Tamkang University
淡江大學

資訊管理專題

Tamkang University

Hot Issues of Information Management

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

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Min-Yuh Day
戴敏育
Assistant Professor
專任助理教授

Dept. of Information Management, Tamkang University
淡江大學 資訊管理學系

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

2016-09-20

課程大綱 (Syllabus)

週次 (Week)	日期 (Date)	內容 (Subject/Topics)
1	2016/09/13	Introduction to Case Study for Information Management Hot Topics
2	2016/09/20	Information Systems in Global Business: UPS (Chap. 1) (pp.53-54)
3	2016/09/27	Global E-Business and Collaboration: P&G (Chap. 2) (pp.84-85)
4	2016/10/04	Information Systems, Organization, and Strategy: Starbucks (Chap. 3) (pp.129-130)
5	2016/10/11	Ethical and Social Issues in Information Systems: Facebook (Chap. 4) (pp.188-190)

課程大綱 (Syllabus)

週次 (Week)	日期 (Date)	內容 (Subject/Topics)
6	2016/10/18	IT Infrastructure and Emerging Technologies: Amazon and Cloud Computing (Chap. 5) (pp. 234-236)
7	2016/10/25	Foundations of Business Intelligence: IBM and Big Data (Chap. 6) (pp.261-262)
8	2016/11/01	Telecommunications, the Internet, and Wireless Technology: Google, Apple, and Microsoft (Chap. 7) (pp.318-320)
9	2016/11/08	Midterm Report (期中報告)
10	2016/11/15	期中考試週

課程大綱 (Syllabus)

週次	日期	內容（Subject/Topics）
11	2016/11/22	Enterprise Applications: Summit and SAP (Chap. 9) (pp.396-398)
12	2016/11/29	E-commerce: Zagat (Chap. 10) (pp.443-445)
13	2016/12/06	Enhancing Decision Making: Zynga (Chap. 12) (pp.512-514)
14	2016/12/13	Building Information Systems: USAA (Chap. 13) (pp.547-548)
15	2016/12/20	Managing Projects: NYCAPS and CityTime (Chap. 14) (pp.586-588)
16	2016/12/27	Final Report I (期末報告 I)
17	2017/01/03	Final Report II (期末報告 II)
18	2017/01/10	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**

Source: Kenneth C. Laudon & Jane P. Laudon (2014), Management Information Systems: Managing the Digital Firm, Thirteenth Edition, Pearson.

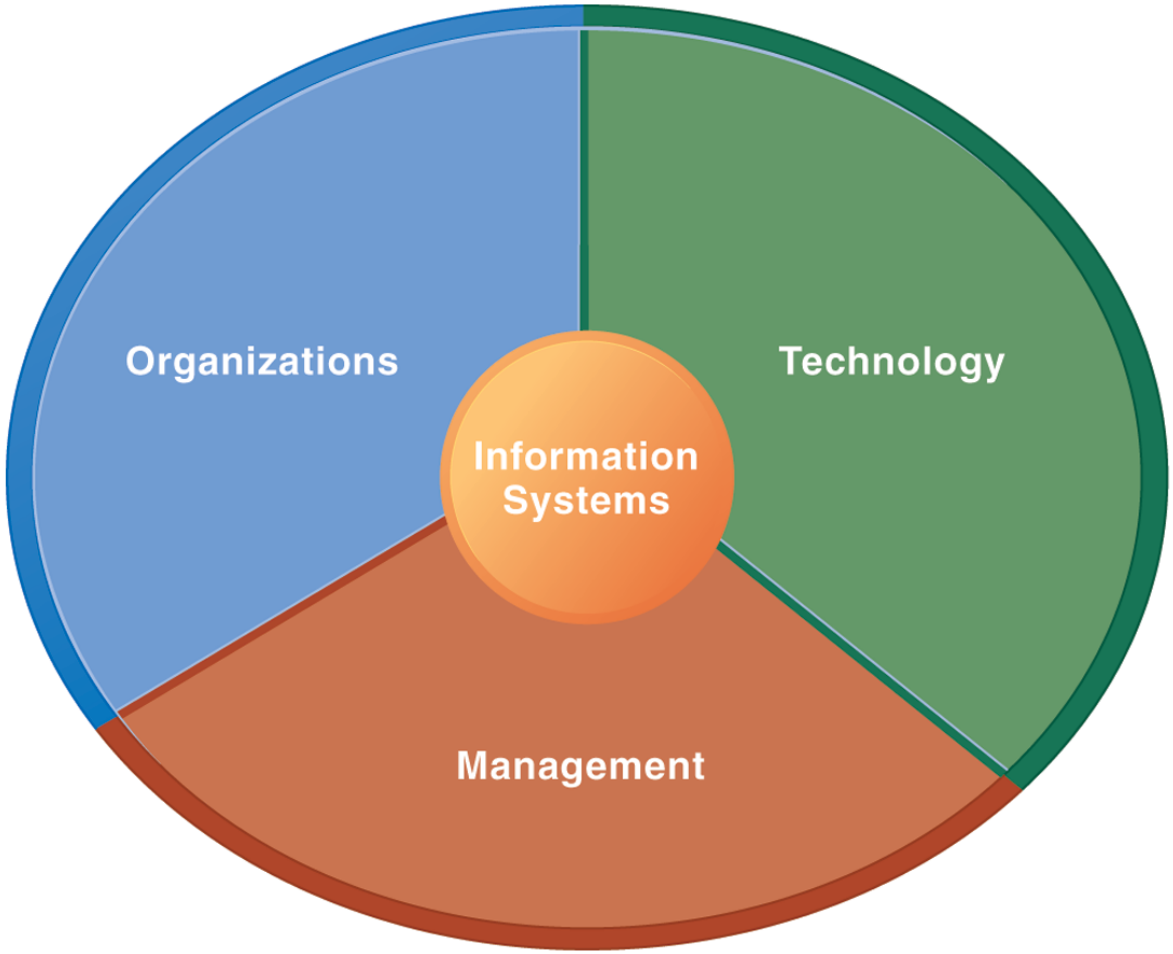
Chap. 1
Information Systems in Global Business:
UPS

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

UPS Competes Globally with Information Technology

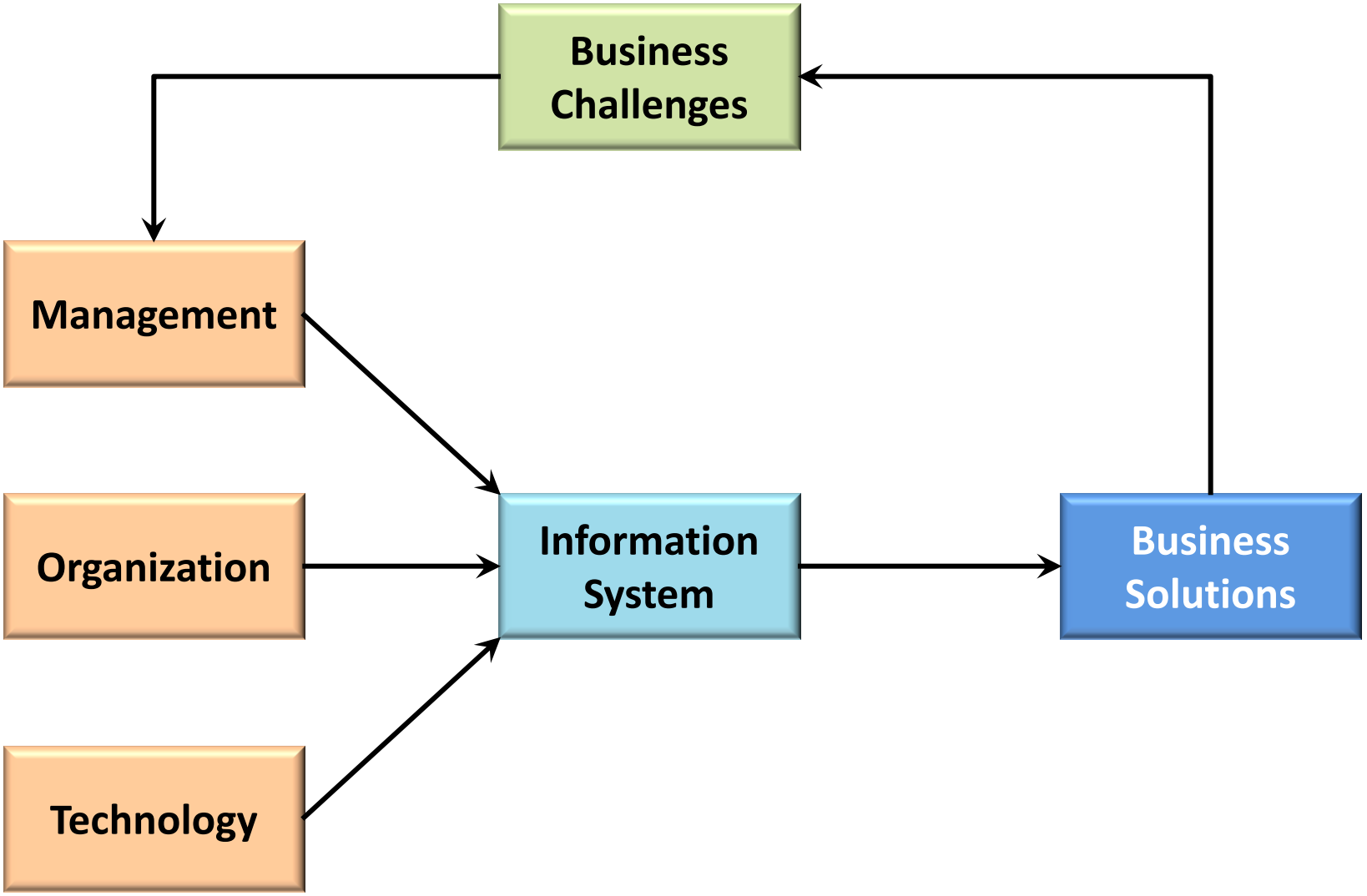
1. What are the inputs, processing, and outputs of UPS's package tracking system?
2. What technologies are used by UPS? How are these technologies related to UPS's business strategy?
3. What strategic business objectives do UPS's information systems address?
4. What would happen if UPS's information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

Information Management (MIS) Information Systems



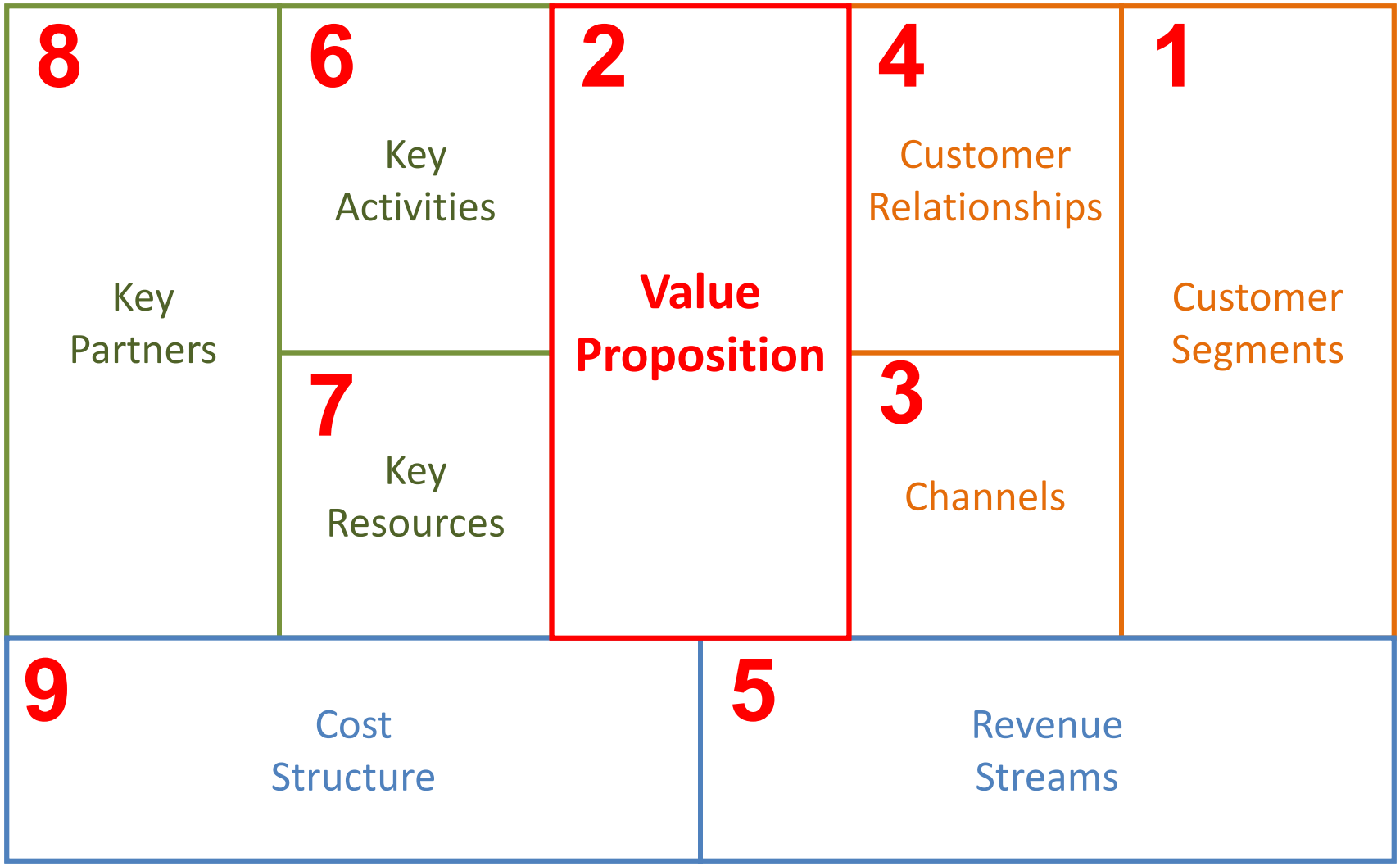
Source: Kenneth C. Laudon & Jane P. Laudon (2014), Management Information Systems: Managing the Digital Firm, Thirteenth Edition, Pearson.

Overview of Fundamental MIS Concepts



Source: Kenneth C. Laudon & Jane P. Laudon (2014), Management Information Systems: Managing the Digital Firm, Thirteenth Edition, Pearson.

Business Model



Source: Alexander Osterwalder & Yves Pigneur, Business Model Generation: A Handbook for Visionaries, Game Changers, and Challengers, Wiley, 2010.

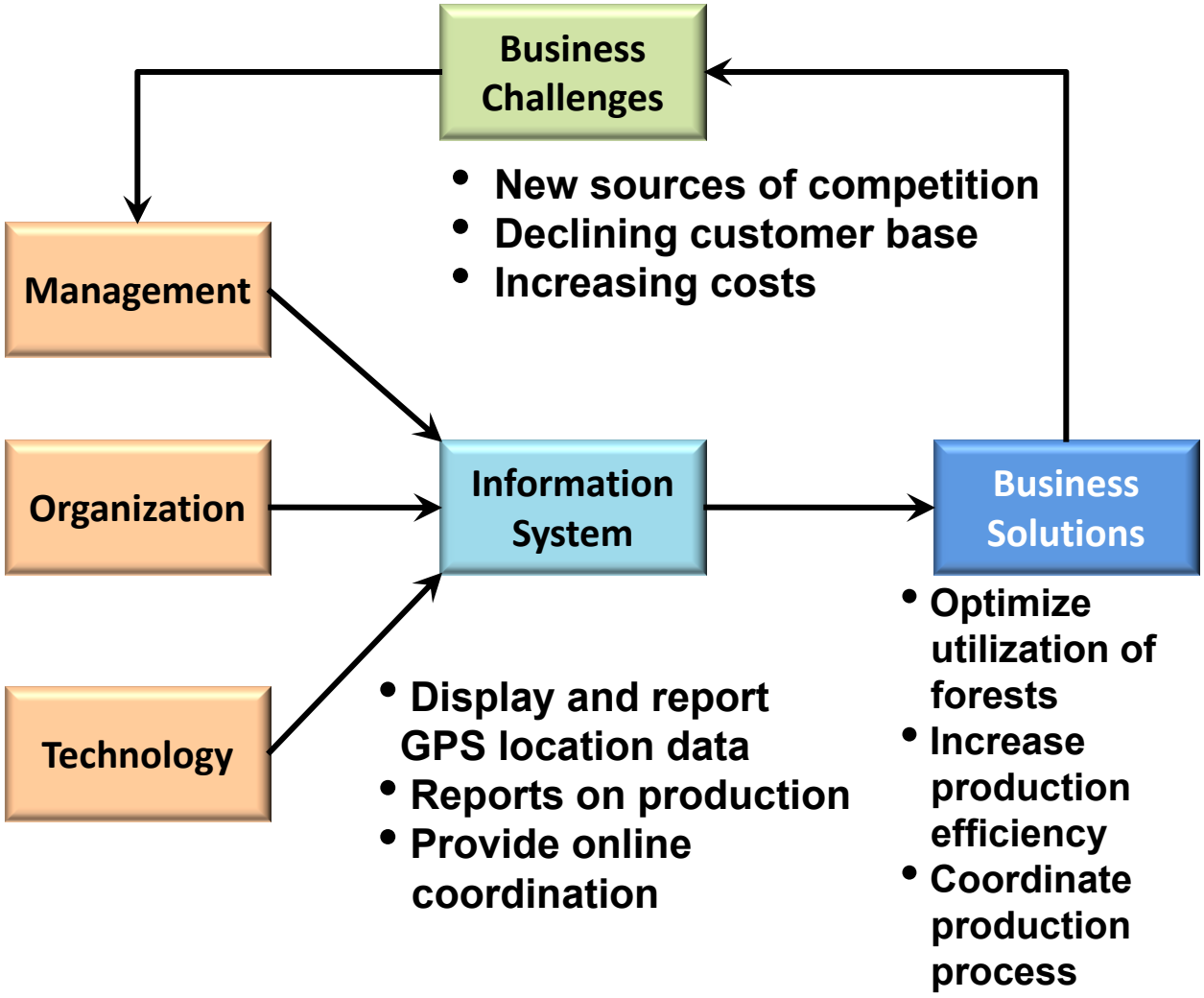
Ponsse:

Efficiency in Wood Harvesting with Information System

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

Source: Kenneth C. Laudon & Jane P. Laudon (2014), Management Information Systems: Managing the Digital Firm, Thirteenth Edition, Pearson.

