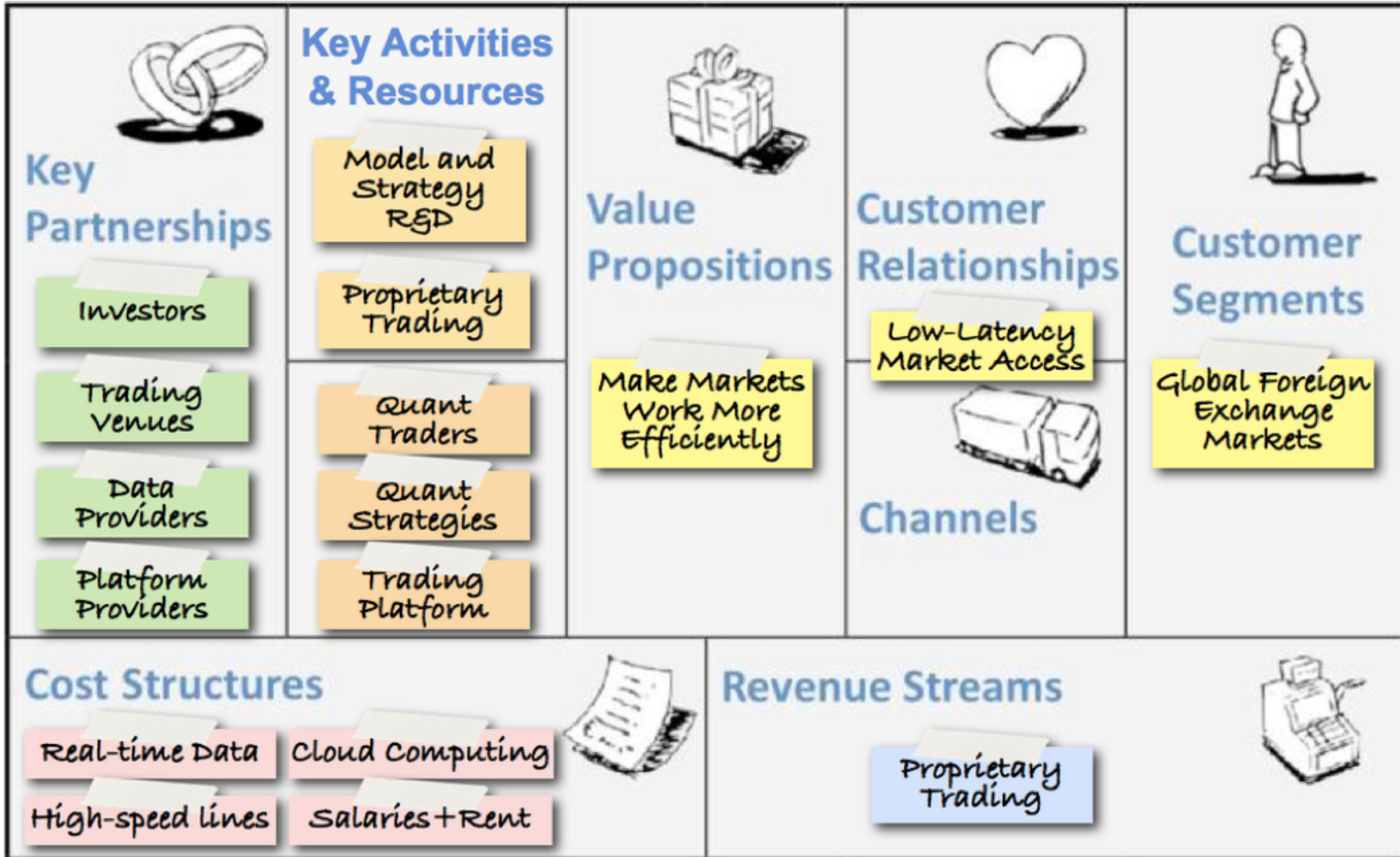
# Finance Business Model



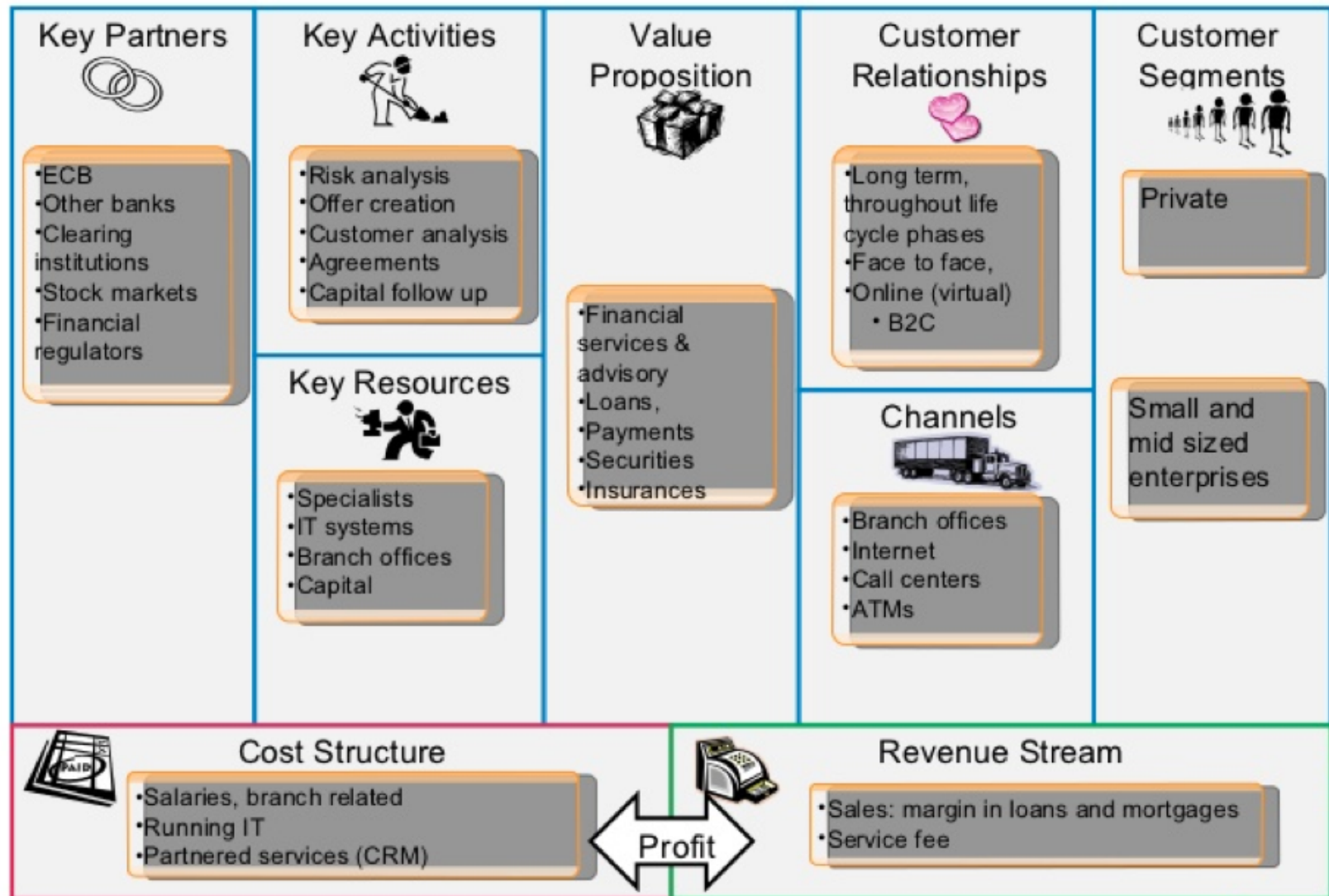
template borrowed from BusinessModelGeneration.com



