

FINTECH
HANGSUN
ASSOCIATE
PROFESSOR

INITIATIVES & MODELS

INITIATIVES & MODELS



「歌う時に私は、あたかも神前で祈るときのように、雑念を払って、心をまっさらにしなければ完璧な藝をお見せすることはできないのです。ですから、お客様を神様とみて、歌を唄うのです。また、演者にとってお客様を歓ばせるということは絶対条件です。だからお客様は絶対者、神様なのです。」

「お客様は神様です」について

Customer Centricity

- Financial institutions are aware that customers take a primary role in their business. But, *acta non verba*.
 - What do customers need for a bank?
A more secure service than banks (34%), a lower cost than banks (29%), a more convenient service than banks (26%), a quicker service than banks (18%), and a better customer service than banks (18%). (According to TransferWise)
 - The process to manage the transformation to a customer-centric organization (McKinsey & Co.):
 - **Vision and positioning:** "Create an institution that customers want to bank with and employees feel proud of."
 - **Customer engagement model:** "Design a bank that delivers exceptional customer service where customers expect it, and excites them where they do not."
 - **Development agenda:** "Define an integrated development agenda to drive short-term gains and long-term growth."
 - **Organization, capabilities, and insights:** "Build the insights engine, organizational capabilities, and governance needed to sustain momentum."
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Digital Transformation

- The most important aspect of the digital transformation is the ability to process a sequence of repetitive tasks at speeds previously unknown in trading.
 - The second stage in the digital transformation, linked to the emergence of **fintech initiatives**, has been more far-reaching. It began with the increased availability of solutions that could improve at the same time the entire value chain, e.g. products based on big data.
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Business Initiative

A business initiative is an organization's way of setting a priority. It is usually a description of the direction the organization wants to take and how that will improve the organization. The initiative may be a component of the organization's vision for the future.

Downsides of Disruptive Fintech Initiatives

- There are new risk exposures with fintech initiatives;
 - Fintech initiatives have deep risks connected with regulations;
 - There is a cultural challenge on how traditional financial institutions accept technology.
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*I keep six honest serving-men
(They taught me all I knew);
Their names are **What** and **Why** and **When**
And **How** and **Where** and **Who**.
I send them over land and sea,
I send them east and west;
But after they have worked for me,
I give them all a rest.*

*I let them rest from nine till five,
For I am busy then,
As well as breakfast, lunch, and tea,
For they are hungry men.
But different folk have different views;
I know a person small
She keeps ten million serving-men,
Who get no rest at all!
She sends em abroad on her own affairs,
From the second she opens her eyes
One million Hows, Two million Wheres,
And seven million Whys!*

- Joseph Rudyard Kipling

Classifications of a FinTech Initiative

- Why a fintech initiative was born?
 - For whom was it born?
 - Which are the services it aims to provide?
 - Where does it aim to perform its business?
 - When does it aim to operate, within the framework of the financial cycle?
 - How is fintech working?
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Classifications of a FinTech Initiative

- Why: is fintech born to supplement the inefficient traditional banking sector or to provide (new) services?
- In traditional financial institutions, there is a combination of a widespread difficulty of financial services to innovate with the internal resistance to change, typical of any organization. The result is a growing gap that new entrants are ready to fill. In the financial services industry, these new entrants are the fintech startups.

Banks still own 99 percent of the market, which is the main challenge of Kantox, and 99% of fintech startups besides, is the education of its customers.

- Philippe Gelis, Chief Executive Officer (CEO) and co-founder

Classifications of a FinTech Initiative

A classification model of fintech initiatives based on the applications and services they provide:

- Customer service: processes and services that deal with the customer at the user interface level as well as at the backend database level;
 - Financial services: applications and processes for portfolio management and risk management;
 - Compliance: methods for a company to comply with external and internal regulations;
 - Business processes: Collections of linked activities with the objective to deliver a specific result.
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Classifications of a FinTech Initiative

We saw a glaring gap in the marketplace. How do you come to compliant and optimal pre-trade decisions, and how do you make sure post-trade that you have always done the right thing? We unify pre-trade decision making with post-trade compliance reporting by using the same infrastructure, data, and logic.

- Satya Pemmaraju, founding partner and CEO of Droit.

The responsibility for providing a secure and convenient online experience is a challenge faced by every market in today's always-on world. Coming on the heels of our SecureKey Concierge service launch earlier this month, we are excited to offer our platform capabilities as a private label service to other leading organizations in vertical market communities where privacy and security are both a necessity and a challenge, ensuring a more secure online experience for users.