Overview of Fundamental MIS Concepts using an integrated framework for describing and analyzing information systems



Source: Kenneth C. Laudon & Jane P. Laudon (2014), Management Information Systems: Managing the Digital Firm, Thirteenth Edition, Pearson.

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?

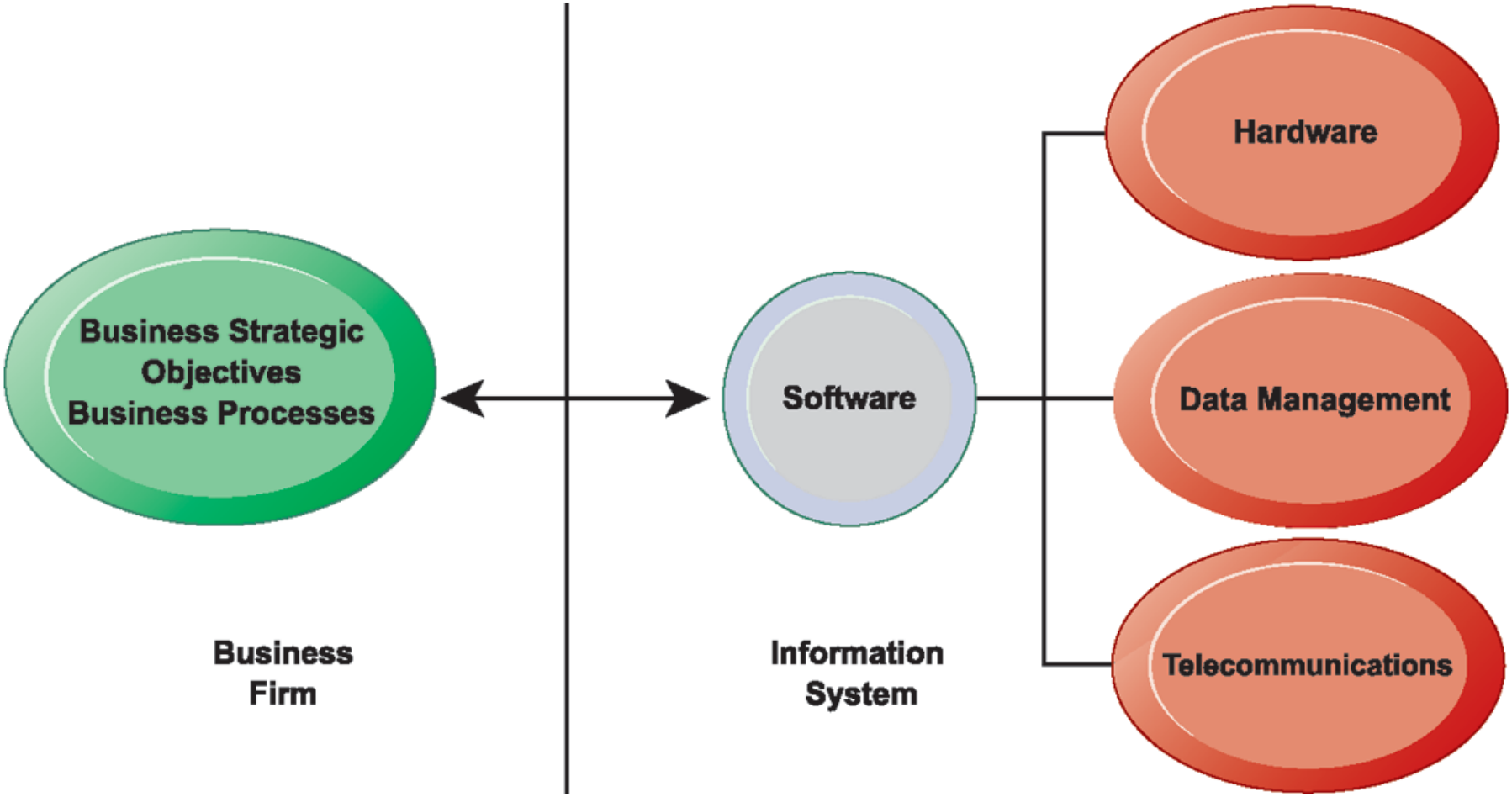
How information systems are transforming business

- 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



Source: Kenneth C. Laudon & Jane P. Laudon (2014), Management Information Systems: Managing the Digital Firm, Thirteenth Edition, Pearson.

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

Source: Kenneth C. Laudon & Jane P. Laudon (2014), Management Information Systems: Managing the Digital Firm, Thirteenth Edition, Pearson.

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

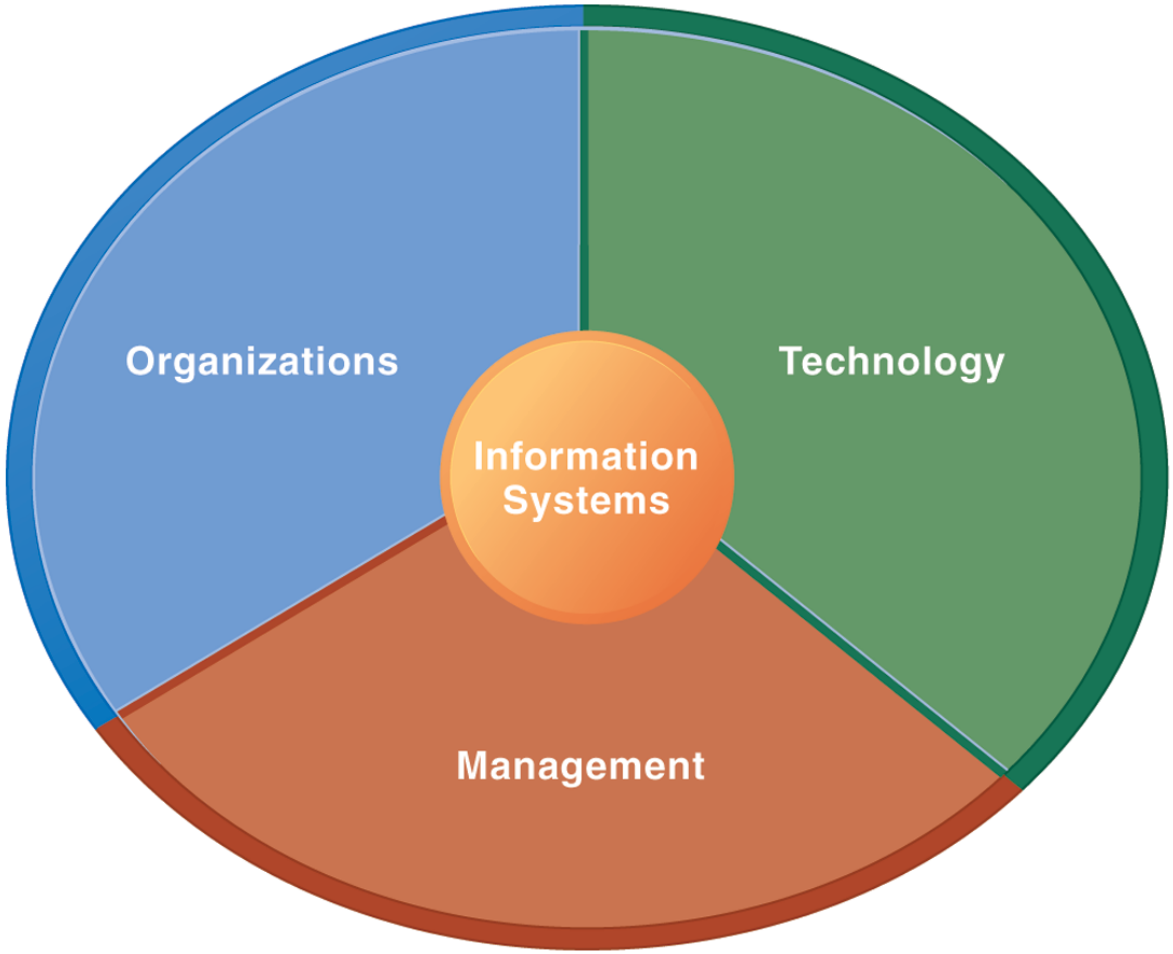
5. Competitive advantage

- 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



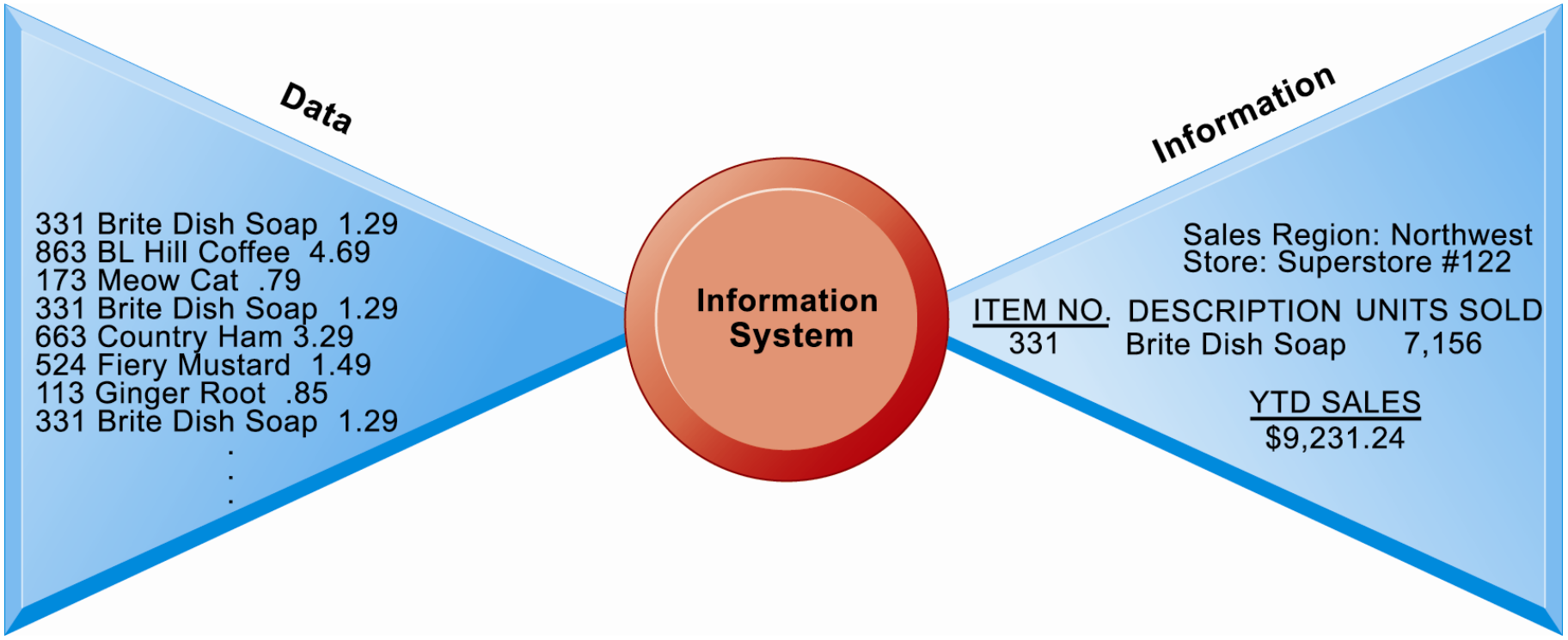
Source: Kenneth C. Laudon & Jane P. Laudon (2014), Management Information Systems: Managing the Digital Firm, Thirteenth Edition, Pearson.

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

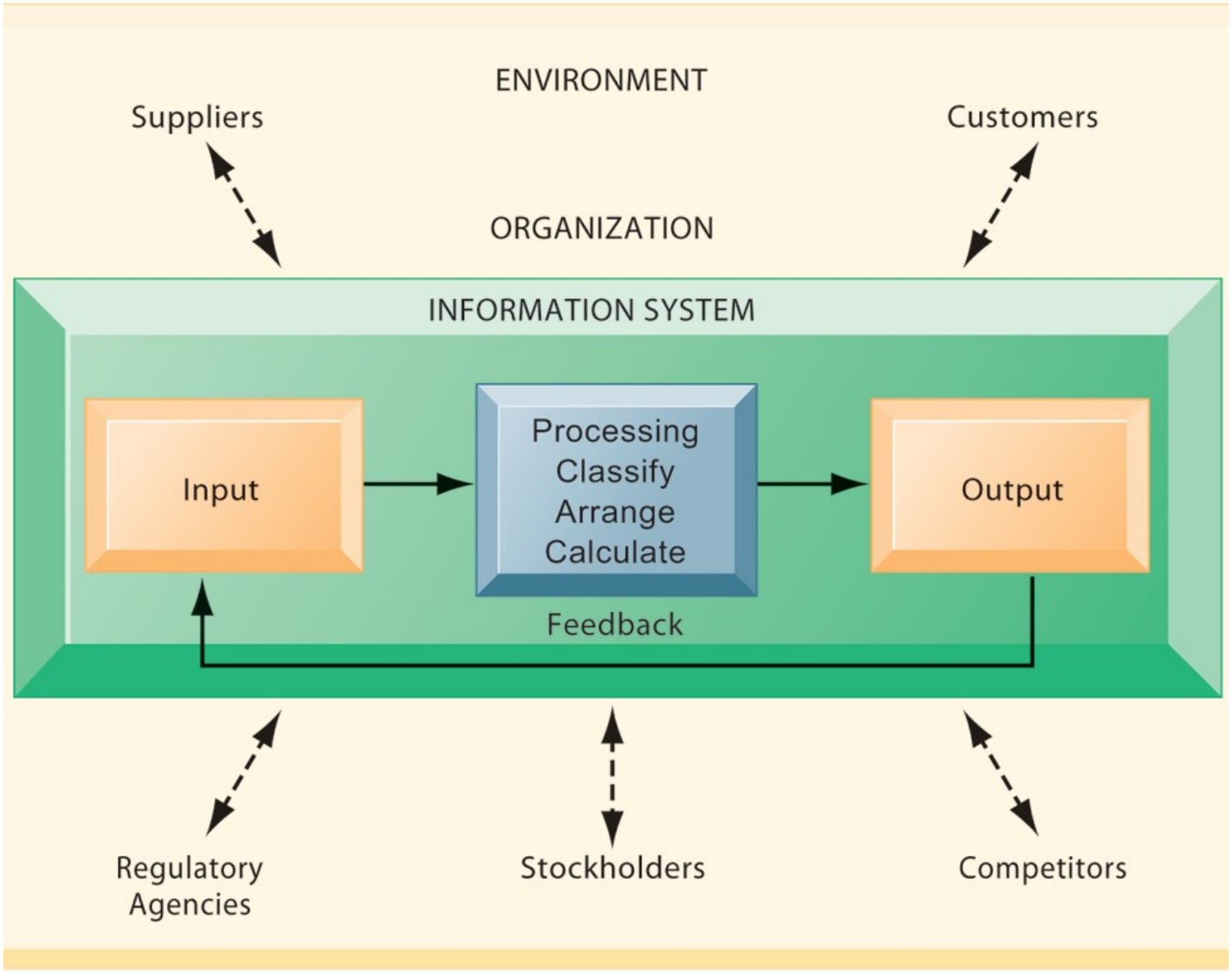
Source: Kenneth C. Laudon & Jane P. Laudon (2014), Management Information Systems: Managing the Digital Firm, Thirteenth Edition, Pearson.

