



WHAT'S NEXT IN FIN TECH?

Wait! What the heck
is FinTech?

If you surveyed venture capitalists who invest in technology today, they would tell you that one of the most exciting areas to invest in is FinTech. The term is investor slang for financial technology (software, hardware and services) bought by companies or used by customers within the world of finance. It encompasses software for consumers to check credit card balances all the way to high-end computer systems that buy and sell stocks in microseconds.

I have spent 20 years looking at innovation as an early-stage investor and adviser to growth-stage technology companies. I have met and invested in companies that had unique ideas that would disrupt or make big changes in the industry, trying to catch large, slower-moving technology companies by surprise. I have seen a lot of advances in the financial technology space and want to share what I am seeing out there today. Let me start with an introduction to the FinTech industry, which you participate in every day as finance professionals. You may be in the industry and users of the technology, but are you aware of just how large a market FinTech is? Annual global spending on information technology or IT (hardware, software and services) in the finance industry sector is second among all other sectors, according to IT research firm Gartner. Banking and securities companies spent \$445 billion in 2012, behind only manufacturing and natural resources at \$467 billion.

We shouldn't be shocked that finance (in the broadest definition, not just banking) is one of the top spenders in IT when you think about what finance has really become — electronic. Everything has moved to ones and zeroes in a vastly complex and fast-moving world of digital money. Public stock trading has become a speed game with the new world of algorithmic trading. You, as an average working individual, own and owe a lot of digital data known as bank balances and loans. Hard assets are valued and traded by the same ethereal soup of bits and bytes. Technology is clearly needed to maintain order and gain efficiencies in an industry based on digital assets.

The annual spend of \$445 billion a year is an awful lot of money, which helps you appreciate why companies such as IBM, Oracle, Microsoft, SAP and Cisco are so enormous themselves. It is even more amazing when you consider that 50 years ago, this industry category was nothing more than a few IBM computers — each the size of a house — and some typewriters. We can all point to some of the key technology leaps in finance over the past 50 years, such as the automated banking machine, computerized point of sale, electronic stock trading and online banking. It has been an amazing space for innovation. In fact, it is a very broad space with plenty of room for innovation.

Investment banks that cover the FinTech sector list no fewer than 15 subsectors of technology. There are payroll solutions, eBrokerage providers, lending and mortgage

BY BRENT HOLLIDAY | ILLUSTRATION BY HAKAN GERMAN

solutions, insurance solutions, payment hardware companies (as well as payment processors), banking solutions and investment software and services, just to name a few. There is not enough space here (nor, dare I say, enough interest in some of those mundane fields) to touch on innovation in all the sectors, so I will just mention a few that I find interesting in this massive industry.

So, what is happening now in the finance sector that will change how banking and finance is done? Where are the disrupters that you will see in your sector in the next few years?

CREDIT CARDS

Twenty years ago, a potentially disruptive innovation was introduced in Europe, where it caught hold in some countries, but was an abysmal failure in North America. It was the smart card, or e-cash as it was also known. Mondex was the biggest brand in the space. The reason it failed is that people like cash and the anonymity of cash. Having a card that was just cash, but looked like a credit card, was too confusing to the consumer. The credit card was working just fine then, as it is now, as a plastic form of payment. Innovation in the credit card business has been rampant with loyalty-based cards, prepaid credit cards and branded cards. But technology for credit cards has not evolved much until very recently. Security (and liability) has driven the adoption of Chip and PIN technology to authenticate the user of the card. But what is next for credit card technology?

Do you have three credit cards because you want to collect hotel points, airline miles and general rewards? Wouldn't it be great if you could just change loyalty rewards on the fly, selecting which you want with each purchase? Dynamics is a U.S.-based company with technology known as ePlate for the credit card and loyalty card business that I find truly amazing. The company has just entered the market with a credit card that allows you to pick a loyalty program before you swipe (or use the chip and PIN). In the first iteration of the technology, it does this by giving you two buttons right on the card that you can pick from (there is a tiny battery on the card that lasts for four years . . . I asked). You pre-select the loyalty programs

You sign up with Lending Club and can invest in one loan or as many as 800 loans in very small increments, diversifying your risk.

online or from a mobile app and then choose A or B as you use the card. I saw the next generation of the card at the Consumer Electronics Show in Las Vegas this year and it actually has a small LED screen that allows you to pick from many loyalty choices that you load on the card from a computer. The card is no different from a normal credit card in size, thickness or weight. It is simply smarter and it allows the consumer to carry one card that collects multiple loyalty points, allowing very interesting marketing tie-ins with purchases. The credit card will act as a gift card using the loyalty program points.

