

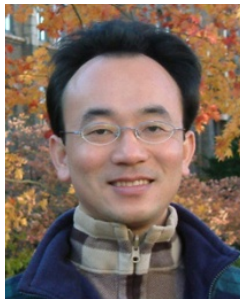
# Hot Issues of Information Management

## Information Systems in Global Business: UPS (Chap. 1)

1061IM4C02

TLMXB4C (M0842)

Thu 7,8 (14:10-16:00) B702



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2017-09-28



# 課程大綱 (Syllabus)

週次 (Week)	日期 (Date)	內容 (Subject/Topics)
1	2017/09/21	Introduction to Case Study for Hot Issues of Information Management
2	2017/09/28	Information Systems in Global Business: UPS (Chap. 1) (pp.53-54)
3	2017/10/05	Global E-Business and Collaboration: P&G (Chap. 2) (pp.84-85)
4	2017/10/12	Information Systems, Organization, and Strategy: Starbucks (Chap. 3) (pp.129-130)
5	2017/10/19	Ethical and Social Issues in Information Systems: Facebook (Chap. 4) (pp.188-190)
6	2017/10/26	IT Infrastructure and Emerging Technologies: Amazon and Cloud Computing (Chap. 5) (pp. 234-236)

# 課程大綱 (Syllabus)

週次 (Week)	日期 (Date)	內容 (Subject/Topics)
7	2017/11/02	Foundations of Business Intelligence: IBM and Big Data (Chap. 6) (pp.261-262)
8	2017/11/09	Telecommunications, the Internet, and Wireless Technology: Google, Apple, and Microsoft (Chap. 7) (pp.318-320)
9	2017/11/16	Midterm Report (期中報告)
10	2017/11/23	Midterm Exam Week (期中考試週)
11	2017/11/30	Enterprise Applications: Summit and SAP (Chap. 9) (pp.396-398)
12	2017/12/07	E-commerce: Zagat (Chap. 10) (pp.443-445)

# 課程大綱 (Syllabus)

週次	日期	內容 (Subject/Topics)
13	2017/12/14	Enhancing Decision Making: Zynga (Chap. 12) (pp.512-514)
14	2017/12/21	Building Information Systems: USAA (Chap. 13) (pp.547-548)
15	2017/12/28	Managing Projects: NYCAPS and CityTime (Chap. 14) (pp.586-588)
16	2018/01/04	Final Report I (期末報告 I)
17	2018/01/11	Final Report II (期末報告 II)
18	2018/01/18	Final Exam Week (期末考試週)



# Management Information Systems: Managing the Digital Firm

**1**

**Organization, Management, and the  
Networked Enterprise**

**2**

**Information Technology Infrastructure**

**3**

**Key System Applications for the  
Digital Age**

**4**

**Building and Managing Systems**

**Chap. 1**  
**Information Systems in**  
**Global Business:**  
**UPS**

# **Case Study: UPS (Chap. 1)** (pp.53-54)

## **UPS Competes Globally with Information Technology**

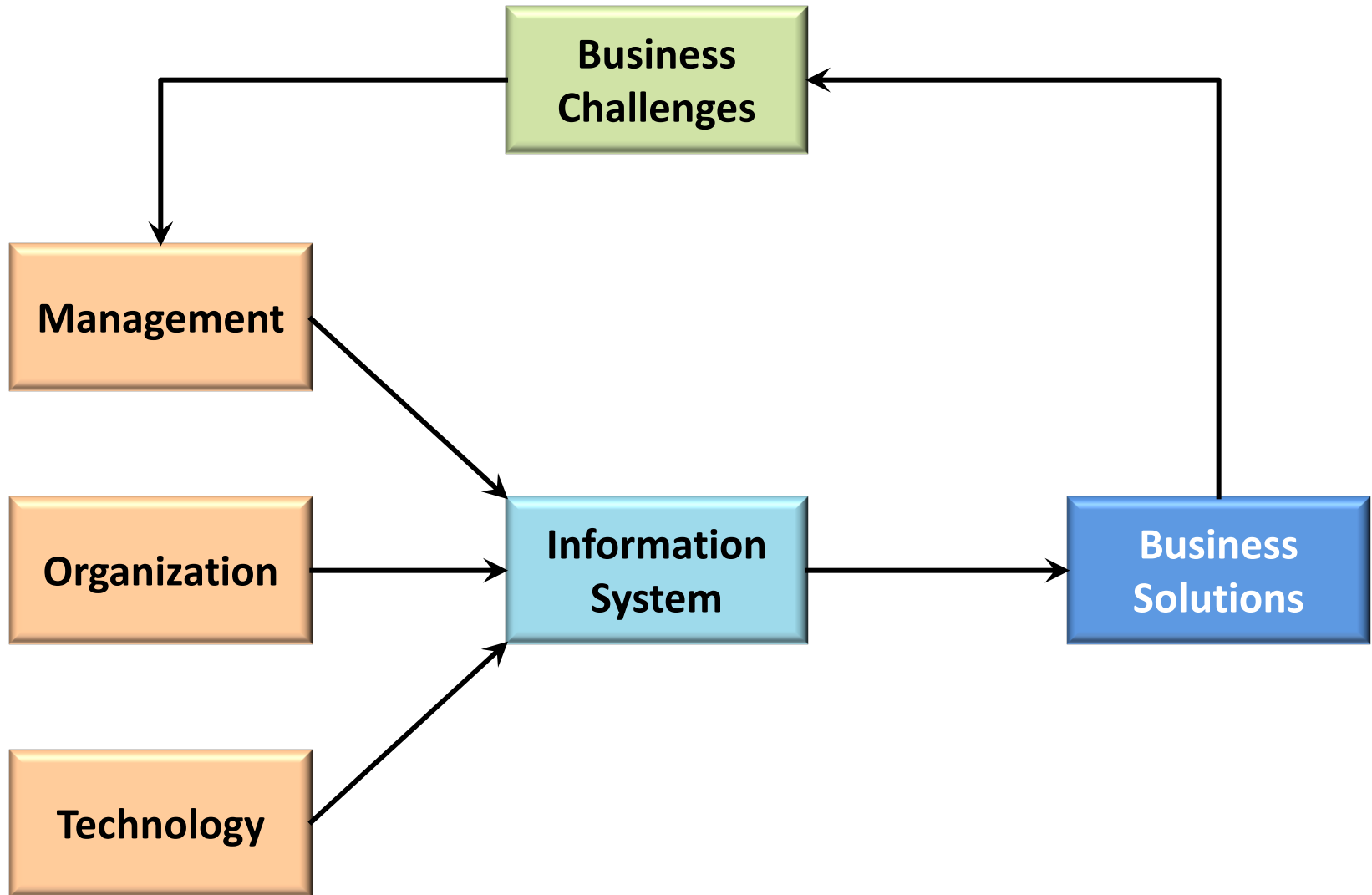
1. What are the inputs, processing, and outputs of UPS's package tracking system?
2. What technologies are used by UPS? How are these technologies related to UPS's business strategy?
3. What strategic business objectives do UPS's information systems address?
4. What would happen if UPS's information systems were not available?

# Information Management (MIS)

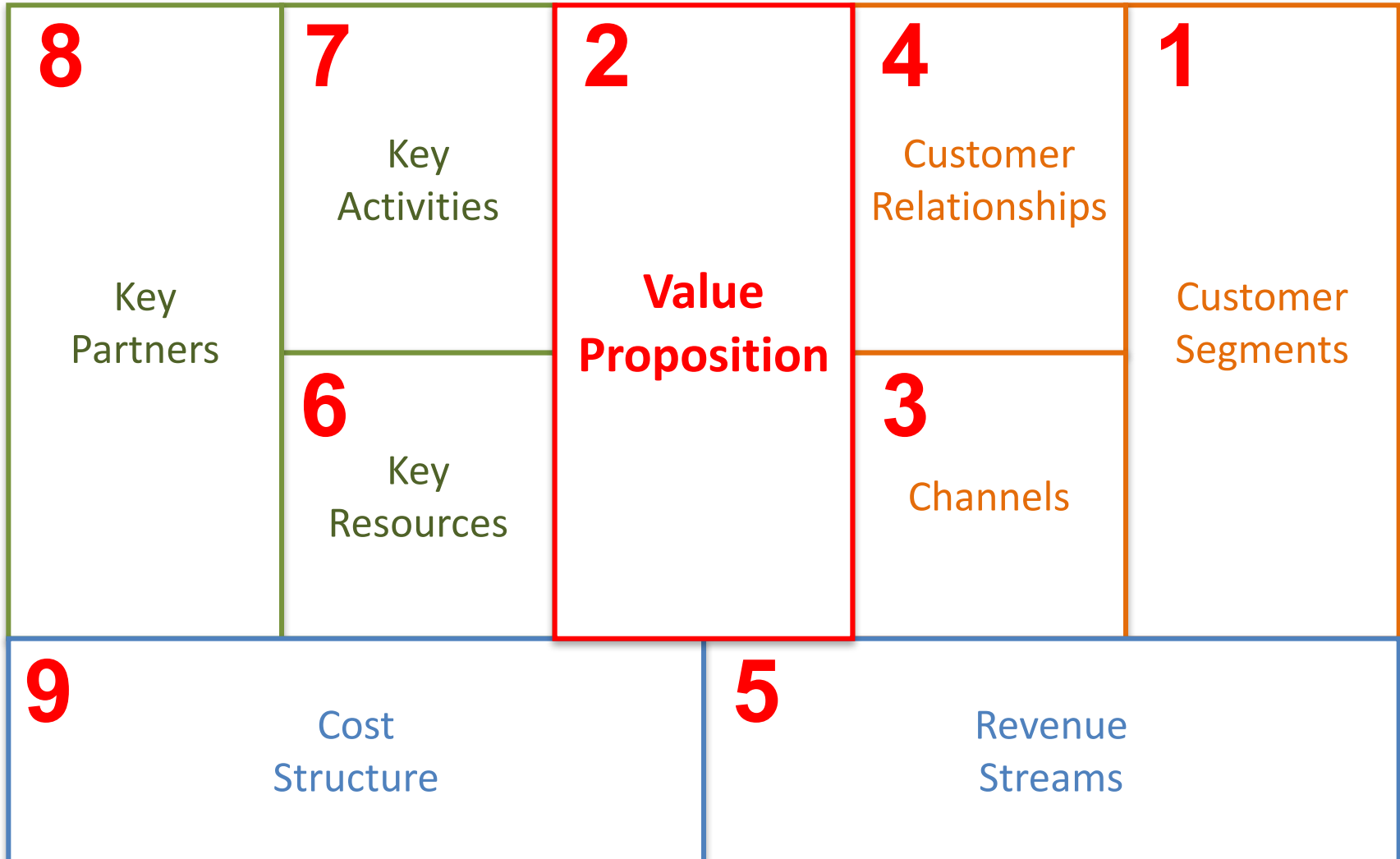
## Information Systems



# Overview of Fundamental MIS Concepts



# Business Model



# Ponsse:

## Efficiency in Wood Harvesting with Information System

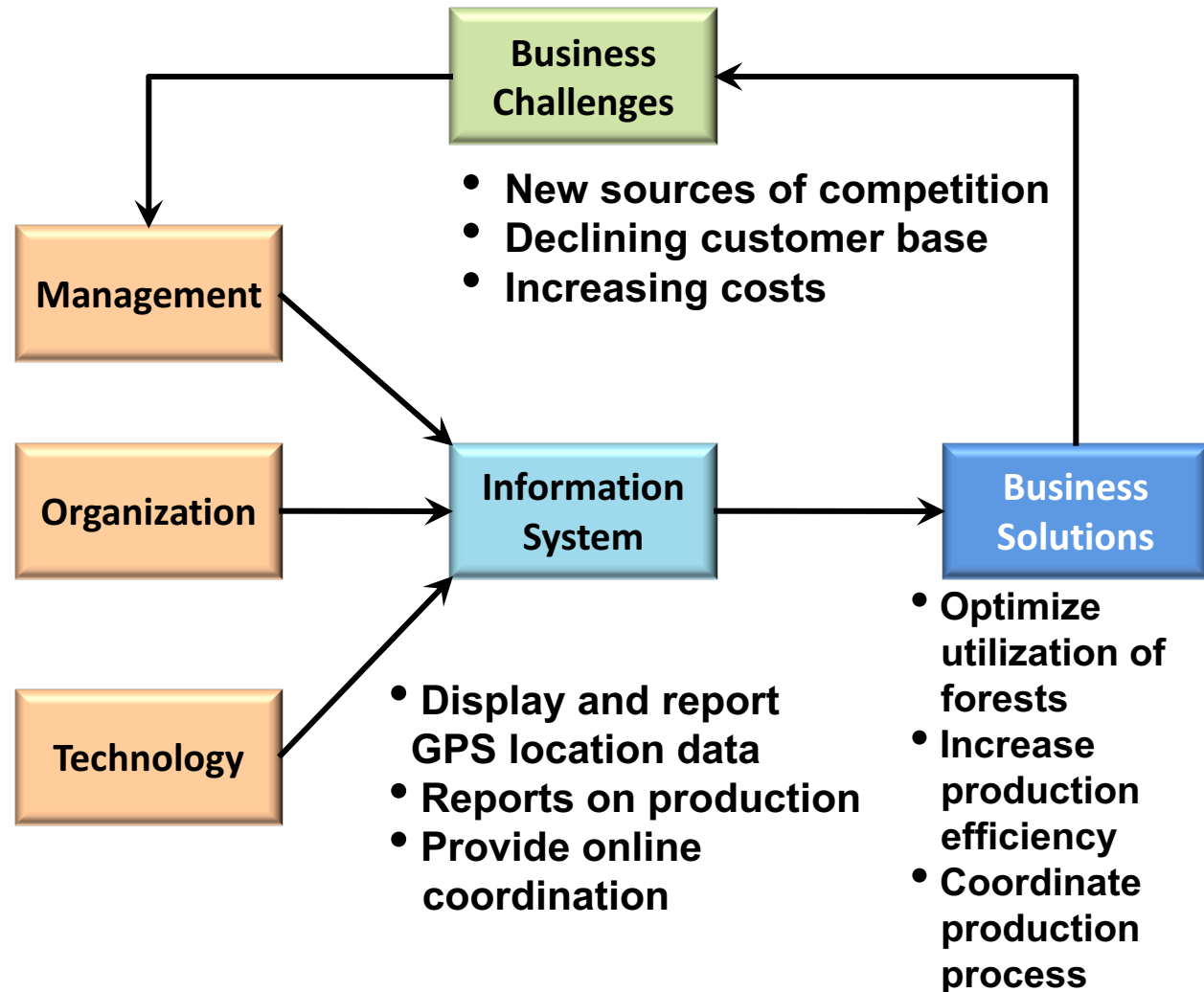


Source: <http://www.ponsse.com/>

# Overview of Fundamental MIS Concepts

## using an integrated framework for describing and analyzing information systems

- Develop new production processes
- Develop new management techniques
- Increase use of data by managers
- Build new business production processes
- Train new channels of information flow
- Train employee in use of the systems
- Develop GPS systems for field use
- Create email links with operators
- Develop data base to receive information





# Information Systems in Global Business

1. How are information systems transforming business and what is their relationship to globalization?
2. Why are information systems so essential for running and managing a business today?
3. What exactly is an information system? How does it work? What are its management, organization, and technology components?
4. What are complementary assets? Why are complementary assets essential for ensuring that information systems provide genuine value for an organization?
5. What academic disciplines are used to study information systems? How does each contribute to an understanding of information systems? What is a sociotechnical systems perspective?