- Charles Walton, CEO of SecureKey

Classifications of a FinTech Initiative

Who: The subsequent business relationship established through the service may have different forms depending on the nature of the subjects that are making use of it.

- P2P: person-to-person services (e.g. Lending Club) ;
- B2P: business-to-person services (e.g. crowdfunding);
- P2B: person-to-business services (e.g. Fundbox, an invoice discounting service);
- B2B: business-to-business services.
- B2G (business-to-government) and B2E (business-to-employees)?

What is the service type of an ATM?

Classifications of a FinTech Initiative

What: what are fintech initiatives are delivering? One possible classification:

- Insurance
 - Wealth management
 - Payments
 - Credit
 - Crowdfunding
 - Retail banking
 - Security
 - Currency and forex (foreign exchanges and remittances)
 - Other
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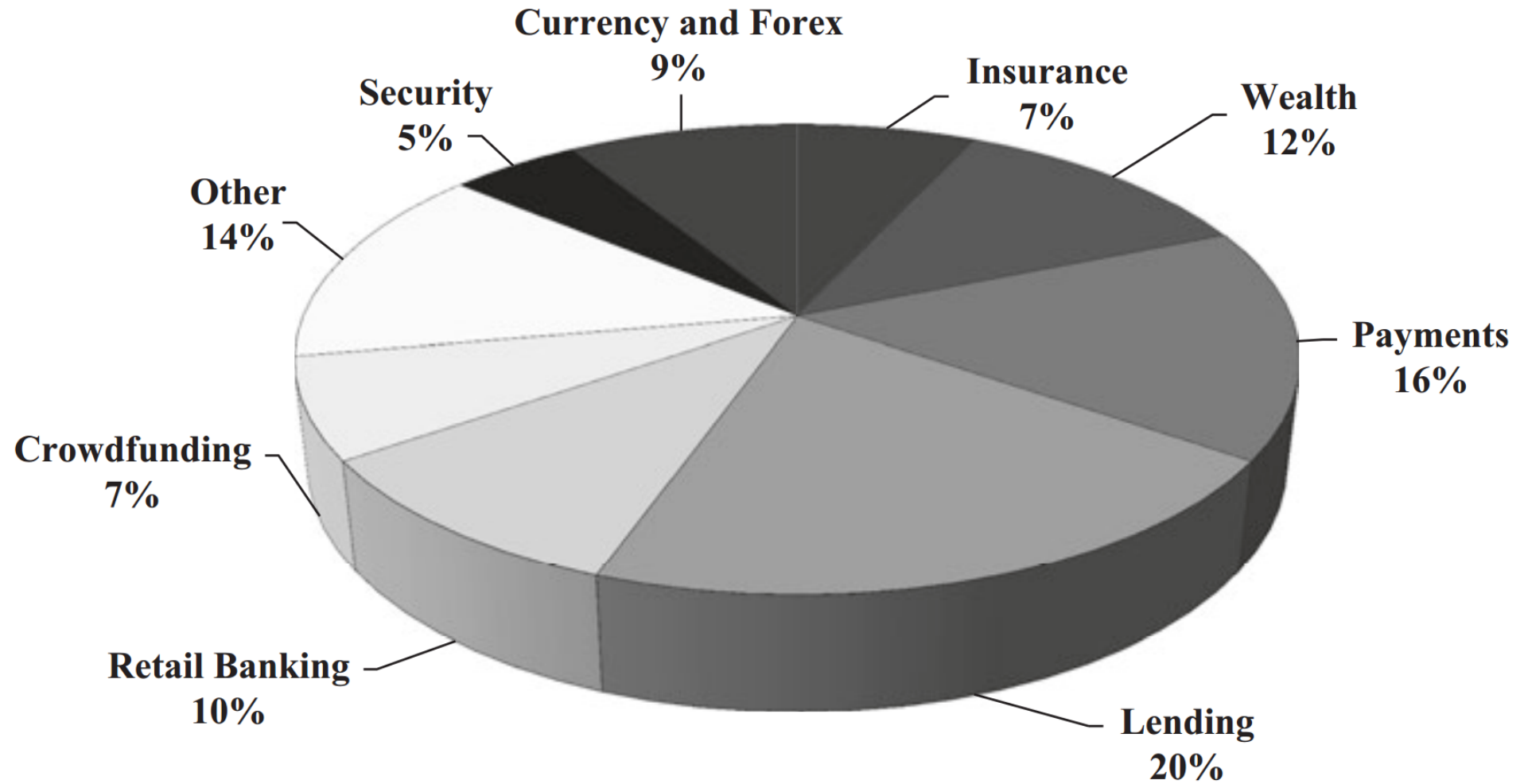
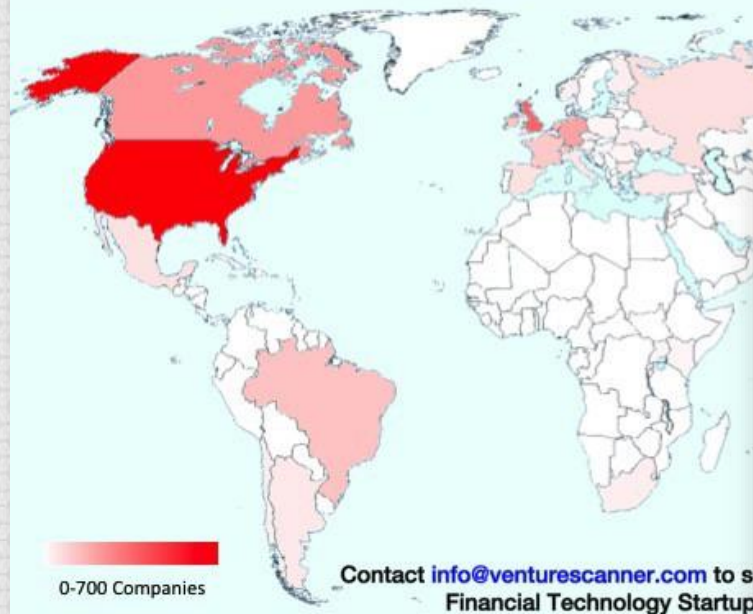