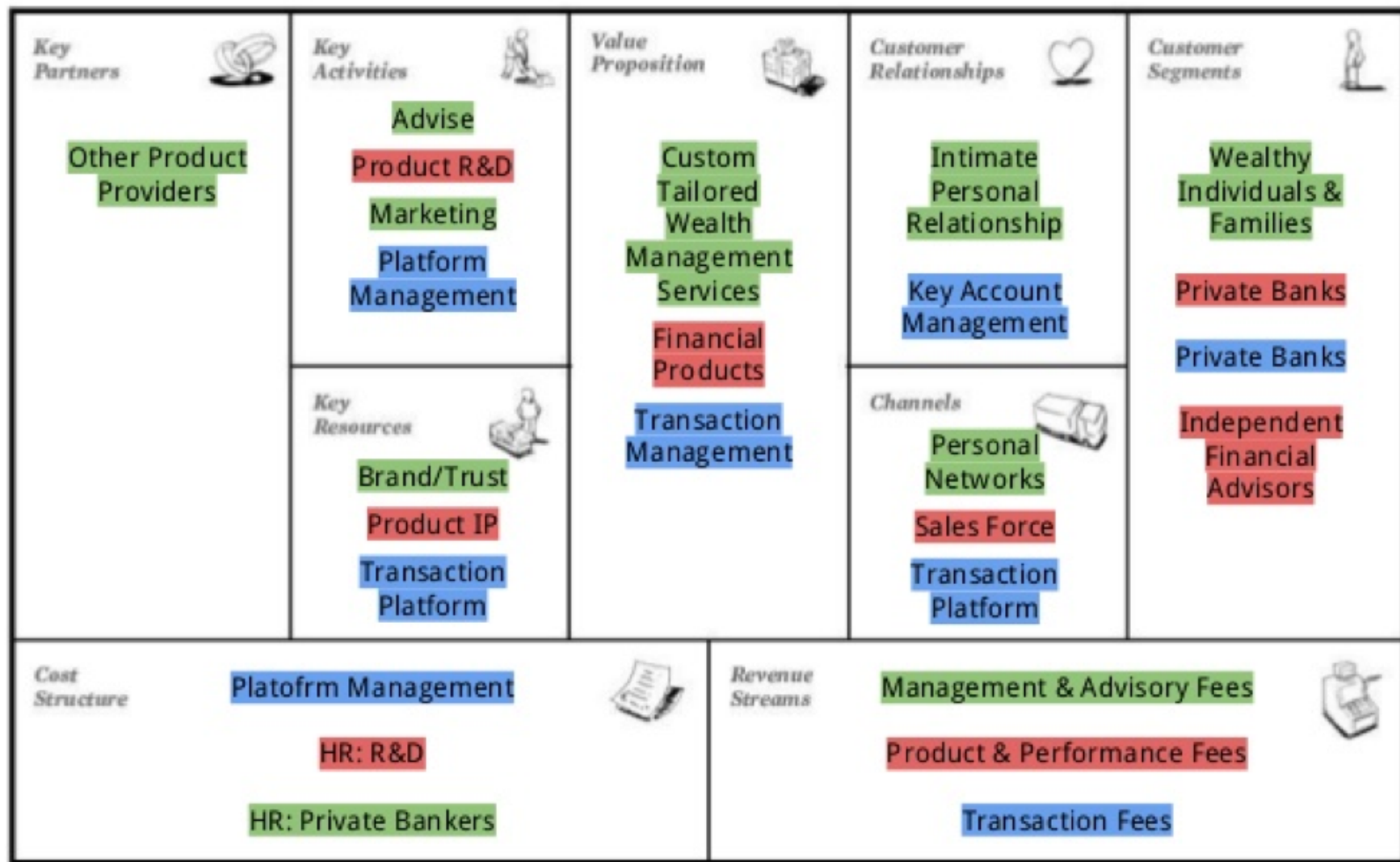
# Foreign Exchange Business Model



# Bizz model canvas: SEB retail banking

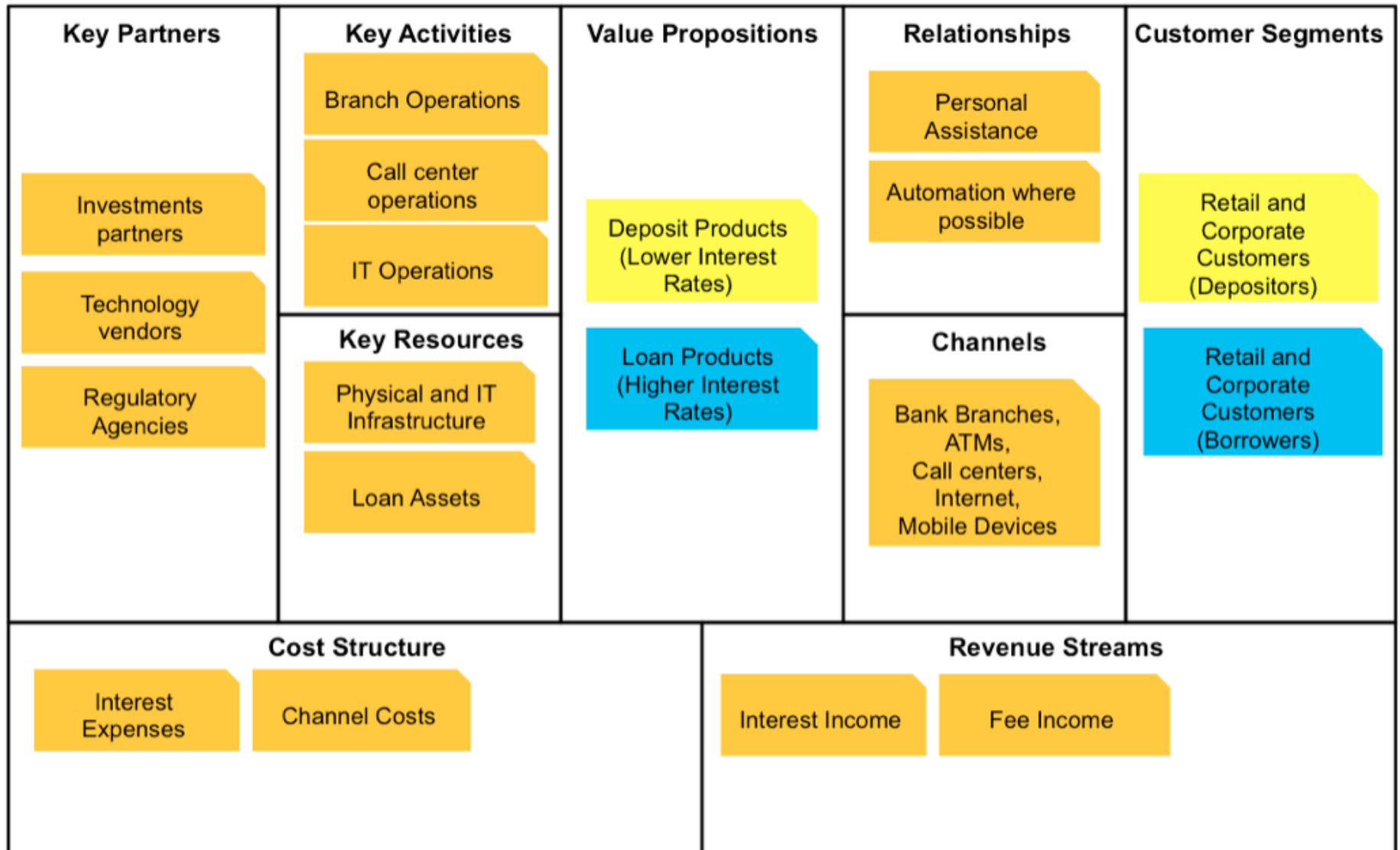


# Private Banking (3 Business In One)

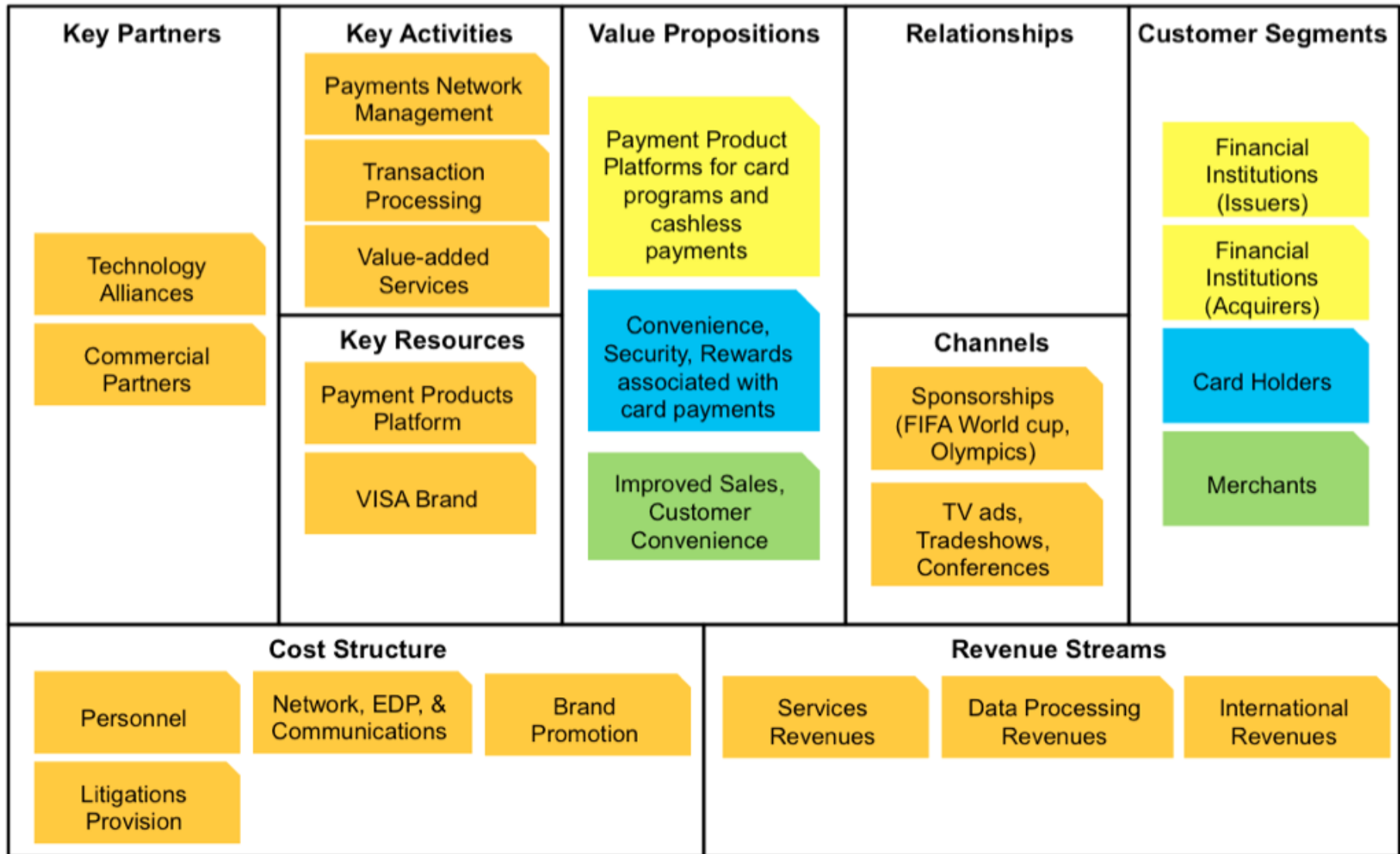


  Relationship Business     
   Product Innovation Business     
   Infrastructure Business

