

CLUB FINTECH



Bo Tang, CFA®

Research Analyst

CABOT WEALTH MANAGEMENT

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FINTECH

The digital revolution is coming for your checkbook and your wallet. But don't worry, it promises to make everything from paying for groceries to buying a car just a little easier. You won't need to balance your checkbook anymore either. Fintech has emerged as the term to describe the application of today's leading-edge digital technology to the stodgy, prosaic world of banking and finance. Since before the halcyon days of Western Union and The Pony Express, we have endeavored to make the movement of money safer, faster, and more convenient for trade. In today's data-driven connected world, money transfers occur at the speed of light and convenience is the guiding principle for the changes we seek.

Not so long ago, putting on your coat and going out to your bank was the only way to deposit or withdraw money. Now, we're able to deposit a check by taking a picture of it and pay for things with the wave of a smartwatch. These changes are fundamentally altering the way we bank and pay for the things we consume. This has big implications for the Wall Street firms and banking institutions of yesteryear. An analysis of FDIC data conducted by the <u>Financial Brand</u> estimates half of today's existing banks are expected to disappear by the year 2042, leaving less than 2,000 banks in the U.S. We are rapidly becoming a cashless society where payments are made electronically and the need for physical currency is diminished. The current system of banks was largely created by a regulatory framework that came out of the Great Depression of the 1930s. The FDIC was created to maintain stability and promote public confidence in the nation's financial system.



Membership grew over the years and peaked at 14,469 in 1983. Since then, the number of FDIC-insured institutions has steadily declined to the present number of approximately 4,000 banks in operation. If you walk into a modern-day bank, you may notice they no longer occupy the same large, classically styled buildings as before. Gone now are the marble floors and massive bank vaults for storing gold and silver bullion. Safety-deposit boxes have been disappearing as well. Since the 2008 financial crisis, banks have been quietly phasing them out. The economics of maintaining them no longer made sense and high-end, independent safe-deposit companies have emerged to replace them.

Source: qwealthreport.com bank vaults

Financial technology – and innovation in banking – is not a new phenomenon. In 1962, the predecessor to Credit Suisse opened one of the first drive-ins for banking services. Customers in Zurich could drive directly to the bank counter and complete their transactions without getting out of their cars. Around this same time, the first automatic teller machines (ATMs) made their debut and pretty soon bank customers had access to a number of banking functions 24-hrs a day. Evidently, the way people have stored and accessed their valuables has always changed with the times. New technology is adopted and adapted. A period of transition ensues, and lifestyle habits slowly change as a new way of doing things prevails.



Source: www.tagesanzeiger.ch/mit-dem-auto-in-die-schalterhalle-154059114525

You may have noticed in recent years that credit cards no longer require you to swipe for payment. Instead, to exact payment, newly issued cards are inserted into the slot of a card reader (or in some cases "hover" or "tap") for a few seconds while the transaction is reviewed and approved. These newer cards have been implanted with microchips that are nearly impossible to counterfeit. The personal information that is embedded into the chips is locked within using cryptographic keys that only the credit card companies can unlock. Since they were introduced in 2015, Visa has documented an 87% reduction in the amount of fraud (by dollars) perpetrated by counterfeiters. The technology used in these chips has been around for decades, but it took a consortium of industry-leading companies (Europay, Mastercard, and Visa) to come together before a standard was set for all to follow. EMV chips employ a type of technology that essentially ensures an account holder's personal information (e.g., account number) is never exposed or stored anywhere except

the bank approving the transaction. Today's smartphones and smartwatches now use a similar system for contactless payments. For example, to enable Apple Pay on an iPhone, the user takes a picture of the credit or debit card that they want to use for purchases. Apple sends the details of the card to the issuing bank (the bank that issues the credit card bill every month) which then generates a series of randomly generated numbers. This string of numbers acts as a secret code identifying the cardholder's account, but the bank is the only party that is able to decipher it. This string of numbers, (a.k.a. token) is stored on the phone and becomes the only information communicated to a merchant in an Apple Pay transaction. This means that if a merchant's customer data is ever compromised, all the hackers would



Source: Adobe Stock | #181426011

have access to is a bunch of random numbers that have no value. Up until this point, common practice was for retailers to store customer's credit card data on their servers to keep records of prior transactions. A series of data breaches soon brought attention to the inadequacy of this policy. In 2013, hackers were able to steal 40 million credit card numbers and other personal data from retailer Target. They would end up paying \$18.5 million in multistate lawsuits. One year later, Home Depot would be the victim of a similar data breach that compromised over 50 million credit card numbers and would ultimately cost the company \$179 million in settlements and fees. Suffice to say, merchants also have a vested interest in payment security technology.

In the first half of 2020, when the Covid pandemic took hold and everyone was asked to stay home, online retailers in the U.S. saw a \$347 million dollar boost in online sales compared to the same period in 2019. Annualized – that is if the growth rate continued – for the remainder of the year, that would have represented a six-fold increase in the growth of online retail. That torrid rate of growth proved ephemeral, however, and e-commerce has now largely returned to pre-pandemic levels. Beyond the headline numbers though, that period of accelerated growth had a lasting impact on the development of digital payments. Businesses that previously did not have a digital presence were forced to accept online payments to survive. Restaurants and retailers had to quickly adapt to takeout-only and curbside pick-up transactions, pushing their capabilities beyond their pre-pandemic limits. This fueled the rise of a new crop of fintech firms including names like Shopify, (Boston's own!) Toast, Stripe, and Square, all of which specialize in helping businesses accept payments online, offline, and everywhere in between.

In the past twenty years, Google has become one of the most powerful companies on earth due in large part to the data it collects through its search engine. This data informs their targeted advertising products, helping businesses generate billions of dollars per year in revenue. Fintech firms hold a similar promise in that the

payments they process contain a treasure trove of consumer purchasing data – on nearly every industry. This type of data is invaluable to marketers and companies looking for insight into when, where, and how consumers purchase their products. It is transforming the way we are marketed to, and the types of products made available to us.

Today's fintech firms are also facilitating money movements between people faster than ever. The recent bank run on Silicon Valley Bank provided a real-life example where a massive amount of funds (\$40 billion dollars) was moved between institutions within a matter of hours. On a smaller scale, popular smartphone apps like Venmo, Cash App, and Apple Pay now allow users to transfer money to other users instantly through a few taps of a keyboard. For friends splitting a bill for dinner, or an Uber ride home, exact change is no longer required. Roommates paying rent or splitting the bills can easily consolidate funds using any number of these peer-to-peer payment services.

As we bear witness to a new generation of financial-service products coming to market, we also call upon past lessons to vet investment in these new businesses. There is a fine balance between the lucrative promise of new technologies and the battle-tested business models that have persisted through multiple economic cycles. Here at Cabot, we aim to identify and invest in the best of these, with an eye towards the future while drawing upon our collective experience of the past. The digital world will keep evolving and companies will keep innovating, but we remain steady in our mission to invest in great businesses.

About the Author



Bo Tang, CFA®Research Analyst

Bo is Cabot Wealth Management's Research Analyst. He works with the Investment Management team to research investments for Cabot's Growth and Income strategies. Before joining Cabot in 2020, Bo previously held positions in trading and operations at Fidelity Investments and State Street Global Advisors. Bo is a member of the Boston Security Analysts Society (BSAS) and a CFA® Charterholder. He attended Carnegie Mellon University for his undergraduate degree and Boston University for his MBA. Bo enjoys spending time with his family and is an avid motorsports enthusiast.

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Source for front page picture: Fintech