Perspectives on Information Systems: Data and Information



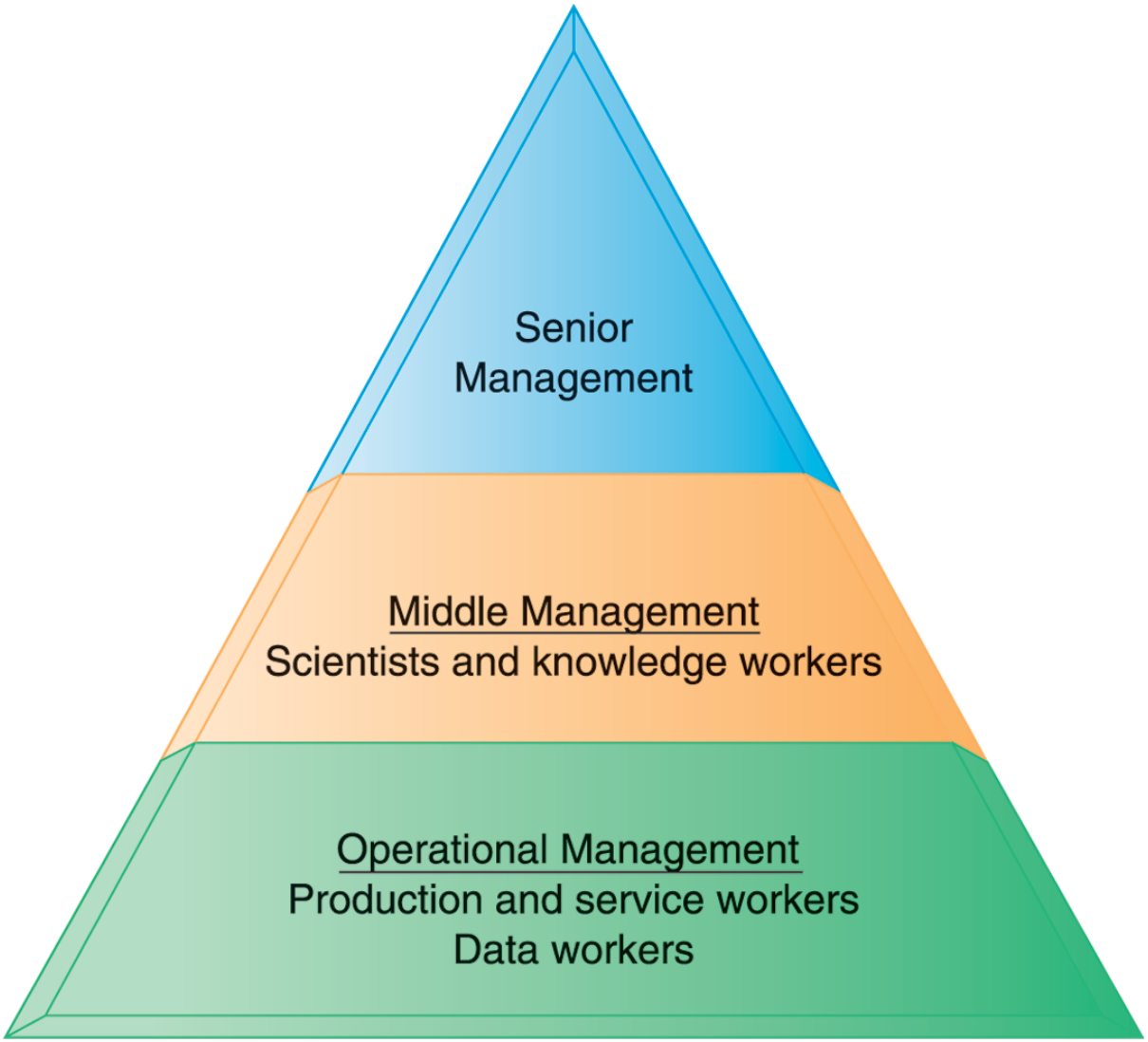
Source: Kenneth C. Laudon & Jane P. Laudon (2014), Management Information Systems: Managing the Digital Firm, Thirteenth Edition, Pearson.

Functions of an Information System



Source: Kenneth C. Laudon & Jane P. Laudon (2014), Management Information Systems: Managing the Digital Firm, Thirteenth Edition, Pearson.

Levels in a Firm



Source: Kenneth C. Laudon & Jane P. Laudon (2014), Management Information Systems: Managing the Digital Firm, Thirteenth Edition, Pearson.

MAJOR BUSINESS FUNCTIONS

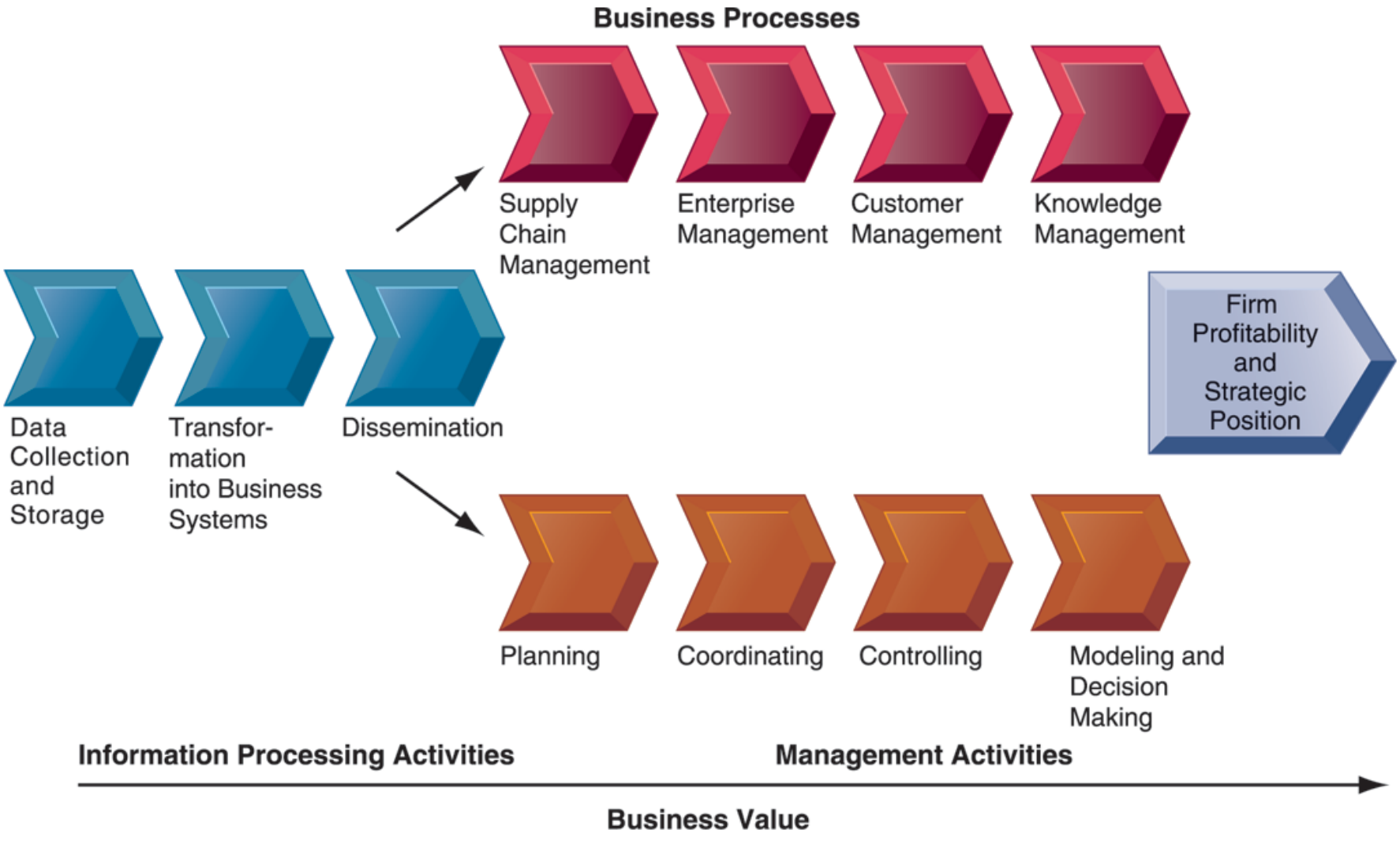
FUNCTION	PURPOSE
Sales and marketing	Selling the organization's products and services
Manufacturing and production	Producing and delivering products and services
Finance and accounting	Managing the organization's financial assets and maintaining the organization's financial records
Human resources	Attracting,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

Source: Kenneth C. Laudon & Jane P. Laudon (2014), Management Information Systems: Managing the Digital Firm, Thirteenth Edition, Pearson.

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

Source: Kenneth C. Laudon & Jane P. Laudon (2014), Management Information Systems: Managing the Digital Firm, Thirteenth Edition, Pearson.

The Business Information Value Chain



Source: Kenneth C. Laudon & Jane P. Laudon (2014), Management Information Systems: Managing the Digital Firm, Thirteenth Edition, Pearson.

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**.

Source: Kenneth C. Laudon & Jane P. Laudon (2014), Management Information Systems: Managing the Digital Firm, Thirteenth Edition, Pearson.

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

Source: Kenneth C. Laudon & Jane P. Laudon (2014), Management Information Systems: Managing the Digital Firm, Thirteenth Edition, Pearson.

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

Source: Kenneth C. Laudon & Jane P. Laudon (2014), Management Information Systems: Managing the Digital Firm, Thirteenth Edition, Pearson.

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.

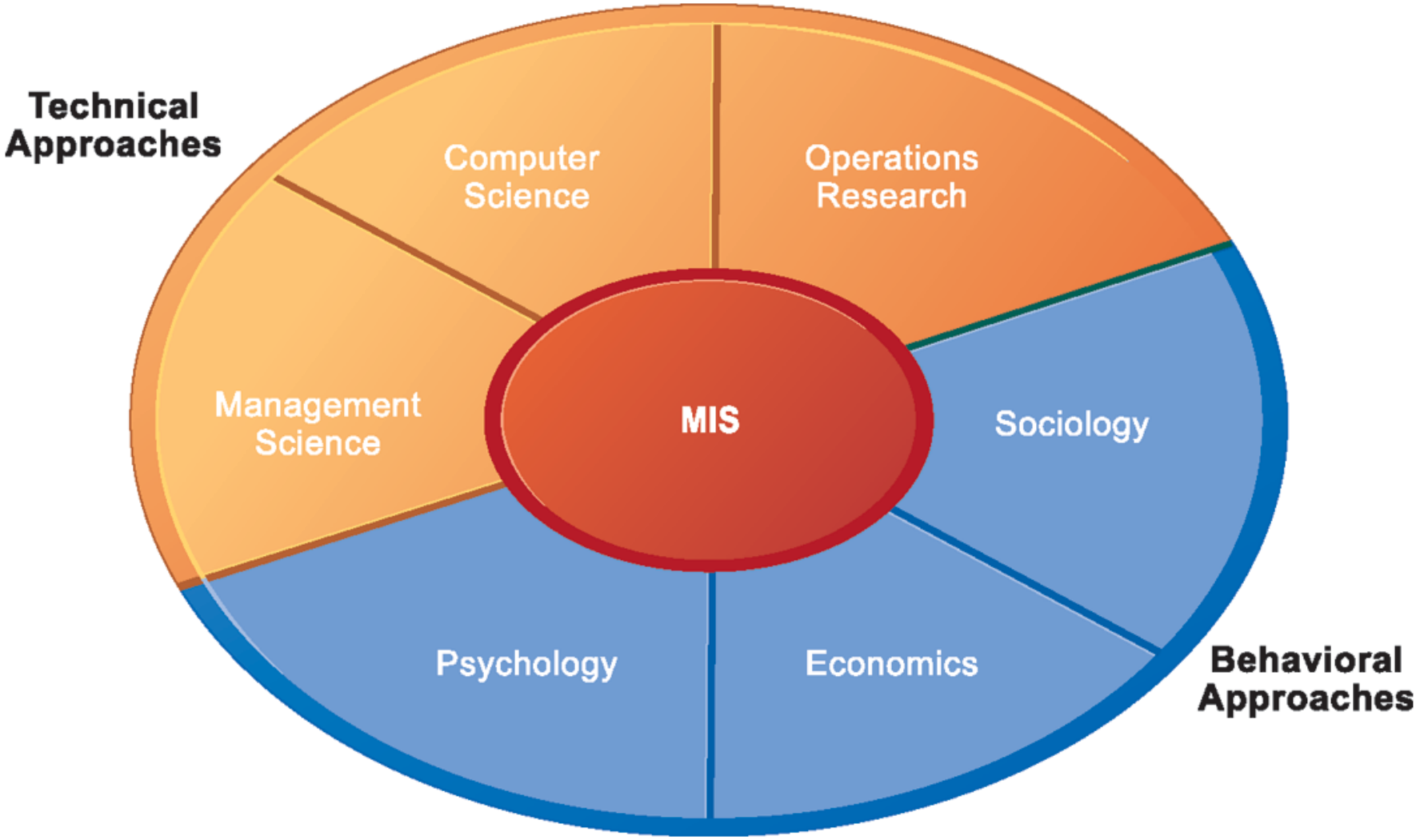
Source: Kenneth C. Laudon & Jane P. Laudon (2014), Management Information Systems: Managing the Digital Firm, Thirteenth Edition, Pearson.

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

Source: Kenneth C. Laudon & Jane P. Laudon (2014), Management Information Systems: Managing the Digital Firm, Thirteenth Edition, Pearson.

Contemporary Approaches to Information Systems

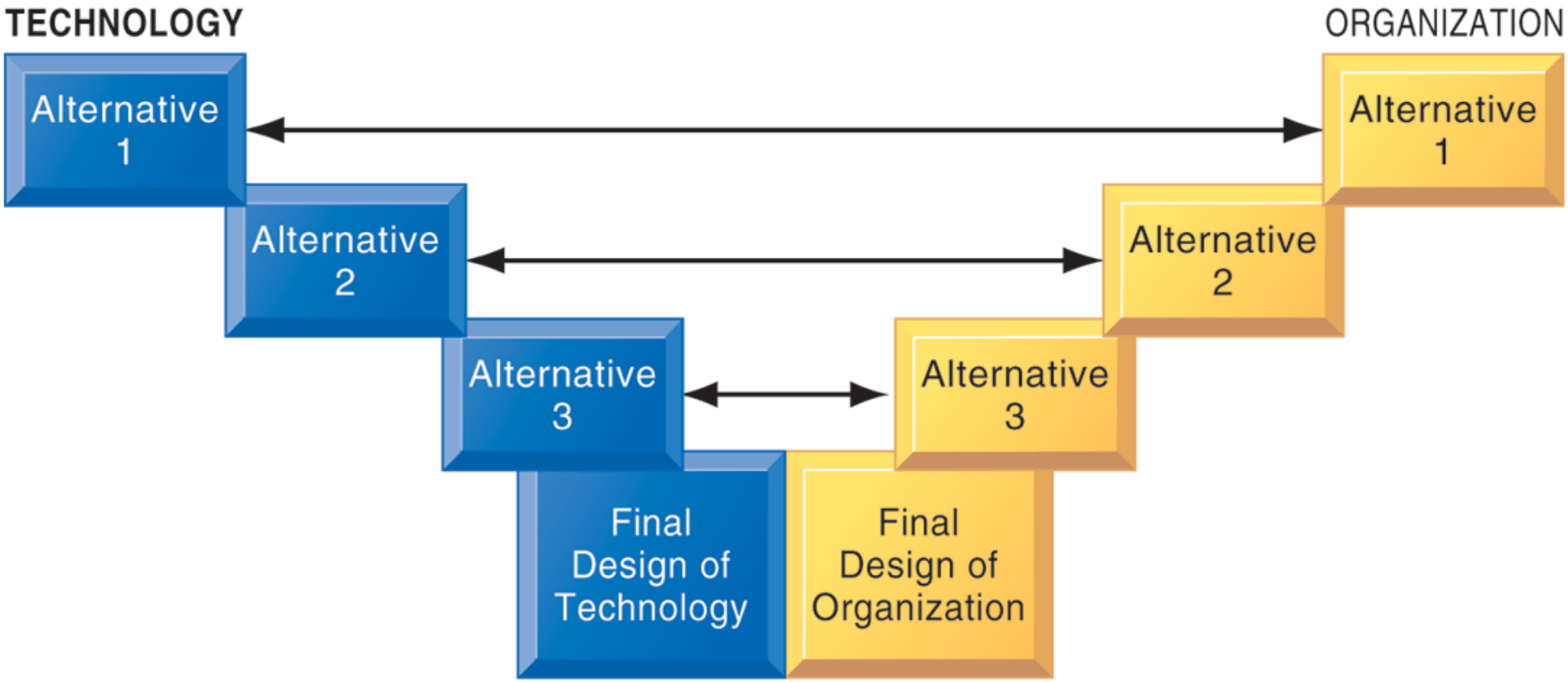


Source: Kenneth C. Laudon & Jane P. Laudon (2014), Management Information Systems: Managing the Digital Firm, Thirteenth Edition, Pearson.