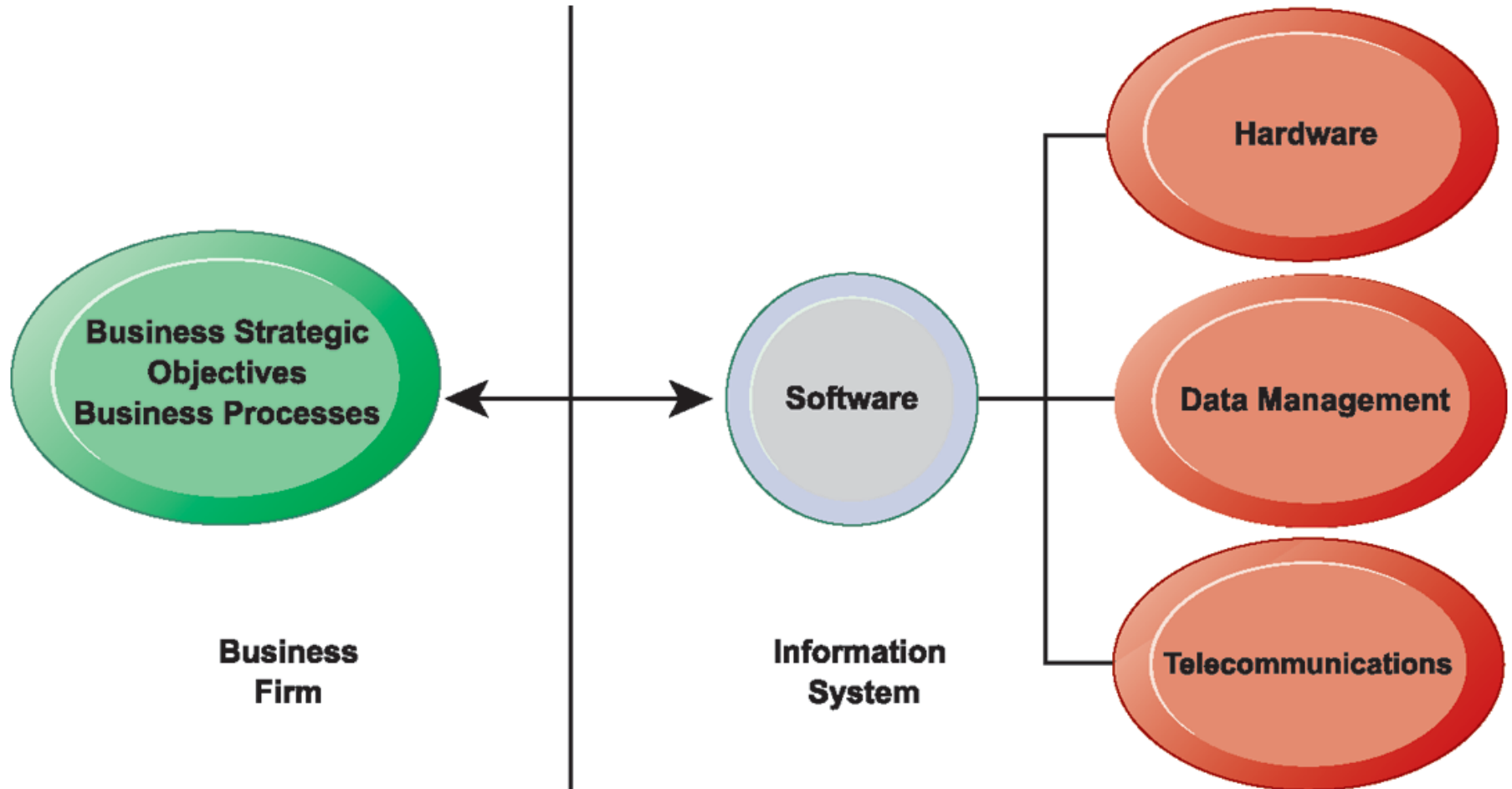
# How information systems are transforming business

- Emerging mobile digital platform
- Growing business use of “big data”
- Growth in cloud computing

# Globalization opportunities

- Internet has drastically reduced costs of operating on global scale
- Increases in foreign trade, outsourcing
- Presents both challenges and opportunities

# The Interdependence Between Organizations and Information Technology



# Strategic Business Objectives of Information Systems

1. Operational Excellence
2. New Products, Services and Business Models
3. Customer and Supplier Intimacy
4. Improved Decision Making
5. Competitive Advantage
6. Survival

# 1. Operational Excellence

- Improvement of efficiency to attain higher profitability
- Information systems, technology an important tool in achieving greater efficiency and productivity
- Walmart's Retail Link system links suppliers to stores for superior replenishment system

## 2. New Products, Services, and Business Models

- **Business model:** describes how company produces, delivers, and sells product or service to create wealth
- Information systems and technology a major enabling tool for new products, services, business models
  - Examples: Apple's iPad, Google's Android OS, and Netflix

# 3. Customer and Supplier Intimacy

- Serving customers well leads to customers returning, which raises revenues and profits.
  - Example: High-end hotels that use computers to track customer preferences and used to monitor and customize environment
- Intimacy with suppliers allows them to provide vital inputs, which lowers costs.
  - Example: JCPenney's information system which links sales records to contract manufacturer



# 4. Improved Decision Making

- Without accurate information:
  - Managers must use forecasts, best guesses, luck
  - Results in:
    - Overproduction, underproduction
    - Misallocation of resources
    - Poor response times
  - Poor outcomes raise costs, lose customers
- Example:
  - Verizon's Web-based digital dashboard to provide managers with real-time data on customer complaints, network performance, line outages

# 5. Competitive advantage

- Delivering better performance
- Charging less for superior products
- Responding to customers and suppliers in real time
- Examples: Apple, Walmart, UPS

# 6. Survival

- Information technologies as necessity of business
- Industry-level changes
  - Example: Citibank's introduction of ATMs
- Governmental regulations requiring record-keeping
  - Examples: Toxic Substances Control Act, Sarbanes-Oxley Act

# Information Systems Are More Than Computers



# Dimensions of Information Systems

- **Organizations**

- People, structure, business processes, politics, and culture.

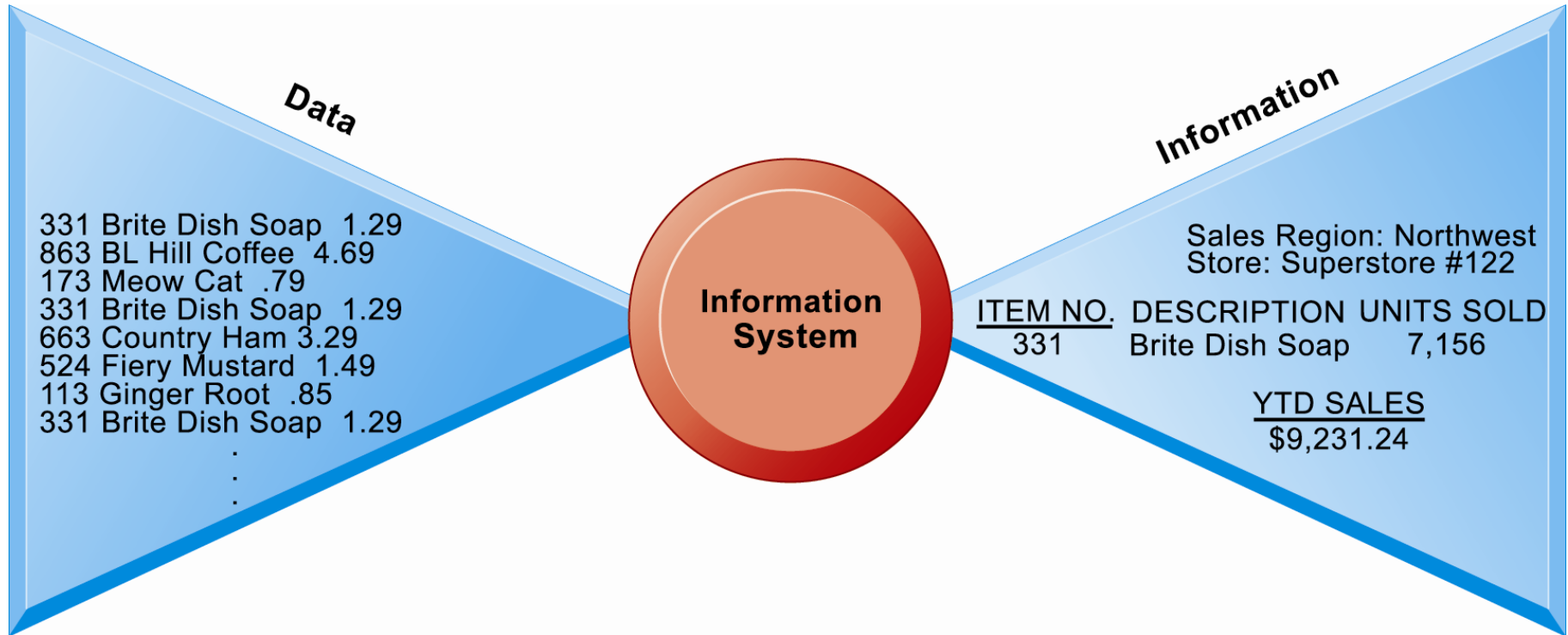
- **Management**

- Make sense out of the many situations faced by organizations, make decisions, and formulate action plans to solve organizational problems.

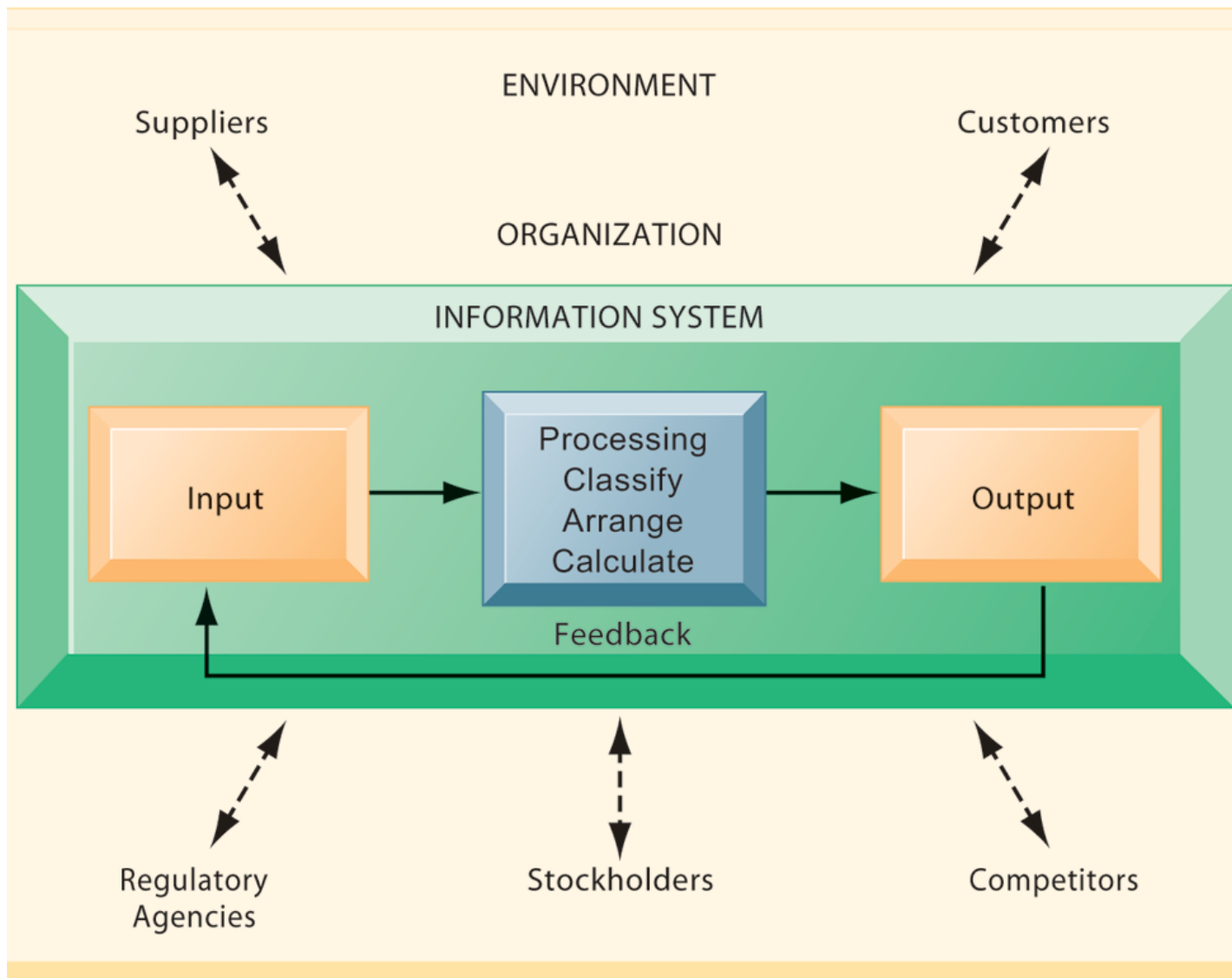
- **Information Technology**

- Computer hardware, software, data management technology, networking and telecommunications technology

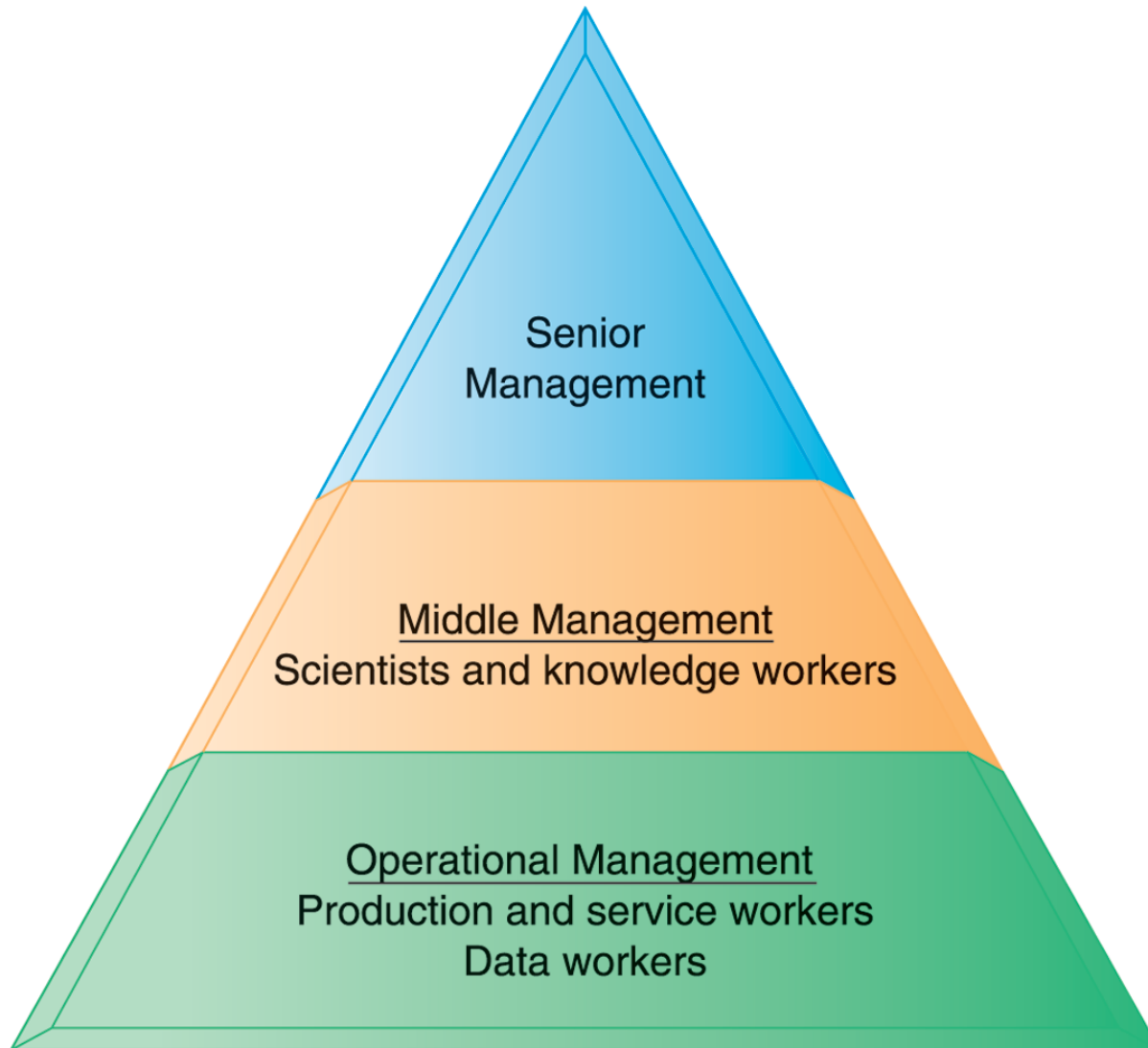
# Perspectives on Information Systems: Data and Information



# Functions of an Information System



# Levels in a Firm



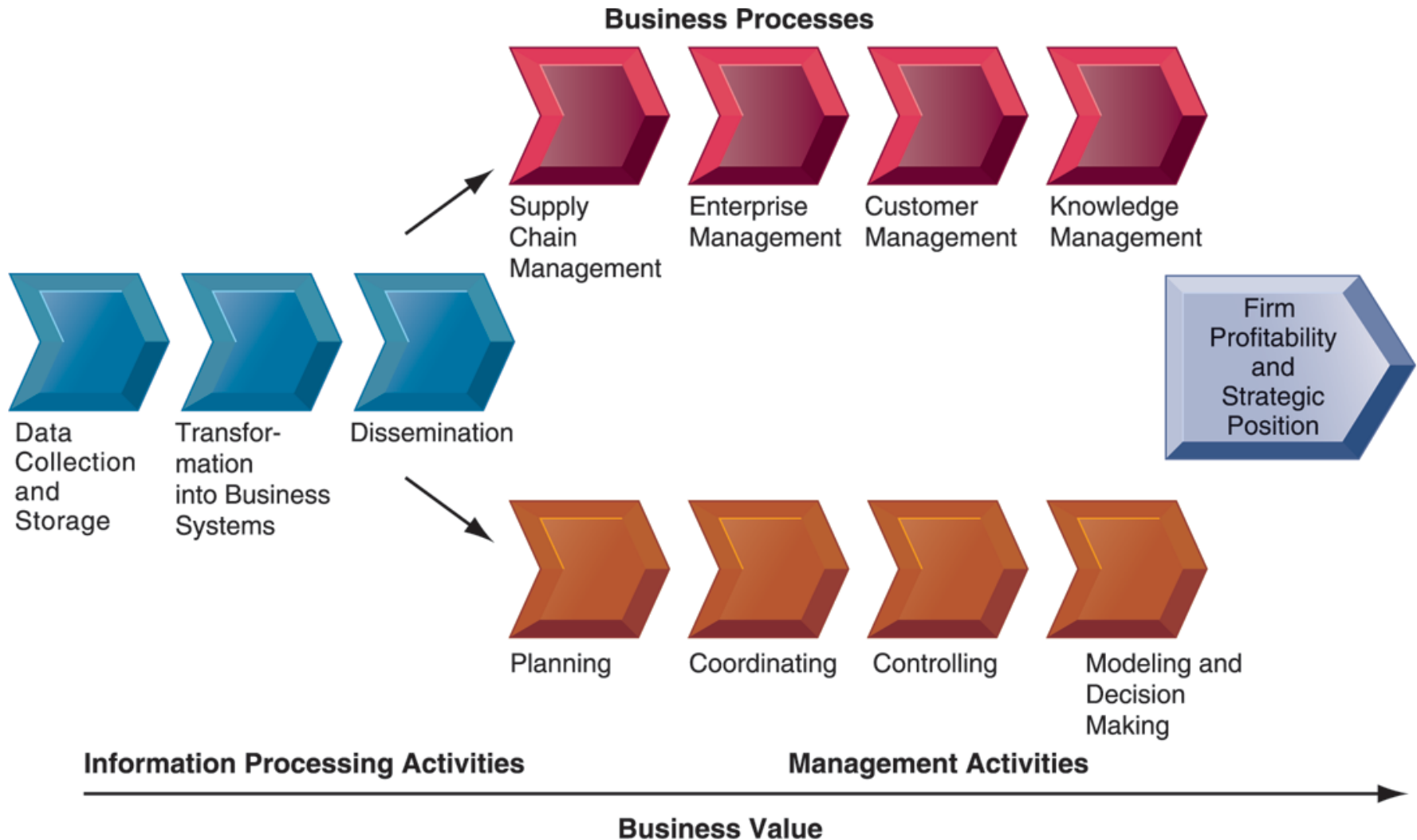


# MAJOR BUSINESS FUNCTIONS

<b>FUNCTION</b>	<b>PURPOSE</b>
<b>Sales and marketing</b>	Selling the organization's products and services
<b>Manufacturing and production</b>	Producing and delivering products and services
<b>Finance and accounting</b>	Managing the organization's financial assets and maintaining the organization's financial records
<b>Human resources</b>	Attracting, developing, and maintaining the organization's labor force; maintaining employee records

# **IT ISN'T JUST TECHNOLOGY: A BUSINESS PERSPECTIVE ON INFORMATION SYSTEMS**

# The Business Information Value Chain



# The Business Information Value Chain

- From a business perspective, information systems are part of a series of **value-adding activities** for acquiring, transforming, and distributing information that managers can use to **improve decision making**, **enhance organizational performance**, and, ultimately, **increase firm profitability**.

