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CREATING Strategic Value THROUGH Financial Technology

JAY D. WILSON, JR.

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Creating Strategic Value through Financial Technology

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To Becky, my supportive wife, who inspires me to be better each day.

To Connor and Sadie, my two children, who bring so much joy and keep us entertained.

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Preface

As the financial crisis and Great Recession illustrated, the health and vibrancy of the banking industry is an important ingredient in a healthy economy. In the United States, community banks play a special role in the economy as they constitute the majority of banks, are collectively the largest providers of agricultural and small business lending, and are often key employers and providers of financing in their local communities. While conditions have improved since the depths of the financial crisis, community banks face difficult market conditions with intense and growing competition from both larger banks and non-bank lenders, a relatively difficult interest rate environment that places pressure on margins, and a heightened regulatory and compliance burden.

Community bankers are also increasingly facing an additional challenge with the rise of FinTech and its vast array of emerging companies and technology innovations in different areas of financial services. FinTech is a challenging strategic threat to assess for banks since competition is coming from startups focused on addressing a number of core banking services. While many bankers view FinTech as a potential threat, FinTech offers the potential to improve the health of community banks for those banks that can selectively leverage FinTech to enhance performance and customer satisfaction and improve profitability and returns. FinTech can also help level the playing field for community banks to compete more effectively with larger banks and non-bank lenders.

This book seeks to illustrate the potential benefits of FinTech to banks, both large and small, so that they can gain a better understanding of FinTech and how it can create value for their shareholders and enhance the health and profitability of their institutions. We provide a map of the FinTech industry and present guideposts for navigating the sector so that different parties (investors, entrepreneurs, and traditional financial services companies like community banks) can enhance customer/product offerings, improve efficiency/cost structure, and ultimately profit by creating strategic value as financial services and technology increasingly intersect.

Section One introduces the reader to FinTech and discusses the reasons behind the excitement and interest in the sector globally and, more specifically, for financial services in the United States. Additionally, we examine how FinTech can help community banks close the performance gap with larger banks and enhance customer services offerings, efficiency, profitability, and valuations in a challenging operating environment. Lastly, we delve into the history of FinTech to determine themes and trends from some of the more mature FinTech companies. For those bankers still skeptical of the power of FinTech, consider the time and money saved by both customers and bankers through the use of the ATM, an earlier FinTech innovation that we discuss in Chapter 3. Imagine the lines at banks before a long holiday weekend if that were the only place to go and get cash, as well as the inconvenience of being unable to obtain cash on a Sunday or holiday because all of the bank's branches were closed.

Section Two discusses several FinTech niches that have great potential for banks. Each chapter focuses on a particular niche (Bank Technology, Alternative Lending, Payments, Wealth Management, and Insurance). We provide an overview of emerging trends in each particular FinTech niche and highlight certain FinTech companies that have developed in these areas. Finally, we discuss key insights that can be gleaned from the successes of these emerging FinTech companies. The case studies presented hopefully provide guideposts for bankers as they assess the vast array of companies in the FinTech ecosystem and that particular niche.

Despite the potential benefits of FinTech for community banks and vice versa, significant challenges exist for community banks considering FinTech opportunities. Community banks typically operate with a leaner technology staff and the appeal of FinTech can often be overshadowed by the breadth of the landscape. Lastly, there can be significant cultural, valuation, and risk differences between banks and FinTech companies, which can make partnerships and mergers between the two difficult.

Consequently, **Section Three** attempts to address some of these issues in greater detail and illustrates how both financial institutions and FinTech companies can create strategic value from improving one or some combination of the three primary valuation elements of cash flow, risk, and growth. For those interested in pursuing FinTech opportunities, they present traditional financial institutions with a number of strategic options, including focusing on one or some combination of the following: building your own FinTech solutions, acquiring a FinTech company, or partnering with a FinTech company. While we do not yet know which strategy will be most successful, we do know that discussions of whether to build, partner, or buy will increasingly be on the agenda of boards and executives of both financial institutions and FinTech companies for the next few years. In Section Three, we discuss a range of topics that should assist banks with analyzing these strategic options, including how to value a FinTech company and the pros and cons of partnership and acquisition strategies, and provide an introduction to the frameworks and return analyses banks can use to analyze and structure potential FinTech partnerships and mergers.

FinTech is an increasingly important topic for bankers seeking to navigate complex and difficult market conditions. As FinTech continues to spread across the financial landscape, banks of all sizes are beginning to craft their responses and prepare to either embrace future innovations as an improvement to their business models or attempt to shield their business models from potential disruption. Banks are starting to realize that they must develop a strategy that considers how to evolve, survive, and thrive as technology and financial services increasingly intersect. For these reasons, a number of banks are seeking to engage in discussions with FinTech companies. The right combination of technology and financial services through a partnership has significant potential to create value for both FinTech companies and traditional financial institutions.

