Changes in the Financial Industry: Adyen and Fintech

CASE STUDY

It was an especially successful 2018 for Adyen, a Dutch company that mostly focuses on processing Internet payments. In February, Adyen announced that it would become the primary payments provider of American Internet giant eBay. This was a big success for two reasons. First, eBay is, of course, a huge company with a large revenue; in 2017, the value of goods sold on the platform amounted to a staggering $36.28 billion. For Adyen, this meant a huge increase of its business. Second, and perhaps more importantly, eBay gave preference to Adyen over PayPal, which is very often the first choice of online companies. For a startup like Adyen to beat a market leader like PayPal was remarkable.

As if that was not enough, Adyen also had a very successful initial public offering (IPO) at the stock exchange. Its shares, which were priced at €240, nearly doubled in value during the first trading day. Some conservative commentators stated that this was the outcome of overhype, emphasizing that the price of the shares did not reflect the profits the company was making. However, at least for the first few months after the IPO, the optimism seemed well founded, for in December 2018, Adyen shares were still priced around €430. Adyen, a company with around 750 employees, was at one point more valuable than Deutsche Bank, a traditional financial institution that employs more than 100,000 people!

What explains Adyen's success? The answer to that lies in the data technology it uses. To put it simply, Adyen makes payment transactions easier. Making payments on the Internet is a much more complicated business than many people think it is. In many payment cycles, several companies work together to ensure that the payment is successful. To start with, there is, of course, the merchant, but there are also companies providing a gateway for the payments, assessing the risk, and so on. Because of this crowded field of facilitators, many things can go wrong. For instance, software may be outdated, or programs used by one provider may be incompatible with those of another. Because of this, many payments fail for technical reasons even when the client has enough funds to make the transaction.

According to Forrester, a consultancy firm that focuses on financial data, around 10 percent of all payments fail for such "technical" reasons. As online payments increase exponentially, there is huge room for improvement here. Adyen is reducing this performance gap by integrating several components of the payment chain (such as the gateway, risk assessment, and processing) into one platform. It has thus been successful in ensuring a higher success rate in its payments chain than other facilitators. (It also provides the company with a wealth of data on customer behavior)

A second advantage of the Adyen business model is that its payments platform is connected to most payment systems being used in the world. Payment systems can differ greatly from country to country. In the Netherlands, for instance, most online payments are done through the iDEAL system, which links payments to checking accounts. In other countries, most payments are done through credit cards or debit cards like Visa or Mastercard. When it comes to processing payments, this variety of methods complicates things enormously, as the payment processors need to have several platforms. Adyen, however, has one integrated platform that can link with most payment methods being used all over the world. This is, of course, an attractive option for merchants or online companies that sell their goods worldwide. When eBay decided to work with Adyen, it gave two reasons for its decision: Adyen processes payments more cheaply and gives more control to merchants that use the platform.

Adyen is a good example of a company that works in the field of fintech (financial technology). Companies that use technology to facilitate financial transactions have been highly successful over the last ten years. Founded in 2006, Adyen is relatively old for a fintech company, but it has grown enormously—in 2017, as its website proudly boasts, it had €108 billion in processed volume. Remarkable as Adyen's case is, it is definitely not unique; other firms have used technology to find a new niche in the international payments universe. The company TransferWise (which was founded in Estonia but now mostly operates from the United Kingdom) is another example: it facilitates money transfers from Country A to Country B while avoiding currency conversion.

Initially traditional banks find it hard to compete with companies like Adyen. It is in the DNA of fintech companies to develop and focus on state-of-the-art information systems. Traditional banks are very different; they work in buildings, value direct, physical contact with the customer, and often have branches in various countries that are more or less independent. Their IT staff often has a supporting role and not, as in the case of Adyen, a guiding one. Traditional banks use IT systems to facilitate business operations, not to compete with other financial providers. Their IT systems are usually at the national level and may differ from country to country. The heart of Adyen is the financial platform, and the IT staff works continuously to make it cheaper and more user-friendly. The data that come in on this platform are analyzed and used to upgrade and update it. The data that Adyen gets are global (the platform processes payments from all over the world) and highly diverse (from payment transactions on the Internet as well as transactions performed in physical shops). This wealth of data ensures that Adyen has better opportunities to analyze the market of payment transactions and its developments than traditional banks do.

Fintech is a good example of what economists call "creative destruction." This term, originally labelled by the Austrian economist Joseph Schumpeter, describes the influence of technology on the economy. According to his theory, new technologies inevitably result in winners and in losers. One famous example of a disruption is the invention of the Spinning Jenny, a device invented in Britain during the eighteenth century. The Spinning Jenny made the production of cloth more efficient, cheaper, and—critically—reduced the number of laborers needed in the textiles industry. Over the last 30 years, the Internet has had the same effect on society: some jobs have disappeared, and others have come into existence. A good example is travel agencies. Forty years ago, there was a travel agency on every high street, but according to the official Dutch statistics agency, 67.2 percent of all holidays in 2017 were booked online. Likewise, traditional hotels now have to compete with sites like Airbnb.

Creative destruction comes in waves, and the banking industry is now in the frontline of change because of the emergence of fintech companies. Adyen has incorporated many stages of the payment chain, and traditional companies that used to provide, for instance, risk assessment now have to either make their business model more efficient or face the very real possibility of going out of business. The German firm N26 is also a good example of how fintech is changing the banking industry. This company provides payment services just like a normal bank does, but it does not have buildings where customer agents give advice to the customers; everything is online. In 2018, N26 was attracting 2,000 new customers every day and had secured $160 million from private investors to expand. One of the founders, Maximilian Tayenthal, remarked that traditional banks had not taken N26 seriously when the company was launched.