**COMPLEMENTARY SOCIAL,  
MANAGERIAL, AND  
ORGANIZATIONAL ASSETS  
REQUIRED TO OPTIMIZE RETURNS  
FROM INFORMATION  
TECHNOLOGY INVESTMENTS**

# Organizational assets

- Supportive organizational culture that values efficiency and effectiveness
- Appropriate business model
- Efficient business processes
- Decentralized authority
- Distributed decision-making rights
- Strong IS development team

# Managerial assets

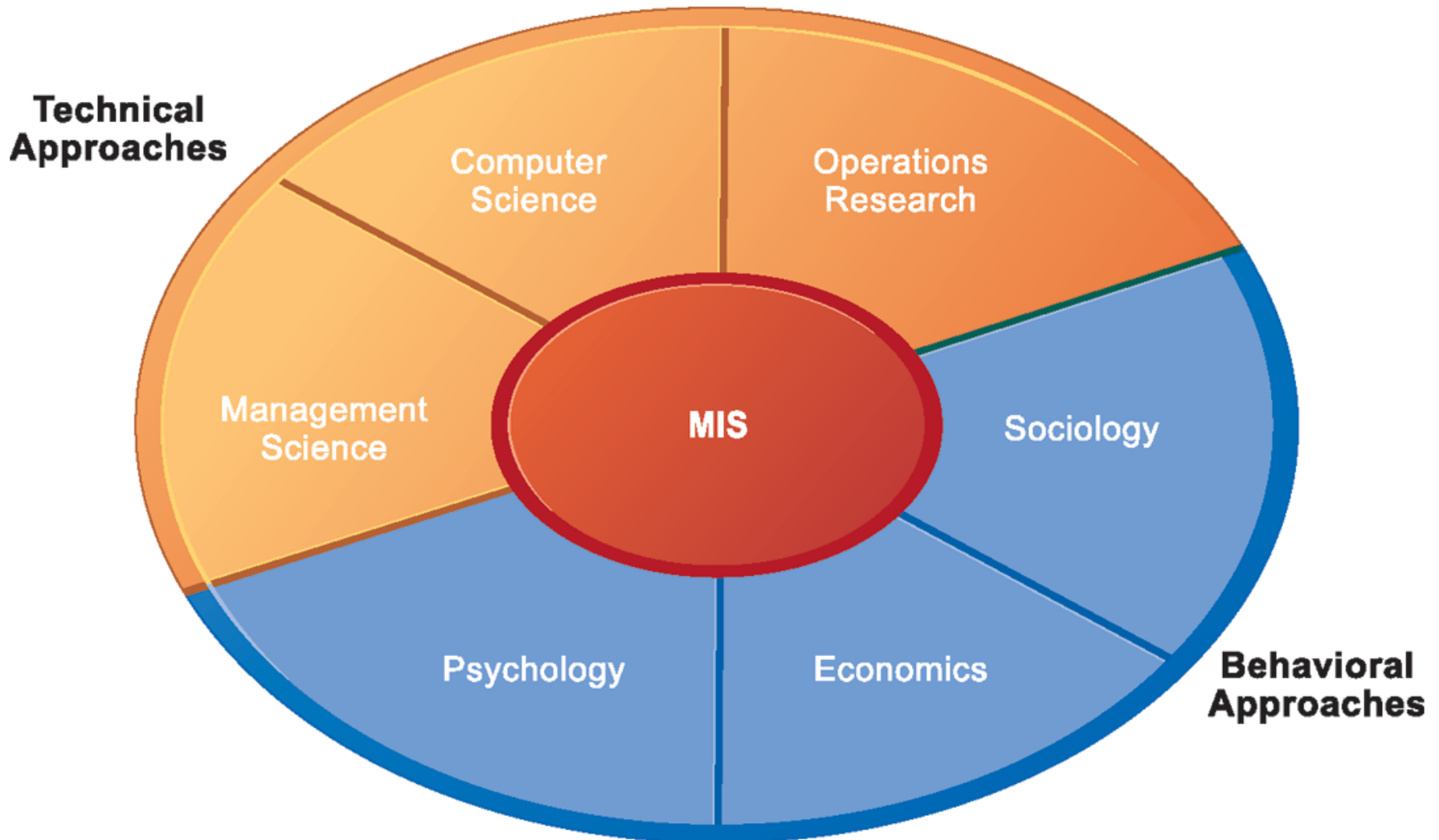
- Strong senior management support for technology investment and change
- Incentives for management innovation
- Teamwork and collaborative work environments
- Training programs to enhance management decision skills
- Management culture that values flexibility and knowledge-based decision making.

# Social assets

- The Internet and telecommunications infrastructure
- IT-enriched educational programs raising labor force computer literacy
- Standards (both government and private sector)
- Laws and regulations creating fair, stable market environments
- Technology and service firms in adjacent markets to assist implementation



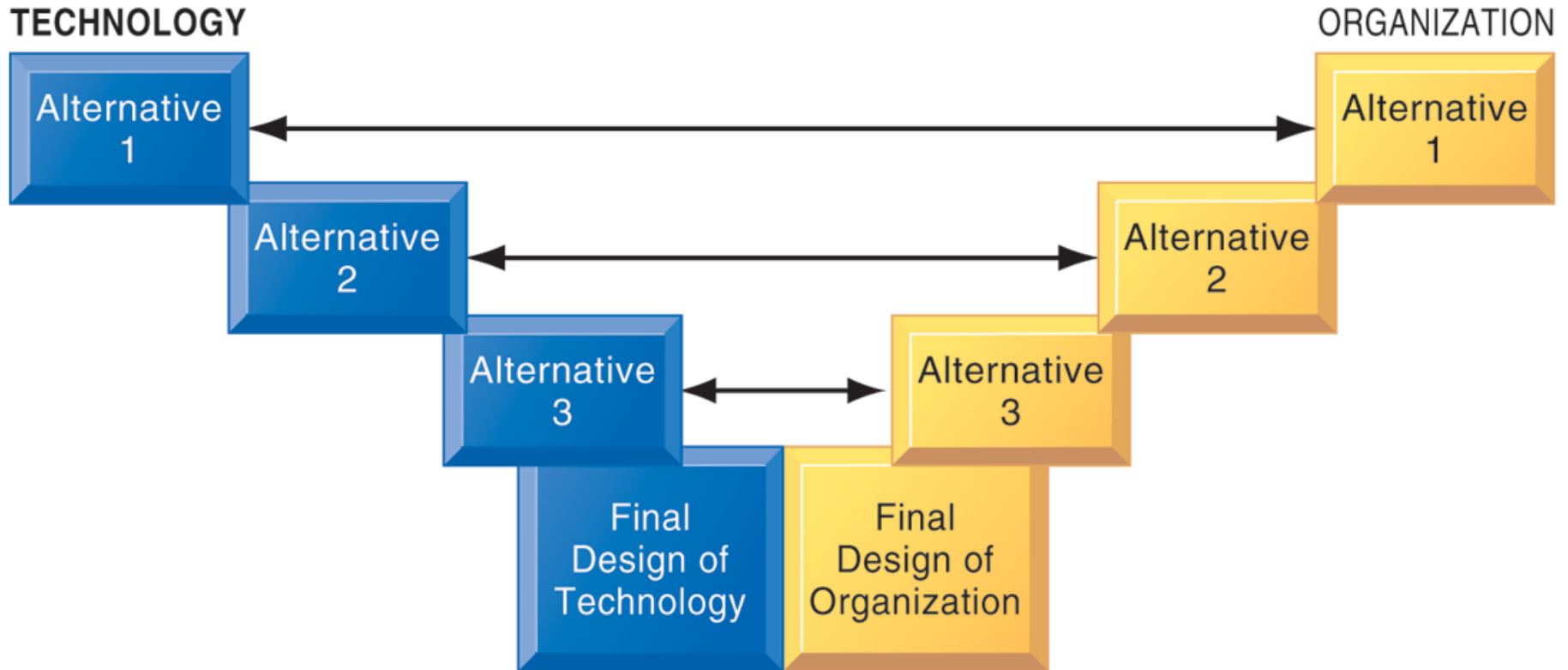
# Contemporary Approaches to Information Systems



# Contemporary Approaches to Information Systems

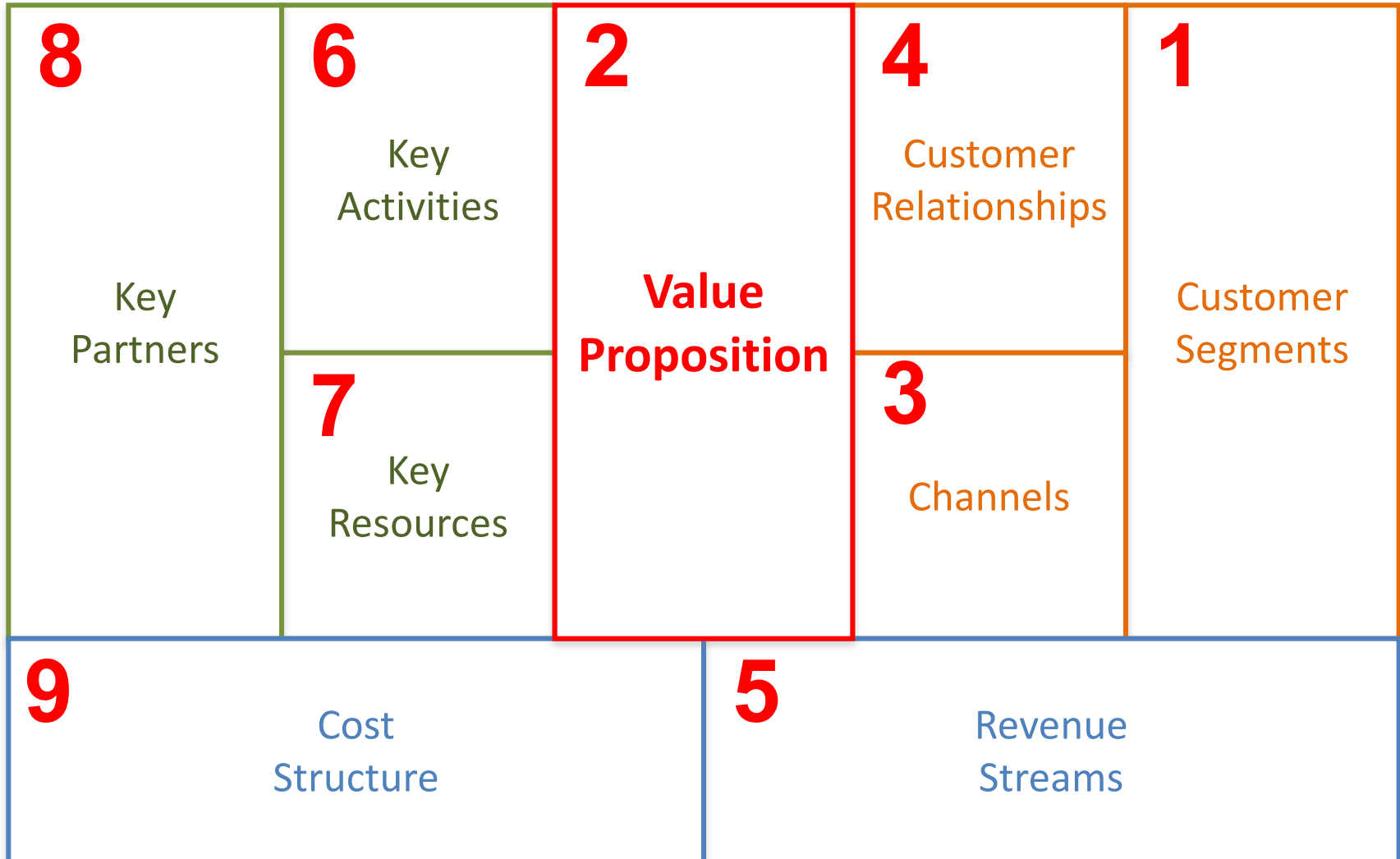
- **Technical Approach**
- **Behavioral Approach**
- **Sociotechnical Systems**

# A Sociotechnical Perspective on Information Systems



# Business Model

# Business Model



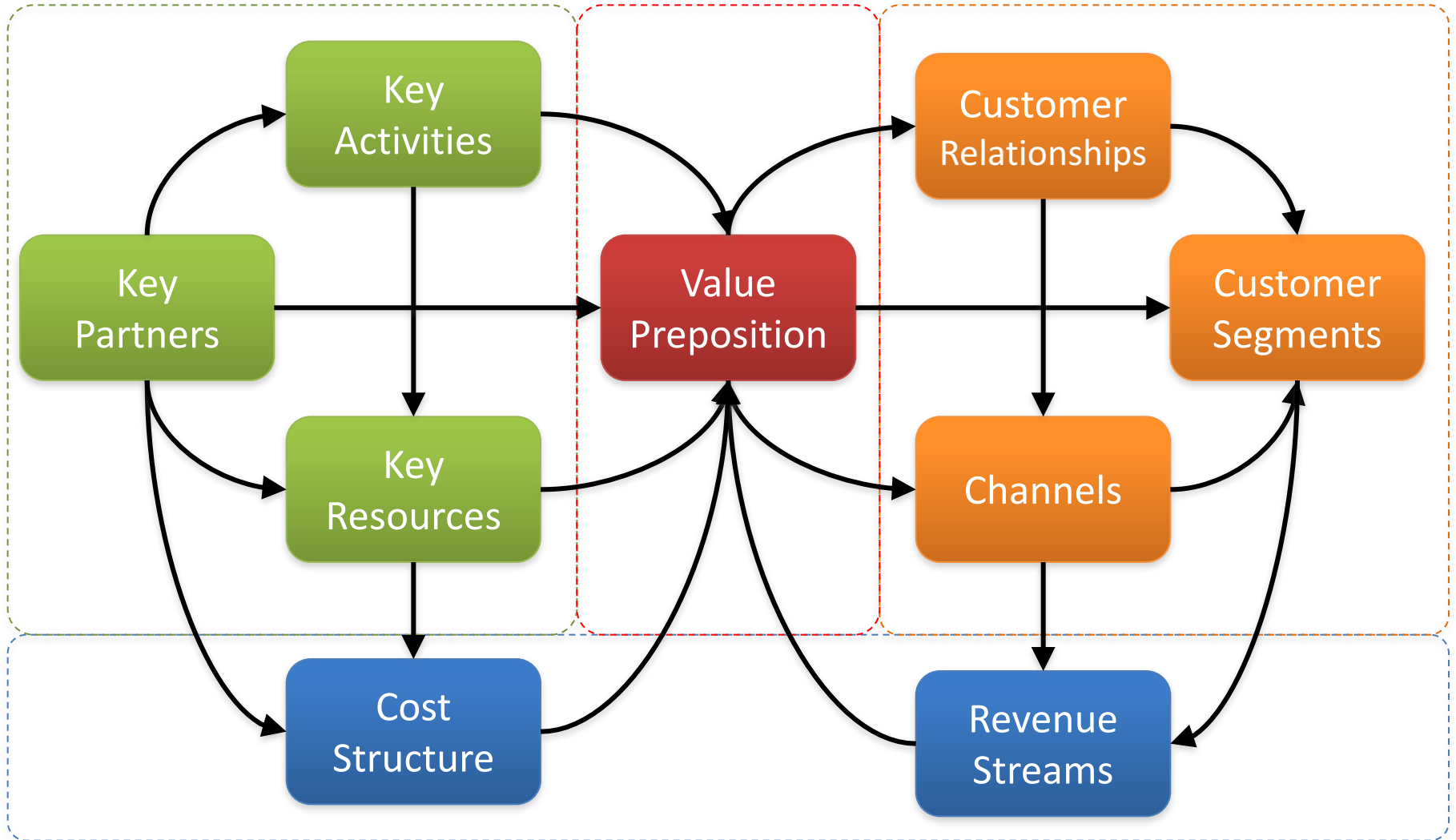
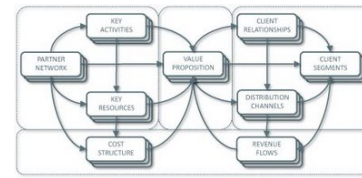
# Definition of **Business Model**