Contemporary Approaches to Information Systems

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

A Sociotechnical Perspective on Information Systems



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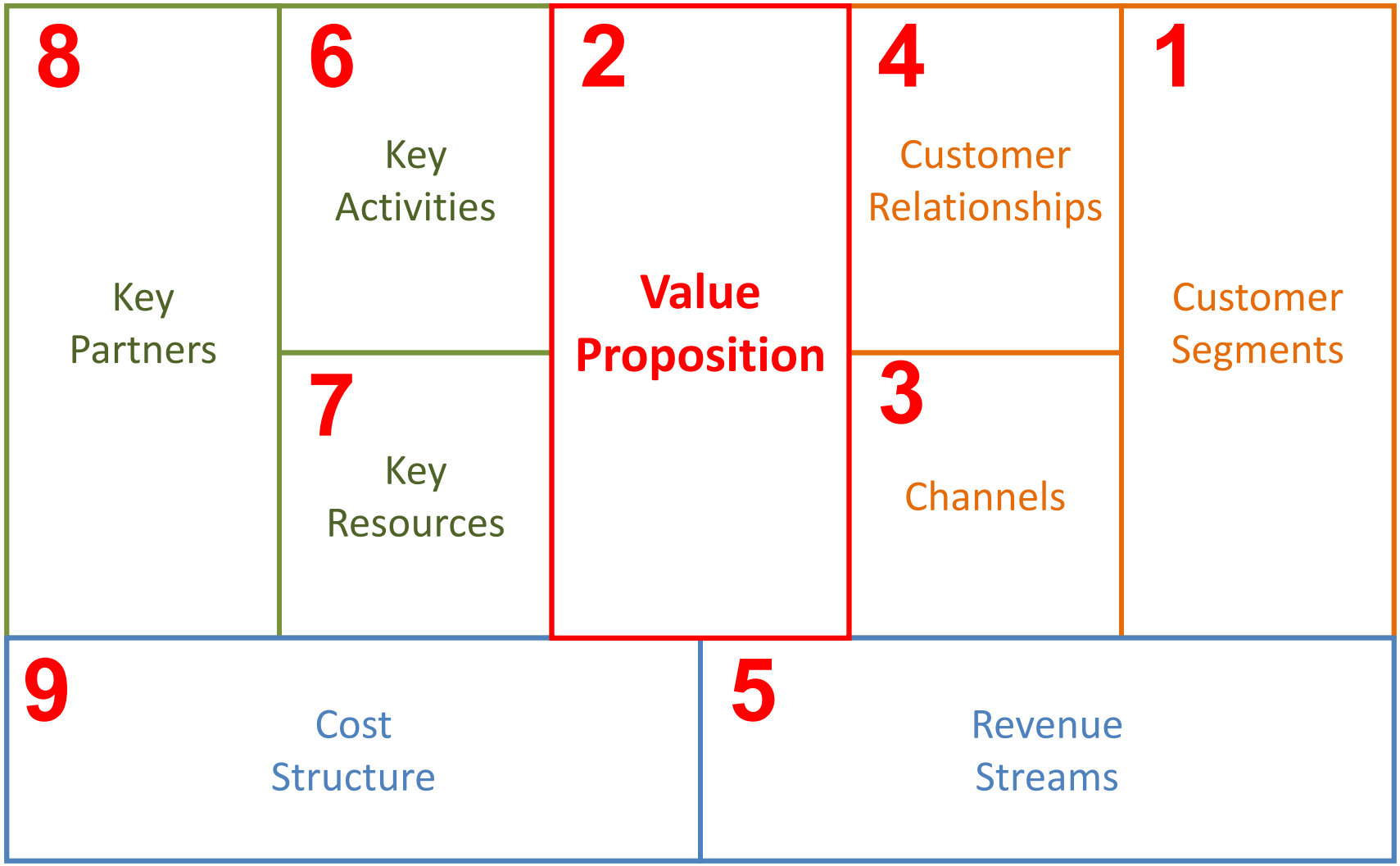
Business Model

Business Model



Source: Alexander Osterwalder & Yves Pigneur, Business Model Generation: A Handbook for Visionaries, Game Changers, and Challengers, Wiley, 2010.

Definition of Business Model

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

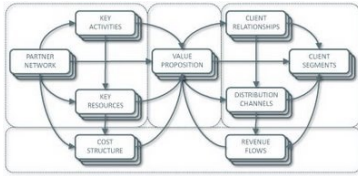
Source: Alexander Osterwalder & Yves Pigneur, Business Model Generation: A Handbook for Visionaries, Game Changers, and Challengers, Wiley, 2010.

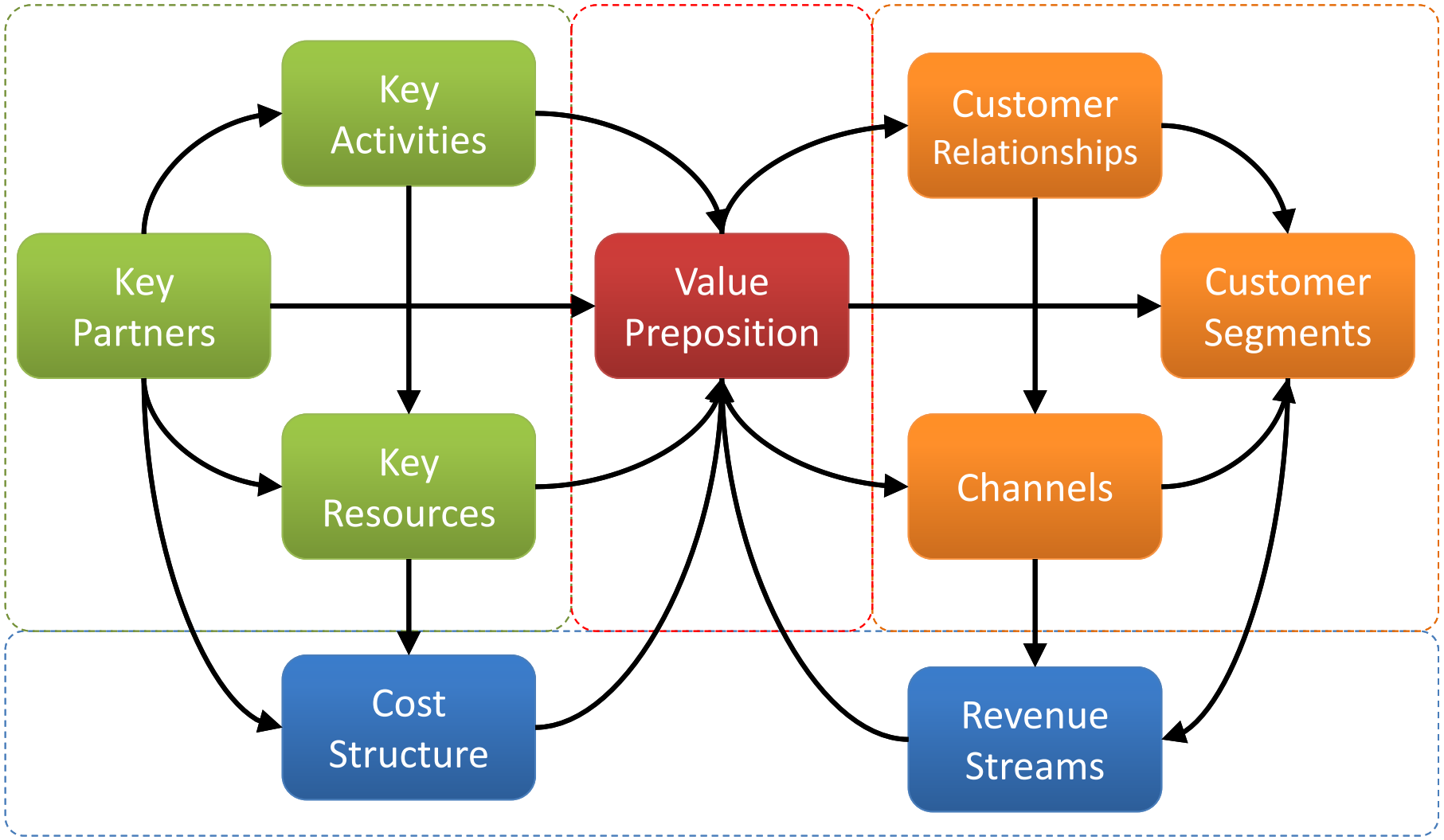
Definition of Business Strategy

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

Source: (Ostenwalder, Pigneur and Tucci, 2005)

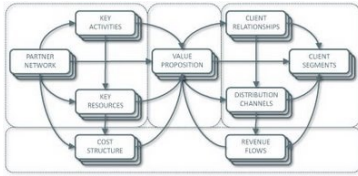
Business Model Canvas





Source: http://nonlinearthinking.typepad.com/nonlinear_thinking/2008/07/the-business-model-canvas.html
https://www.youtube.com/watch?v=QoAOzMTLP5s

Business Model Canvas



Infrastructure Management

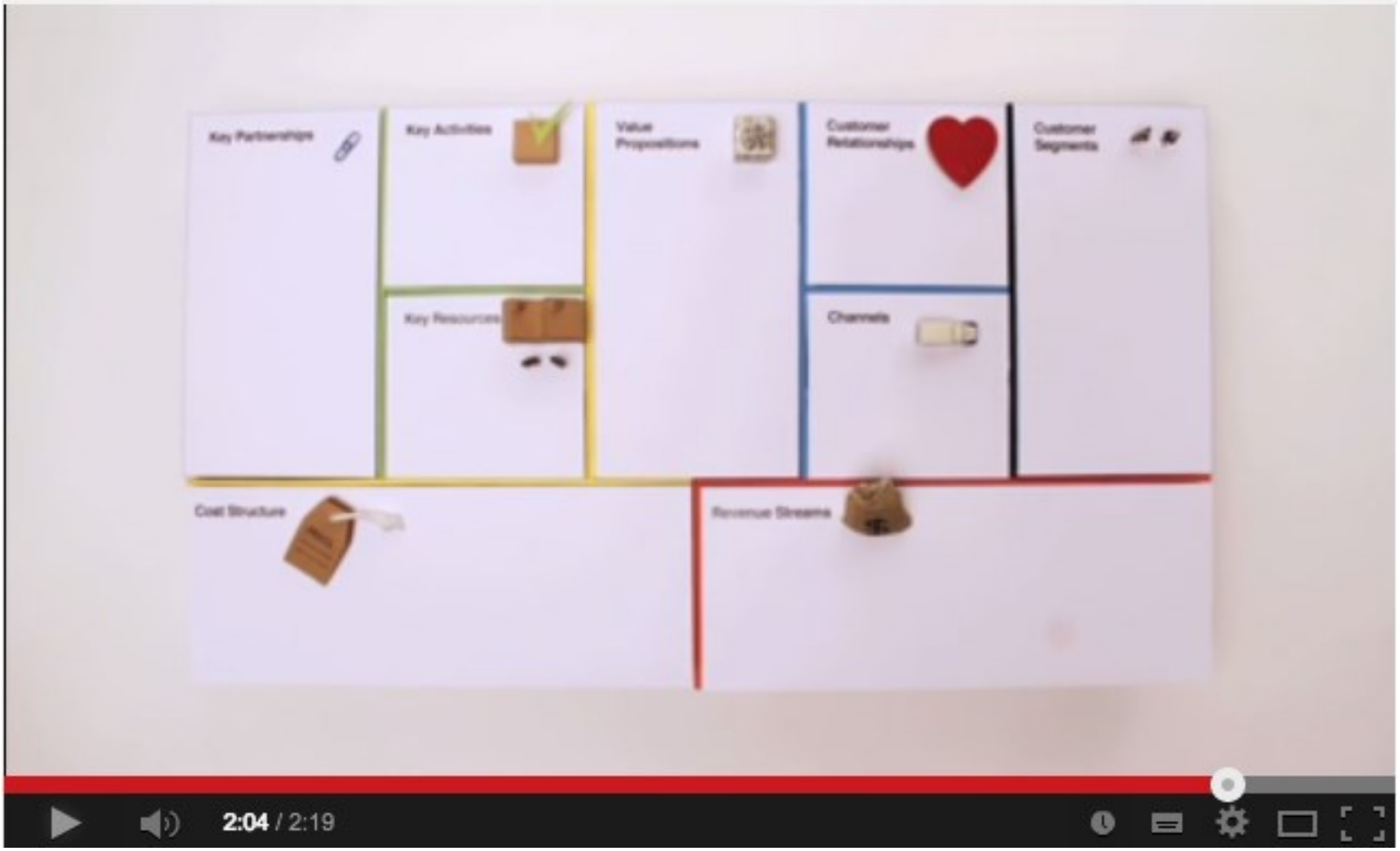
Product

Customer Interface

Financial Aspects

Source: http://nonlinearthinking.typepad.com/nonlinear_thinking/2008/07/the-business-model-canvas.html
https://www.youtube.com/watch?v=QoAOzMTLP5s

Business Model Canvas Explained



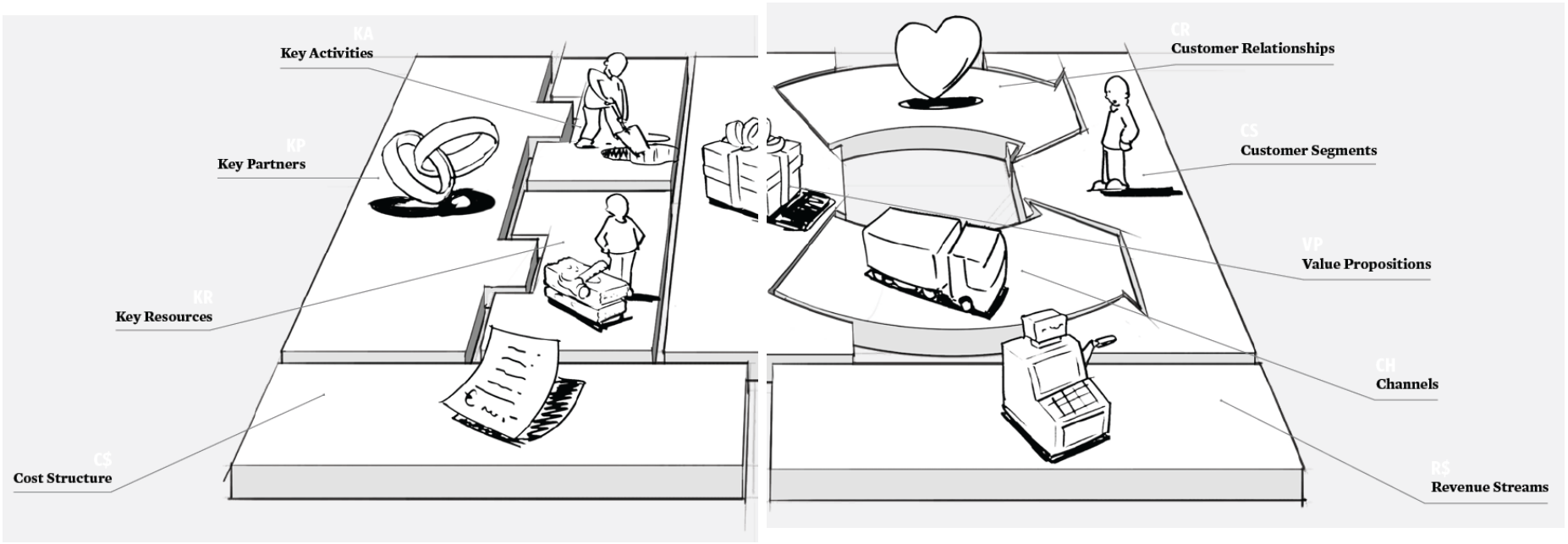
Source: http://www.youtube.com/watch?v=QoAOzMTLP5s

The 9 Building Blocks of Business Model

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

Source: Alexander Osterwalder & Yves Pigneur, Business Model Generation: A Handbook for Visionaries, Game Changers, and Challengers, Wiley, 2010.

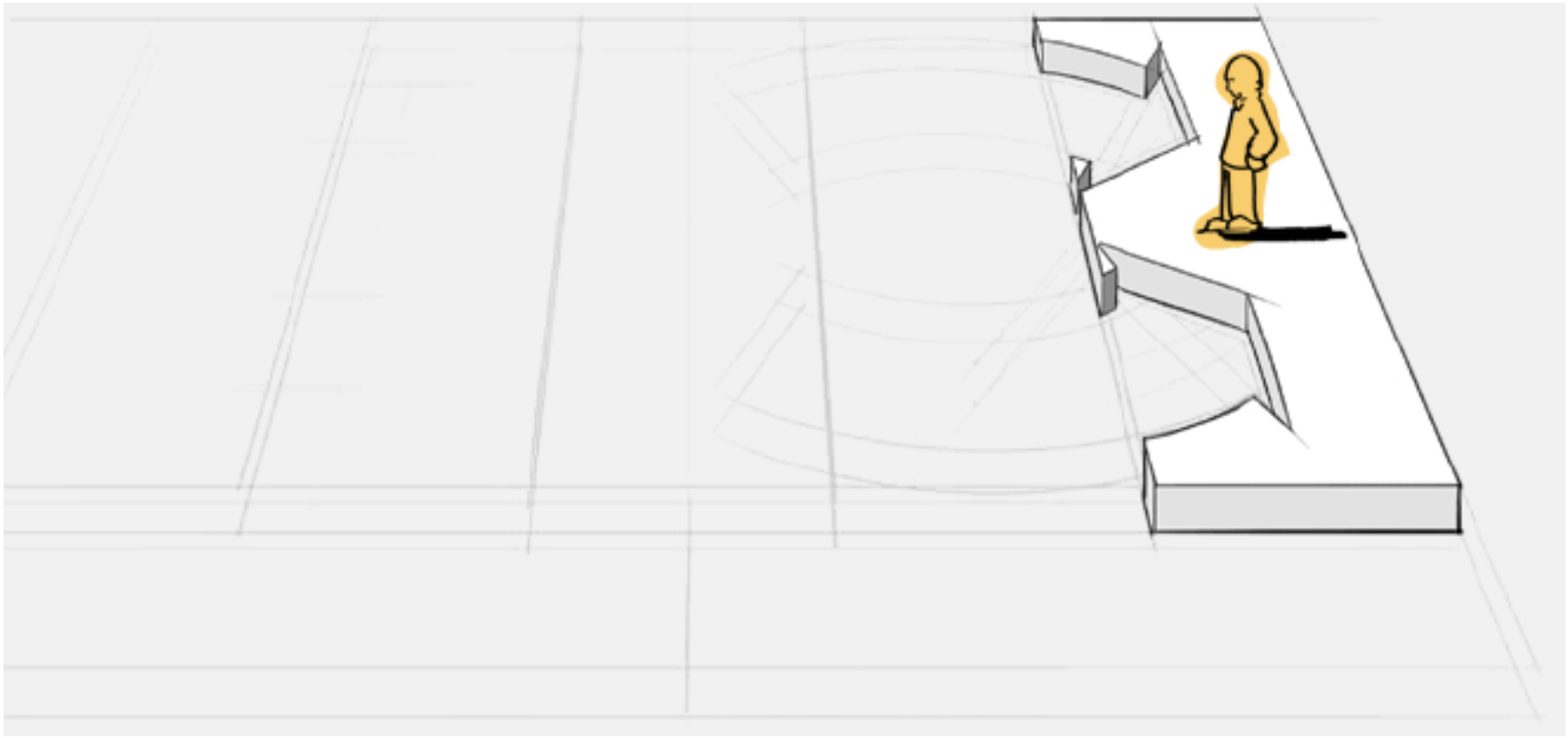
The 9 Building Blocks of Business Model



Source: Alexander Osterwalder & Yves Pigneur, Business Model Generation: A Handbook for Visionaries, Game Changers, and Challengers, Wiley, 2010.