Fig. 3.1 Fintech specialization share (elaboration from "Fintech 100, Leading Global Fintech innovators, Report" [2015](#))

Classifications of a FinTech Initiative

- Where (1): where are fintech firms located?
 - Where (2): what kind of owners are fintech firms from?
 - Startups;
 - Traditional financial institutions, such as banks or insurance companies;
 - Technological or retail companies moving into financial services;
 - Advanced startups with a mixed ownership.
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Where FinTech Innovation is Happening by Venture Scanner



GLOBAL FINTECH VC DEAL VOLUME 2016



Classifications of a FinTech Initiative

When: two different types of fintech business models:

- Traditional fintech;
- Emergent fintech.

Traditional	Emergent
Market players are generally perceived as facilitators, which are typically large, incumbent technology vendors supporting the financial services sector. For example, Fiserv, Accenture, SunGard, TCS, FirstData.	Market players are disruptors and innovators by nature. They are disintermediating traditional financial institutions or provide new technology and different processes solutions to service existing needs. For example: Zopa, Fidor Bank, TransferWise.
Companies focus on the support, maintenance, and delivery of the existing infrastructure, which in some cases is outsourced.	Two operating models have emerged: of either using the existing infrastructure, which tends to be controlled by established players, or replacing it completely or using solutions in the cloud (P2P network, blockchain, etc.). The replacement of infrastructure is a high-risk strategy; however, it produces better results if successful.
Operate under established revenue models that tend to use cost per transaction, a percentage of assets, or license fees.	Emerging revenue models are broad and tend to function using multiple different types of revenue streams, including advertisement and data monetization. Fees are different among providers and consumers (the latter ones with no payment in some cases).

Classifications of a FinTech Initiative

How (1): with which technology does fintech delivers service?

- Mobility (for instance, mobile banking)
 - Big Data Analytics
 - Internet of things (IoT)
 - Cloud computing
 - Artificial intelligence (AI)
 - Robotics
 - Social networks, etc.
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Classifications of a FinTech Initiative

How (2): how do fintech companies innovate?

- Disruptors/enablers
 - Bases of innovation:
 - Product or service innovations
 - Process innovations
 - Organizational innovations
 - Business model innovations
 - Nonetheless, there are strong links existing between different forms of innovation, and the process through which innovations spread through an industry is not deterministic.
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Classifications of a FinTech Initiative

- Product or service innovations: the development of new products, changes in the design of established products, or use of new materials or components in the manufacture of established products.
 - Process innovations: implementing specific solutions that manage the flow of information, by reducing waste, by completely embracing the digital innovation, or by radically changing the way through which a specific product is produced and/or delivered. *Process innovations are not simple restructures inspired by efficiency and effectiveness principles.*
 - Organizational innovation: the implementation of a new organizational method in the undertaking's business practices, workplace organization, or external relations. *Changing the organization does not necessarily mean innovating: as always, there must be an innovative culture leading the change.*
 - Business model innovations (to be continued).
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Business Model