**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.**

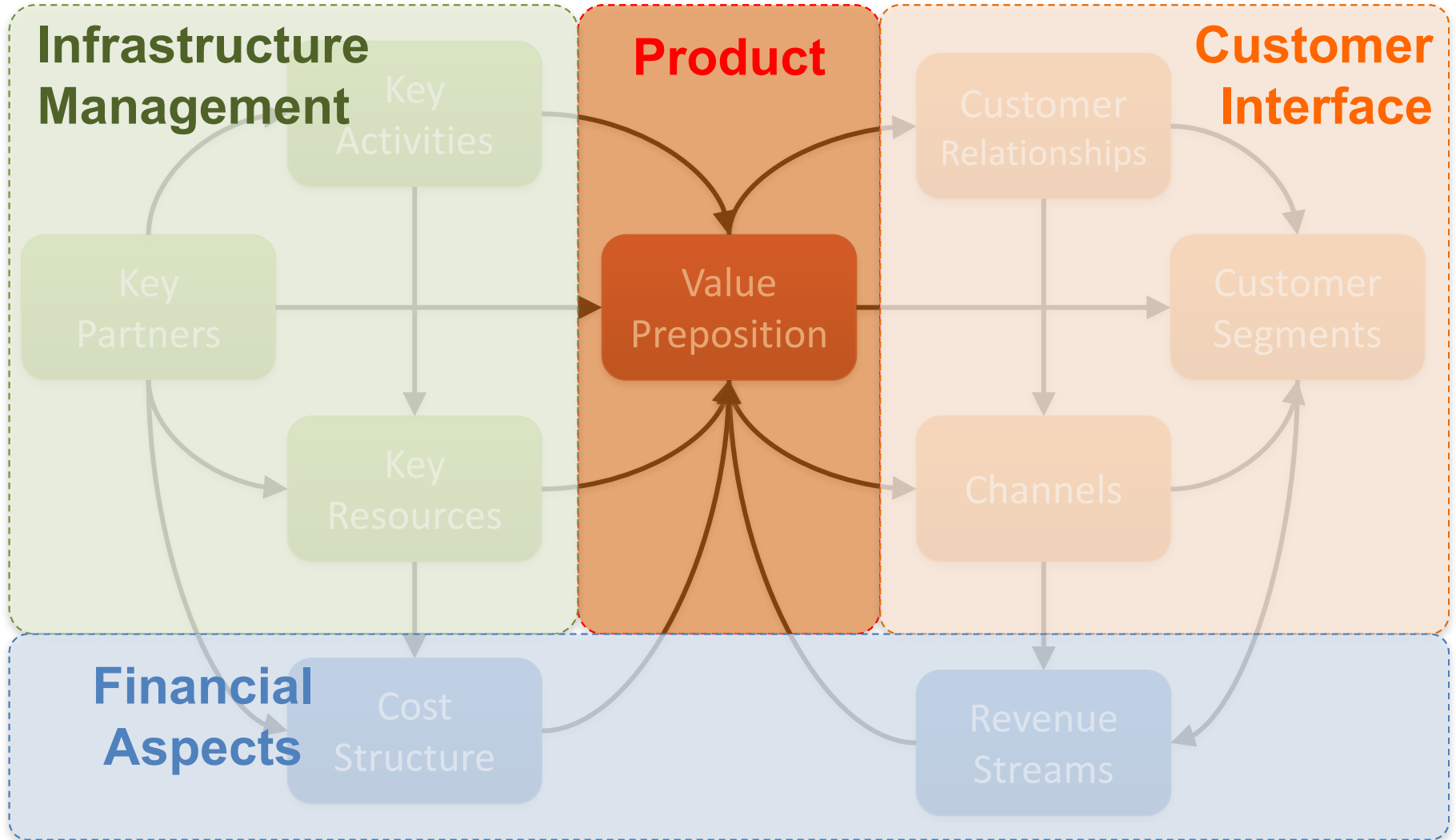
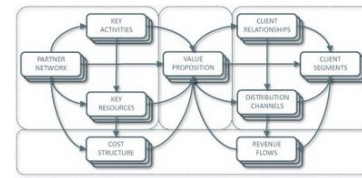
# Business Model Canvas



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>

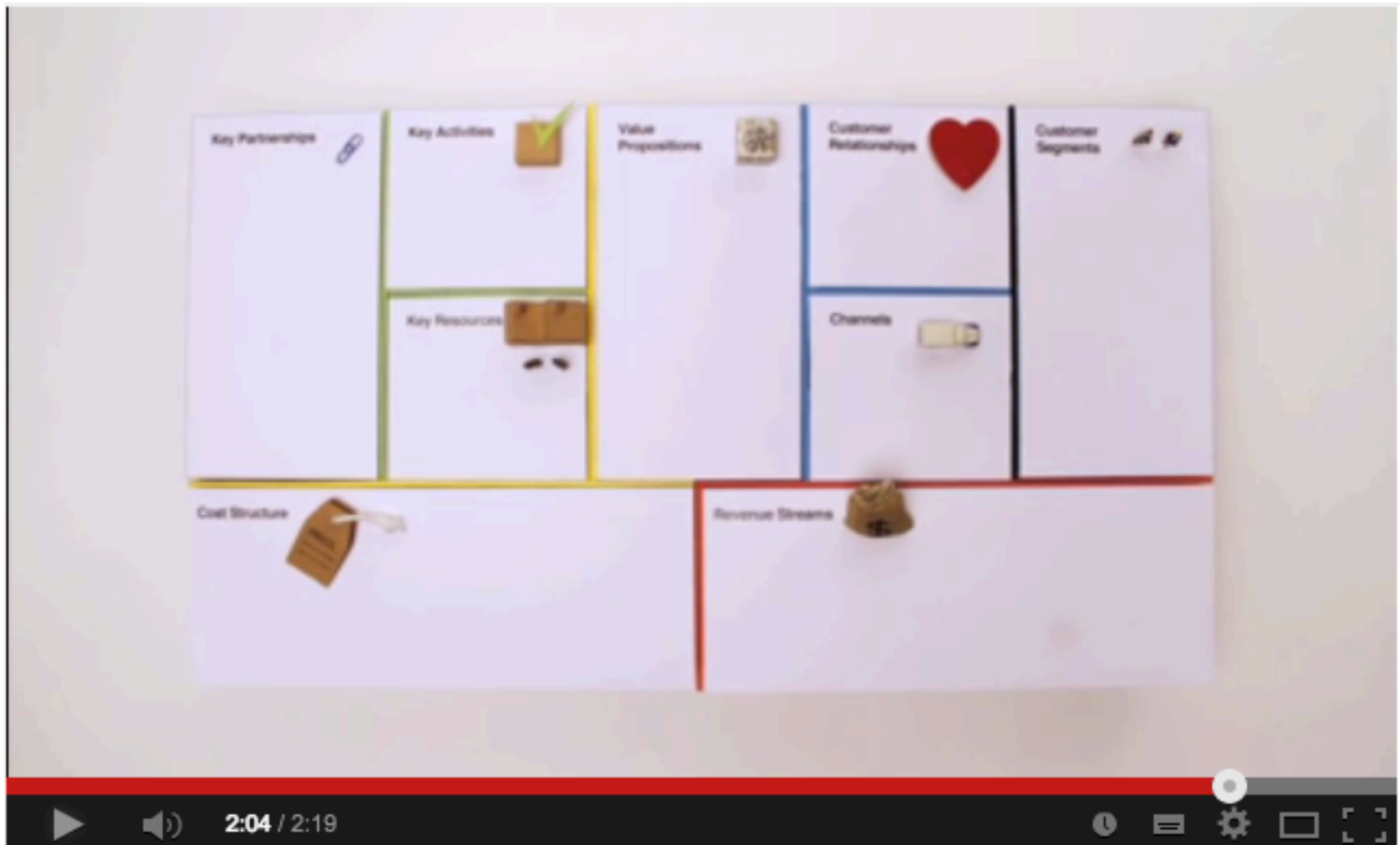


# Business Model Canvas

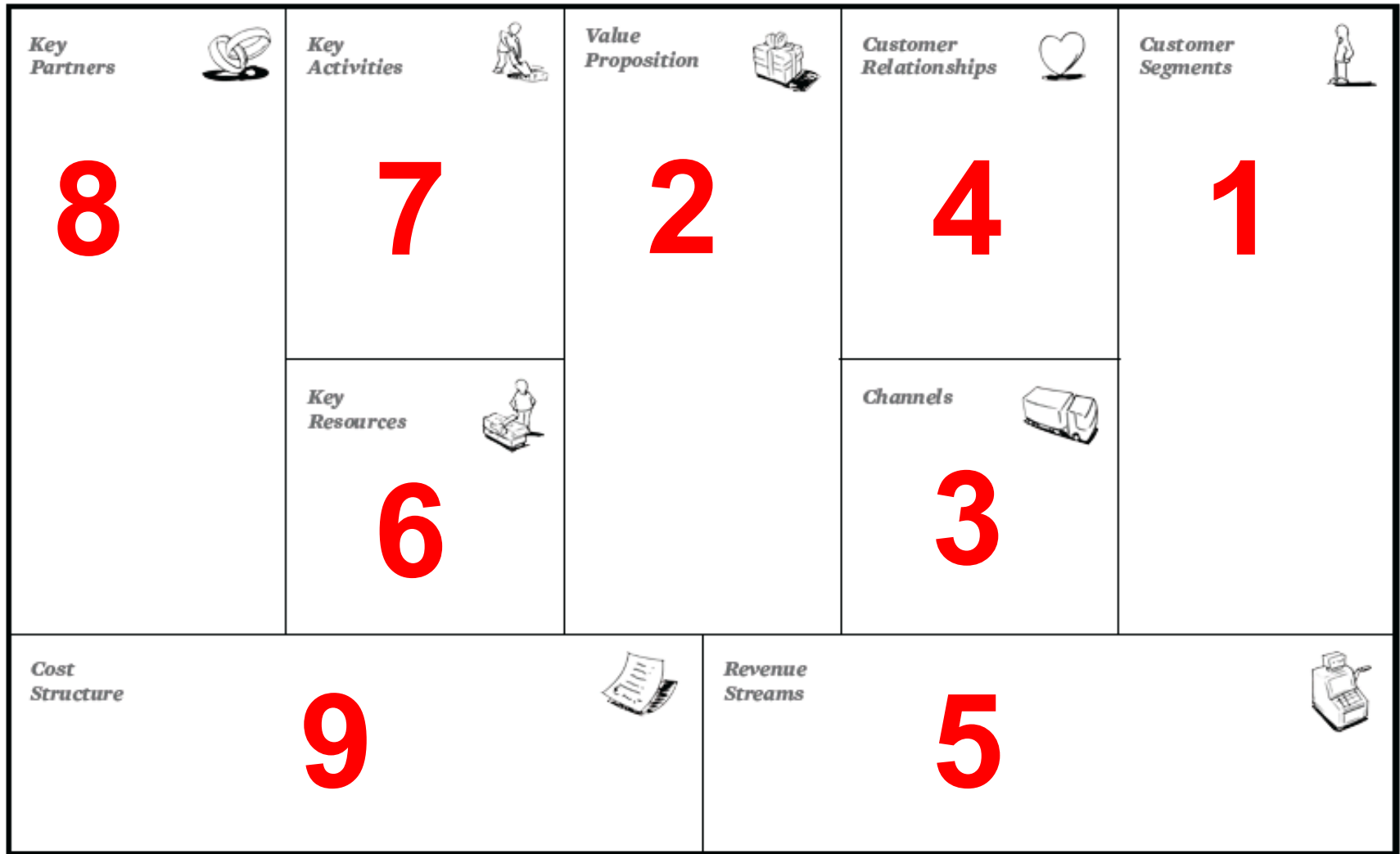


Source: [http://nonlinearthinking.typepad.com/nonlinear\\_thinking/2008/07/the-business-model-canvas.html](http://nonlinearthinking.typepad.com/nonlinear_thinking/2008/07/the-business-model-canvas.html)  
<https://www.youtube.com/watch?v=QoAOzMTLP5s>

