Fintech: Ecosystem and Business Models

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Abstract. Fintech is touted as a game changing disruptive innovation capable of shaking up traditional financial markets. This paper identifies five elements of the fintech ecosystem: (1) fintech startups (e.g., payment, wealth management, lending, crowdfunding, capital market, and insurance fintech companies), (2) technology developers (e.g., big data analytics, cloud computing, cryptocurrency, and social media developers), (3) government (e.g., financial regulators and legislature), (4) financial customers (individuals and organizations), and (5) traditional financial institutions (e.g., traditional banks, insurance companies, stock brokerage firms, and venture capitalists). This paper then discusses six fintech business models: payment, wealth management, crowdfunding, lending, capital market, and insurance services.

Keywords: Fintech, Business Model, Startup, Ecosystem, Banking, Financial Institutions

1 Introduction

Fintech promises to reshape the financial industry by cutting costs, improving the quality of financial services, and creating a more diverse and stable financial landscape [1]. The technological developments in infrastructure, big data, data analytics, and mobile devices allow fintech startups to disintermediate traditional financial firms with unique, niche, and personalized services. Due to fintech companies already having significant impact on the financial industry, every financial firm needs to build capabilities to leverage and/or invest in fintech to stay competitive.

With the advances in e-finance and mobile technologies for financial firms, fintech innovation emerged after the worldwide financial crisis in 2008 by combining the e-finance, Internet technologies, social networking services, social media, artificial intelligence, and big data analytics. Fintech startups differentiated themselves from traditional financial firms with personalized niche services, data-driven solutions, an innovative culture, and a nimble organization. Most major financial firms have begun taking fintech seriously and are developing strategies to compete, coexist, and collaborate with fintech startups.

The growth of investment in fintech has been phenomenal. According to Accenture [2], global investment in fintech ventures in the first quarter of 2016 reached $5.3 billion, a 67 percent increase over the same period previous year, and the percentage of investments going to fintech companies in Europe and Asia-Pacific nearly doubled to
62 percent. Much of this increase in investment has come from traditional financial institutions. Traditional financial institutions invest in external fintech startups in the form of collaborative fintech ventures as well as their internal fintech projects in hopes of leapfrogging fintech innovation and gaining a competitive advantage.

It is clear from the evidence that fintech is now well beyond the stage of hype and has become a major player in the financial world. In light of the urgent need to inform financial professionals of the significance of this disruptive innovation, this paper will discuss the following topics. First, this paper introduces a historical view of fintech and presents the fintech ecosystem. This paper then discusses various business models and investment types.

2 Fintech Ecosystem

To understand the competitive and collaborative dynamics in fintech innovation, we must first analyze the ecosystem. A stable symbiotic fintech ecosystem is instrumental to the growth of the fintech industry. This paper identifies five elements of the fintech ecosystem: (1) fintech startups (e.g., payment, wealth management, lending, crowdfunding, capital market, and insurances fintech companies), (2) technology developers (e.g., big data analytics, cloud computing, cryptocurrency, and social media developers), (3) government (e.g., financial regulators and legislature), (4) financial customers (individuals and organizations), and (5) traditional financial institutions (e.g., traditional banks, insurance companies, stock brokerage firms, and venture capitalists). These elements symbiotically contribute to the innovation, stimulate economy, facilitate collaboration and competition in the financial industry, and ultimately benefit consumers in the financial industry. Fig. 1 shows the five elements of the fintech ecosystem.

Fig. 1. The five elements of the fintech ecosystem
At the center of the ecosystem are fintech startups. These companies are mostly entrepreneurial and have driven major innovations in the areas of payment, wealth management, lending, crowdfunding, capital market, and insurances by incurring lower operating costs, targeting more niche markets, and providing more personalized services than traditional financial firms. Consumers, rather than relying on a single financial institution for their needs, are beginning to pick and choose services they would like from different fintech companies. A consumer may manage their loan via SoFi, while using PayPal to manage payments, Rocket Mortgage for their mortgage, and Robinhood for stock management. Venture capitalists and private equities are conducive to the creation of fintech startups and the level of investments increased significantly over time as well.

Technology developers provide digital platforms for social media, big data analytics, cloud computing, artificial intelligence, smart phones, and mobile services. Technology developers create a favorable environment for fintech startups to launch innovative services rapidly. Big data analytics can be used to provide unique personalized services to customers and cloud computing may be used for cash-strapped fintech startups to deploy web-based services at a fraction of the cost of in-house infrastructure development. Algorithmic trading strategies can be used as the basis for robo-advisor wealth management services at much lower fees than traditional wealth management services. Social media facilitates the growth of communities in the crowdfunding and person-to-person lending services.

Governments have been providing a favorable regulatory environment for fintech since the 2008 financial crisis [3]. Depending on the national economic development plans and economic policies, different governments provide different levels of regulation (e.g., licensing of financial services, relaxation of capital requirements, and tax incentives) for fintech startups to stimulate fintech innovation and facilitate global financial competitiveness. On the other hand, since 2008, traditional financial institutions have been subject to more rigorous regulation, capital requirements, and reporting requirements from government regulators. The looser regulatory requirements imposed on fintech startups allow them to provide more customized, inexpensive, and easy-to-access financial services to consumers than traditional institutions.