- A business model describes the rationale of how an organization creates, captures, and delivers value.
 - It represents all the core aspects of a business:
 - Purpose
 - Infrastructure
 - Trading practices
 - Business process
 - Target customers
 - Offerings
 - Strategies
 - Operational processes and policies
 - Organizational structures
 - Sourcing
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Business Model

- Primary dimensions of a business model:
 - The value architecture or creation;
 - The value proposition or delivery;
 - The value finance or economics;
 - The value network or the network effect.
 - The entrepreneurs interested in launching a fintech initiative should first get an answer to some basic questions:
 - Which value are they adding to the customers?
 - What will be their business model?
 - How will they earn money?
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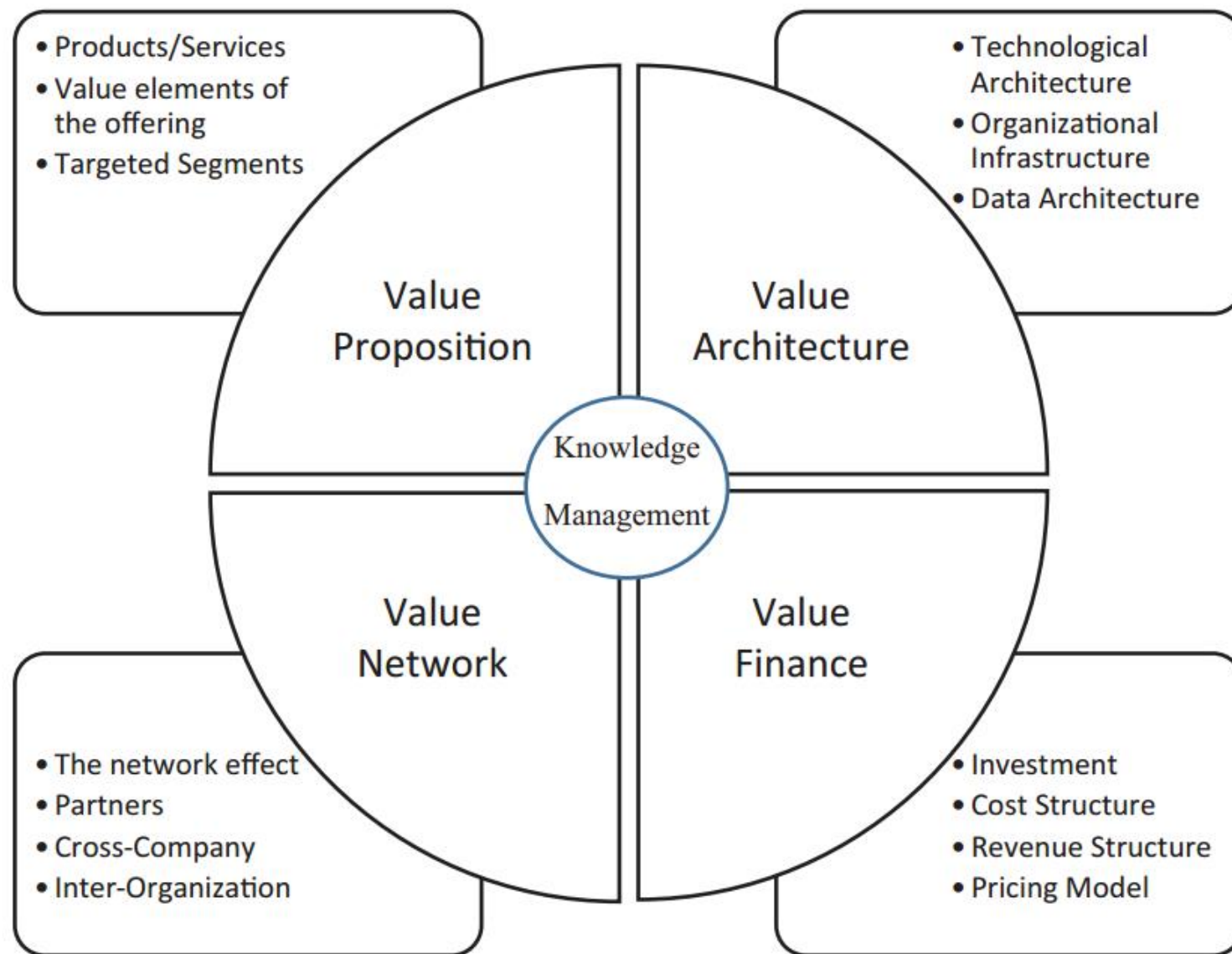


