Daxi Cheng, Hexin Zhang, Jake Schmidt

Assignment 1: FinTech Overview

1. **Describe the main areas in which FinTech companies operate; find examples of companies that you find interesting and describe what they offer and how they compete.**

The FinTech landscape is diverse. According to the report, there are five main areas:

1.Transactions/Payments/Digital Currency

- Stripe ($9.2B) is quickly becoming the standard platform for companies to accept payments from credit cards, Apple Pay, and more. The company innovates by exposing many easy and helpful APIs to streamline payments for individuals, smalls business, and global enterprises alike.

2. Savings/Investments/Wealth Advising/Wealth Management

- Wealthfront ($700M) offers automated financial planning for a flat 0.25% fee. Intelligent dividend reinvestment and automatic daily tax-loss harvesting generate returns at a low cost.

3. Lending/Equity crowdfunding

- SoFi ($4.4B) offers student loan and mortgage refinancing at disruptively low rates.

4. Capital markets

- Robinhood ($1.3B), an equities exchange, is popular with millennial hobbyist investors thanks to its zero-commission trades and mobile-first strategy.

5. Credit Scores

- Credit Karma ($3.5B) is another innovator in the credit space. In the wake of security breaches in the credit rating giants such as Equifax, Credit Karma markets a brand identity of trust, transparency, and security which attracts customers.

6. Insurance

- Clover Health ($1.2B) takes full advantage of its customers' data to provide a cheaper and more efficient insurance marketplace.

2. What is the potential impact of FinTech on banks? While there is much uncertainty, try to rely on as much expert opinion and data as you can.

The potential impact would be loss of data from payment transactions, loss of customer depth and fee revenue reductions.

1. In terms of payment transactions, as more and more customers turn to mobile payments, financial institutions may lose their control over their customer's transaction experience. The FinTech winner will be able to access customers' spending patterns and gain more understanding of the data.
2. In terms of customer depth, since FinTech companies could provide diversified financial products to customers at all levels and usually with better customer experience, customers may prefer to purchase these product from FinTech companies instead of banks.
3. The fee revenue will reduce, primarily because deposits and lending, the area which most banks' revenue come from, will be the most affected are by FinTech companies as new lending platforms are transforming credit evaluation and loan origination as well as opening up consumer lending to non-traditional sources of capital. As more customers turn to lending platforms, traditional deposits and investment products will be harmed. The intensified competition will narrow spread between borrowing and lending, leaving banks with little room of profit.

As a result of above, people employed in banks may decline in the future. According to Antony Jenkins, the former CEO of Barclays, "the number of branches and people employed in the financial services sector may decline by as much as 50% over the next 10 years." Yet there may be new jobs created with FinTech but in substantially small numbers.

3. Where is capital being currently deployed in FinTech? Which areas are, in your view, ripe with opportunity?

We can look at this question in three ways.

1. In terms of customer type: According to Citi's report, Personal & Small and Medium Enterprises (SME) account for 73% of the total capital, followed by asset management and wealth for 10%. Insurance also accounts for 10% and investment banking takes 4% of total capital shares. Large corporate accounts for the rest 3%.

2. In terms of business type, we can see that lending accounts for 46% of total capital.

3. Geographically, North America leads in venture capital funding for Fintech startups, according to a 2017 CB Insights report, with over $5B raised in the first three quarters of 2017. However, Chinese and Asian investors are not far behind, with $4.9B raised over the same period.

Generally we define 'ripe of opportunity' as some field that have adequate profit, space for more investment and also fewer competitors. So we think that lending, which accounts for 56% of the total profit and only 46% of the capital and 28% of the number of start-ups is ripe of opportunity.

However, another exciting fintech development with huge potential value is crowdsourced hedge funds such as Quantopian and Numerai. Developers and data scientists build and submit candidate models/algos which are evaluated and selected for inclusion in the fund's portfolio, with the developer getting a share of any profits. This paradigm inverts the typical crowdfunding dynamic — which has many small investors pitch in for a product — to one in which many "products" (algos) vie for the approval of one large investor. Quantopian has paid out millions of dollars to date.

4. Analyze the main options available to Costa's client (Darden Case) and provide your recommendation.

Option 1: Doing nothing

Costa's client can just simply choose to keep its current business model and do nothing. However, this might not be a good option for the following reasons:

1. Miss the opportunity to generate more profit. According to the report from Citi, by 2023, 17% of U.S. consumer bank revenues could be based on fintech and digital business models. Also, we know that lending is the most profitable sector of the global banking system which counts for about 55% of the total profit according to Citi's report.
2. Fall behind the competitors. Goldman, as one of the competitors in banking sector, has already embraced fintech and is launching its own online lending operation. If the client chooses to do nothing now, they would fall behind their competitors and might be even harder to enter into that field later on.

Option 2: Acquire fintech firms

Costa's research had revealed that banking as a consumer experience was evolving and that banks were going to need to become more technology driven. Acquiring those fintech companies seems to be the most direct and easiest way. However, there are several factors we still need to consider:

1. Costs and regulations. It is costly to directly acquire those fintech firms and many regulations prohibit banks from doing so. According to the data in exhibit 2 of the case, fintech companies are generally priced at a premium to the broader markets with the median

S&P 500 company priced at 19.6 times forward earnings at year-end 2014, so it is unwise to just purchase those firms that have already been really high valuated.

2. Large technology companies, such as Facebook, Google, Amazon and Apple, could also be a big threat.

Given all the facts above, it is feasible for the client to acquire one or two companies.

Option 3: Convert current IT and strategy to become a fintech company

Banks could shift their ambitions, overhaul their infrastructures, and become fintech or technology companies. This option takes too much effort and courage.

1. First of all, it might not be acceptable for the client to just transform the whole business model just for the threat of fintech companies.
2. Secondly, even if the management team chooses to do so, the cultural and size differences might hinder the pivoting process.
3. Not to mention if they transformed into a technology company, they would lose their comparative advantages such as customer relations and connections in the finance field.

So we don't recommend the firm to take that risk. Facing the challenge of fintech companies doesn't necessarily mean you need to become one of them.

Option 4: Partner with fintech companies to serve customers

Reorient the firm as the dynamic center of a fintech ecosystem. Explore and develop financial technologies that can work together with fintech companies.

By partnering with fintech companies, the bank can still retain customers while taking advantage of the latest convenient technologies the fintech companies develop. This is a rather cheap, safe option that may also allow the adoption of more mature technologies from rather large fintech companies. This is also the most common option that financial-services executives choose in the survey (over 30% of them, Exhibit 4). So in general, we recommend this option to the Costa's client.