1. Customer Segments

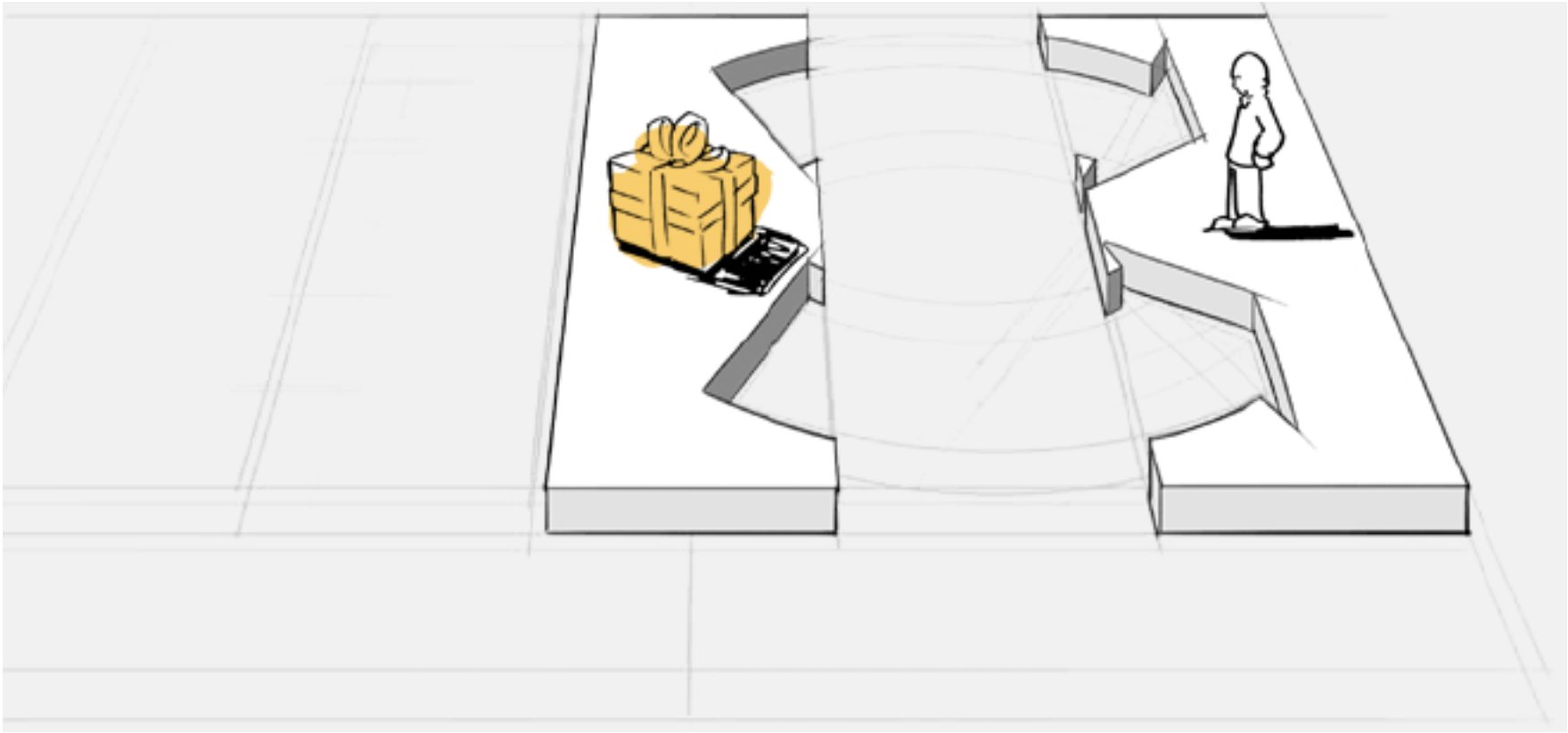
Defines the different groups of people or organizations an enterprise aims to reach and serve



Source: Alexander Osterwalder & Yves Pigneur, Business Model Generation: A Handbook for Visionaries, Game Changers, and Challengers, Wiley, 2010.

2. Value Propositions

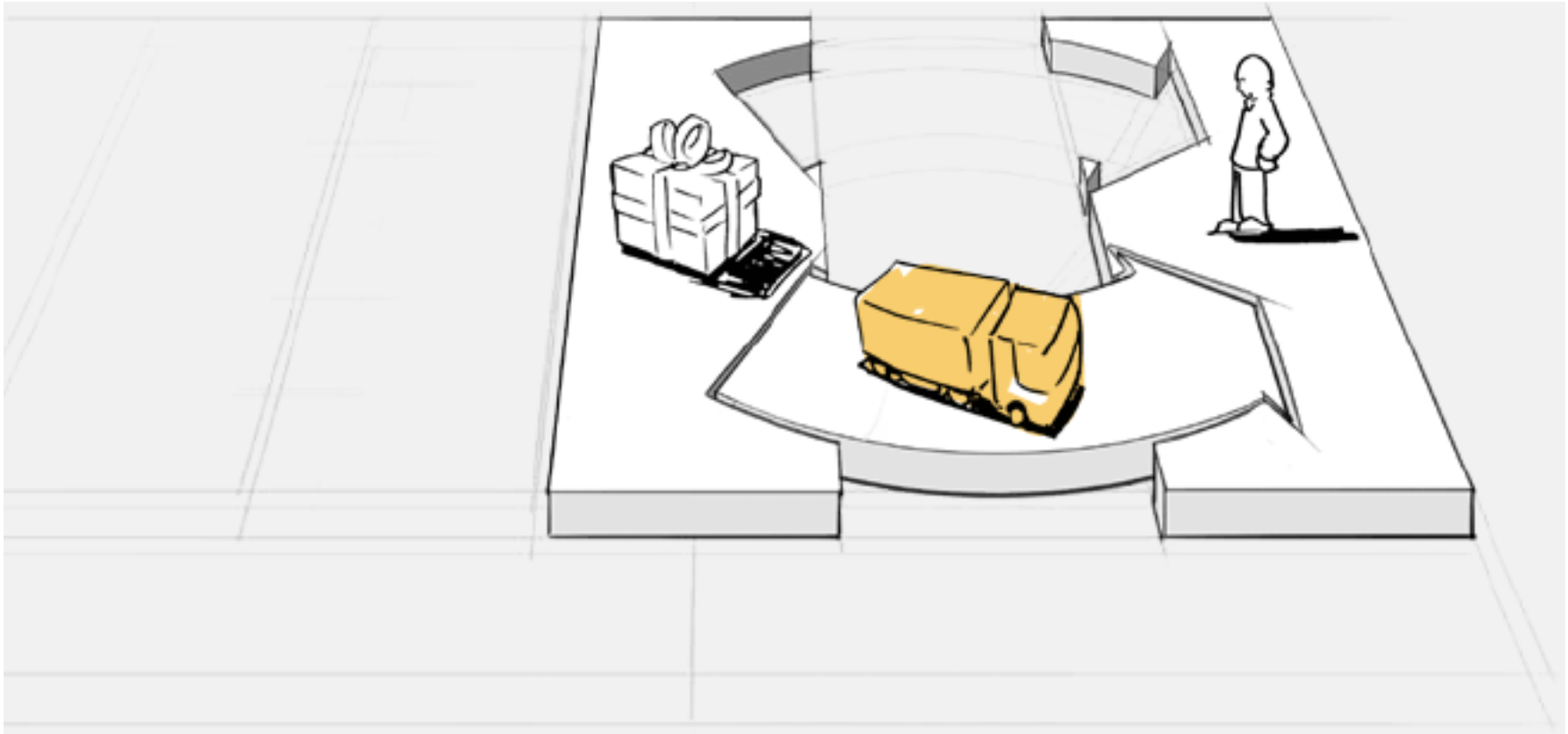
Describes the bundle of products and services that create value for a specific Customer Segment



Source: Alexander Osterwalder & Yves Pigneur, Business Model Generation: A Handbook for Visionaries, Game Changers, and Challengers, Wiley, 2010.

3. Channels

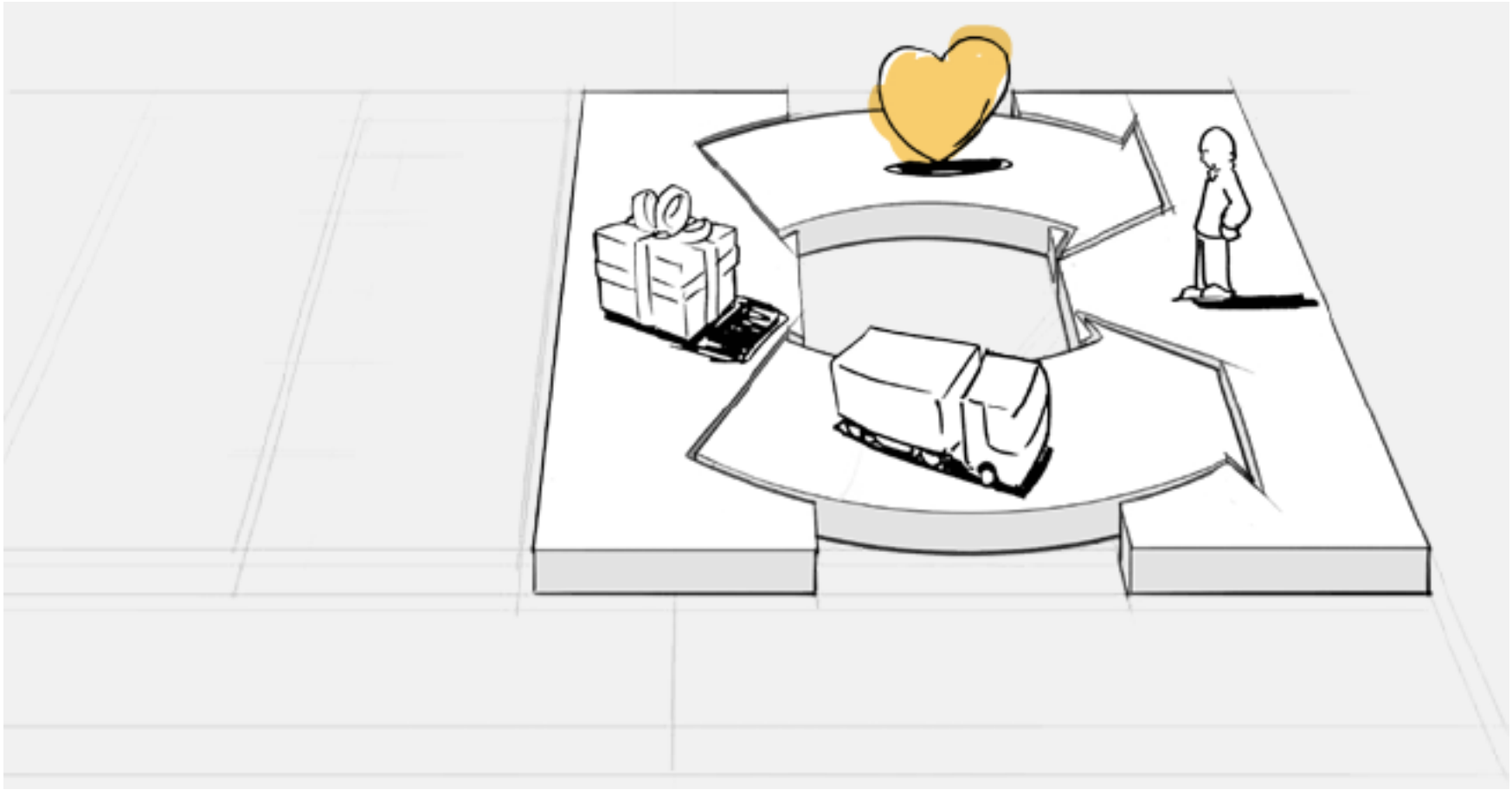
Describes how a company communicates with and reaches its Customer Segments to deliver a Value Proposition



Source: Alexander Osterwalder & Yves Pigneur, Business Model Generation: A Handbook for Visionaries, Game Changers, and Challengers, Wiley, 2010.

4. Customer Relationships

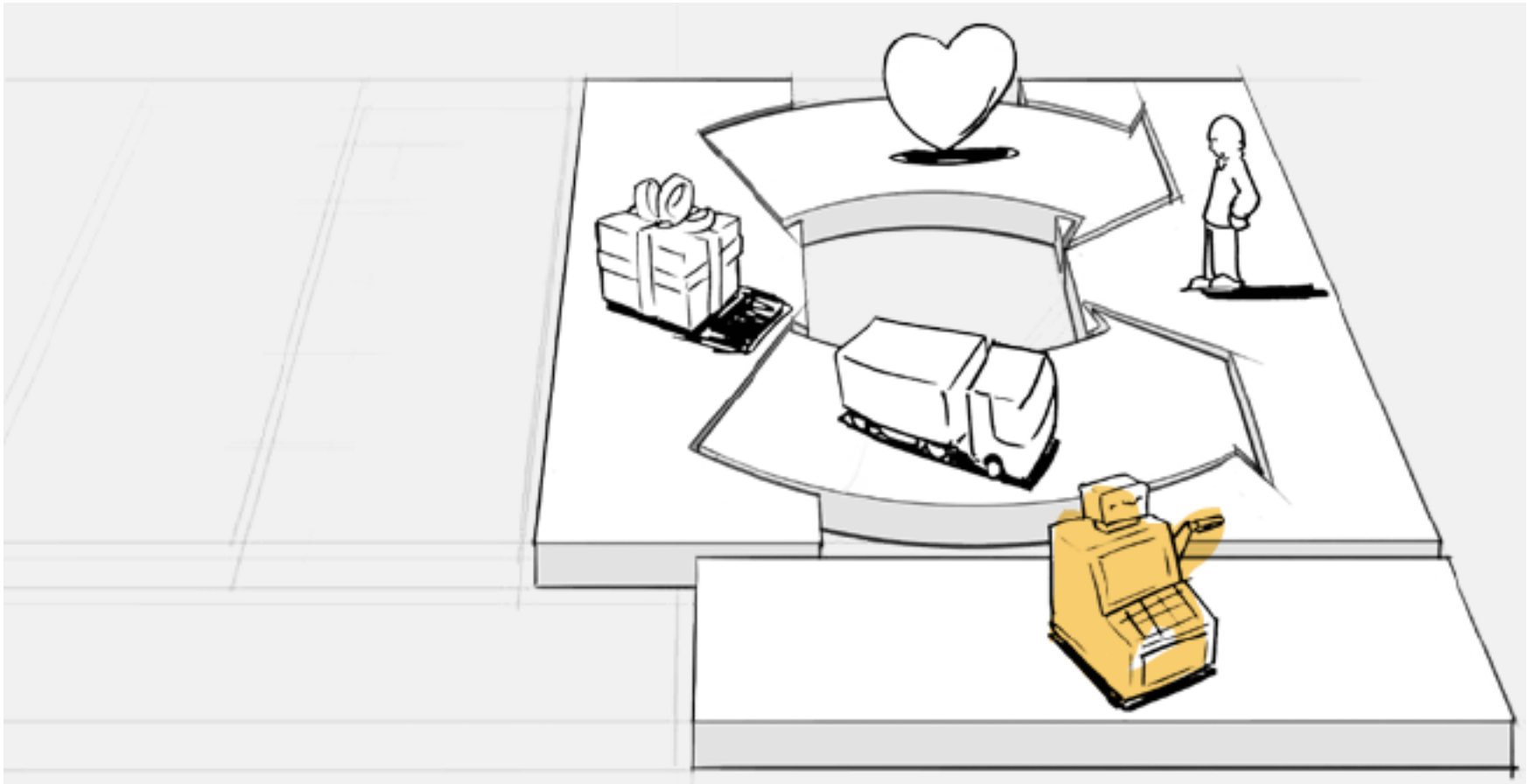
Describes the types of relationships a company establishes with specific Customer Segments



Source: Alexander Osterwalder & Yves Pigneur, Business Model Generation: A Handbook for Visionaries, Game Changers, and Challengers, Wiley, 2010.