Fig. 3.4 The V4 business model framework

The Business Model Canvas

- **Market:** This includes three important aspects. The 3 Cs: the target customers, the competitors, and the compliance with the operative regulation. For whom does the fintech initiative aim to create value? Who are its target customers? Which are the rules it must respect?
 - **Value propositions:** Which are the products and/or services included in the organization offering? What value does the fintech initiative deliver to a customer in a given segment? Which needs are important to satisfy?
 - **Channels:** How does the company intend to reach the target customers? What is the most convenient channel for the customer? Are the different channels integrated with an omnichannel approach?
 - **Customer experiences:** Which will be the customer experience? How can the company build, maintain, and improve it to delight the customer? Will it perfectly fit with the aims of both the organization and of the customers?
 - **Key resources and systems:** Which resources are critical to deliver the value proposition through the channels and to maintain, enhance, and improve the customer relationships? Which organization should be set up?
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The Business Model Canvas

- **Key processes and activities:** Which are the most important activities and processes to make the business successful?
 - **Key partnerships and collaborations:** Who are the key partners and vendors? Which key resources do they provide and what key processes/activities do they operate? What is in it for them? Which relationship should be built with them?
 - **Revenue:** What will the customers pay for? How much? Which is the pricing model?
 - **Costs and investments:** Which are the finance (costs and investments) implied by the business model? Which are the most relevant? What is fixed and what is variable? Which are the main cost drivers and risks to consider?
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Business Model Canvas

Partnership and Collaboration <ul style="list-style-type: none">■ Third Party Merchants■ Payment Providers■ Traditional financial institutions	Processes and Activities <ul style="list-style-type: none">■ Security■ R&D Platform■ 24/7 Support■ Marketing	Products and Services <ul style="list-style-type: none">■ Secure, multi-payment, multi-currency online transaction platform■ No Setup Costs or monthly fees■ Easy to use	Customer Experience <ul style="list-style-type: none">■ Referral Program■ Volume discounts■ Quick configuration■ Support	Market: <ul style="list-style-type: none">• Customer• Competitors• Regulators <u>Buyers:</u> <ul style="list-style-type: none">■ B2C■ B2B■ Auction Buyers <u>Sellers:</u> <ul style="list-style-type: none">■ Merchants■ Businesses■ Auction Sellers
	Resources and Systems <ul style="list-style-type: none">■ Paypal Platform■ R&D Team■ Partnerships■ Market Position		Channels <ul style="list-style-type: none">■ Website■ Social Media■ Online Advertising■ Partner Programs	
Costs and Investments <ul style="list-style-type: none">■ Platform development and maintenance■ Transaction security■ Customer Acquisition costs (referral)			Revenue Streams <ul style="list-style-type: none">■ Transactions commissions■ Interest income on escrow transactions	

Fig. 3.6 PayPal's business model canvas (adapted by the author from multiple sites)

Business Model Canvas

Partnership and Collaboration <ul style="list-style-type: none">■ Payment Providers■ Business and entrepreneurship communities■ Large Organizations and institutions	Processes and Activities <ul style="list-style-type: none">■ Market Education■ R&D Platform■ Partner Development■ Marketing	Product and Services <ul style="list-style-type: none">■ Raise money from family, friends and social networks, all online■ Transparent, horizontal funding mechanism■ Easy to use: everybody can do it	Customer Experience <p>Support on:</p> <ul style="list-style-type: none">■ Project setup■ Campaign advisory■ Social media	Market: <ul style="list-style-type: none">• Customer• Competitors• Regulators <p><u>Buyers:</u></p> <ul style="list-style-type: none">■ Artists, creative types■ Social entrepreneurs■ Startups and SMEs <p><u>Sellers :</u></p> <ul style="list-style-type: none">■ Family/friends,/networks■ Large Companies■ Philanthropic Organizations
	Resources and Systems <ul style="list-style-type: none">■ Crowdfunding Platform■ Marketing and Education Team■ Online Social Network		Channels <ul style="list-style-type: none">■ Crowdfunding platform■ Social Media■ Word of Mouth■ Partner Programs	
Costs and Investments <ul style="list-style-type: none">■ Platform development and maintenance■ Marketing and Customer education costs■ Staff Salaries			Revenue Streams <ul style="list-style-type: none">■ Project commissions■ Secondary stream emerging	