# Business Model of Banking companies

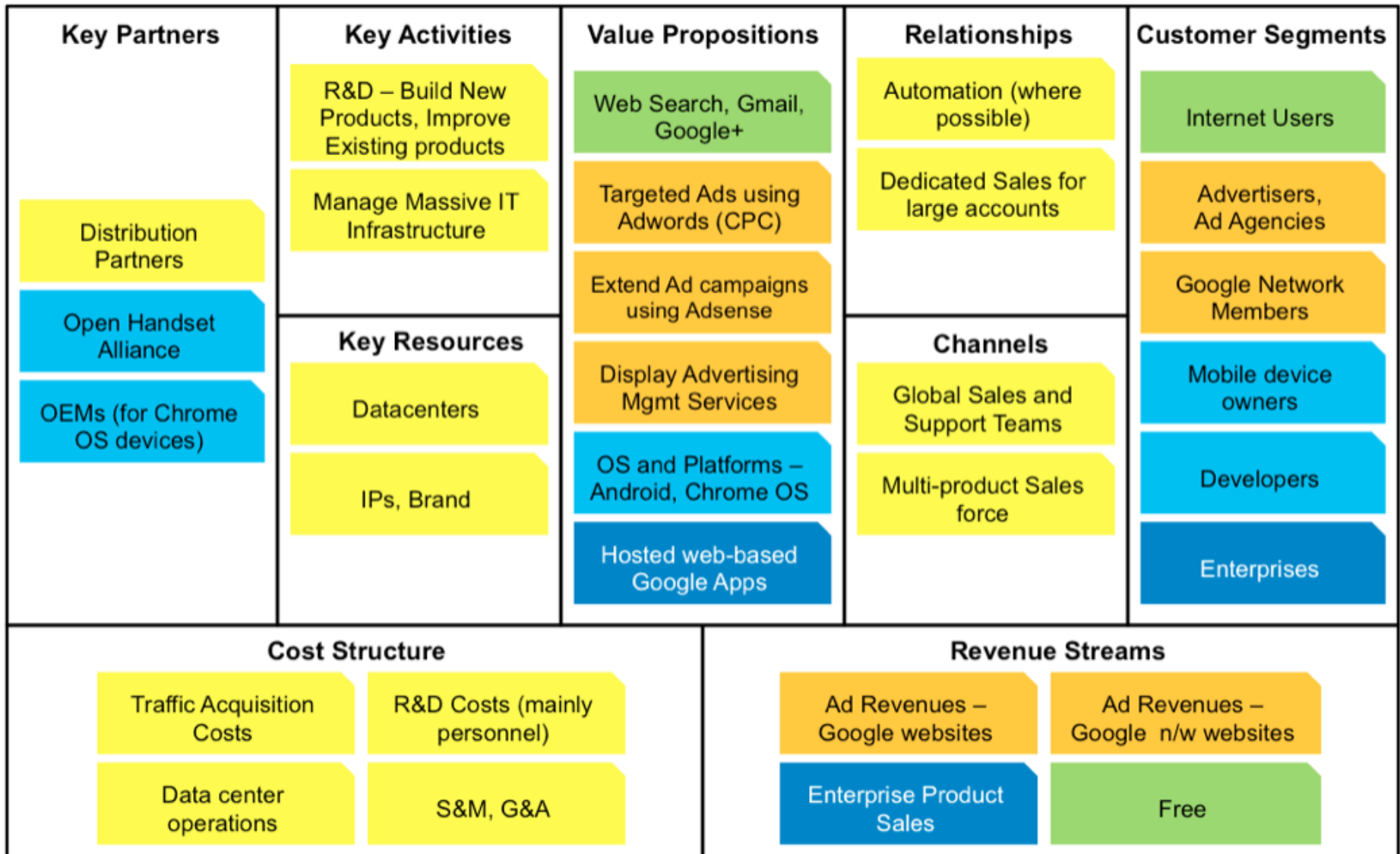


# VISA – Leader in Global Payments Industry

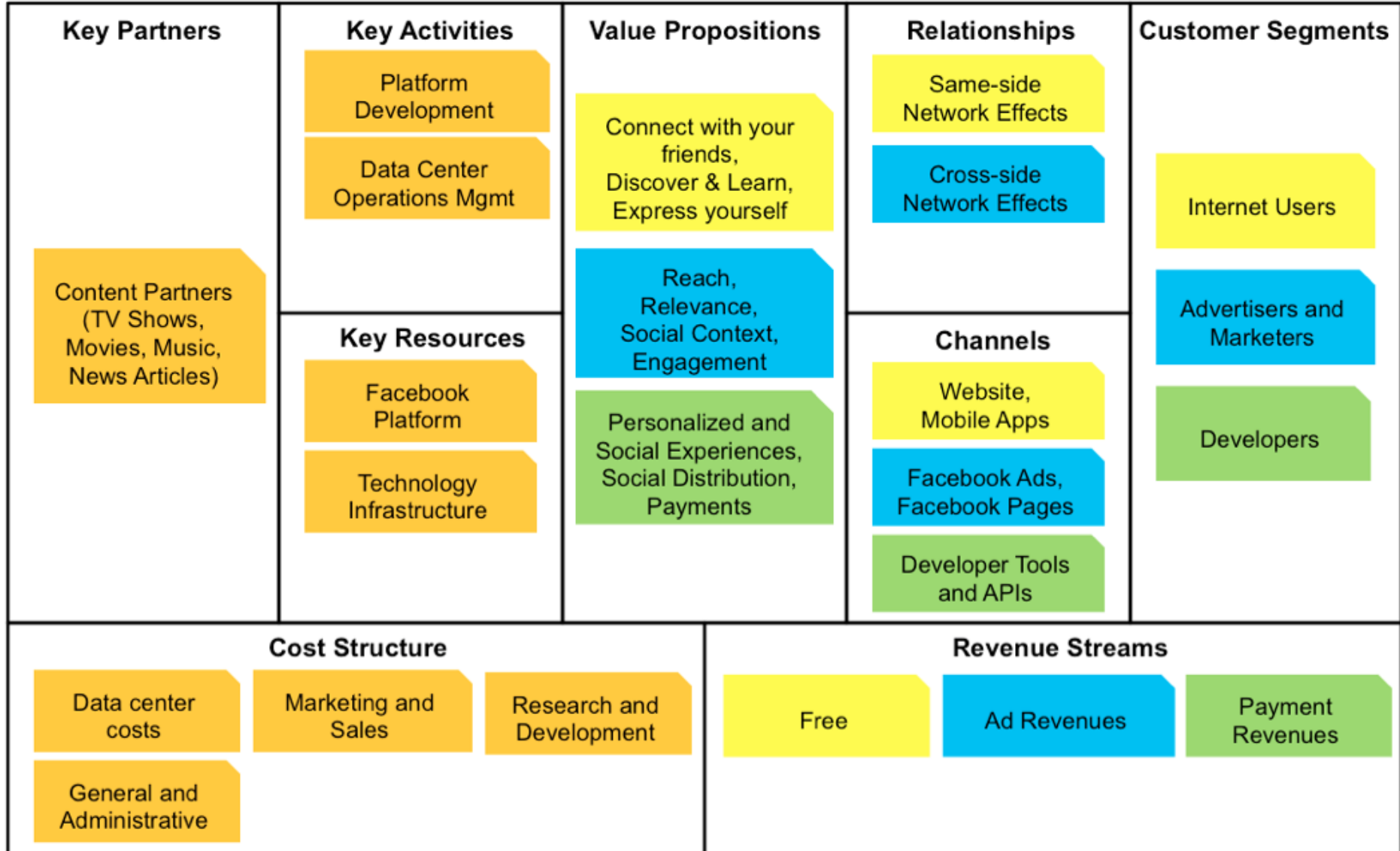




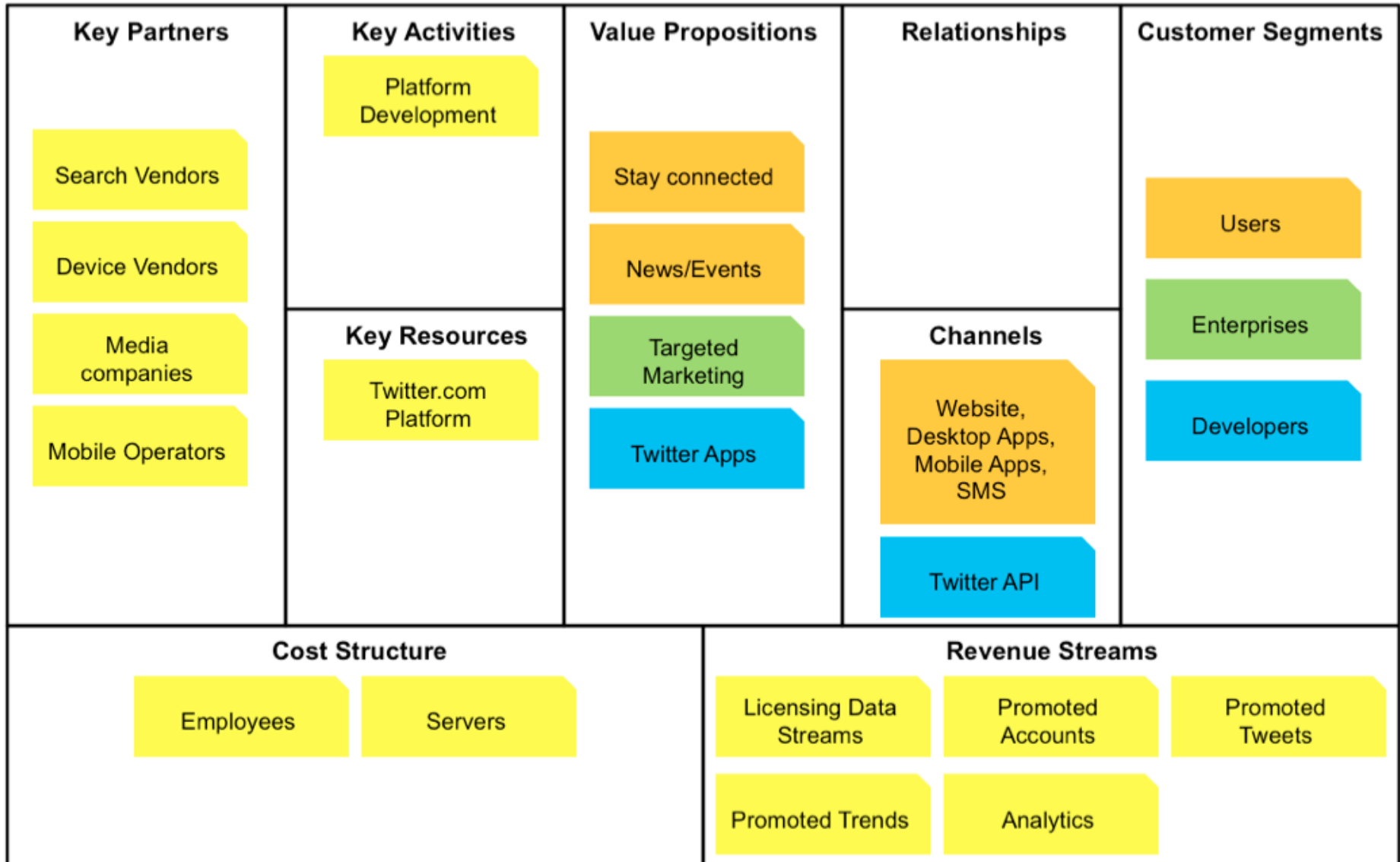
# Google Business Model



# Facebook – World's leading Social Networking Site (SNS)

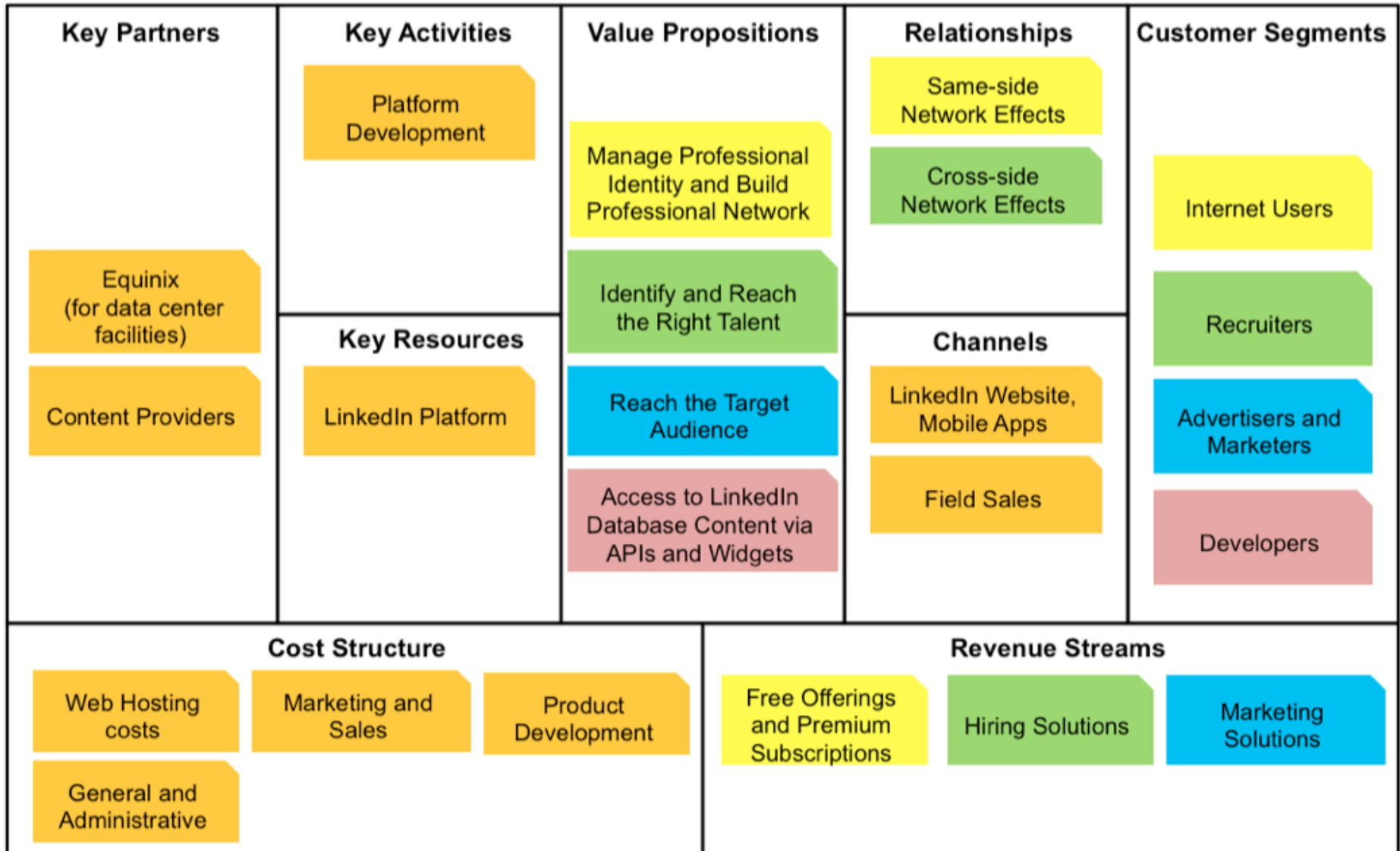