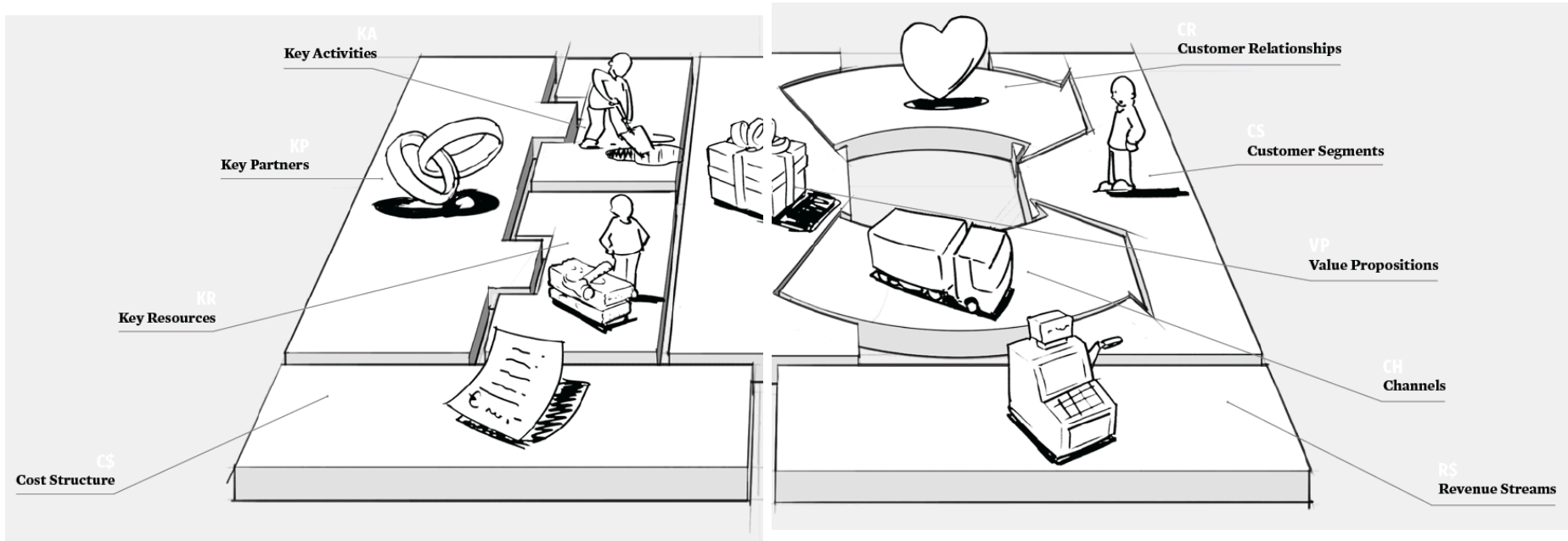
# Business Model Canvas Explained



# The 9 Building Blocks of Business Model

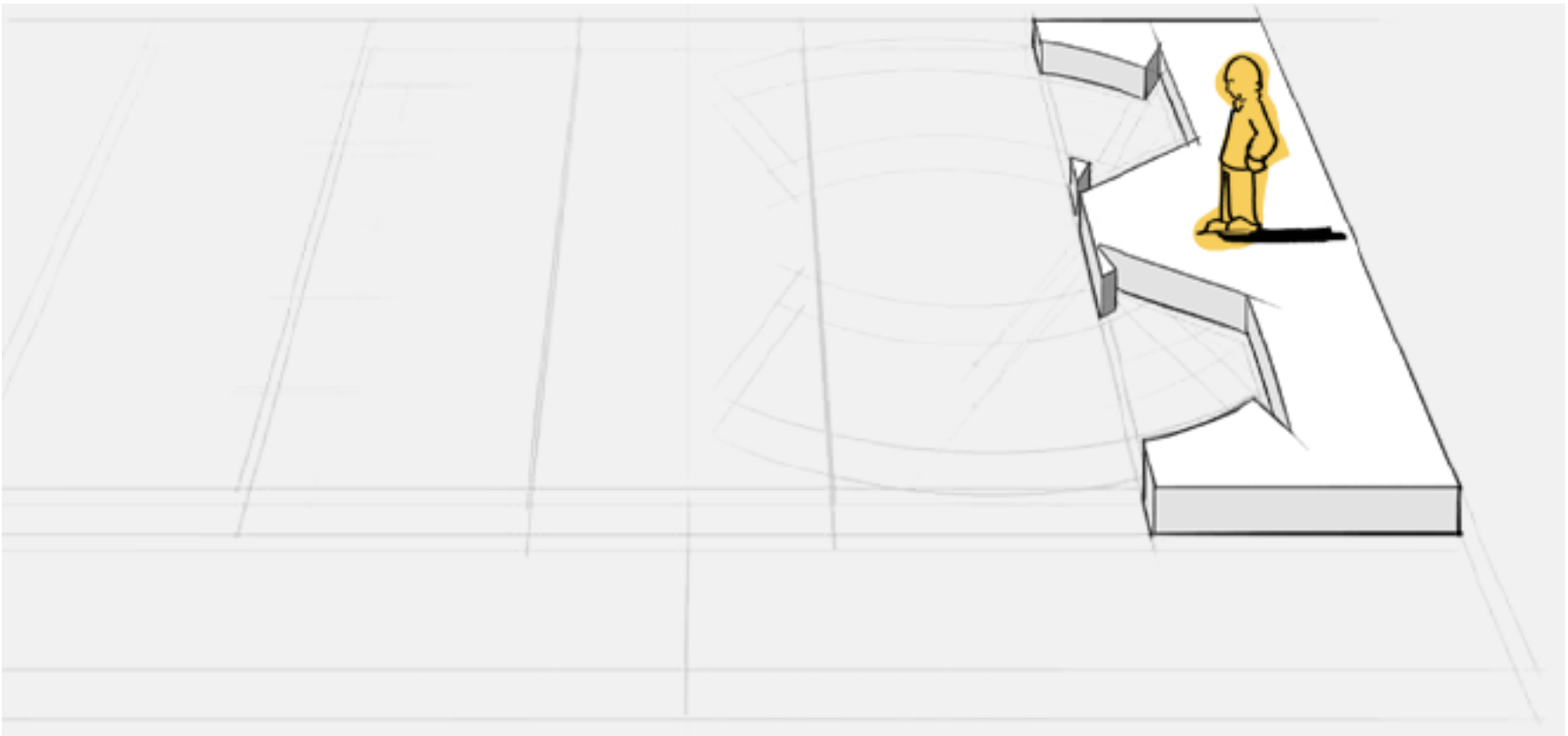


# The 9 Building Blocks of Business Model



# 1. Customer Segments

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



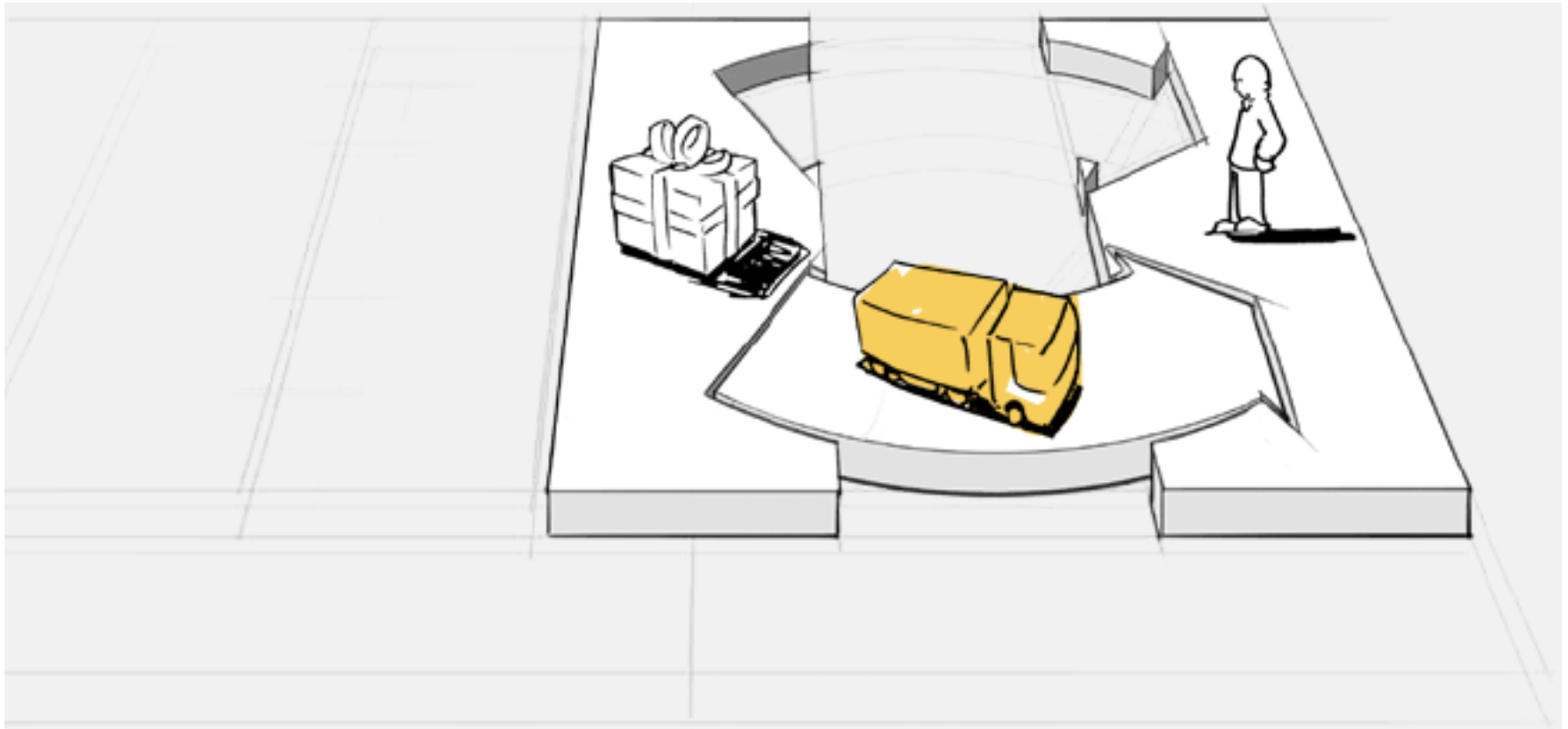
## 2. Value Propositions

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



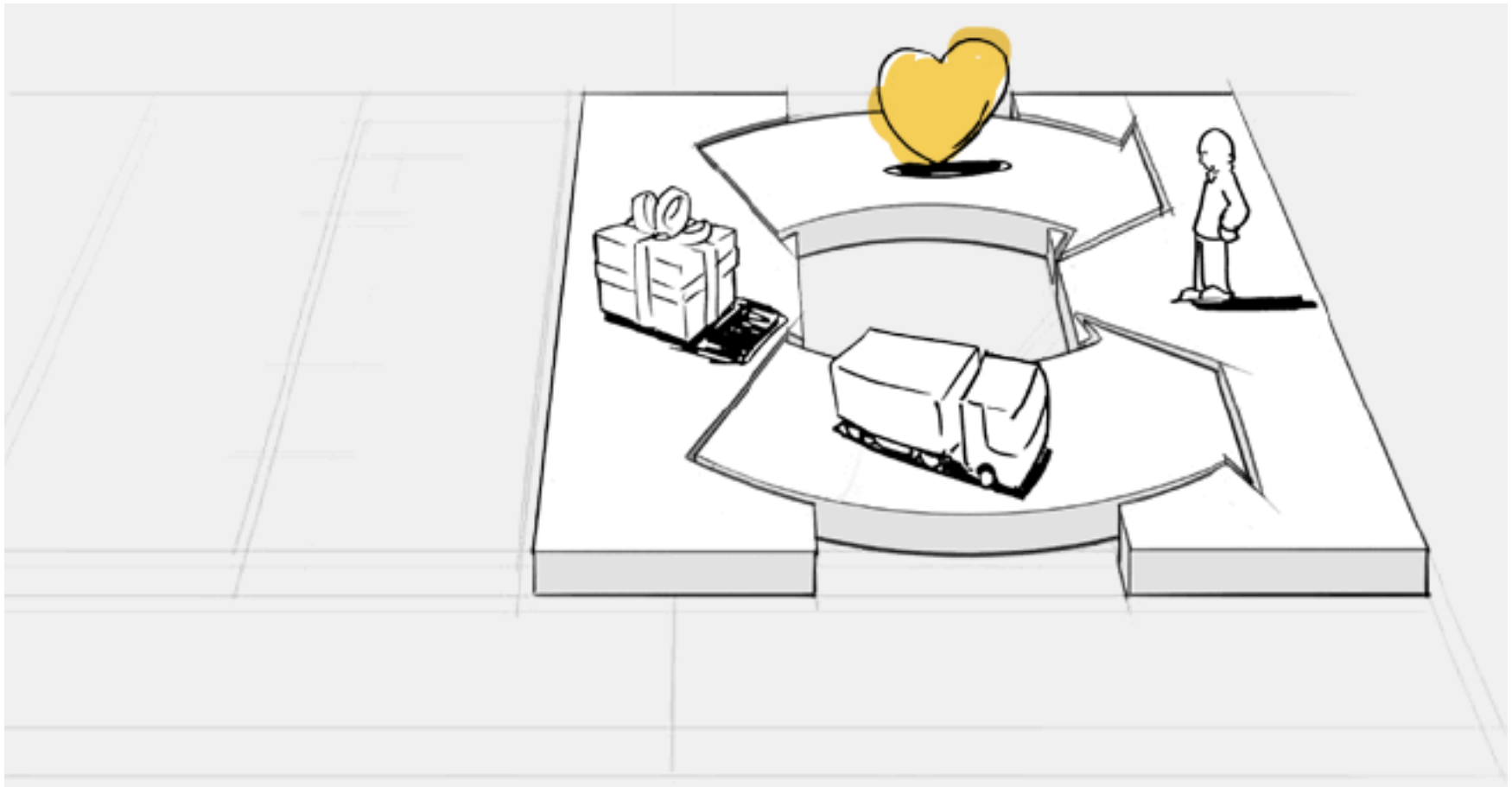
# 3. Channels

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



# 4. Customer Relationships

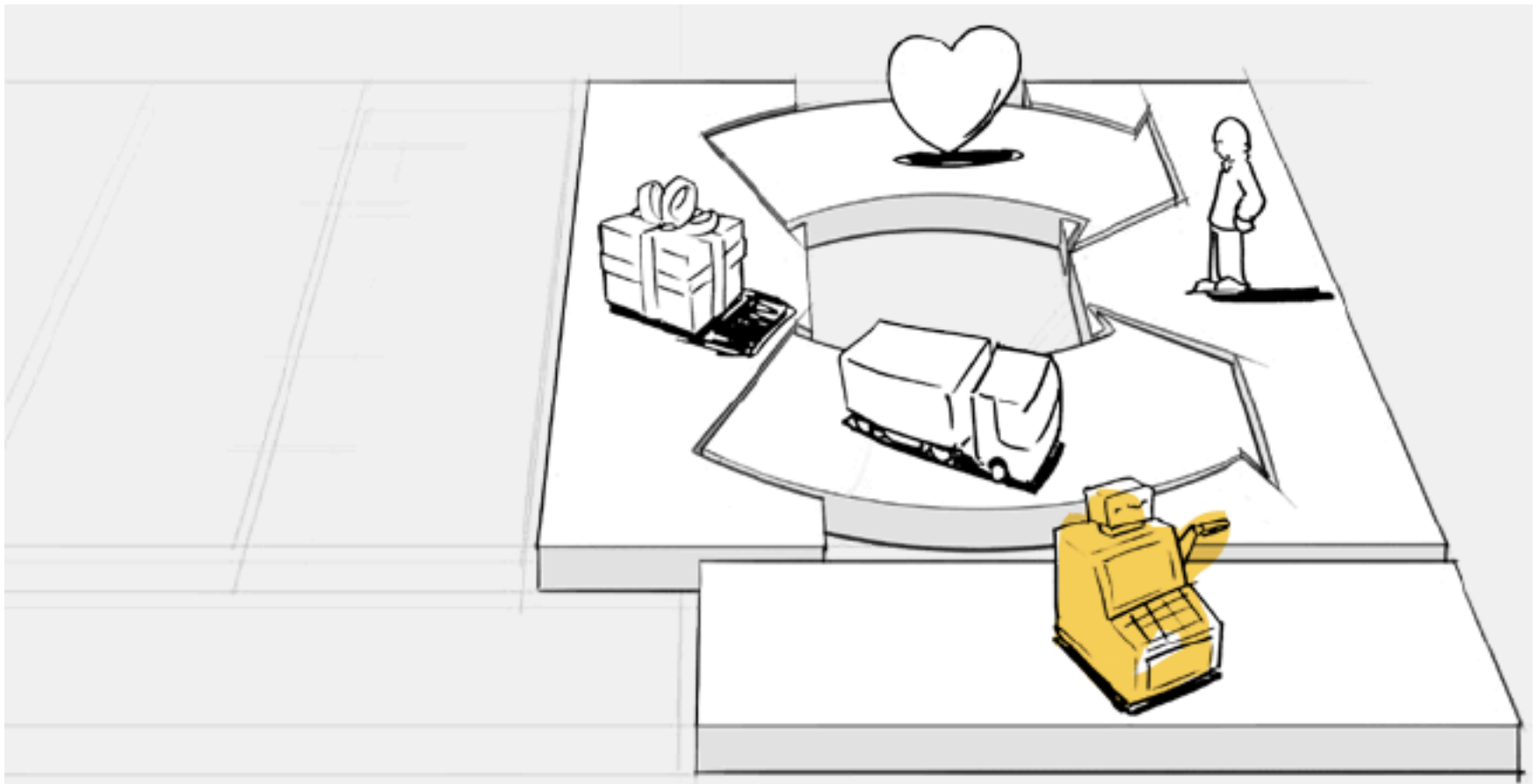
Describes the types of relationships a company establishes with specific Customer Segments