5. Revenue Streams

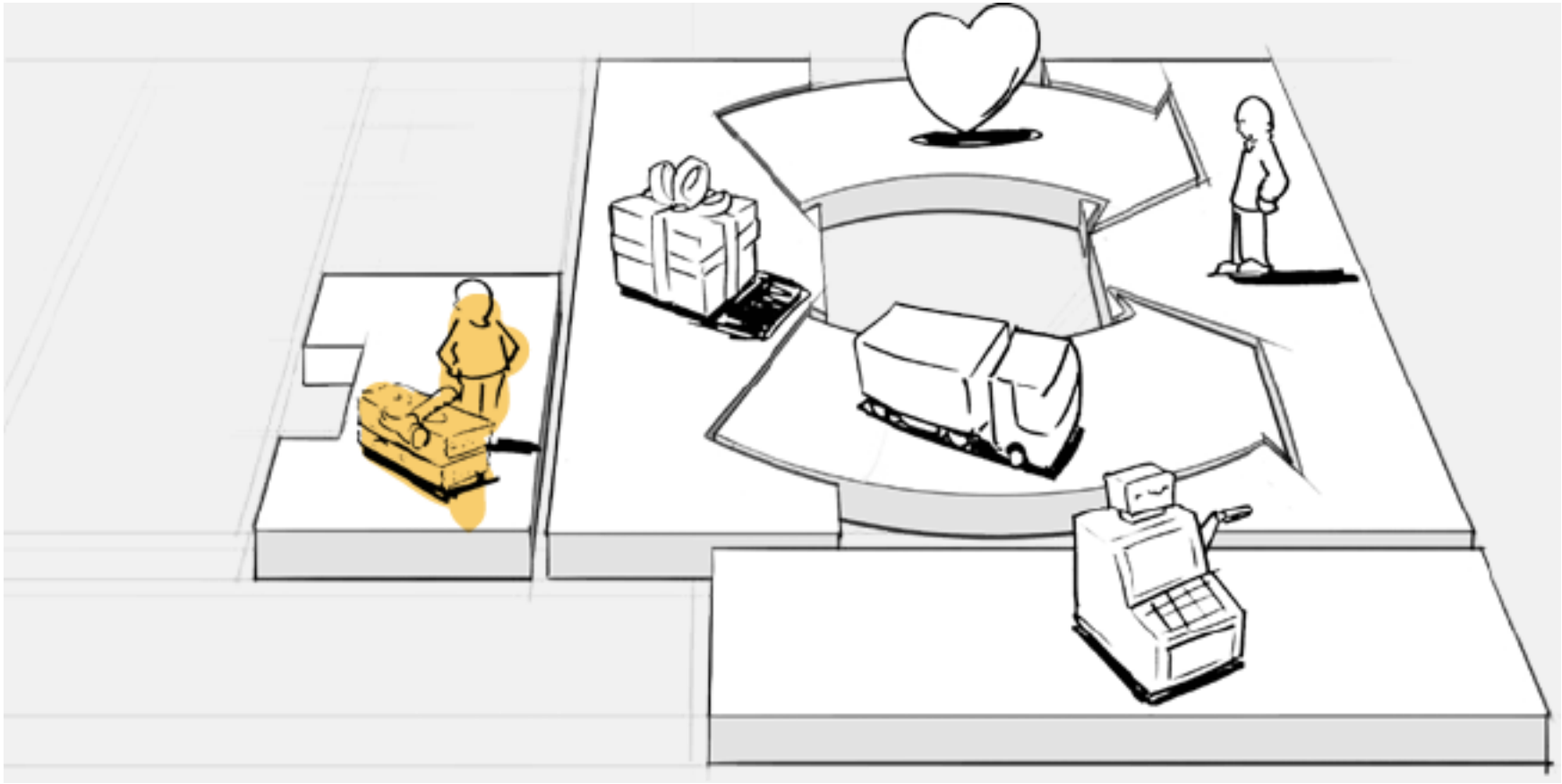
Represents the cash a company generates from each Customer Segment (costs must be subtracted from revenues to create earnings)



Source: Alexander Osterwalder & Yves Pigneur, Business Model Generation: A Handbook for Visionaries, Game Changers, and Challengers, Wiley, 2010.

6. Key Resources

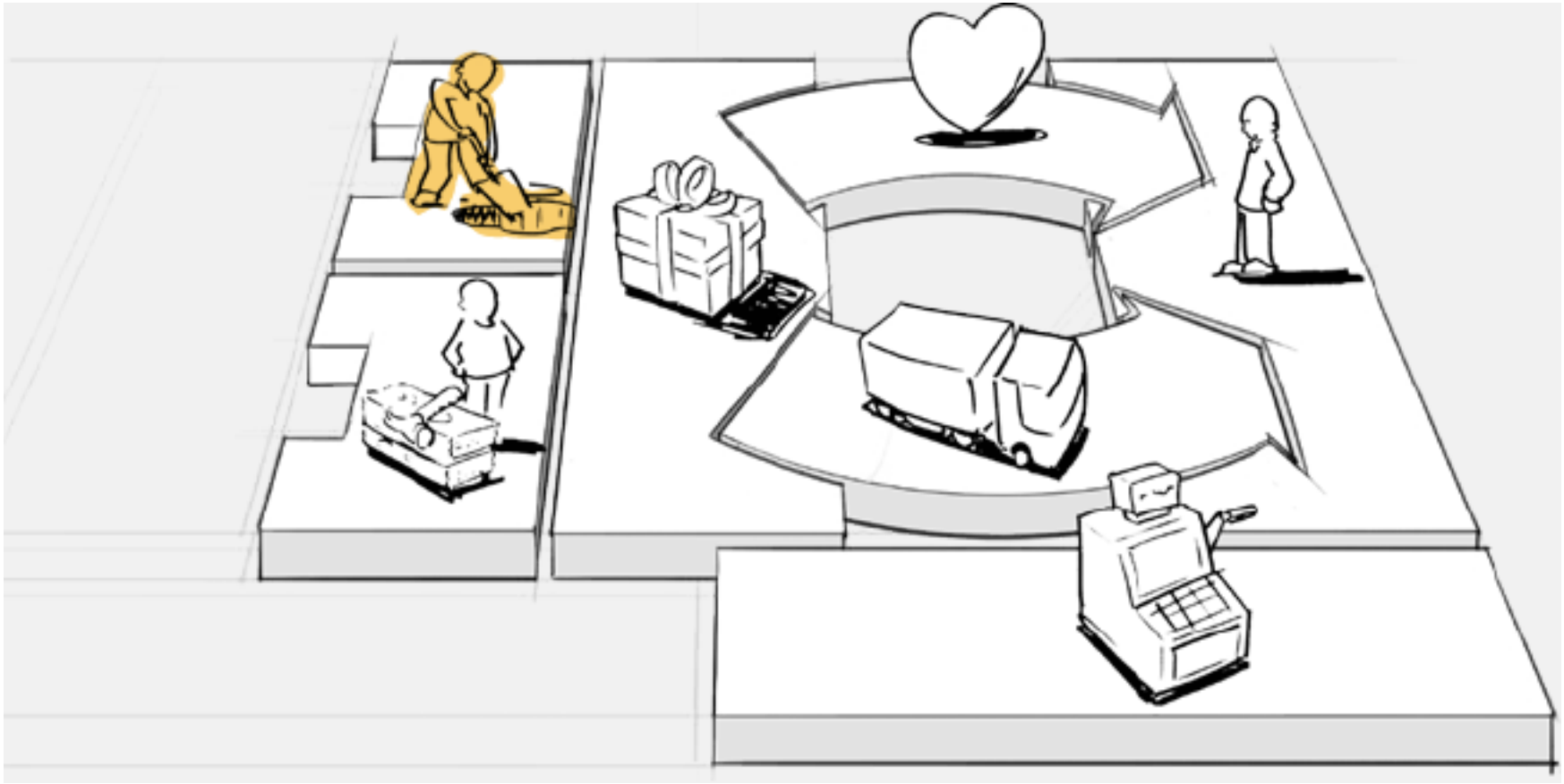
Describes the most important assets required to make a business model work



Source: Alexander Osterwalder & Yves Pigneur, Business Model Generation: A Handbook for Visionaries, Game Changers, and Challengers, Wiley, 2010.

7. Key Activities

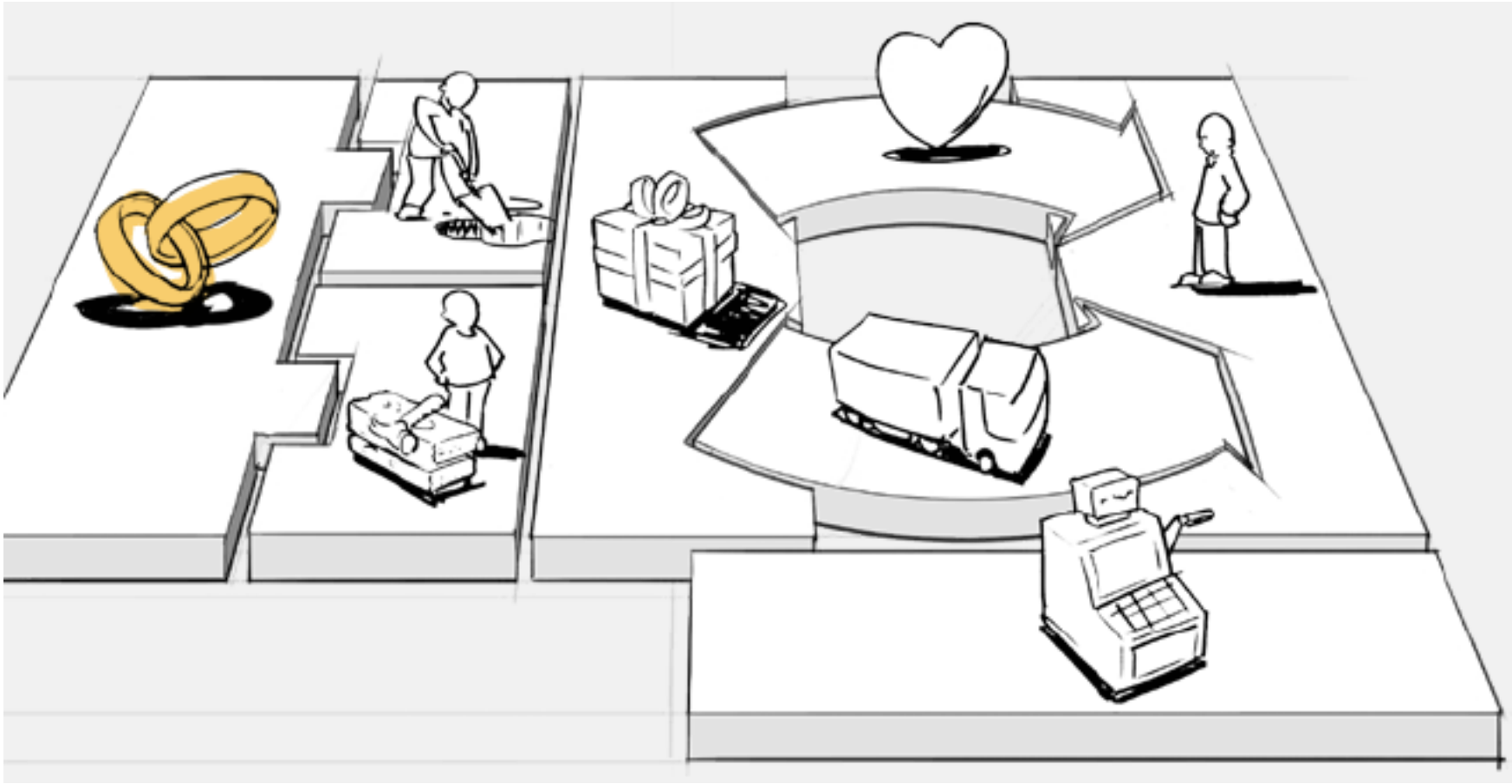
Describes the most important things a company must do to make its business model work



Source: Alexander Osterwalder & Yves Pigneur, Business Model Generation: A Handbook for Visionaries, Game Changers, and Challengers, Wiley, 2010.

8. Key Partnerships

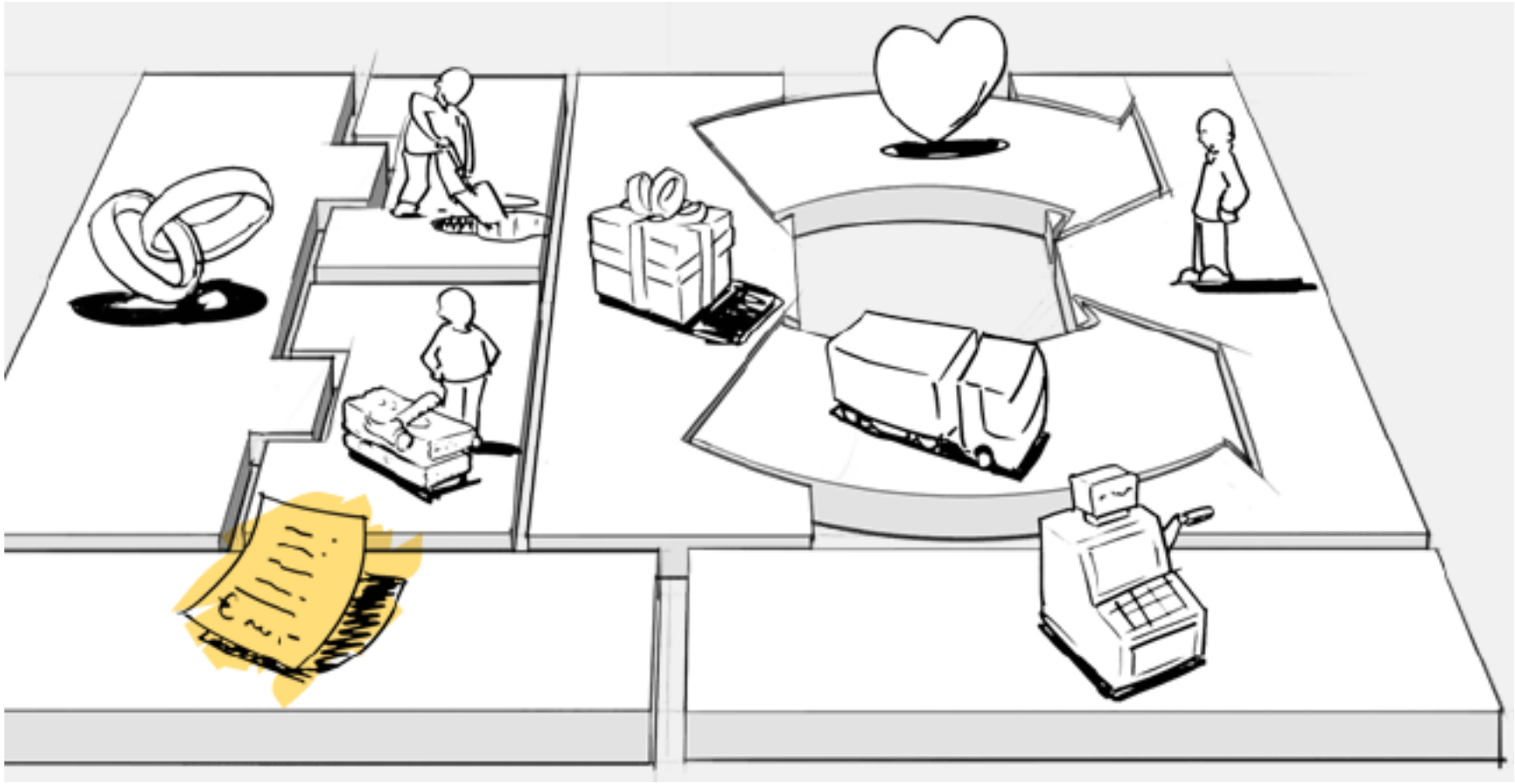
Describes the network of suppliers and partners that make the business model work



Source: Alexander Osterwalder & Yves Pigneur, Business Model Generation: A Handbook for Visionaries, Game Changers, and Challengers, Wiley, 2010.

9. Cost Structure

Describes all costs incurred to operate a business model



Source: Alexander Osterwalder & Yves Pigneur, Business Model Generation: A Handbook for Visionaries, Game Changers, and Challengers, Wiley, 2010.

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.

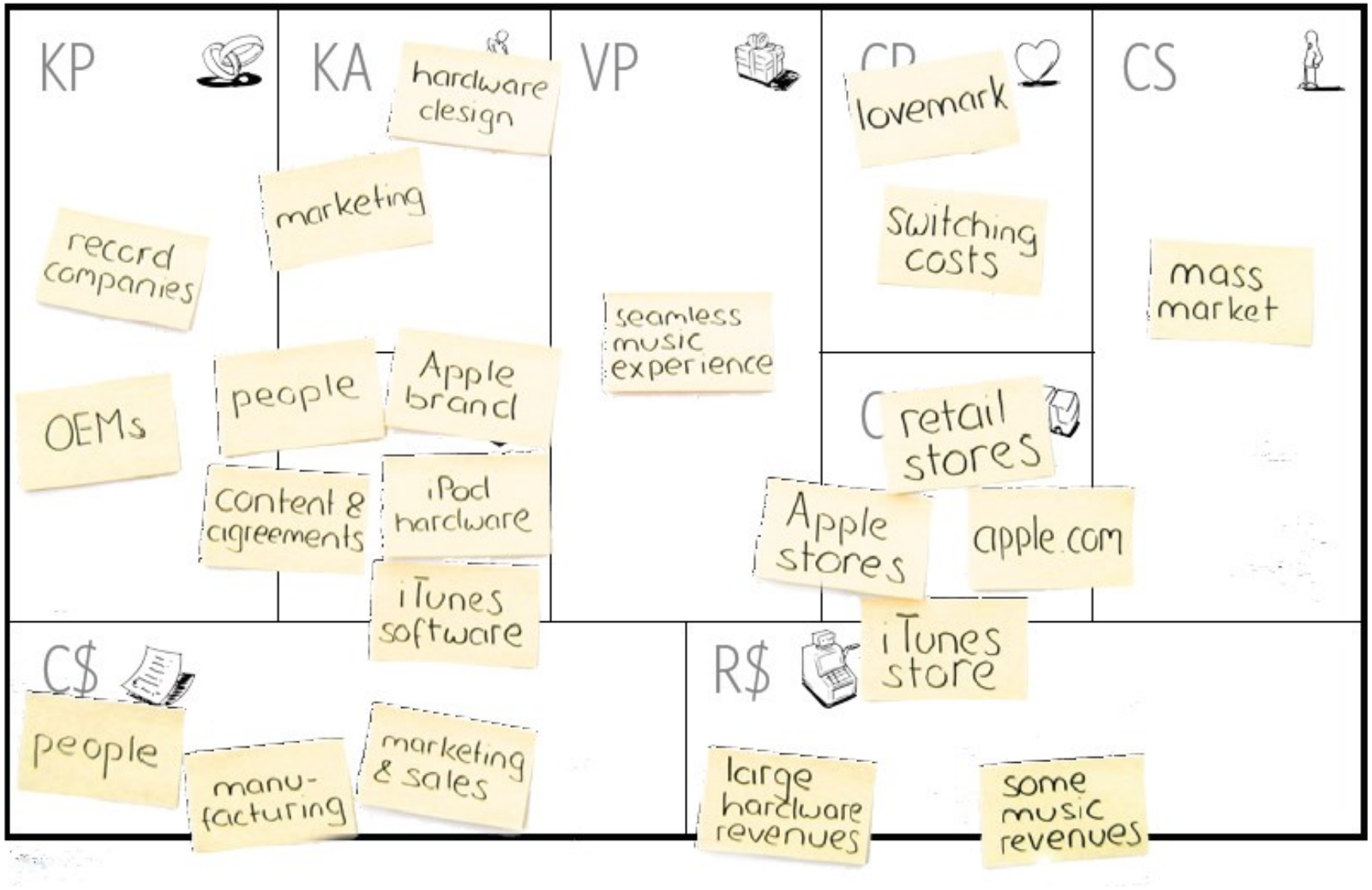
Source: Alexander Osterwalder & Yves Pigneur, Business Model Generation: A Handbook for Visionaries, Game Changers, and Challengers, Wiley, 2010.