# Twitter Business Model





# LinkedIn – World's Largest Professional Network

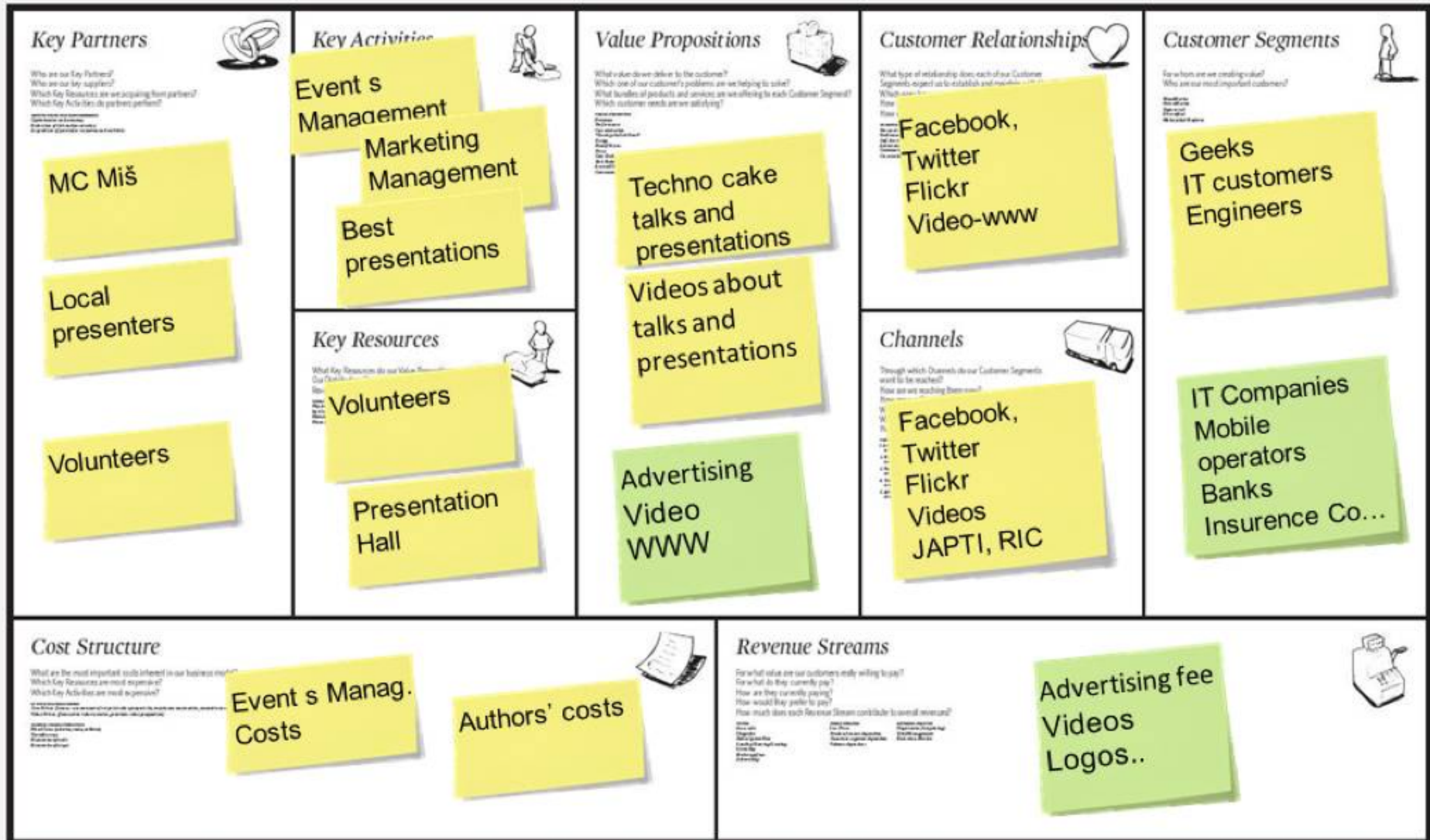


# The Business Model Canvas

Designed for: Techno Cake

Designed by: Danilo Tič

On: 1.2.2011  
Version: 01



# How Airbnb Works?

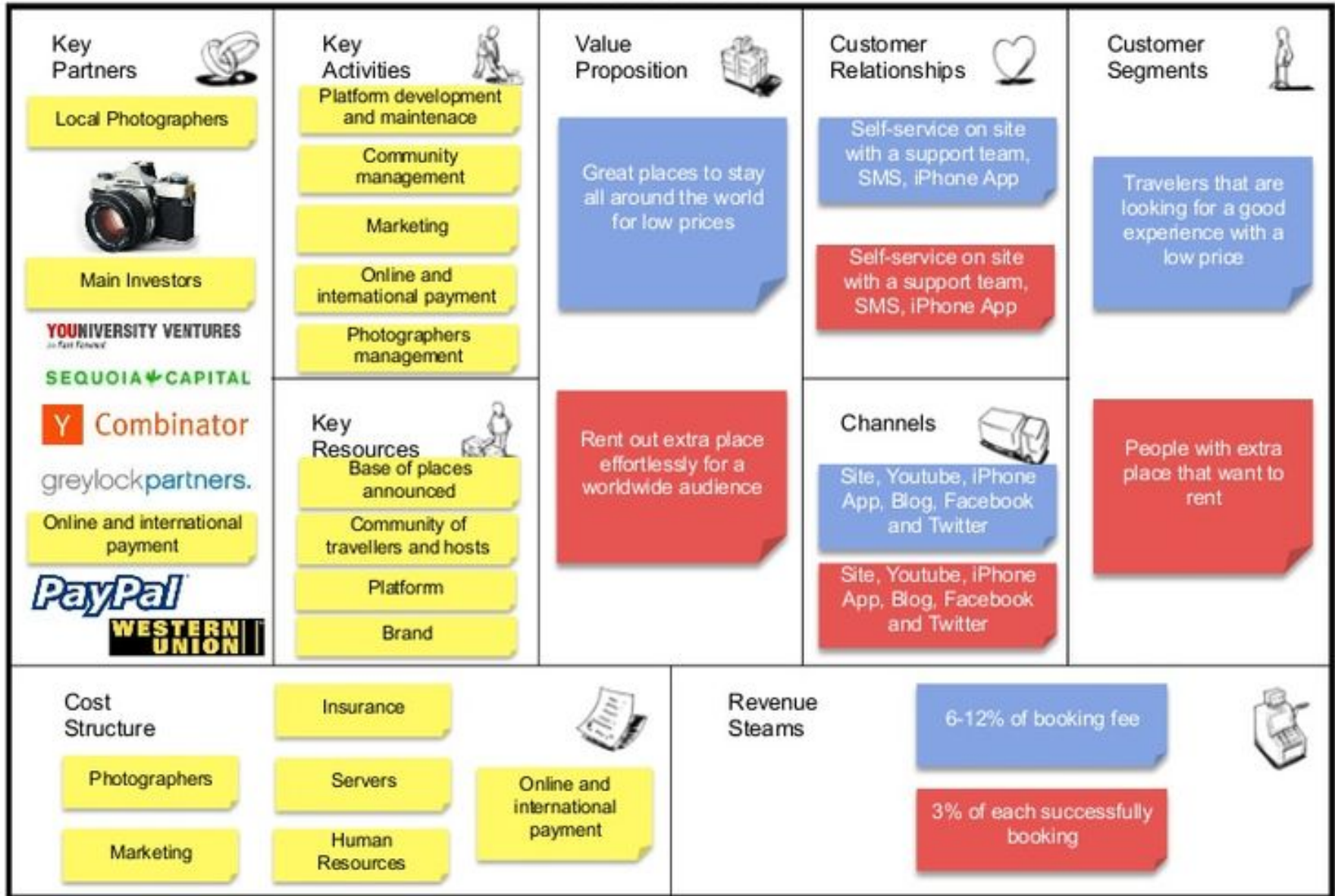
## Insights into Business Model & Revenue Model