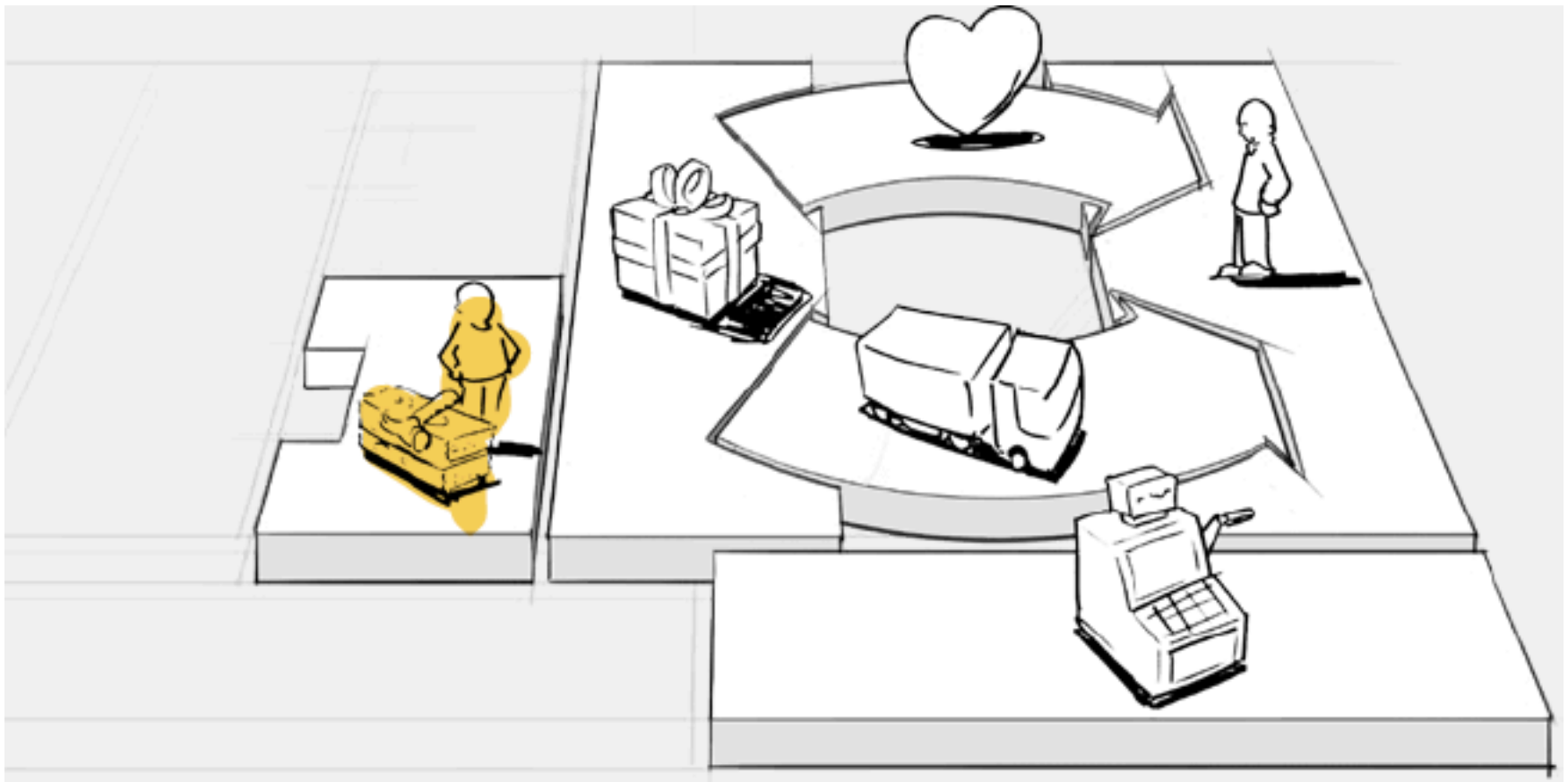
# 5. Revenue Streams

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



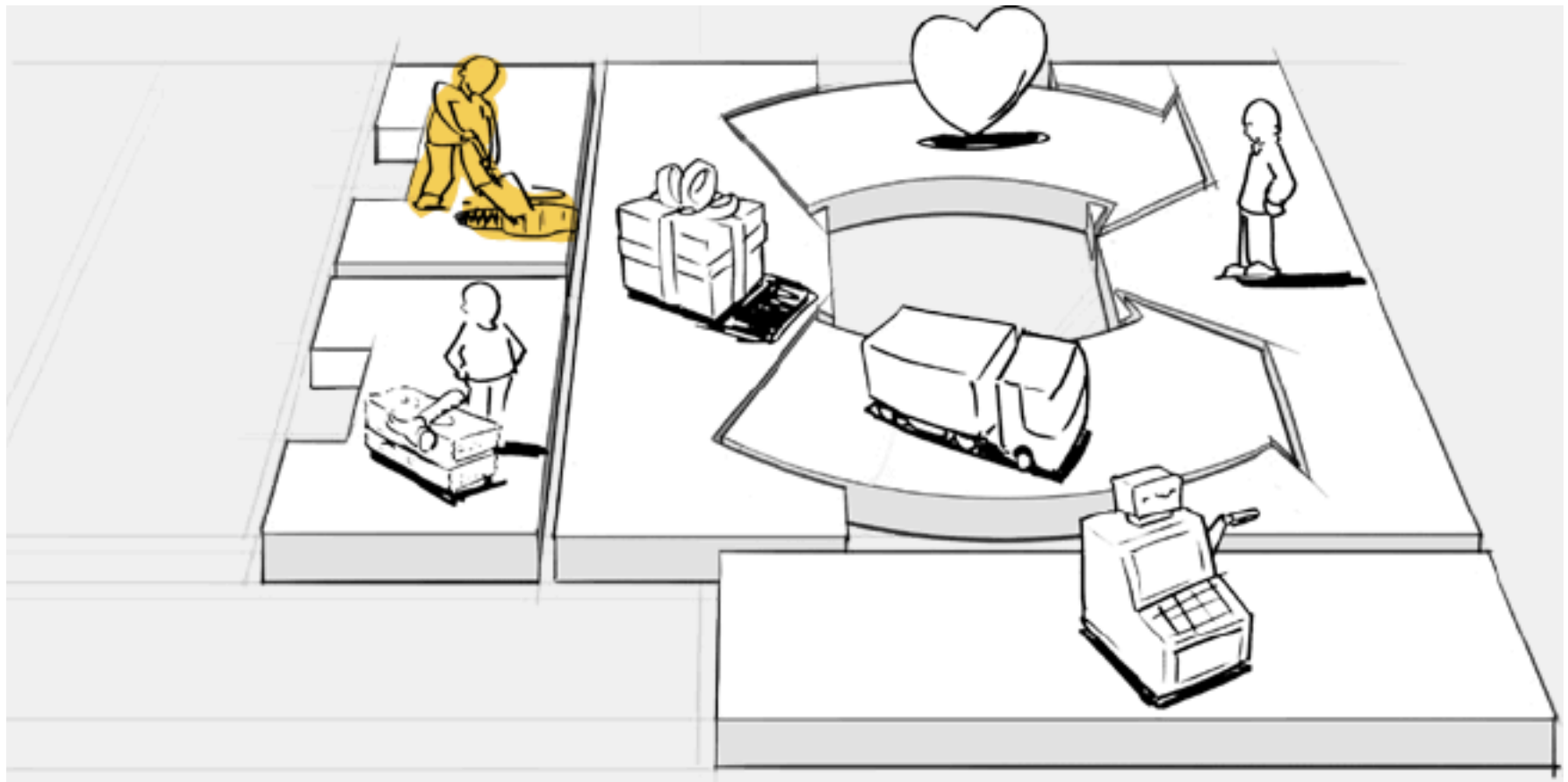
# 6. Key Resources

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



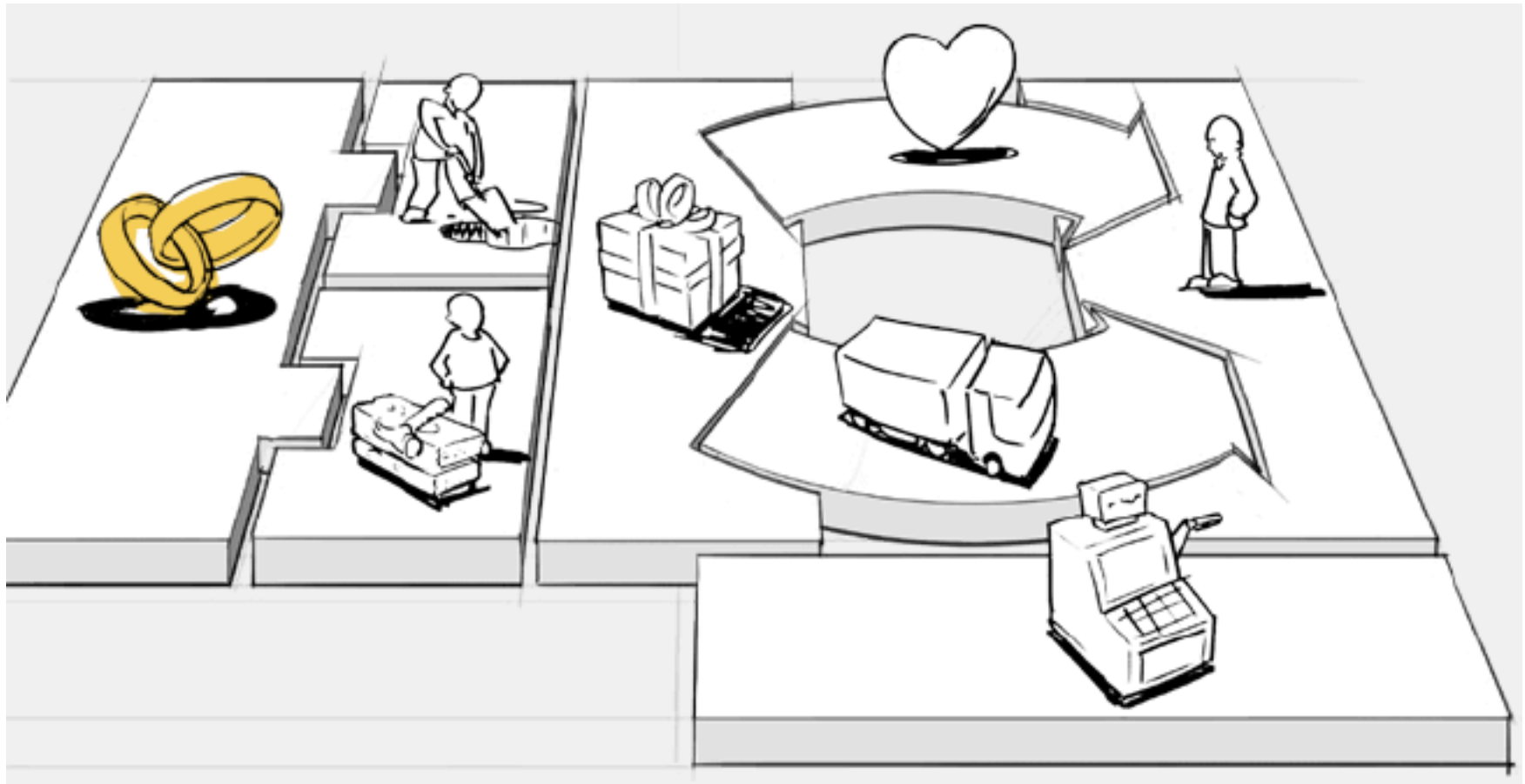
# 7. Key Activities

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



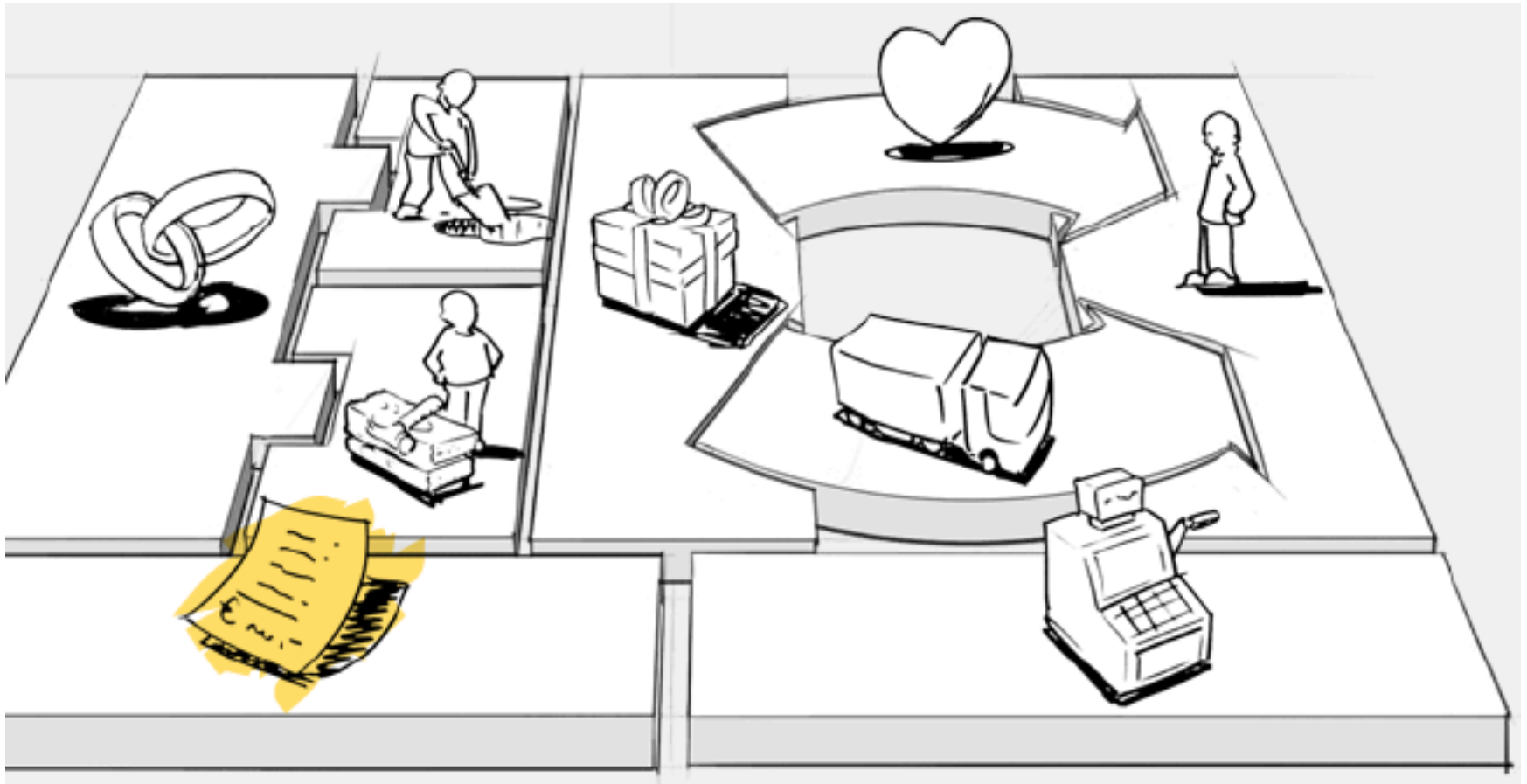
# 8. Key Partnerships

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

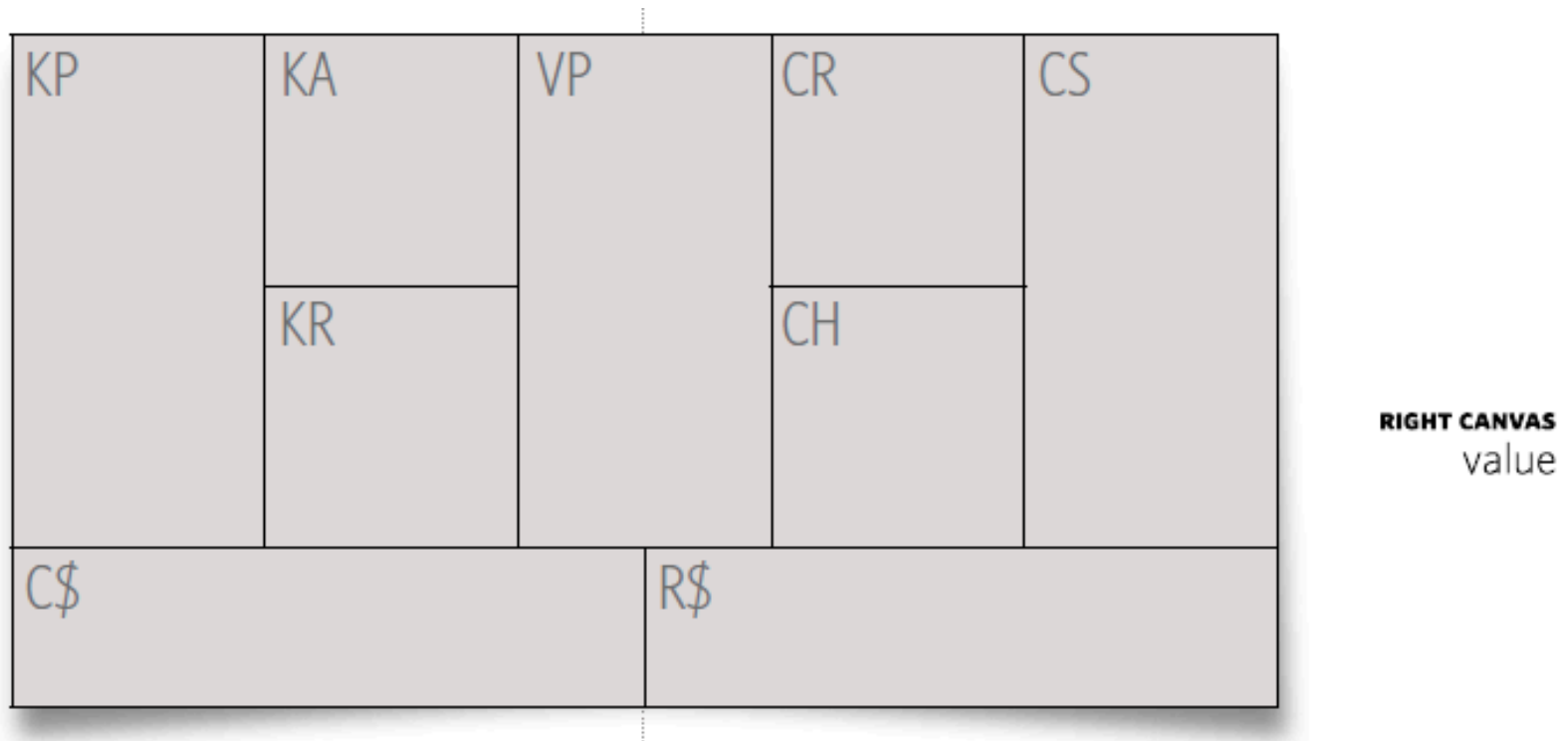
- The business model elements result in the cost structure.