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.

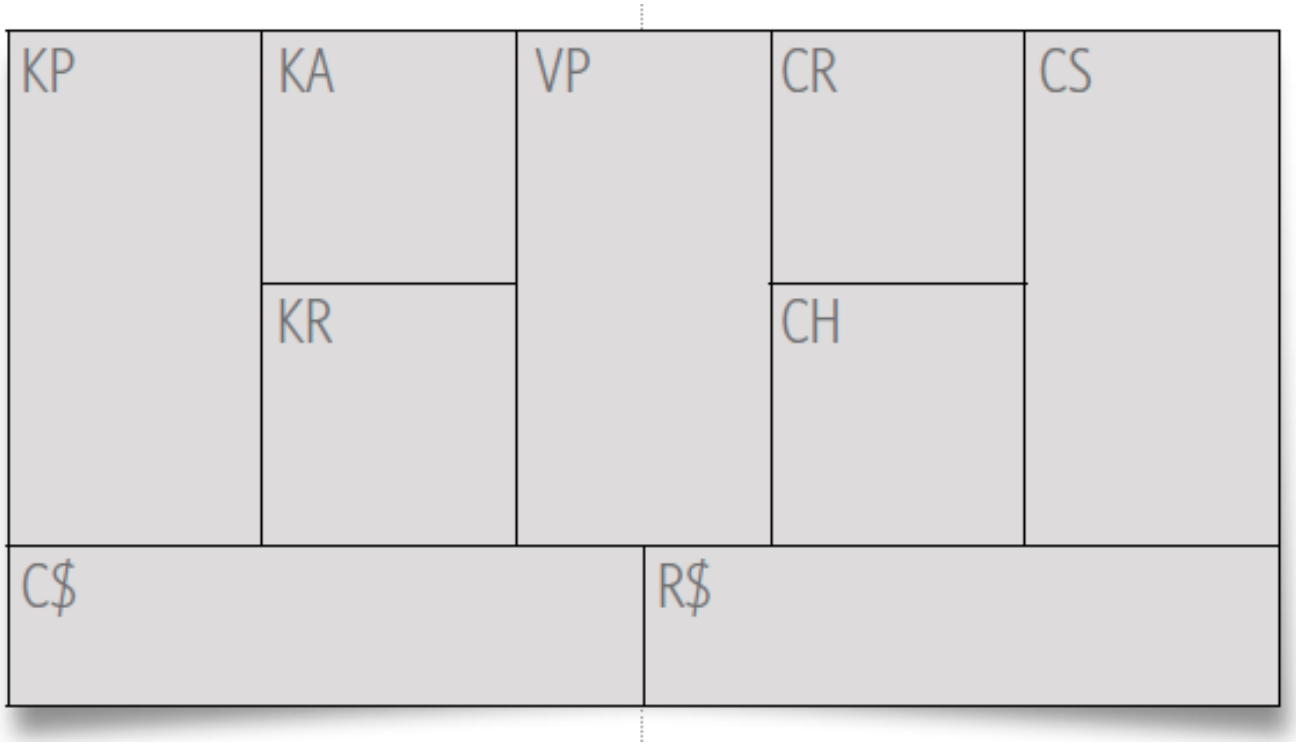
Source: Alexander Osterwalder & Yves Pigneur, Business Model Generation: A Handbook for Visionaries, Game Changers, and Challengers, Wiley, 2010.

Business Model Generation



Source: Alexander Osterwalder & Yves Pigneur, Business Model Generation: A Handbook for Visionaries, Game Changers, and Challengers, Wiley, 2010.

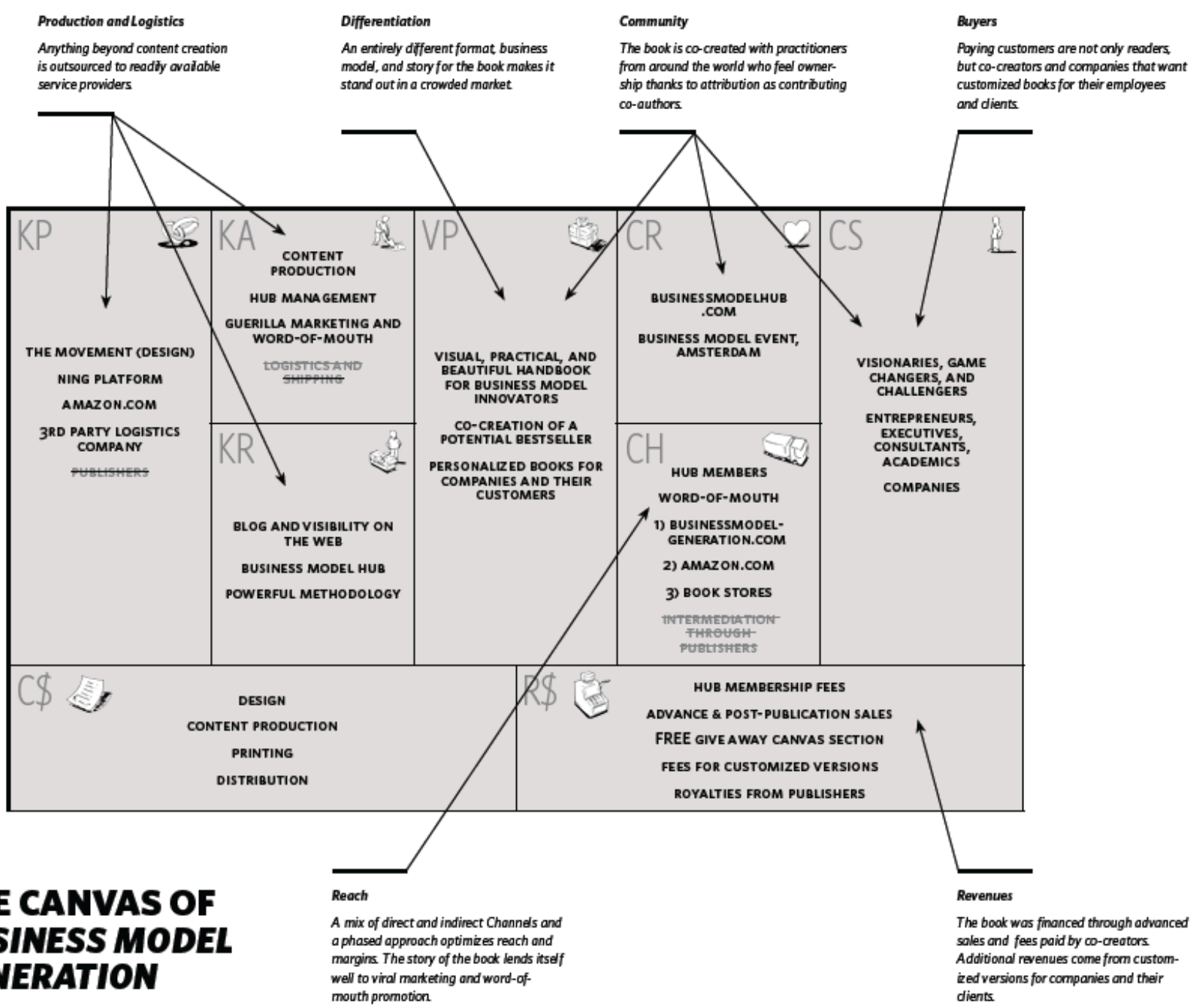
Business Model Generation



LEFT CANVAS
efficiency

RIGHT CANVAS
value

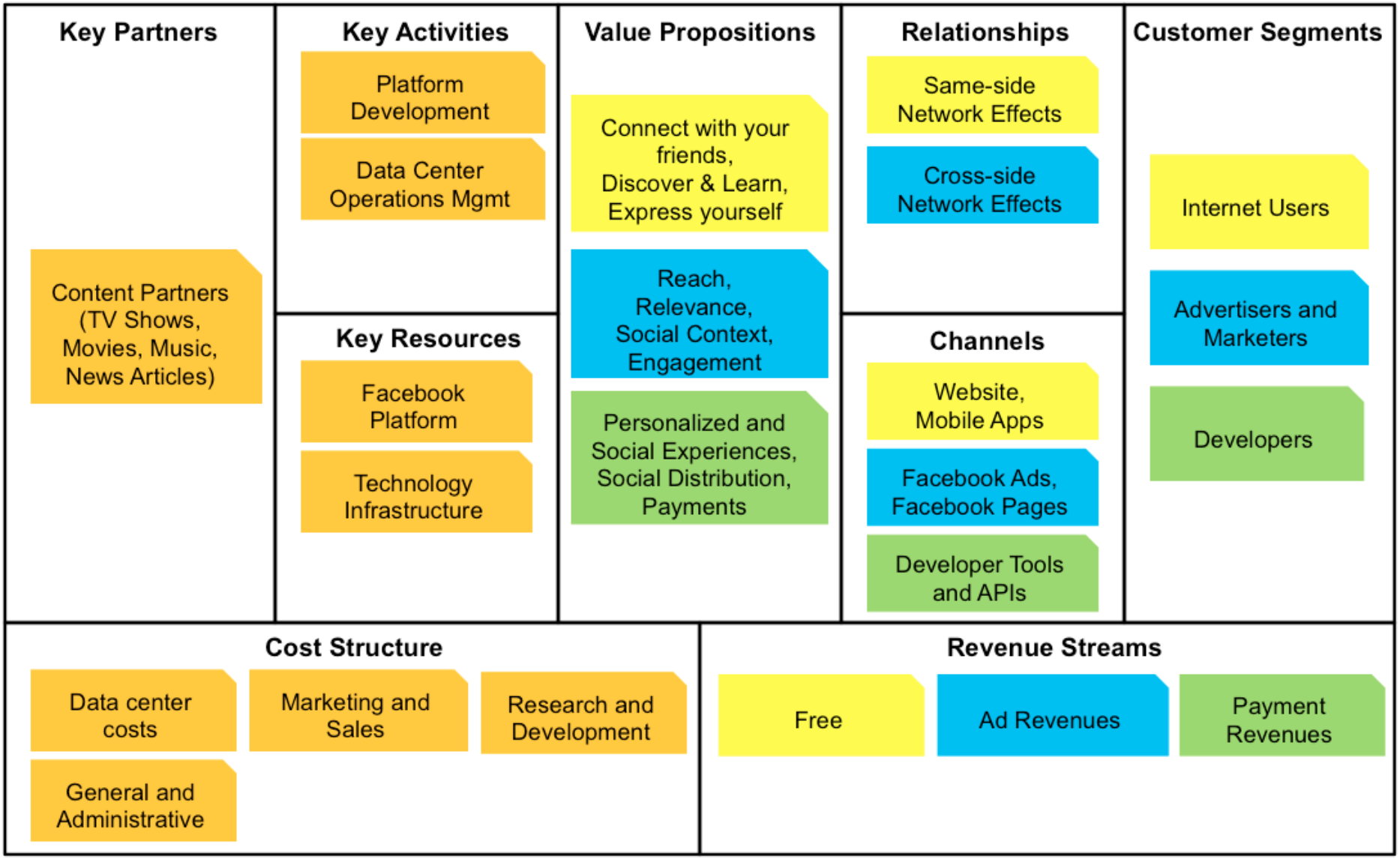
Source: Alexander Osterwalder & Yves Pigneur, Business Model Generation: A Handbook for Visionaries, Game Changers, and Challengers, Wiley, 2010.



THE CANVAS OF *BUSINESS MODEL GENERATION*

Source: Alexander Osterwalder & Yves Pigneur, Business Model Generation: A Handbook for Visionaries, Game Changers, and Challengers, Wiley, 2010.

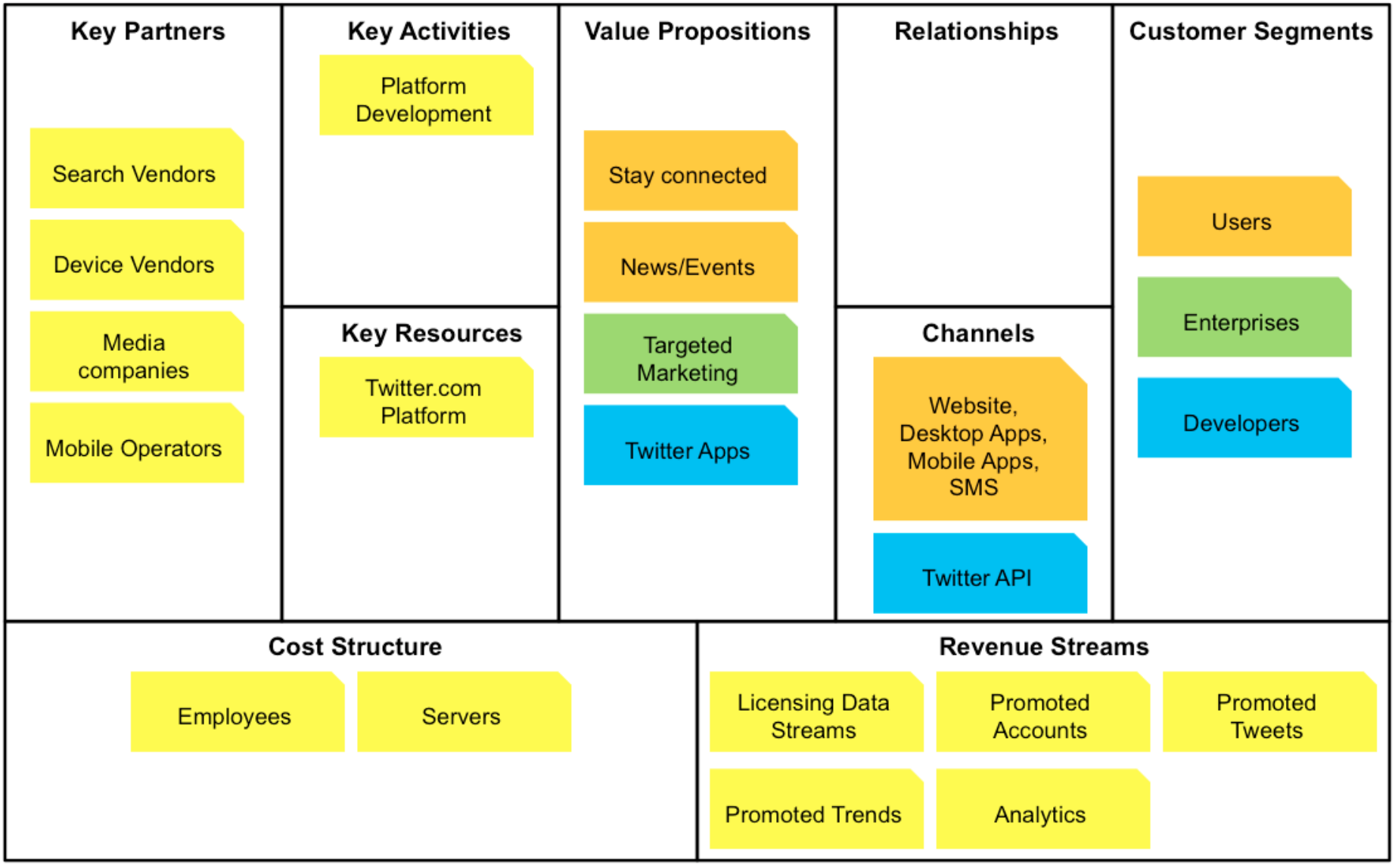
Facebook – World's leading Social Networking Site (SNS)