Companies like Adyen and N26, which make online banking so much easier, have already had a huge impact on the physical presence of banks in many countries. In the United Kingdom, for instance, there were 18,000 branches in 1990; at the end of 2017 there were only 8,000 left. In the Netherlands, the digital banking experience progressed so rapidly that the Dutch government felt it necessary to make it clear that it would not allow the loss of cash payments from the Dutch High Streets as this would severely limit the participation in society of vulnerable groups such as the elderly.

According to experts, the next wave of technology will be even more disruptive. In 2018, Antony Jenkins, who ran Barclays from 2012 to 2015, told the BBC that in the coming years around 50 percent of all jobs in banking (including those of middle managers and customer agents) would be replaced by some kind of artificial intelligence. Andy Haldane, the chief economist of the Bank of England, warned in the same year of a fourth industrial revolution that would cause severe disruptions in the job market, and at the heart of it would be artificial intelligence—a modern counterpart to the Spinning Jenny.

This does not mean that success is automatically guaranteed for new companies like Adyen, TransferWise, and N26. A majority of these fintech startups go bankrupt, and many of these fintech companies need to make large investments before they can generate profits. Even when they generate profits, these are often, for a time at least, rather small compared to the overall value of the company on the stock exchange. During the first six months of 2018, for instance, Adyen increased its profits by 67 percent to €156.4 million. This may seem like a staggering amount for a company that was only founded in 2006, but it is not a lot of money compared to the total amount of payments it processed (€70 billion). It pales even more if one takes into account the total value of the company on the stock exchange (around €16 billion).

FinTech companies are also being challenged by the major traditional banks who are rapidly developing their own versions of online payment systems, from peer-to-peer payments for retail customers, to highly automated online payment and billing systems for global businesses. As consumers and firms have moved towards mobile and online payments, many traditional banks have invested heavily in new technologies in part using the funds saved by closing down traditional physical bank branches. Where in-house innovation has not worked, the large banks have purchased fintech firms and folded them into their existing business and technology platforms. Traditional banks have a decided advantage over fintech startups: extraordinary cash flow and tens of millions of loyal customers and firms. In this scenario, fintech firms have been early to the party, but typically do not survive to the end of the party, at least not as independent firms.

Like so many other companies in fintech, Adyen is still more of a financial promise than an immediate reality. Investors pay for profits that are still to come, as well as IPO exit strategies that promise rich rewards even in the absence of profits. CEOs of startup companies in the fintech sector need to have a keen marketing instinct; they must be able to explain why their idea will make money in the years to come. TransferWise, the company that facilitates money transfers without asking for huge fees for currency conversion, was founded in 2011, but it only made its first profit in 2017.

Adyen's founders were very experienced entrepreneurs when they started their company. They had already created another company, Bibit, which they sold to The Royal Bank of Scotland for €100 million. Indeed, the word adyen means "again" in a language from Surinam, meaning that Adyen is their second endeavor in the field of financial technology. Many companies never get a second chance, and research shows that around 90 percent of new fintech companies go bankrupt without ever having been profitable.

But those that survive change the banking and payments industry. The first financial results that Adyen released in 2018 show that the company may survive competitive challenges. Year-on-year, Adyen reports, the processed volume of payments has grown by 43.1 percent. TransferWise has also been growing rapidly; in 2018, it reported that 3.9 billion dollars is being sent through its network every month. Both firms illustrate how fintech startups are changing the traditional bank and payment systems using new technologies and business models.

Sources: Jan Hammer, "Adyen: A Global Success Born in Amsterdam," Index Ventures, June 13, 2018, https://www.indexventures.com/blog/adyen-a-global-success-born-in-amsterdam; "The Forrester Wave™: Global Merchant Payment Providers, Q4 2018," Adyen, https://www.adyen.com/landing/online/global/forrester-wave-report; "Dutch Payment Firm Adyen First-Half Profit Surges," CNBC, August 22, 2018, https://www.cnbc.com/2018/08/22/dutch-payments-firm-adyen-first-half-profit-surges.html, "Bank Jobs Could Fall by 50% in 10 Years Says Ex-Barclays Boss," BBC News, November 26, 2015, https://www.bbc.com/news/business-34933960, Kamal Ahmed, "Bank of England Chief Economist Warns on AI Jobs Threat," BBC News, August 20, 2018, https://www.bbc.com/news/business-45240758; Tomasz Grynkiewicz, "5 Years Ago Nobody Took Their Bank Seriously. Today This Fintech Attracts 2,000 Customers a Day," Netguru, April 9, 2018, https://www.netguru.com/blog/n26-fintech-disruption-digital-banking; Transferwise.com, all accessed January 2019.

CASE STUDY QUESTIONS

1-12 According to Adyen, the payments platform has two advantages compared to other payment platforms. Describe these advantages in your own words.

1-13 Many fintech companies are very valuable on the stock exchange even though they make little or no profit. Explain this situation. Why do investors pay so much for shares of companies that hardly make any profits?

1-14 Explain the term "creative destruction." Is the German bank N26 destroying jobs or creating new jobs?

1-15 Explain why such a high percentage of fintech startups go bankrupt before making any profits at all.

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