# Airbnb Business Model Canvas



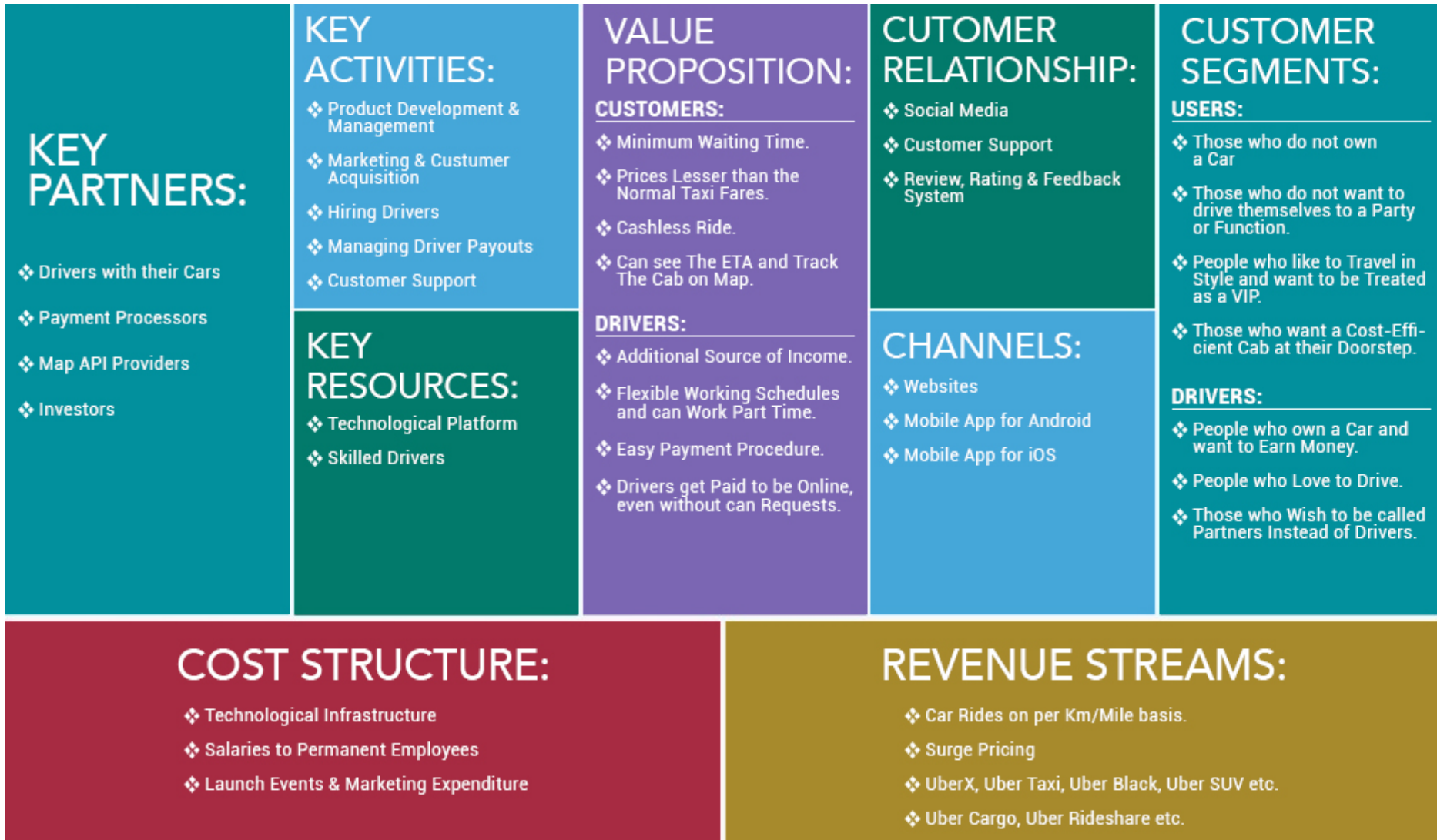




# How Uber Works?

## Insights into Business Model & Revenue Model

# Uber Business Model Canvas



# Uber Business Model Canvas

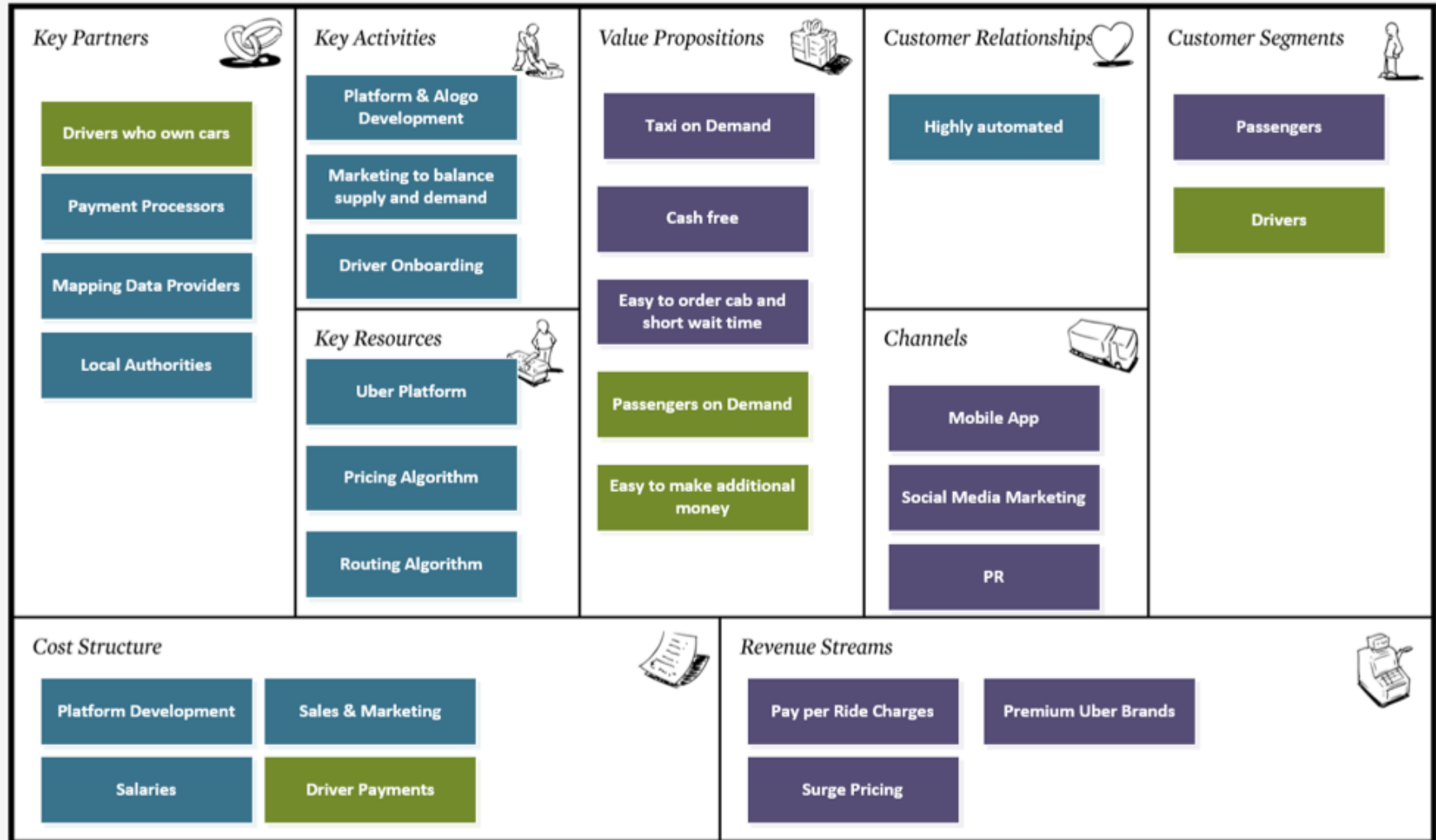
## The Business Model Canvas

Designed for: **Uber**

Designed by: **Denis Oakley**

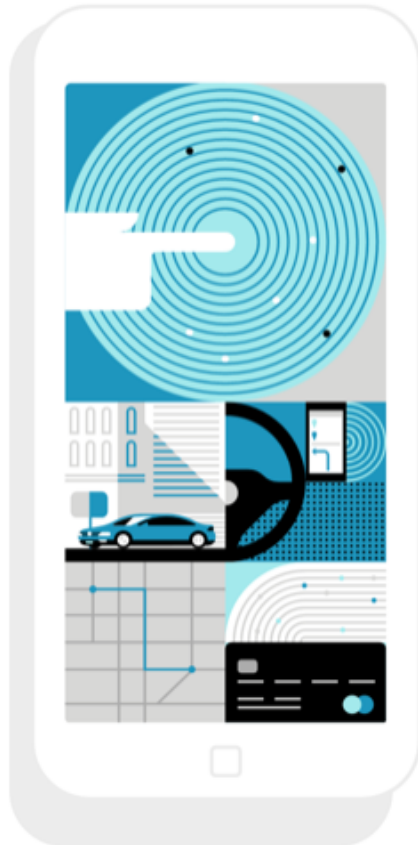
On: 27 1 2016

Iteration: 1.0





# Uber



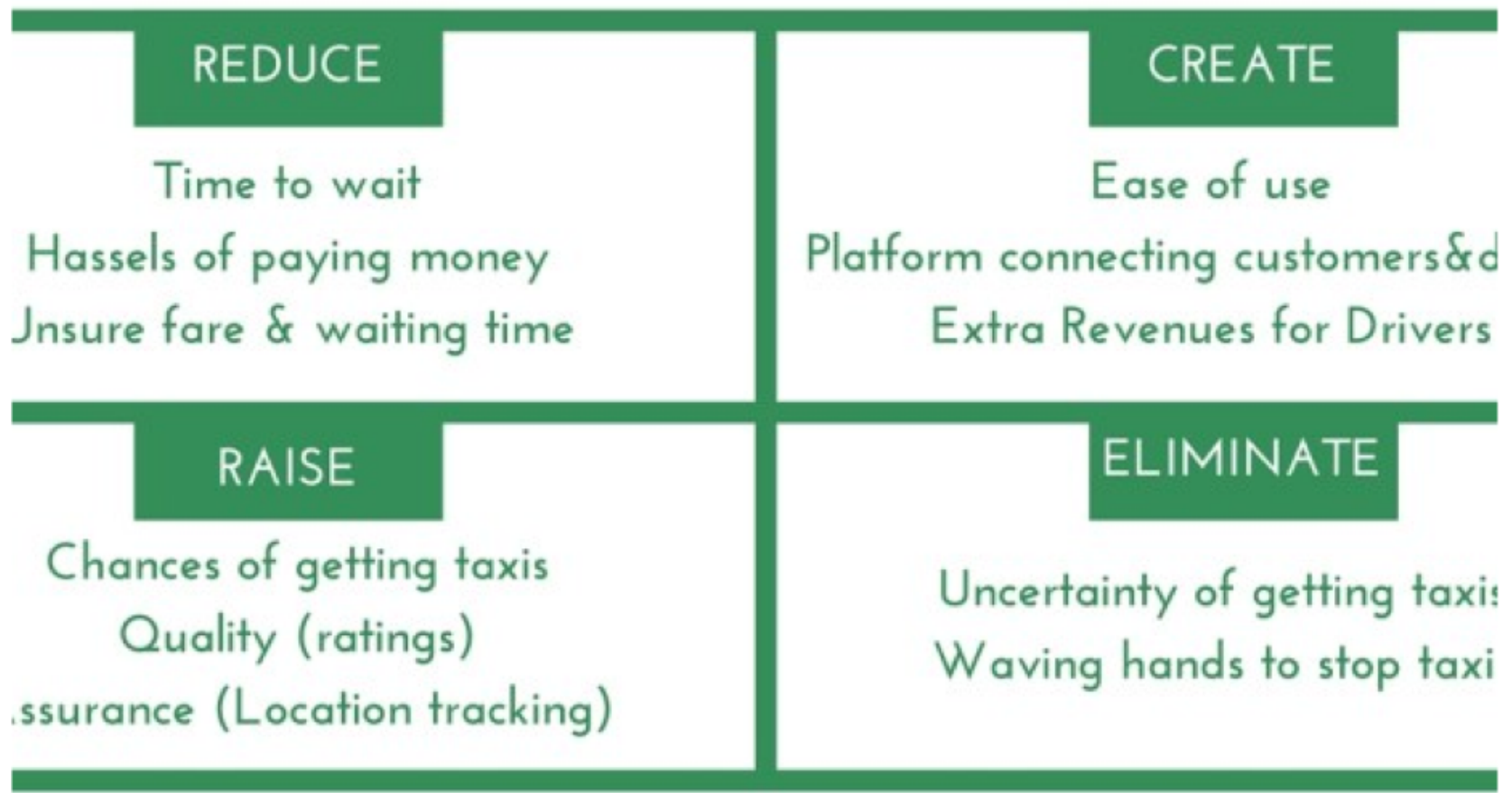
---

## Tap the app, get a ride

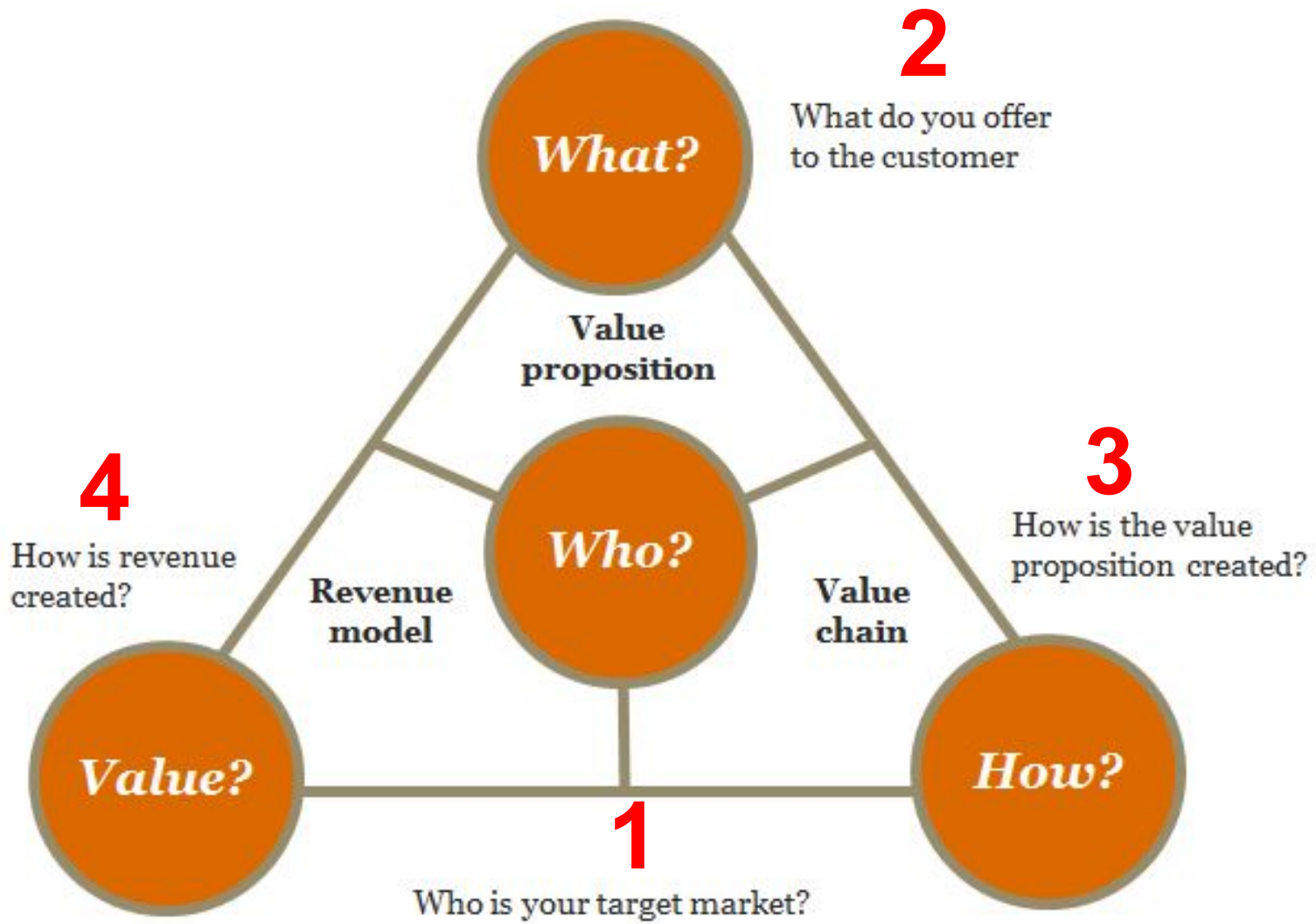
Uber is the smartest way to get around. One tap and a car comes directly to you. Your driver knows exactly where to go.

[MORE REASONS TO RIDE >](#)