www.businessmodelgeneration.com

Source: http://bmimatters.com/tag/business-model-canvas-examples/

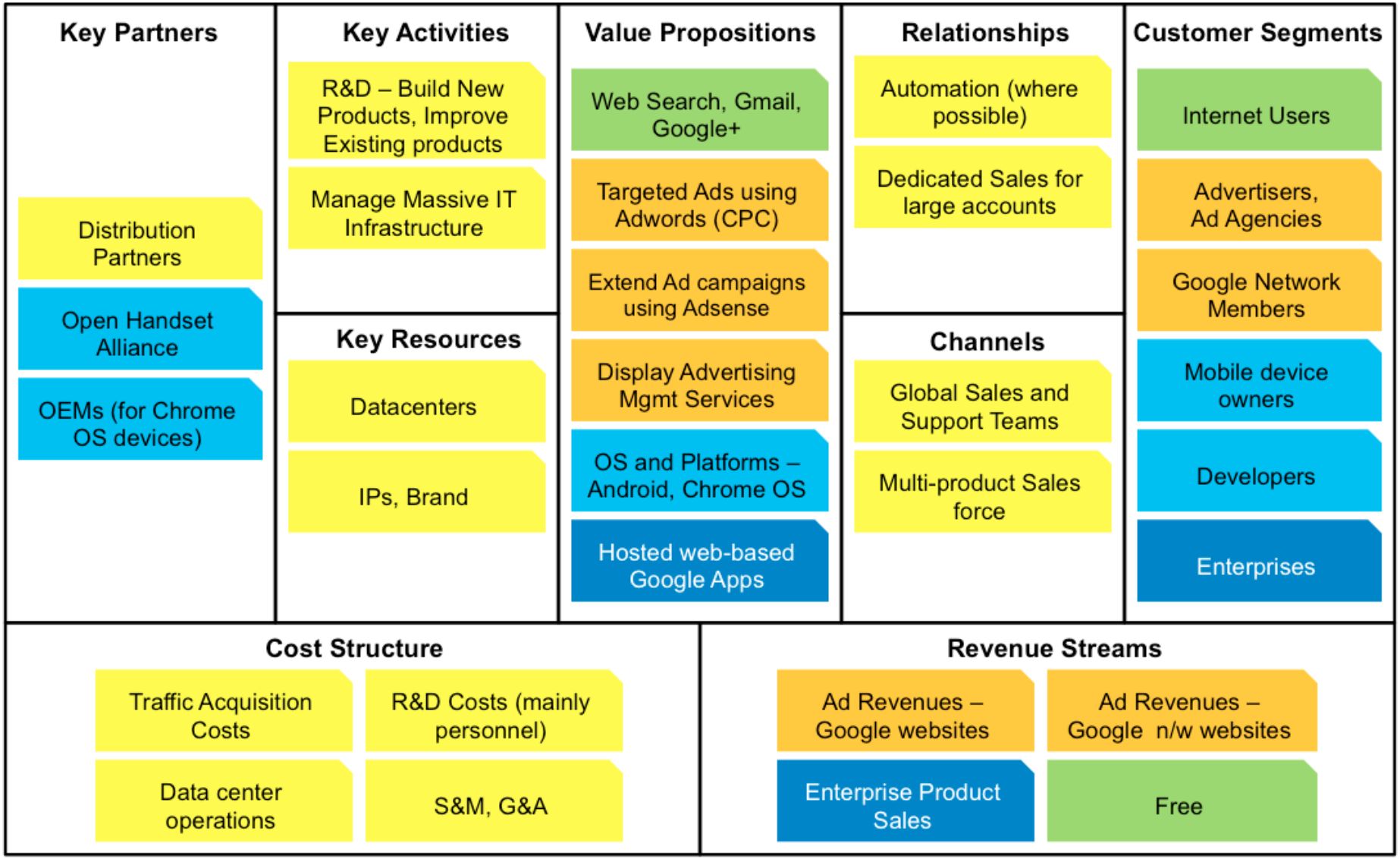
Twitter Business Model



www.businessmodelgeneration.com

Source: http://bmimatters.com/tag/business-model-canvas-examples/

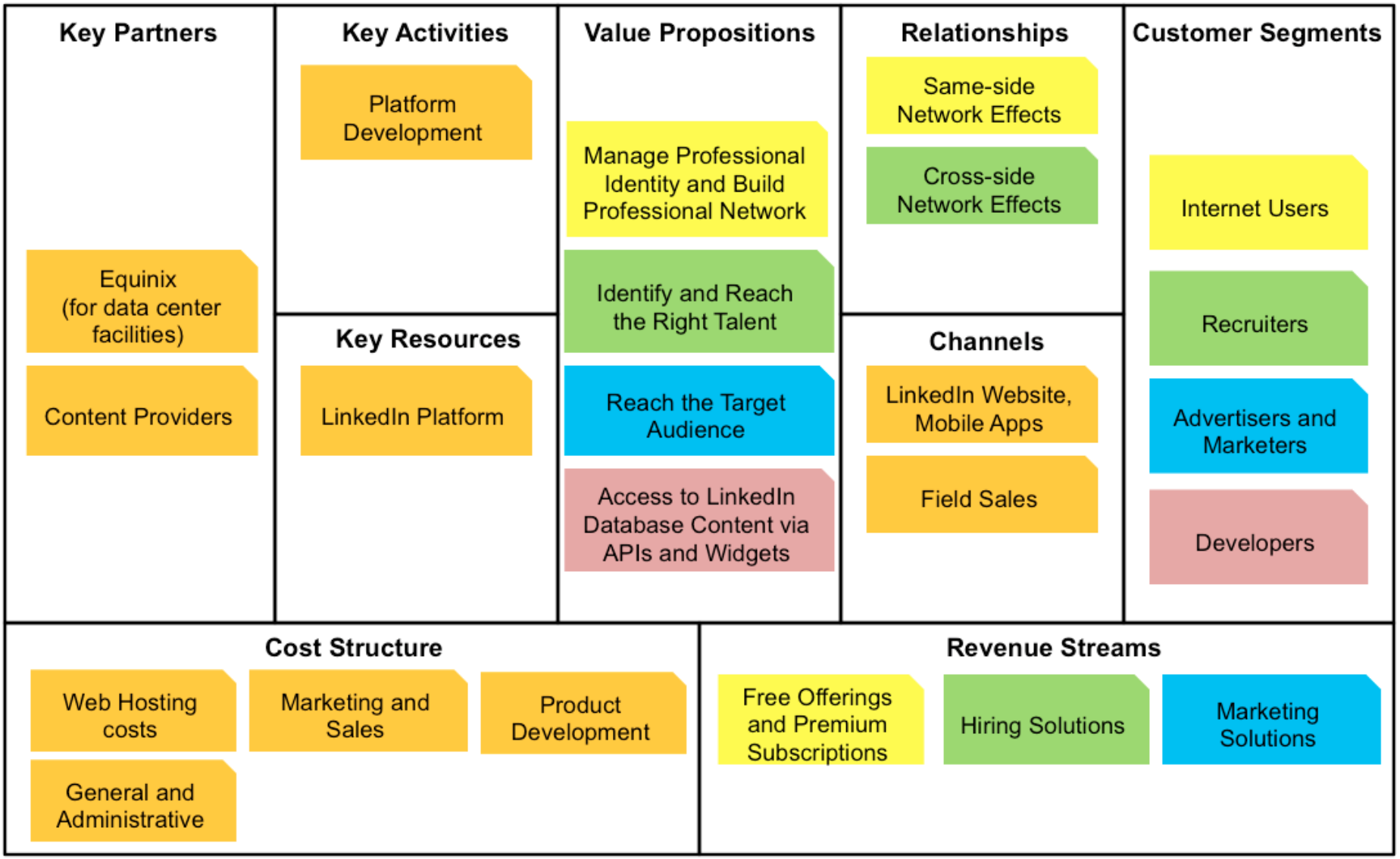
Google Business Model



www.businessmodelgeneration.com

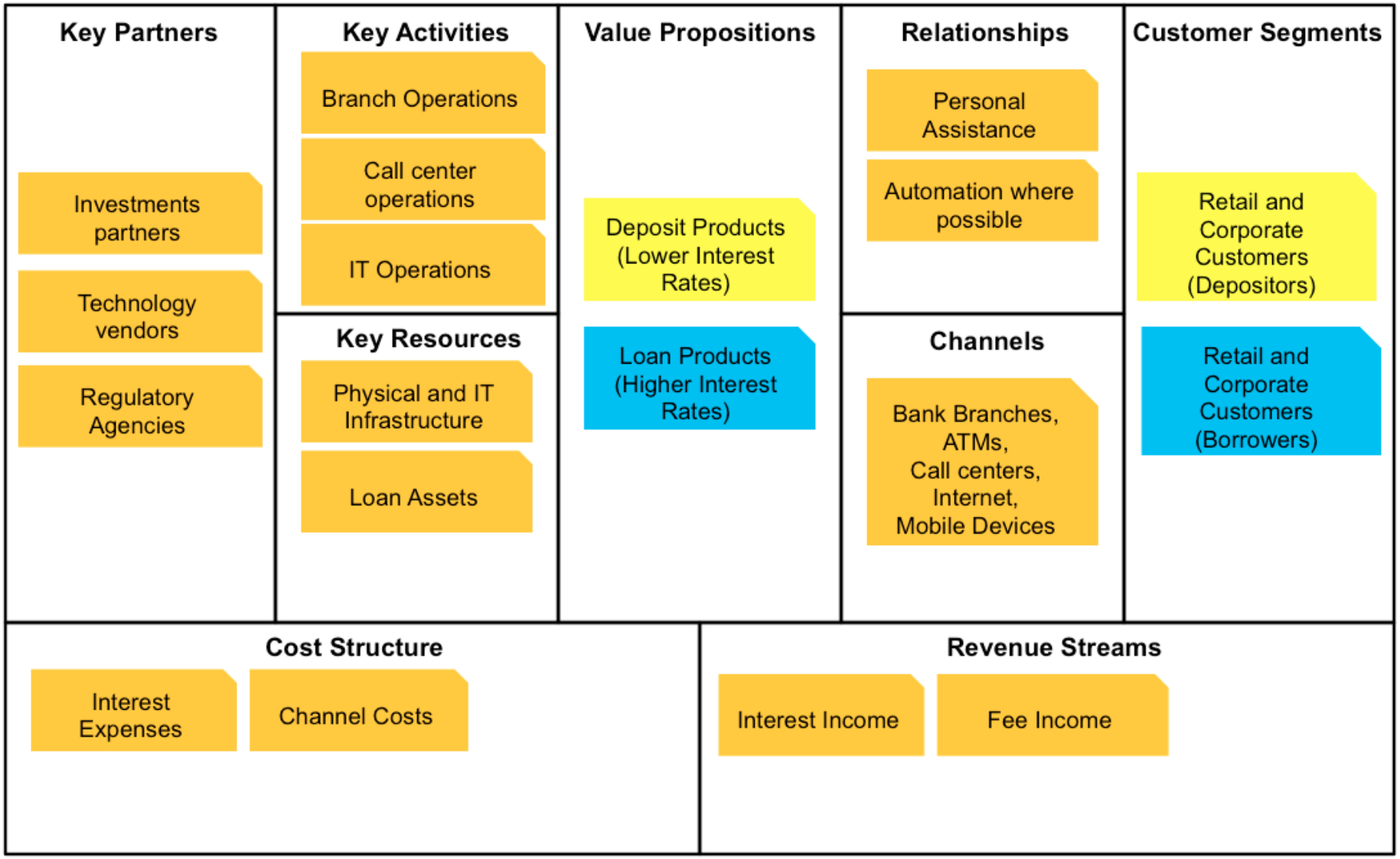
Source: http://bmimatters.com/tag/business-model-canvas-examples/

LinkedIn – World's Largest Professional Network



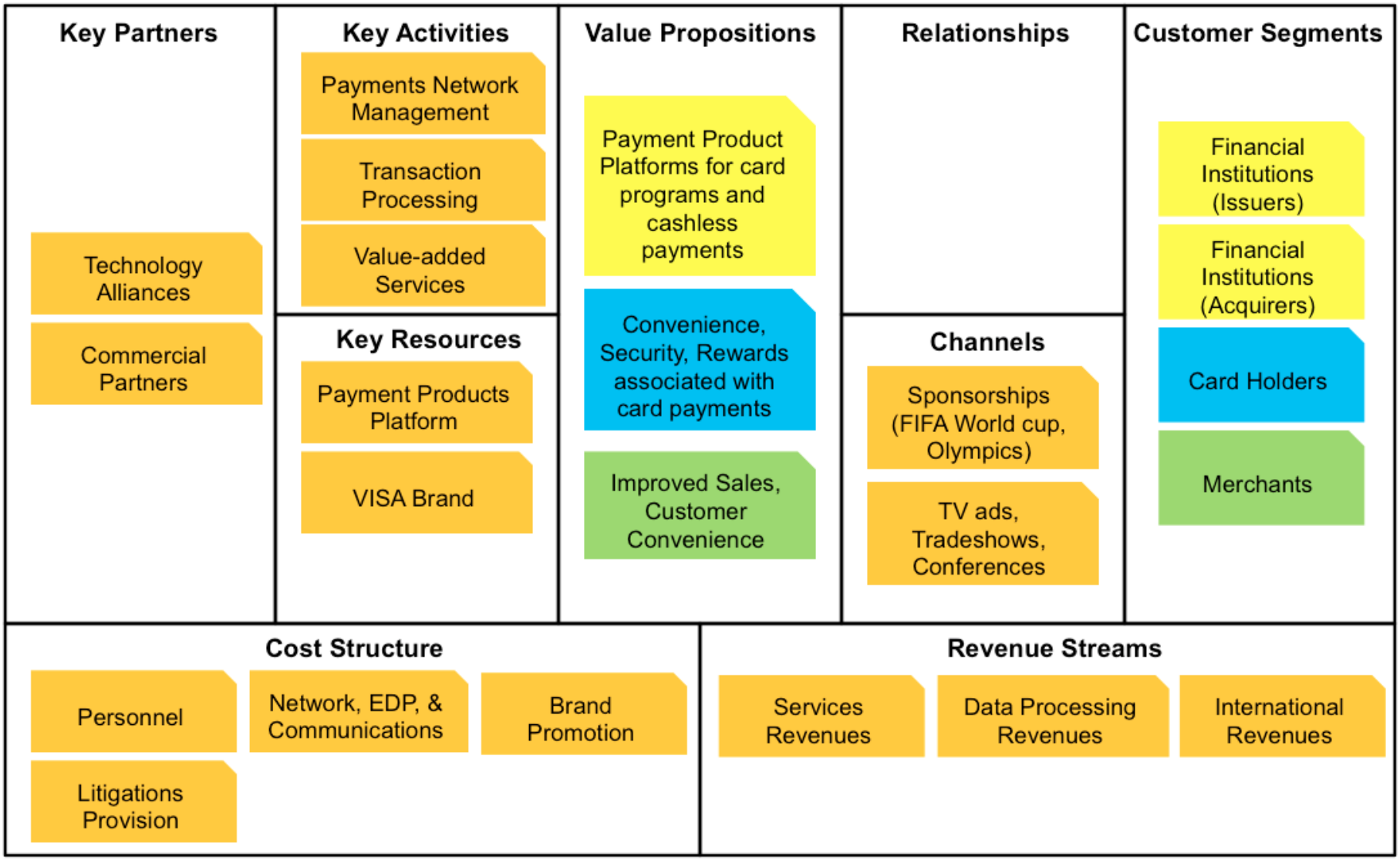
Source: http://bmimatters.com/tag/business-model-canvas-examples/

Business Model of Banking companies



Source: http://bmimatters.com/tag/business-model-canvas-examples/

VISA – Leader in Global Payments Industry



www.businessmodelgeneration.com

Source: http://bmimatters.com/tag/business-model-canvas-examples/

The Business Model Canvas

Designed for: Techno Cake

Designed by: Danilo Tič

Date: 1.2.2011

Iteration: 01

Key Partners

MC Miš

Local presenters

Volunteers

Key Activities

Event s Management

Marketing Management

Best presentations

Key Resources

Volunteers

Presentation Hall

Value Propositions

Techno cake talks and presentations

Videos about talks and presentations

Advertising
Video
WWW

Customer Relationships

Facebook,
Twitter
Flickr
Video-www

Channels

Facebook,
Twitter
Flickr
Videos
JAPTI, RIC

Customer Segments

Geeks
IT customers
Engineers

IT Companies
Mobile operators
Banks
Insurence Co…

Cost Structure

Event s Manag. Costs

Authors' costs

Revenue Streams

Advertising fee
Videos
Logos..

www.businessmodelgeneration.com

Source: http://businessmodelcombo.wordpress.com/2011/02/04/what-would-a-sustainable-techno-cake-business-model-look-like/

How Airbnb Works?

Insights into

Business Model

&

Revenue Model

Source: http://nextjuggernaut.com/blog/airbnb-business-model-canvas-how-airbnb-works-revenue-insights/

Airbnb Business Model Canvas

Source: http://nextjuggernaut.com/blog/airbnb-business-model-canvas-how-airbnb-works-revenue-insights/

startupbizmodel.com

airbnb

29 mar - 2012

Key Partners

- Local Photographers

- Main Investors
- YOUNIVERSITY VENTURES
- SEQUOIA CAPITAL
- Y Combinator
- greylockpartners.
- Online and international payment
- PayPal
- WESTERN UNION

Key Activities

- Platform development and maintenace
- Community management
- Marketing
- Online and international payment
- Photographers management

Key Resources

- Base of places announced
- Community of travellers and hosts
- Platform
- Brand

Value Proposition

- Great places to stay all around the world for low prices
- Rent out extra place effortlessly for a worldwide audience

Customer Relationships

- Self-service on site with a support team, SMS, iPhone App
- Self-service on site with a support team, SMS, iPhone App

Channels

- Site, Youtube, iPhone App, Blog, Facebook and Twitter
- Site, Youtube, iPhone App, Blog, Facebook and Twitter

Customer Segments

- Travelers that are looking for a good experience with a low price
- People with extra place that want to rent

Cost Structure

- Photographers
- Marketing
- Insurance
- Servers
- Human Resources
- Online and international payment

Revenue Steams

- 6-12% of booking fee
- 3% of each successfully booking

Source: http://www.slideshare.net/ThiagoPaiva/airbnb-12210879

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：
   週二 3,4 (10:10-12:00) B507

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