# Business Model Generation





# Business Model Generation



**Production and Logistics**

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

**Differentiation**

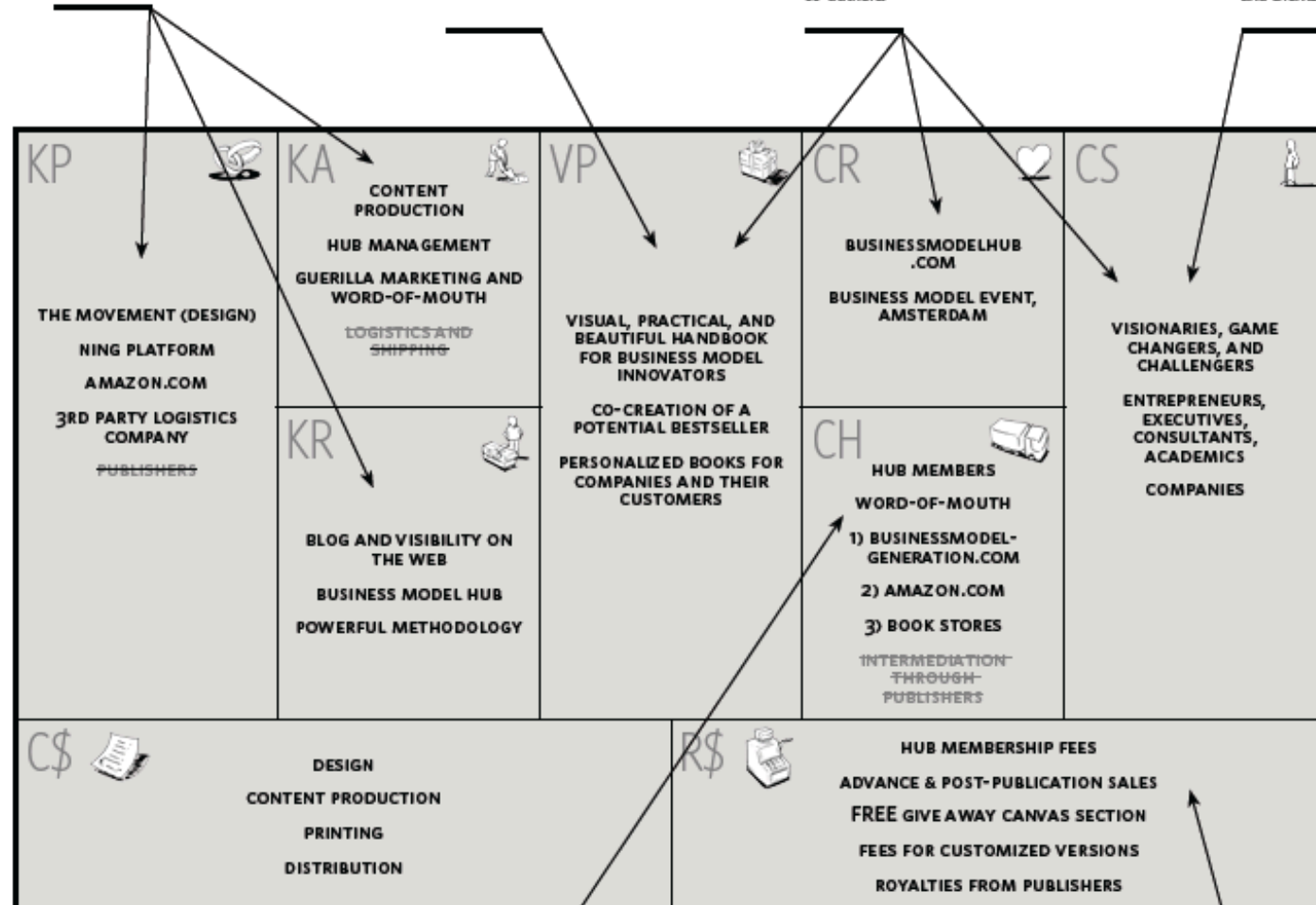
An entirely different format, business model, and story for the book makes it stand out in a crowded market.

**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

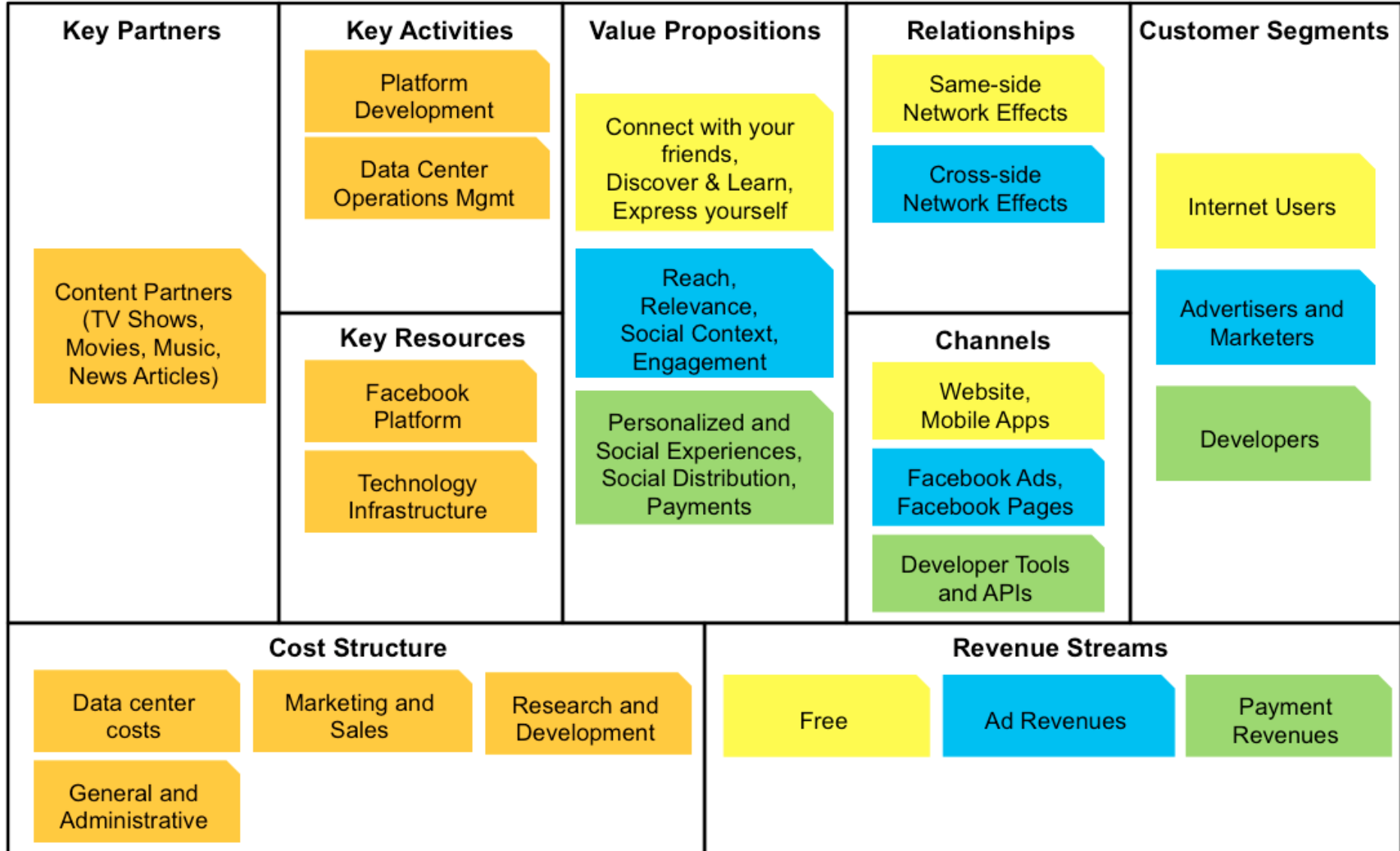
**Reach**

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.

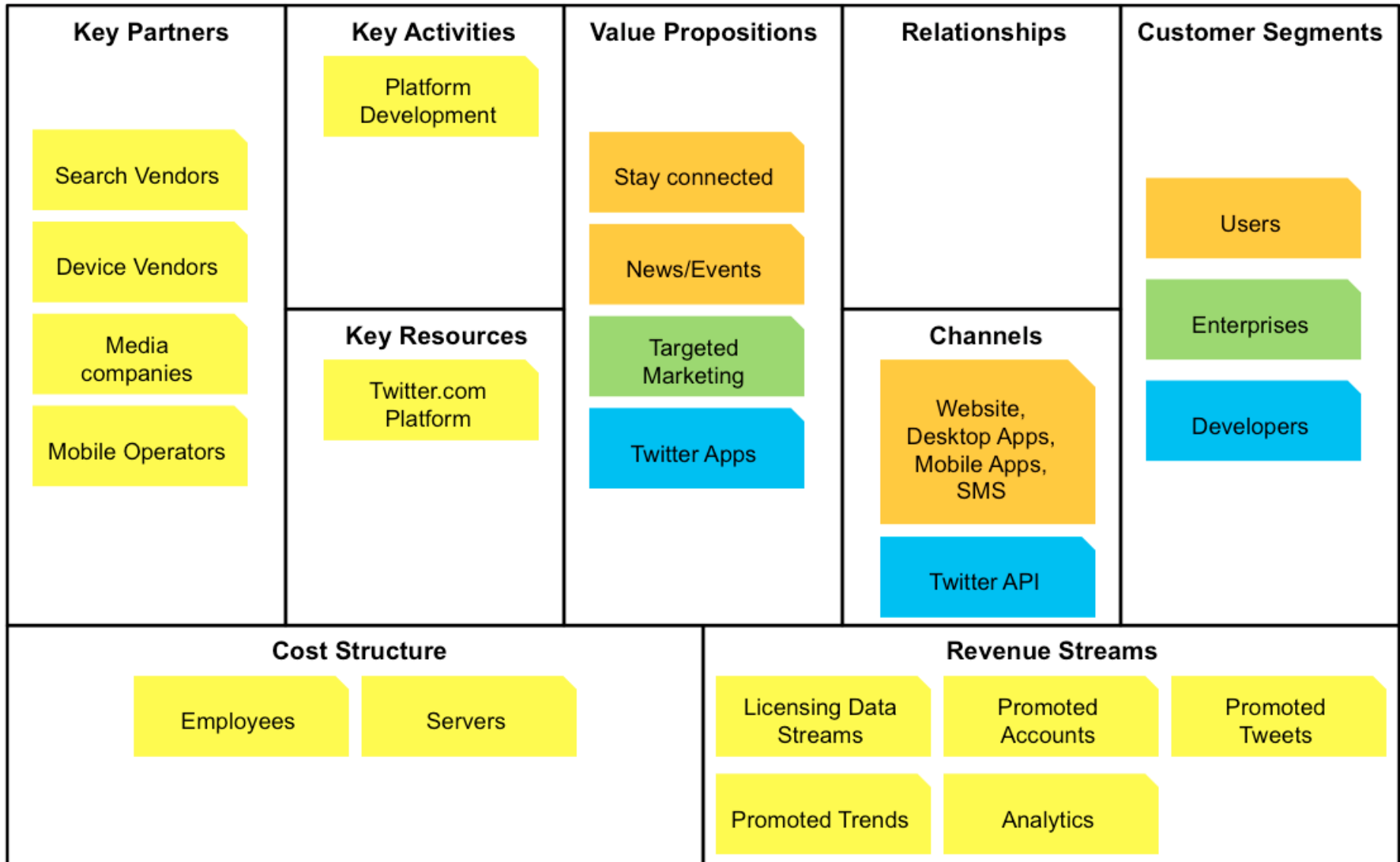
**Revenues**

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

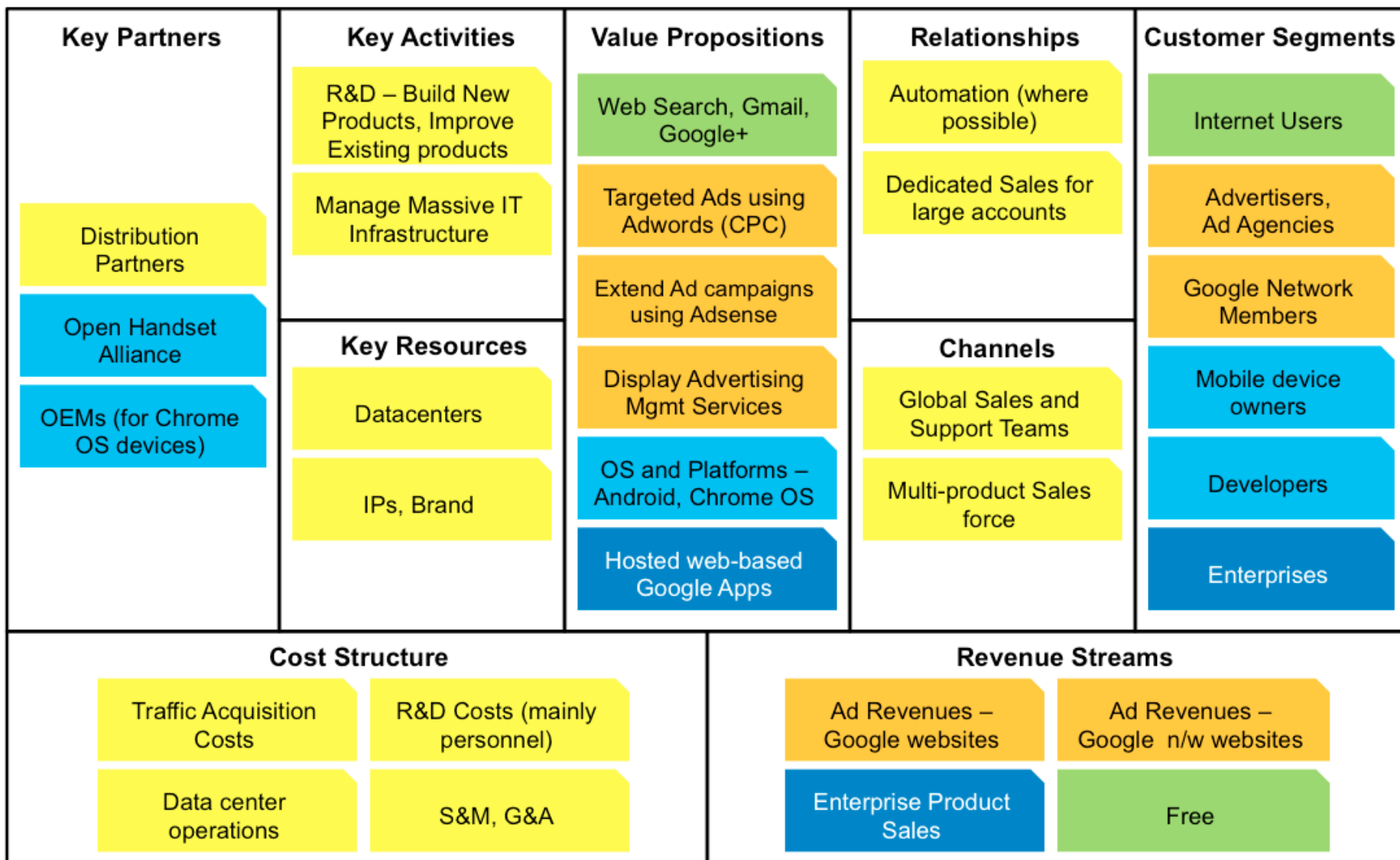
# Facebook – World's leading Social Networking Site (SNS)