# Come up with Killer Startup Ideas



# Structure of a Business Model



# New Business Model

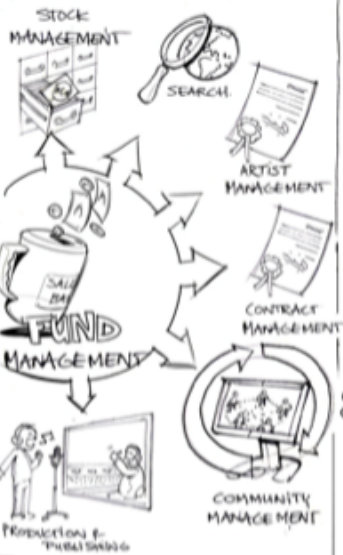


**PARTNERS**

I amsterdam.  
amazon



**KEY ACTIVITIES**



**KEY RESOURCES**



**VALUE PROPOSITION**



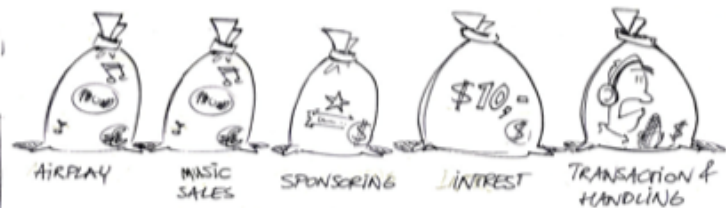
**CLIENT RELATION**



**CLIENTS**



**REVENUE**



**COSTS**



**SELLABAND**

# Customer Value

**Marketing**

**“Meeting  
needs  
profitably”**

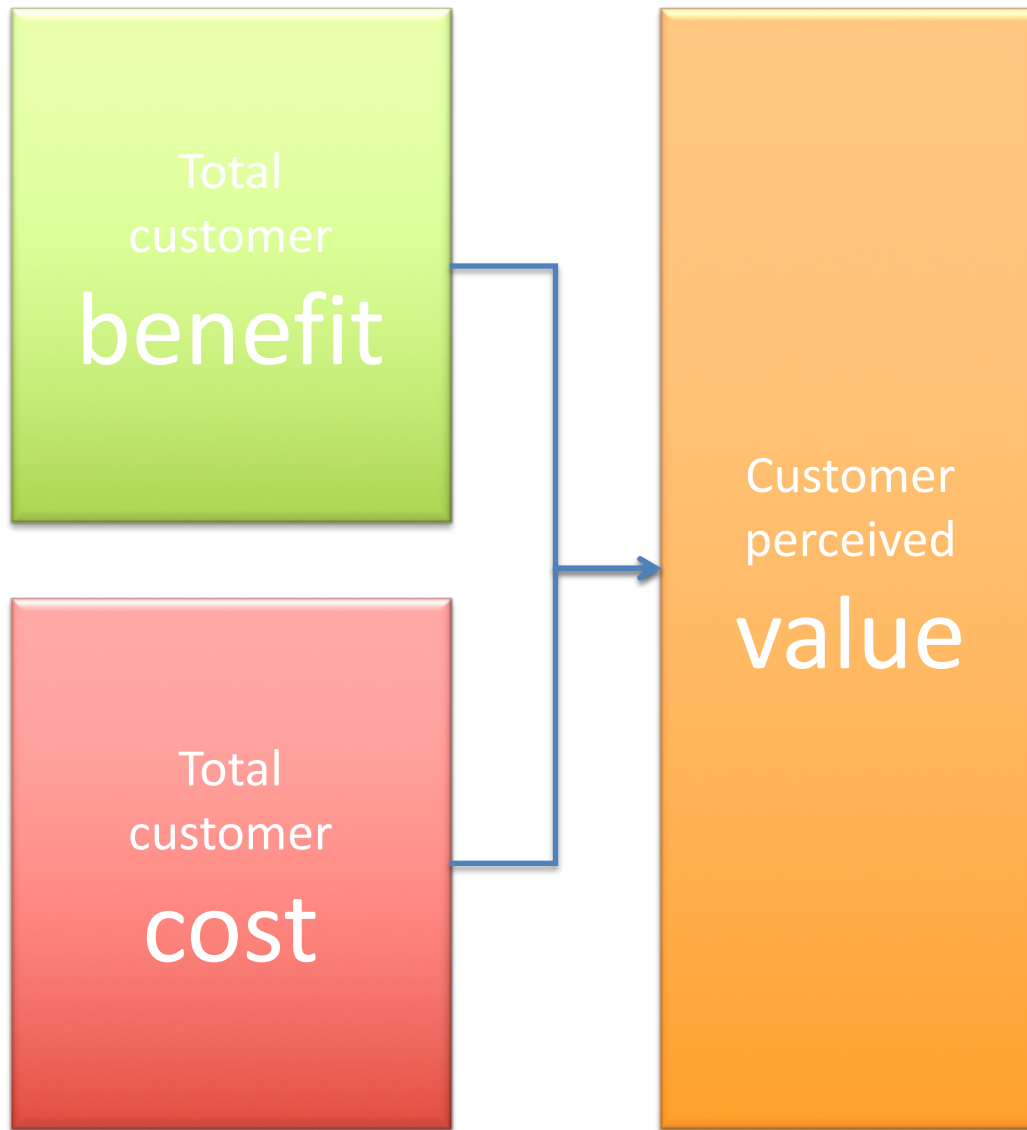
# Value

the sum of the  
tangible and  
intangible

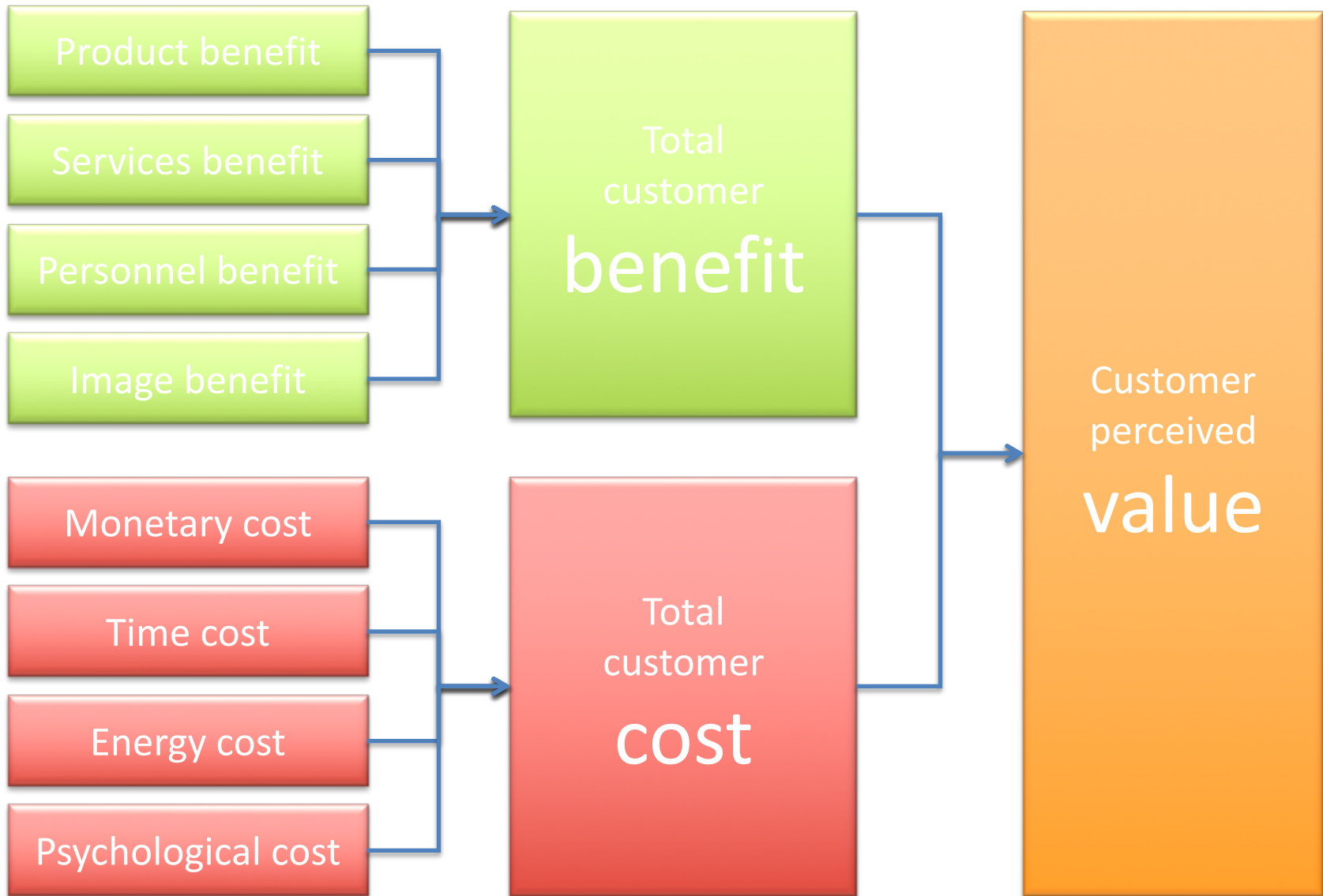
benefits and costs



# Value



# Customer Perceived Value



# The Future of Financial Services

## Industry Leaders

- Oversight, guidance and thought leadership from **16 C-suite executives** and **25 strategy officers** of global financial institutions



## Innovators

- In-person and phone interviews with **100+ innovative new entrants** and **subject matter experts**

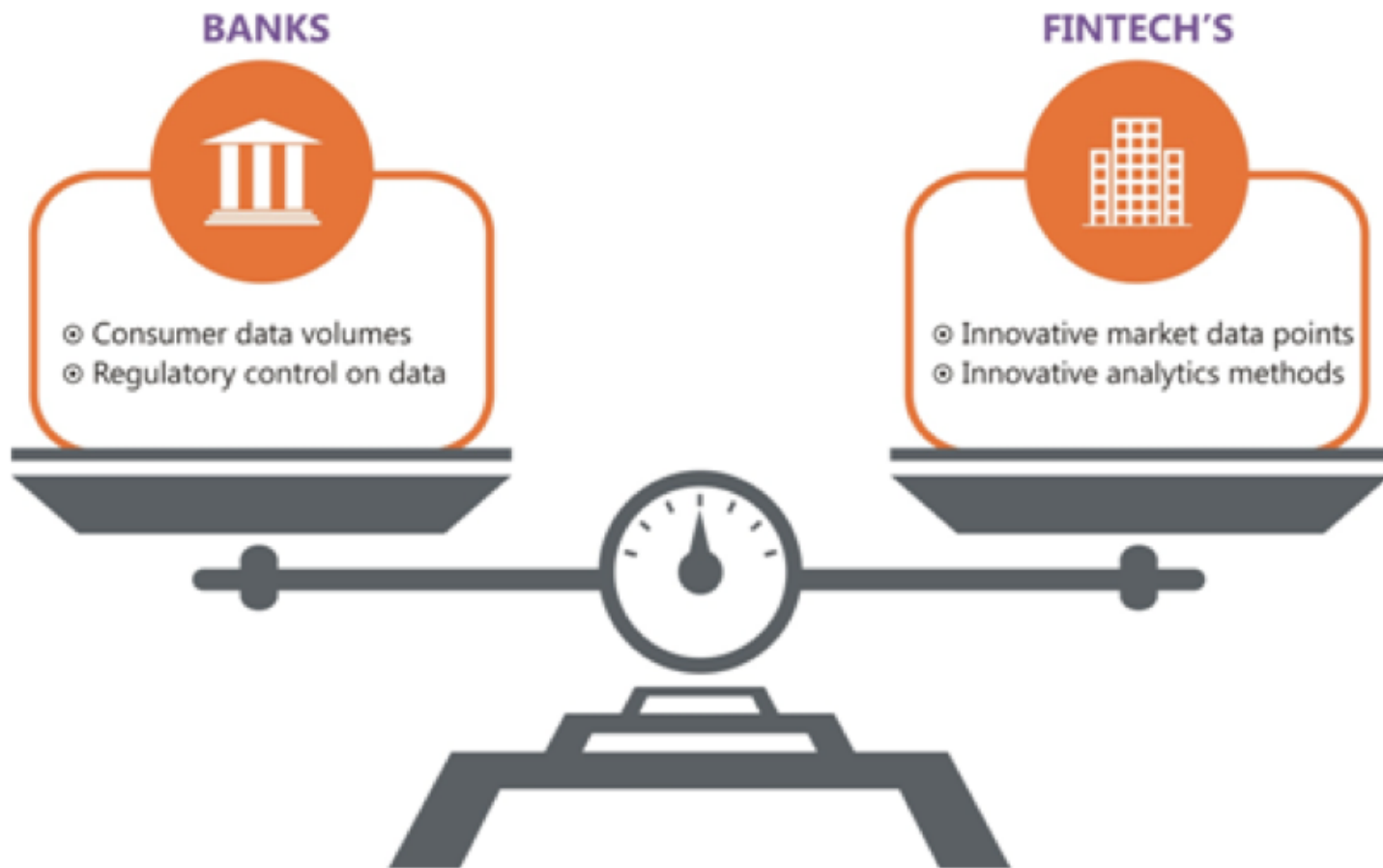


# Fintech Innovation: New Data Business Models

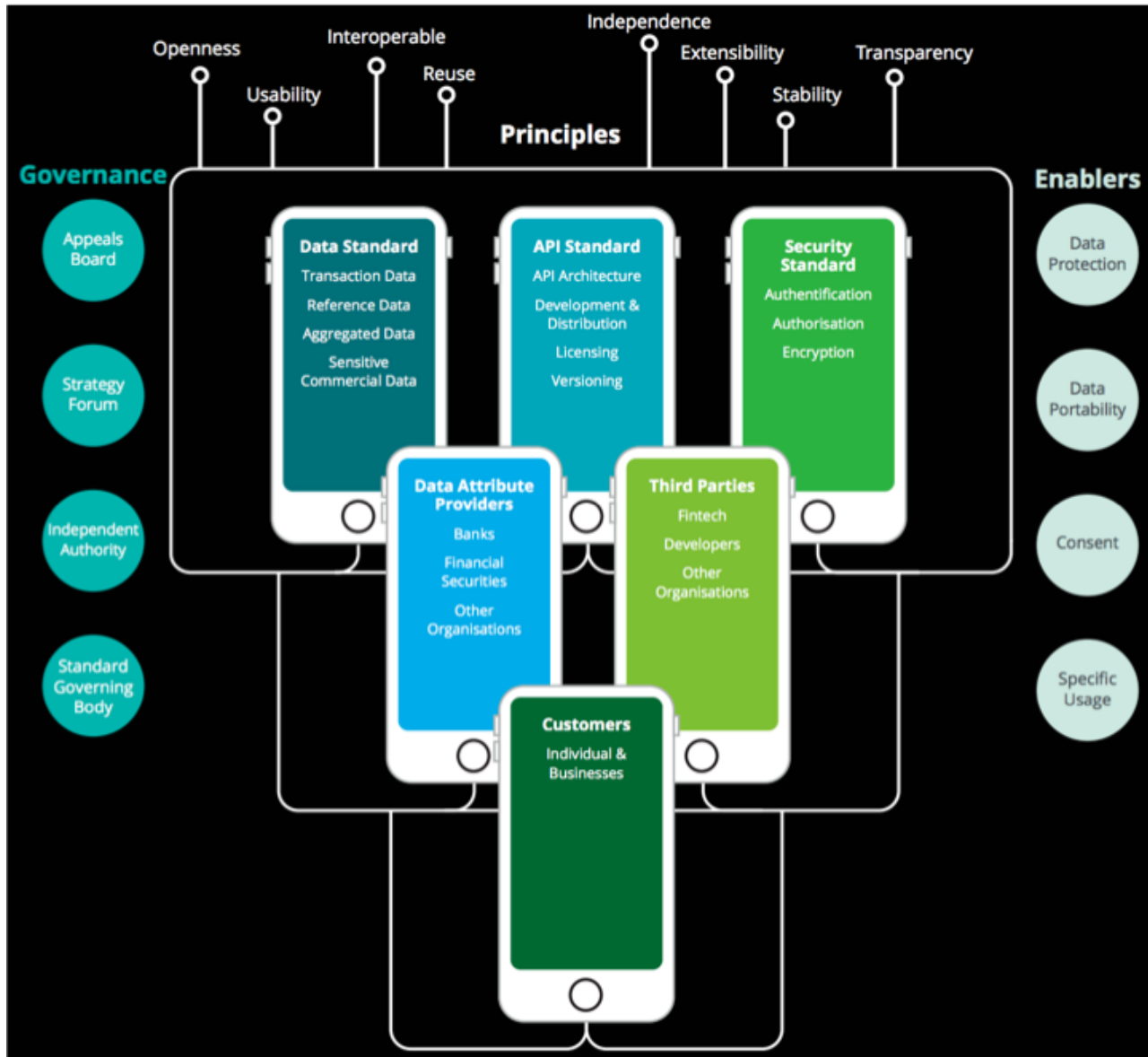
Fintech Innovation:  
New Data Business Models