Financial customers are the source of revenue generation for fintech companies. While large organizations are important sources of revenue, the predominant revenue source for fintech companies are individual customers and small and medium-sized enterprises (SMEs). A survey found that the use of fintech services is greatest among younger, wealthier customers [3]. Early fintech adopters tend to be tech-savvy, younger, urban, and higher-income individuals. Currently, millennials (people between the age of 18 and 34) constitute a significant portion of fintech consumption in most countries. The future demographic is favorable to the fintech companies, in that in the next few decades the tech-savvy millennials will account for the largest part of the population and drive the growth of fintech services.

Traditional financial institutions are also a major driving force in the fintech ecosystem. After realizing the disruptive power of fintech and dwindling window of opportunities to blunt the fintech’s impact on the market, traditional financial institutions have been reevaluating their existing business models and developing strategies to embrace fintech innovation.
3 Fintech Business Models

This paper identifies six fintech business models implemented by the ever-growing number of fintech startups: payment, wealth management, crowdfunding, lending, capital market, and insurance services. Their value propositions, operating mechanisms, and major fintech companies in each business model are discussed below.

3.1 Payment Business Model

Payments are relatively simple compared to other financial products and services. Fintech companies focusing on payments are able to acquire customers rapidly at lower costs, and are one of the fastest moving in terms of innovation and adoption of new payment capabilities. The two markets of payment fintechs are (1) consumer and retail payment and (2) wholesale and corporate payment. Payments is one of the most used retail financial services on a day to day basis, as well as one of the least regulated financial services. According to BNY Mellon [4], consumer and retail payment fintechs include mobile wallets, P2P mobile payments, foreign exchange and remittances, real-time payments, and digital currency solutions. These services improve the experience of their customers who look for a streamlined payments experience in terms of speed, convenience, and multi-channel accessibility.

3.2 Wealth Management Business Model

One of the more popular wealth management fintech business models is automated wealth managers (robo-advisors), that provide financial advice for a fraction of the price of a real-life adviser. They work by using algorithms to suggest a mix of assets to invest in based on a customer’s investment preferences and characteristics [5]. This business model benefits from changing demographics and consumer behavior that favor automated and passive investment strategies, a simple and transparent fee structure, and attractive unit economics that allow low or no investment minimums [3].

3.3 Crowdfunding Business Model

Crowdfunding involves three parties: the project initiator or entrepreneur who needs funding, the contributors who may be interested in supporting the cause or project, and the moderating organization that facilitates the engagement between the contributors and the initiator. The moderating organization enables the contributors to access information about the different initiatives and funding opportunities for the development of products/services.

Rewards-based crowdfunding, donation-based crowdfunding, and equity-based crowdfunding are the most popular crowdfunding business models. Rewards-based crowdfunding has been an attractive fundraising option for thousands of small businesses and creative projects. In the event that there is any interest to be charged on the amount of the rewards-based crowdfunding, the borrower sets the interest rate that
they are comfortable with and can guarantee a refund within the stipulated time period [6]. In return for a fund from supporters of a project, the business typically gives some type of rewards for the funding. Donation-based crowdfunding is a way to source money for a charity project by asking donators to contribute money to it. Equity-based crowdfunding is an appealing option for small and medium-sized companies (SMEs) as increased capital ratio requirements on traditional banks make lending to SMEs less prioritized by the traditional banks.

3.4 Lending Business Model

Peer-to-Peer (P2P) consumer lending and Peer-to-Peer (P2P) business lending is another big trend in fintech. P2P lending fintechs allow individuals and businesses to lend and borrow between each other. With their efficient structure, P2P lending fintechs are able to offer low interest rates and an improved lending process for lenders and borrowers. A subtle but significant distinction from a bank is that these fintechs are technically not involved in the lending themselves, as they are simply matching lenders with borrowers, and collecting fees off of users.

3.5 Capital Market Business Model

New fintech business models take hold across a full spectrum of capital market areas such as investment, foreign exchange, trading, risk management, and research. One area of promising capital market fintech is trading. Trading fintechs allow investors and traders to connect with each other to discuss and share knowledge, place orders to buy and sell commodities and stocks, and monitor risks real-time. Another area of capital market fintech business models is foreign currency transactions. Foreign currency transactions have been a service dominated by financial institutions. Fintechs lower barriers and costs for individuals and SMEs engaging in foreign currency transactions all around the world. Users are able to see live pricing and send/receive funds in various currencies securely in real time, all via their mobile device. Fintechs offering this service are able to do so at a much lower cost, via payment methods that are much more familiar to individual clients or businesses.

3.6 Insurance Services Business Model

In insurance fintech business models, fintechs work to enable a more direct relationship between the insurer and the customer. They use data analytics to calculate and match risk, and as the pool of potential customers broadens, customers are offered products to meet their needs (e.g., car, life, healthcare, or causality insurance). They also streamline health care billing processes. The insurance fintech business model seems to be the most well-embraced by traditional insurance providers. The technology allows insurers to expand their data collection to non-traditional sources to supplement their traditional models, improving their risk analysis.
5 Conclusion

Because fintech is such a recent development, there is still a paucity of studies on the social, regulatory, technological, and managerial aspects of fintech. This makes it very challenging for financial firms to make informed decisions in regards to the investment in fintech projects. This paper is one of first studies to develop a high-level architectural view of the fintech sector. This paper presented five elements of the fintech ecosystem: fintech startups, technology developers, government, financial customers, and traditional financial institutions. Then, this paper discussed six fintech business models: payment, wealth management, crowdfunding, lending, capital market, and insurance services.

References