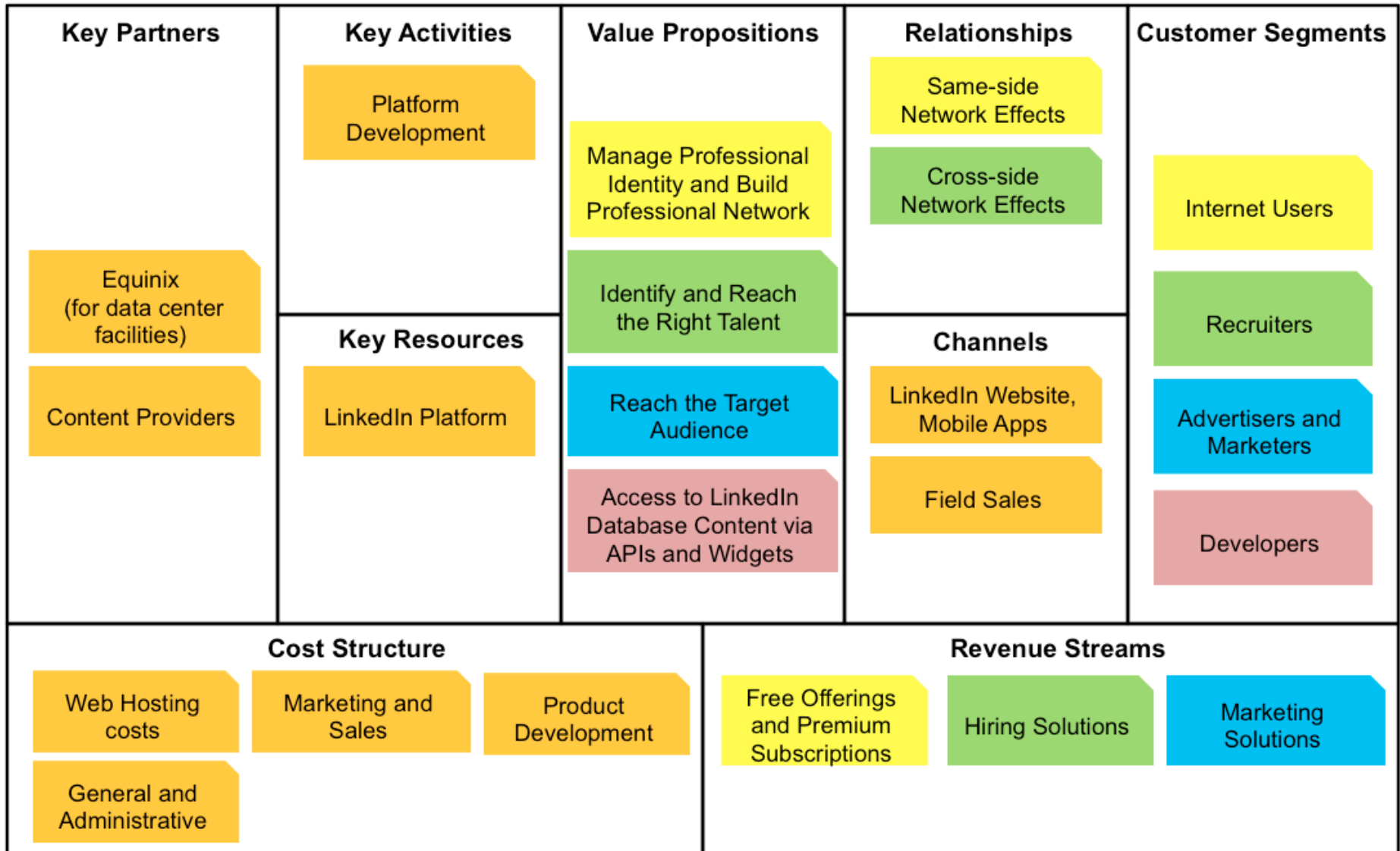
# Twitter Business Model



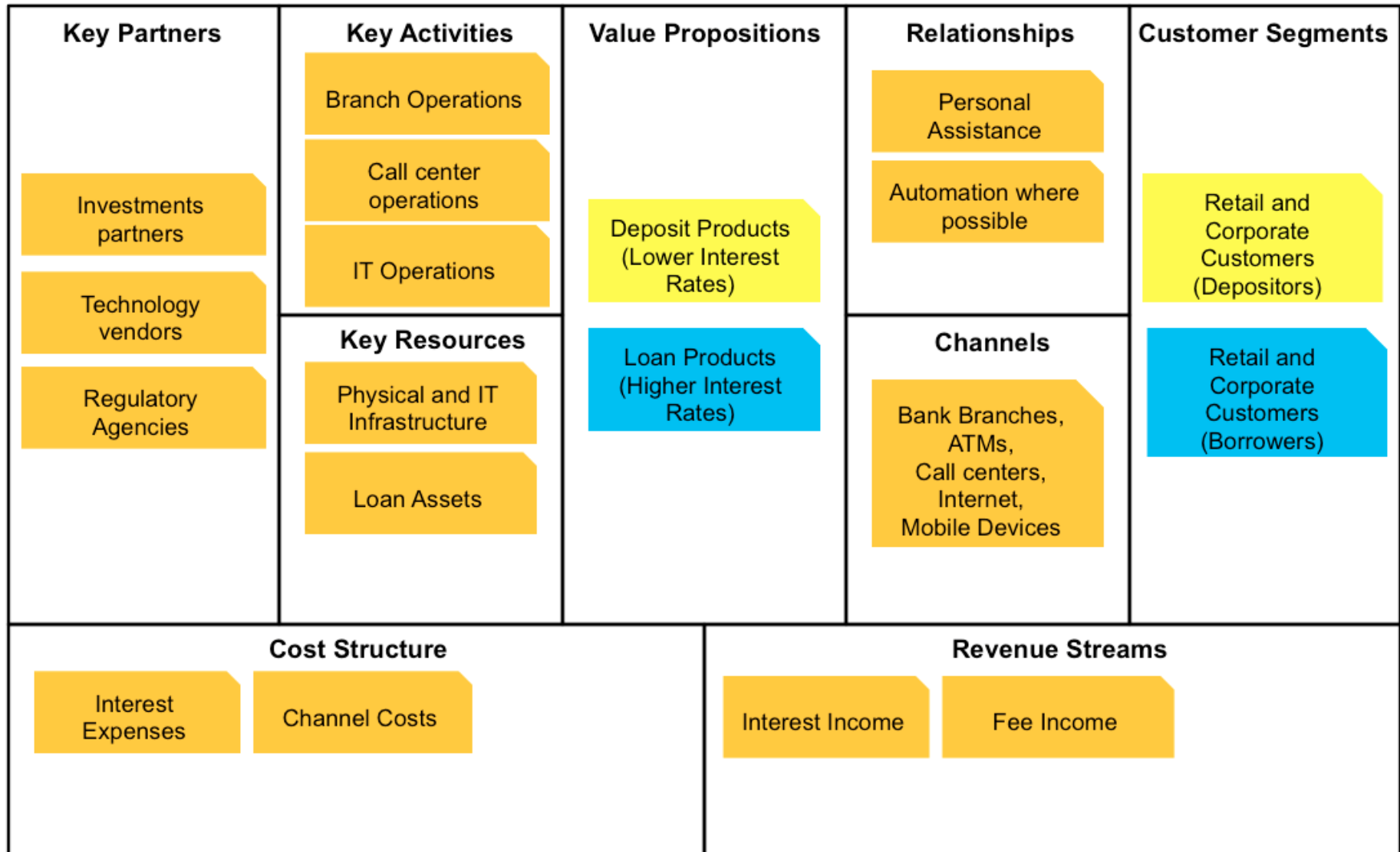
# Google Business Model



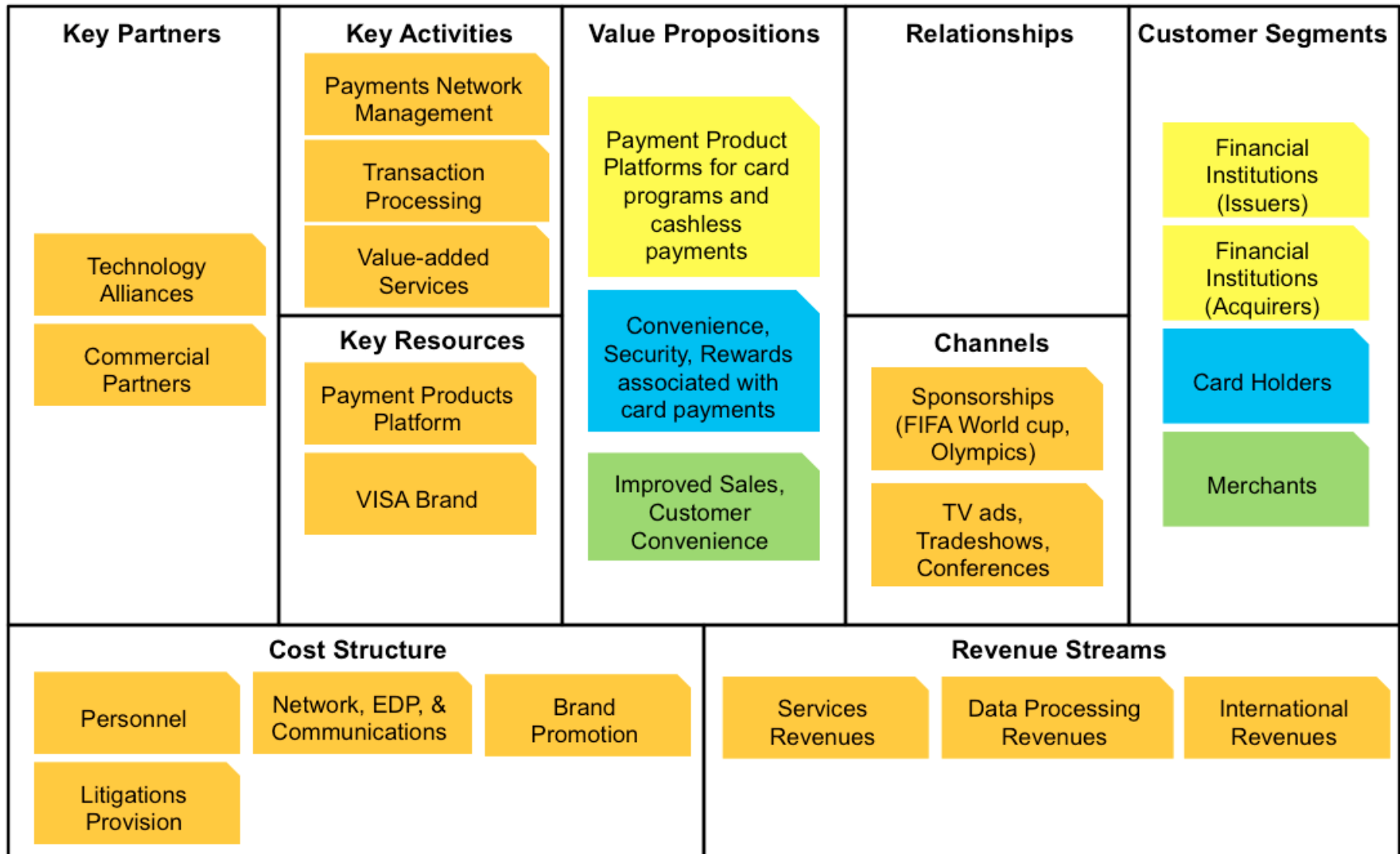
# LinkedIn – World's Largest Professional Network



# Business Model of Banking companies



# VISA – Leader in Global Payments Industry



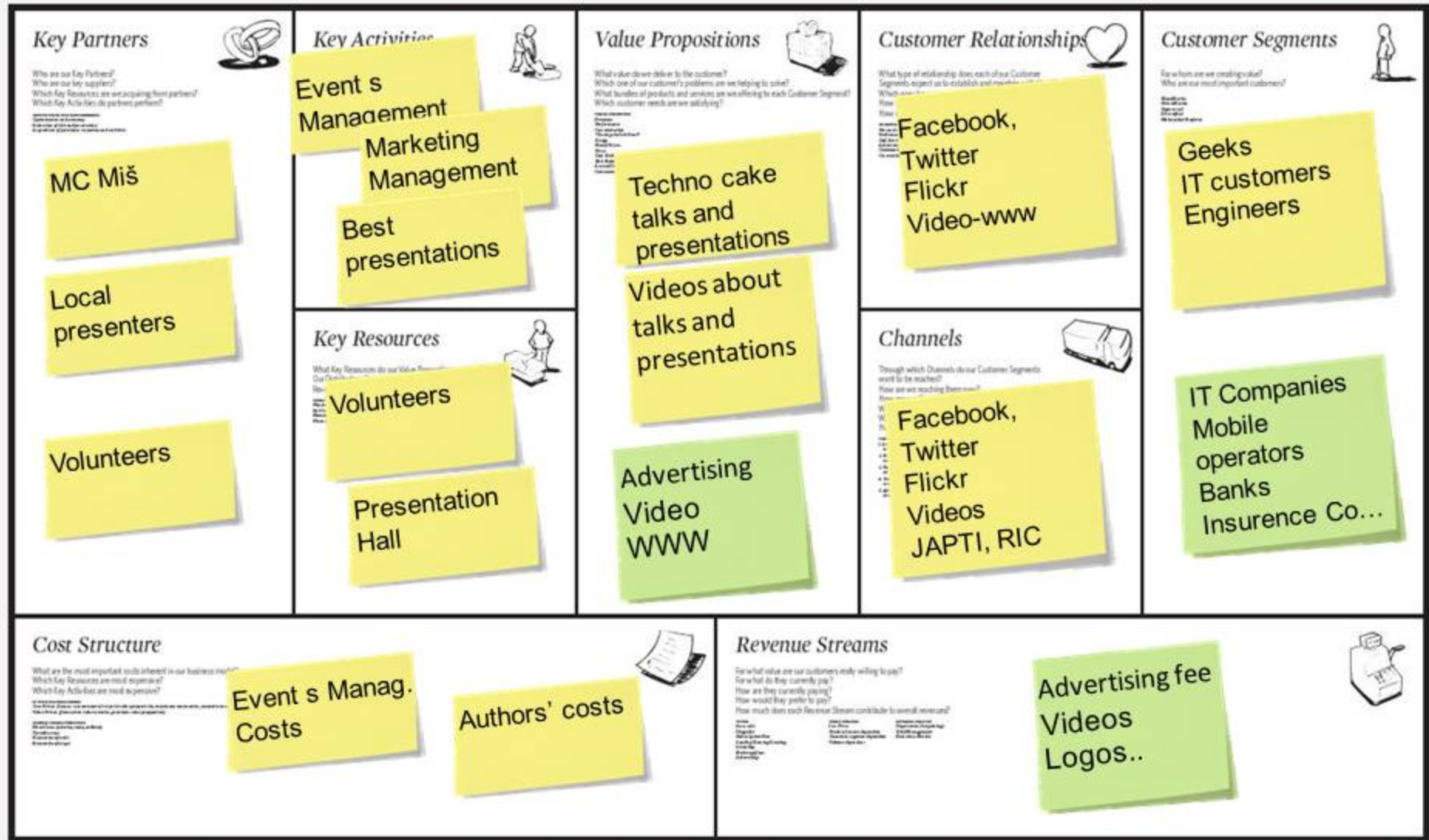


# The Business Model Canvas

Designed for: Techno Cake

Designed by: Danilo Tič

On: 1.2.2011  
Revision: 01



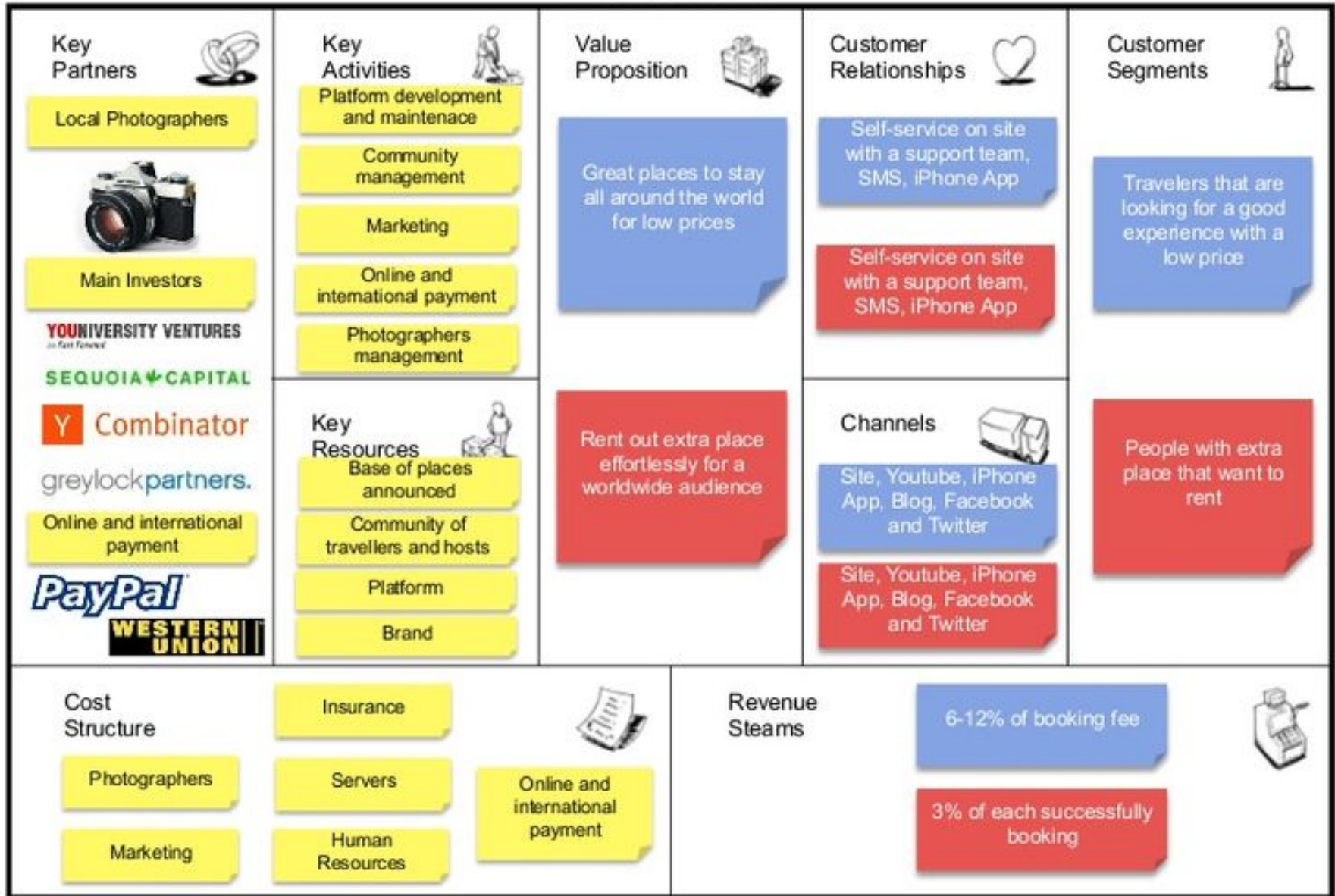
# How Airbnb Works?

## Insights into Business Model & Revenue Model



# Airbnb Business Model Canvas







# Case Study: P&G (Chap. 2) (pp.84-85)

## Piloting Procter & Gamble from Decision Cockpits

1. What management, organization, and technology issues had to be addressed when implementing Business Sufficiency, Business Sphere, and Decision Cockpits?
2. How did these decision-making tools change the way the company ran its business? How effective are they? Why?
3. How are these systems related to P&G's business strategy?

# 資訊管理專題

## (Hot Issues of Information Management)

1. 請同學於資訊管理專題個案討論前  
應詳細研讀個案，並思考個案研究問題。
2. 請同學於上課前複習相關資訊管理相關理論，  
以作為個案分析及擬定管理對策的依據。
3. 請同學於上課前  
先繳交資訊管理專題個案研究問題書面報告。
4. 上課時間地點：  
週四 7,8 (14:10-16:00) B702

# References

- Kenneth C. Laudon & Jane P. Laudon (2014),  
Management Information Systems: Managing the  
Digital Firm, Thirteenth Edition, Pearson.
- Kenneth C. Laudon & Jane P. Laudon 原著，  
游張松 主編，陳文生 翻譯 (2014)，  
資訊管理系統，第13版，滄海