Dynamics recently raised \$35 million from Bain Capital to get the card to market. There are discussions going on with Canadian financial institutions, I am told, for their Chip and PIN version of the card.

LENDING TO ONE ANOTHER

The very foundation of banking is the concept of lending. For 2,000 years the concept of debt has not changed much, especially for the personal borrower. The Internet allowed for new twists on the marketing of lending with companies like LendingTree and many mortgage initiation websites taking advantage of access to more information and aggregation of demand. While the banks may compete more on rates due to the real-time nature of the Web, by and large personal borrowers have to go to a financial institution to get debt.

Let me tell you about another amazing and

disruptive FinTech website called Lending Club. It was founded in 2007, but started to get real traction in 2011 and 2012. It matches people looking for money with people willing to invest in debt structures. Let's say you are an individual with some extra cash looking to make better returns than GICs. You sign up with Lending Club and can invest in one loan or as many as 800 loans in very small increments, diversifying your risk. You can put 75 percent of your loan investments in safer Grade A loans at lower rates and 25 percent in higher risk Grade E, F and G loans at higher rates. As a borrower, you submit your credit application just like a bank, but you watch the loan get filled in real time as investors drop in their money. You might say Lending Club itself is a bank, but it really is a person-to-person connection for lending and acts more as an originator in the fees it takes from both the investors and the borrowers. It grades the loans and creates the supply and demand.

Lending Club has raised close to \$100 million in financing itself to grow the business from some of the top venture firms in Silicon Valley. I know a few of the investors and they are very excited about the future of person-to-person lending. This company shouldn't worry any of you in the banking industry. They only have a reported \$1.4 billion in loan value filled cumulatively over the past three years. A drop in the bucket compared to overall lending, but definitely innovative.

MOBILE PHONE PAYMENTS

Innovation in payment has advanced rapidly in the past 30 years from the first electronic point-of-sale devices hooked up to phone lines to verify funds (relatively) quickly to fully integrated point-of-sale computers that process payments, control inventory and provide integration with loyalty programs and gift cards (think of your local supermarket or Tim Hortons). But advances in our cellphone networks and the smartphone devices most of us are carrying now have made secure instant payment available anywhere. There are two main approaches to using a smartphone for payment. One is the electronic wallet idea that Google, among others, supports. The electronic wallet is

an application on your phone that accesses electronically stored versions of your credit and debit cards. You won't need the plastic anymore, if all the merchants support this idea. It uses a technology called NFC (near field communication) that all new smartphones have. NFC allows you to tap the receiving chip with your phone at a point of sale, transferring the information securely to the merchant. When shopping online, your electronic wallet makes it easy to pay with credit cards or debit cards because you don't have to enter the information over and over again. My fingers nearly fell off when booking hotels and flights recently online, as every transaction required filling out the same information over and over again. The e-wallet, if the online merchant participates, allows you to simply pick the card and authenticate with a PIN.

A lot of the buzz in mobile payment surrounds a company started by Twitter co-founder Jack Dorsey. The company, Square,

makes a device that you attach to your smartphone that swipes credit or debit cards and verifies over wireless data networks. That makes your smartphone a point-of-sale device to accept payment. Now any service provider, like a home renovator, can accept your payment and not take a cheque. Pizza delivery guys can validate the credit card and get paid with their BlackBerry. Square has received enormous valuation from investors as they see a legitimate threat to industry behemoths like Verifone. Alternative payment companies like eBay's PayPal saw the opportunity that Square was going after and started their own smartphone card-reader projects. Now Square competitors are everywhere, including a few in Canada.

You can see the battle lines being drawn here. If plastic credit and debit is here for the long haul, then companies like Square will benefit from providing consumers the convenience of using the proven payment methods anywhere. If Google and the e-wallet compa-

nies get the merchants to all adopt NFC and direct e-wallet payments, why would you need a piece of plastic? Your smartphone is your wallet (and likely your keys, too, but I digress) and you would have all the convenience of payment as long as you had your phone with you . . . which you almost always do.

There are a thousand more innovations in FinTech currently in development by savvy entrepreneurs going after a big market. It is a \$445-billion-per-year market because financial institutions are willing to adopt new technologies that make the world of finance more efficient and more accessible. That is what gets investors excited to back companies like Dynamics, Lending Club and Square. E

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