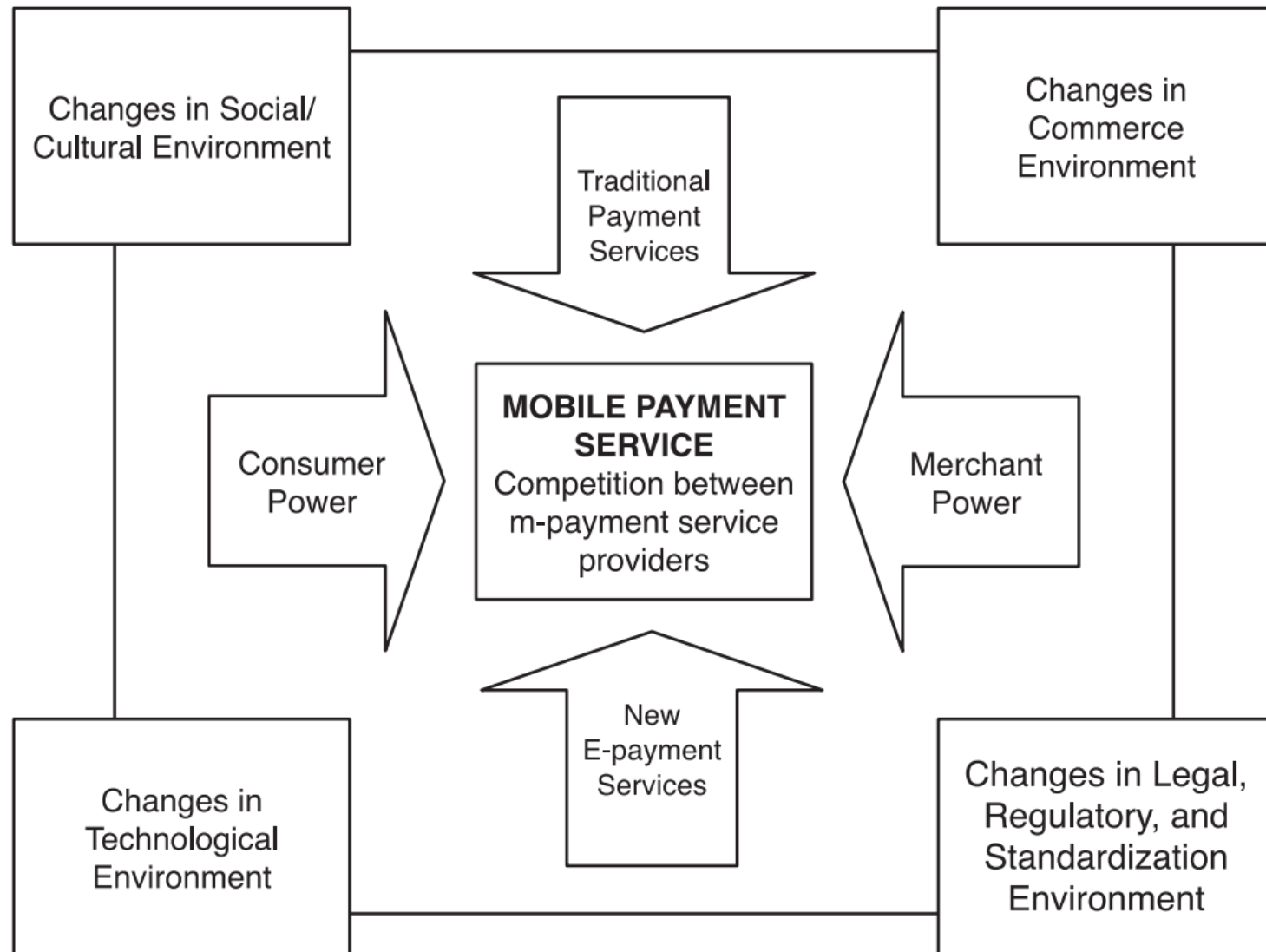
# Fintech Innovation Together: Better Use of Data



# Open API for FinTech



# Mobile Payment Service

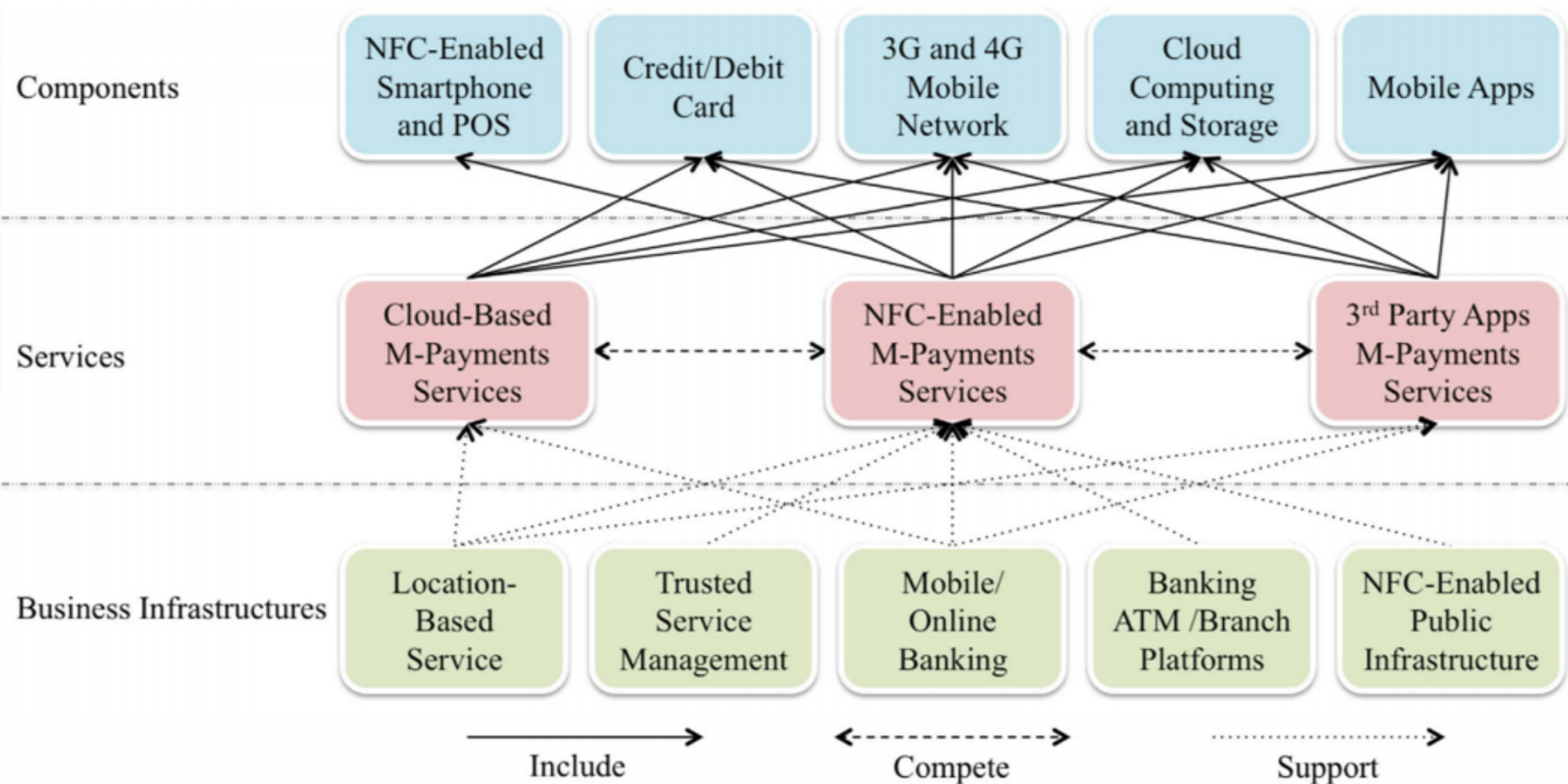


Source: Dahlberg, Tomi, Jie Guo, and Jan Ondrus. "A critical review of mobile payment research."

*Electronic Commerce Research and Applications* 14, no. 5 (2015): 265-284.



# Mobile Payments Technology Innovations





# Transferwise

TransferWise

English (US) Business Request money Help Login Sign Up

## Send money with the real exchange rate

Banks and other providers could charge you up to 5% in hidden costs when sending money abroad. TransferWise is up to 8x cheaper. It's only fair.

You send 1,000 GBP

- 4.98 GBP TransferWise fee (included)
- 1.13970 <sup>\*</sup> Guaranteed exchange rate (24 hours)

Recipient gets 1,134.02 EUR

You could save up to: 35.38 GBP

[See how it works in 1 minute](#)

[Compare price](#) [Get started](#)



Sir Richard Branson invested in TransferWise - [read why](#)

★ ★ ★ 36340 ★ ★ ★  
REVIEWS

5 star rating on Trustpilot - See why [people love TransferWise](#).



Authorised by the UK Financial Conduct Authority ([The FCA](#))



From the people who built Skype

# Transferwise

## TransferWise has accounts across the world

Pay into our bank account in your country. We pay your recipient from our account in their country using the real exchange rate.



# Transferwise

We independently obtained the overall cost of sending money 1,000 GBP to EUR using selected major banks and brokers.