Fig. 3.7 Crowdfunding's business model canvas (adapted by the author from multiple sites)

The Business Model Canvas

- **Market - Focus on Targets:** many fintech companies base their initiatives in a startup approach. Therefore, they direct their interest toward addressing areas of high revenue potential that could provide a quick break-even and a solid return on investment (ROI). This can be achieved either by going directly into existing revenue pools (for instance, classic banking, transactions, markets) or by creating disruptive business models and exploring niches (for instance, mobile payments, personal finance management, account aggregation).
 - **Products and Services - Focus on Value Added:** knowing customers' need and anticipating their expectations is critical for an effective market segmentation, which is useful for designing personalized and specific services. The main task of service development is to create an effective, efficient, and economical customer process.
 - **Channels - Focus on Social and Omnichannel:** improvements in the consumer relationship management (CRM) processes are critical to maintaining and expanding the competitive position of customer-centered organizations, which traditional financial institutions lack. Fintech initiatives should use social media to introduce new products and services. By combining and making transparent direct customer connections (email, call center, agent, portal, social, faxes, reports, etc.) with indirect customer connections such as social media, blogs, log files, and so on, a more holistic, 360° view of each customer can be obtained. This is what is called **omnichannel**.
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The Business Model Canvas

Customer Experience- Focus on Customer-Centric Approach:

- Traditional organizations, up to now, have not created close relationships with their customers. Customers are now choosing differently due to their new needs and, especially, expectations. A new group of customers, named millennials, is causing radical shifts to customer demographics.
 - Most financial services organizations perform customer surveys using a relatively small customer sample size. New solutions enable financial institutions to survey their entire customer base (and possibly prospects through social media) and process the survey results in a fast and cost-effective way. In this way, they can obtain a truer picture of what would be available from their customer service responses.
 - All fintech initiatives have a “customer-centric” approach, meaning that, whichever the plan they choose to pursue, customers must play a pivotal role.
 - McKinsey’s suggestions for designing a customer-centric organization define a clear, effective process:
 - Vision and positioning: “Create an institution that customers want to bank with and employees feel proud of.”
 - Customer engagement model: “Design an organization that delivers exceptional customer service where customers expect it, and excites them where they do not.”
 - Development agenda: “Define an integrated development agenda to drive short-term gains and long-term growth.”
 - Organization, capabilities, and insights: “Build the insights engine, organizational capabilities, and governance needed to sustain momentum.”
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The Business Model Canvas

- **Revenue - Focus on Customer Lifetime Value:** customer lifetime value (CLV or often CLTV), lifetime customer value (LCV), or life-time value (LTV) is a prediction of the net profit attributed to the entire future relationship with a customer. Using real-time location and business characteristics, data can lead to more appropriate pricing on customer risk based on how and where customers use the financial services. For example, by analyzing text and speech in a near-real time environment, organizations are presented with new opportunities to convert the call center from a cost center to a service-to-sales (S2S) center by providing cross-sell and upsell capabilities.
 - **Processes and Activities - Focus on Marketing:** Fintech companies' target market, most of the times, does not even know their products or services. Besides, when it does, it is not able to perceive all the benefits. It is the most useful tool in the hands of the management in order to produce returns from the marketing department. Solutions can help in leveraging for an effective marketing plan, including big data analytics, open data, customized customer content (**content marketing**), and **relational marketing**.
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The Business Model Canvas

- **Resources and Systems - Focus on Technology:** fintech initiatives should not only be maintaining this pace of innovation. They should also actively continue toward this direction in order to survive market's feasible and physiological pullbacks in the near future.
 - **Partnership and Collaboration - Focus on Financial Institutions:** traditional financial organizations have embraced the innovation challenge in different ways; some financial institutions have diversified, becoming venture capitalists. Many professionals have already identified a trend of a growing percentage of startups moving toward enabling and optimizing businesses, rather than disrupting them.
 - **Costs and Investments - Focus on Risks:** in the case of incumbent financial institutions, costs and risks are important factors that traditional management scrutinizes in great depth. Costs can be managed using lean and digitized solutions. The risk aspects are relatively new to the world of fintech initiatives.
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ASSIGNMENT 1.

Draw the business model canvas for a fintech company that you are familiar with.

*What is the **exact** relation between traditional banks and marketplace lending platforms?*

ASSIGNMENT 2.

Familiarize yourself with:

Tang, Huan. "Peer-to-peer lenders versus banks: substitutes or complements?." *Review of Financial Studies* (2018).