TransferWise charges as little as possible



Cost

## Bank Average

Banks hide their cost in the exchange rate

**40.36**

TransferWise uses the real exchange rate

1 = **1.13970**



Fixed exchange rate

Banks often set their own exchange rate

1 = **1.11098**

Save up to 90% with TransferWise and receive

**1,134.02**



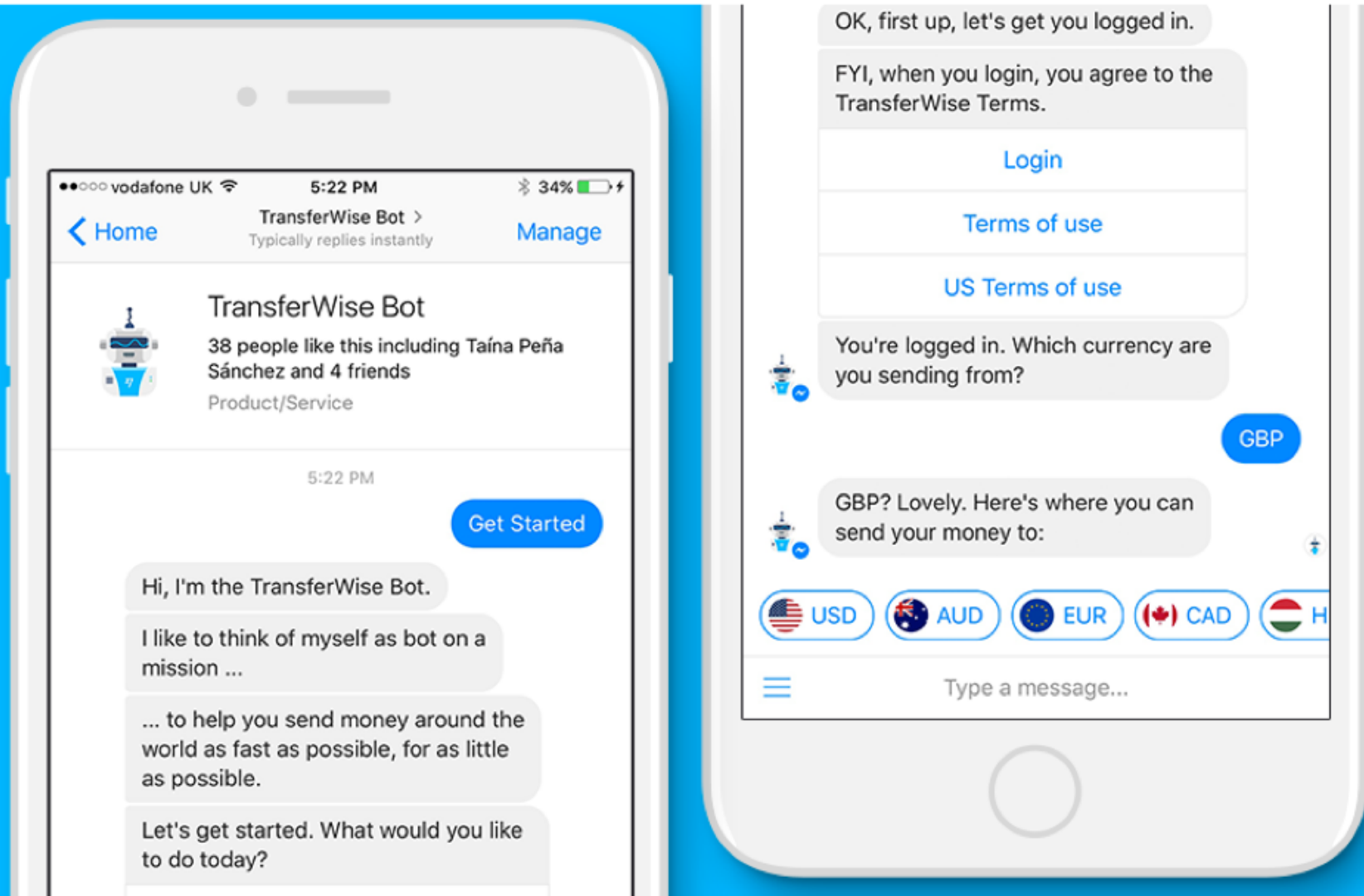
Banks could leave you 40.32 out of pocket

**1,093.70**

Got it, I could save up to 35.38

<https://transferwise.com/>

# TransferWise Bot for Facebook Messenger



# FinTech Technologies

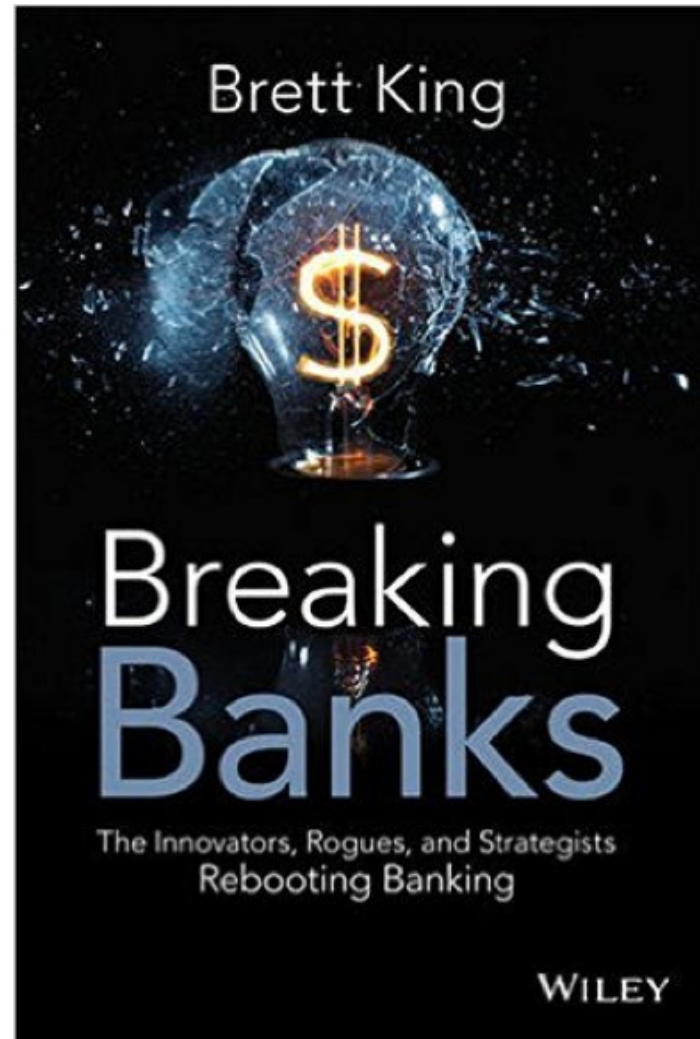
API

Robot

AI

Blockchain

Brett King (2014),  
**Breaking Banks:**  
The Innovators, Rogues, and Strategists Rebooting Banking  
Wiley



# Fintech: Financial Technology

## **Disrupting Banking:** **The Fintech Startups** **That Are Unbundling** **Wells Fargo, Citi and** **Bank of America**



# Fintech: Unbundling the Bank

## Unbundling of a Bank





# Fintech: Unbundling the Bank

## Wealth Management: Wealthfront



**Fintech: Financial Technology**

**Disrupting**

**European Banking:**

**The FinTech Startups**

**That Are Unbundling**

**HSBC, Santander, and**

**BNP**

# Unbundling of a European Bank

The image illustrates the unbundling of a European bank (HSBC) into various digital services. The central focus is the HSBC Business Banking website, which is surrounded by numerous fintech logos. Arrows indicate the mapping of these fintech services to specific features on the HSBC website.

**HSBC Business Banking Website Content:**

- Navigation:** Personal, Business, Search, Internet Banking, Log on, Register.
- Service Categories:** Everyday banking (Accounts & services), Borrowing (Loans & mortgages), Investing (Products & analysis), Insurance (Property & family), Planning (for now & the future).
- Main Offerings:**
  - Send money overseas in a few clicks (It's secure, quick and easy. See just how much we could save you. Fees may apply. Payments may also incur agency and/or beneficiary bank fees. Find out more)
  - Find a mortgage
  - Our lowest ever loan rate
  - Save Together offer
  - International money transfer
- Business Banking Section:**
  - Business Banking (Turnover up to £2m)
  - Commercial Banking (Turnover £2m to £30m)
  - Corporate Banking (Turnover in excess of £30m)
  - International Business
  - Online Services
- CBINSIGHTS Section:**
  - Every business has its own story (We create different business bank accounts to suit different needs)
  - Discover products and services for your banking needs:
    - Community account
    - Other accounts
    - Finance & borrowing
    - Credit cards & debit cards
    - Payment services
    - Business insurance policies
    - Business savings & investments
    - Ways to Bank
    - International business
    - Pensions
  - Get in touch (Have a query? There are lots of ways we can help you feel you're making the right choice. Call us on 0800 731 8904. Find a branch and book an appointment. Retrieve application (Retrieve an online application you have already started))

**Fintech Logos and Services:**

- SavingGlobal**
- borro**
- Bondora**
- zopa**
- LENDING WORKS**
- prêt d'union**
- Lendico**
- fruitful**
- LANDBAY**
- Property Partner**
- wonga**
- Spotcap**
- Funding Circle**
- FINEXKAP**
- fleximize**
- iwoca**
- capiota**
- HOLVI**
- Trade River**
- Ebury**
- Lydia**
- jusp**
- ensygnio**
- payleven**
- ffrees**
- osper**
- CENTRALWAY**
- SQUIRREL**
- nutmeg**
- wikifolio**
- etoro**
- tink**
- CAPITAL**
- Money Dashboard**
- môni**
- transferGo**
- worldremit**
- azimo**
- CurrencyFair**
- Klarna**
- adyen**
- sum up**
- iZettle**
- BILLPAY**
- GOCARDLESS**
- PAYMILL**

# Unbundling of a European Bank

The image illustrates the unbundling of a European bank (HSBC) into various fintech services. The central focus is a screenshot of the HSBC website, with yellow arrows pointing from surrounding fintech logos to specific sections of the website.

**Logos on the left side:** SavingGlobal, borro, Bondora, zopa, LENDING WORKS, prêt d'union, Lendico, fruitful, LANDBAY, Property Partner, wonga.

**Logos at the top:** ffrees, osper, CENTRALWAY, SQUIRREL, nutmeg, wikifolio, eToro.

**Logos on the right side:** tink, CAPITAL, Money Dashboard, moni, transferGo, worldremit, azimo, CurrencyFair, Klarna, adyen.

**Website Screenshot Details:**

- Top Navigation:** Personal | Business | Search | Internet Banking | Log on | Register
- Service Categories:**
  - Everyday banking: Accounts & services
  - Borrowing: Loans & mortgages
  - Investing: Products & analysis
  - Insurance: Property & family
  - Planning: for now & the future
- Main Content Area:**
  - Hero Section:** "Send money overseas in a few clicks. It's secure, quick and easy. See just how much we could save you. Fees may apply. Payments may also incur agency and/or beneficiary bank fees. Find out more"
  - Navigation Bar:** Find a mortgage | Our lowest ever loan rate | Save Together offer | International money transfer
- Bottom Section:**
  - Logos: LendInvest, auxmoney, the currency cloud, lendstar, TransferWise
  - Navigation: Personal | Business
  - Business Banking: Turnover up to £2m
  - Commercial Banking: Turnover £2m to £30m
  - Corporate Banking: Turnover in excess of £30m
  - International Business | Online Services
  - Footer: Business Home > Business Banking | CBINSIGHTS | About Business Internet Banking | LOG ON

# **Responding to Disruptive Business Model Innovations: the Case of Traditional Banks Facing Fintech Entrants**



# Financial Technology (Fintech) Categories

1. Banking Infrastructure
2. Business Lending
3. Consumer and Commercial Banking
4. Consumer Lending
5. Consumer Payments
6. Crowdfunding
7. Equity Financing
8. Financial Research and Data
9. Financial Transaction Security
10. Institutional Investing
11. International Money Transfer
12. Payments Backend and Infrastructure
13. Personal Finance
14. Point of Sale Payments
15. Retail Investing
16. Small and Medium Business Tools

# FinTech Ecosystem

## THE FINTECH ECOSYSTEM

### ROBO ADVISORS & PERSONAL FINANCE



### REGTECHS



### DIGITAL BANKS & BANKING SOFTWARE PROVIDERS



### PAYMENTS & REMITTANCES



### BLOCKCHAIN/DLT & BITCOIN



### INSURTECHS



### ALTERNATIVE FINANCE



### DIGITAL IDENTITY VERIFICATION



Source: Company Websites, BI Intelligence

Source: <https://www.businessinsider.com/fintech-ecosystem-report>

# FinTech 250

## PAYMENTS PROCESSING & NETWORKS



## MOBILE WALLETS & REMITTANCES



## RETAIL INVESTING & SECONDARY MARKETS



## FINANCIAL SERVICES & AUTOMATION



## CAPITAL MARKETS & INSTITUTIONAL TRADING



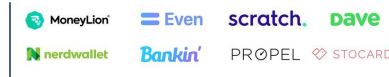
## CORE BANKING & INFRASTRUCTURE



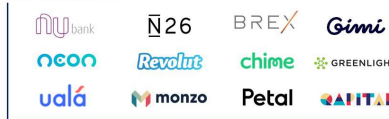
## WEALTH MANAGEMENT



## PERSONAL FINANCE & SAVINGS



## DIGITAL BANKING



# THE FINTECH 250

CBINSIGHTS

## MORTGAGE LENDING



## REAL ESTATE INVESTING



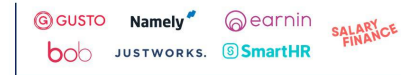
## REGULATORY & COMPLIANCE



## INSURANCE



## PAYROLL & BENEFITS



## CREDIT SCORE & ANALYTICS



## GENERAL LENDING & MARKETPLACES



## POINT-OF-SALE & PERSONAL LENDING



## BUSINESS LENDING & FINANCING



## ACCOUNTING & FINANCE





# FinTech 250

## PAYMENTS PROCESSING & NETWORKS



## MOBILE WALLETS & REMITTANCES



## RETAIL INVESTING & SECONDARY MARKETS

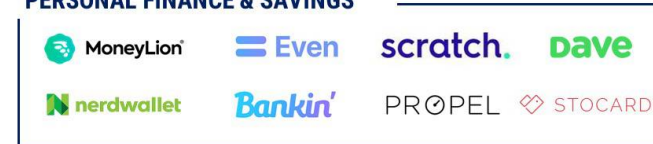


## FINANCIAL SERVICES & AUTOMATION

## WEALTH MANAGEMENT



## PERSONAL FINANCE & SAVINGS



## DIGITAL BANKING



THE FINTECH  
250

CBINSIGHTS

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