FinTech presents the financial services industry with a unique opportunity to both increase revenue, particularly non-interest income, while also lowering costs and improving efficiency. In order to harness the potential of FinTech, bank managers and directors need to understand which FinTech niches best suit their business model and also how to prioritize FinTech initiatives and compare their potential to other strategic initiatives in order to focus on those areas that generate returns and enhance valuation. Similarly, FinTech entrepreneurs need to understand the financial services and banking landscape to be able to discern whether they should approach the industry as a partner, disruptor, or some combination of the two. Therefore, this book should also benefit FinTech companies and entrepreneurs who will gain a greater understanding of the challenging conditions facing banks, how their innovations can create value, key valuation drivers, and how to structure mergers and partnerships with banks.

Globally, banks face many of the same difficult market conditions and challenges currently affecting U.S. banks. However, it is an exciting time to be in financial services. Similar to innovations like the printing press or the steam engine or assembly-line manufacturing that led to significant changes in their respective industries, FinTech offers a unique opportunity to transform the financial services industry while also improving the greater good and providing better and more efficient services for customers, including many un- and under-banked people around the globe. FinTech also offers those countries with a weak financial infrastructure the opportunity for greater financial inclusion by providing financial services like banking, insurance, and wealth management at lower costs through digital channels. This can have a profound impact on people's lives and create profitable business models for banks and innovative FinTech entrepreneurs.

We are still in the early stages of development of a number of FinTech niches and innovations. For example, an innovative development in banking the last few years has been the use of mobile check deposit, which entails writing a physical check and snapping a picture on the phone. As a user of this product, I must admit that it is very convenient and something that I use often as it saves me a trip to my local bank branch. While this is innovative, it is not a fully digital deposit system as it still requires a paper check and doesn't reduce the time spent writing the check or replace the inconvenience when you are out of paper checks.

As the FinTech industry evolves, it will be interesting to see whether idiosyncrasies like depositing a check persist and also whether this dichotomy continues to exist between FinTech, its many niches, and traditional financial services. One can certainly envision a financial services industry in the future where the remaining successful companies combine the best elements of both traditional financial services and FinTech and the two industries converge.

Thanks for taking the time to read this book and please feel free to reach out with comments or questions. In addition to having a keen interest in community banking and FinTech, I am also an avid tennis player. As such, I forewarn the reader to expect a few tennis analogies and stories in different sections of the book.

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The idea for this book was first discussed with Barbara Price, Mercer Capital's chief marketing officer, in mid-2015. More likely than not, this book would not have been the end result of those conversations without Barbara's assistance and encouragement. Additionally, I would like to thank the staff at Wiley for providing editorial guidance and also a listening and an encouraging ear to those initial conversations in mid-2015.

A number of colleagues assisted with the development of the book and I am very grateful for their contributions. Specifically, I would like to thank our marketing associates, Stephanie Wiggins, Connor Bran, and Tammy Falkner, for working on edits and making the charts and cover look great. Also, thanks to my summer 2016 associate, Tripp Crews, who assisted with the preparation of the book by researching and drafting certain sections. He contributed greatly to portions of Chapters 1, 3, 6, and 7, as well as portions of Chapters 4 and 5. Additionally, my colleague, Lucas Parris, and another summer associate, Michael Anthony, provided significant assistance for the insurance technology chapter (Chapter 8). They have my thanks. I would also like to extend my appreciation to all my colleagues at Mercer Capital for encouragement, assistance, feedback, and general support for the book.

Also, thanks to the many clients with whom I have worked over the years. The projects I have worked on for these clients and the resulting relationships have exposed me to a number of different segments and sectors within both community banking and FinTech and this has helped to frame my perspective and insights on a number of issues.

Creating Strategic Value through Financial Technology

SECTION One

Section One of this book introduces the reader to FinTech and discusses the reasons behind the excitement and interest in the sector globally and more specifically for financial services in the United States. Additionally, we examine more specifically how FinTech can have a significant impact on community banks through opportunities to enhance customer service offerings, efficiency, and profitability in a challenging operating environment. Lastly, we delve into the history of FinTech to determine themes and trends from some of the more mature FinTech companies.

Chapter 1 is titled **What Is Financial Technology?** We answer that question and present an overview of current trends in the FinTech industry. We also provide perspective on why FinTech is important and receiving significant attention from investors, regulators, entrepreneurs, and management/boards of traditional financial services companies.

Chapter 2, **Community Banks and FinTech**, discusses traditional bank valuation trends and drivers and shows how incorporating FinTech into your bank's existing strategy can help improve the profitability and valuation of your community bank. This chapter is also important for FinTech entrepreneurs as it demonstrates the potential value proposition for FinTech companies in the community banking sector. Successful FinTech companies need to be able to demonstrate their potential to improve the profitability and valuation of banks in order to attract them as customers or partners.

The Historical Context for Fintech is presented in **Chapter 3**. This chapter walks through the history of FinTech, including ATMs, electronic stock exchanges, and core vendors. We also look at the largest IPOs in the industry's history. This history lesson should help the reader understand what might be important in today's FinTech environment.

CHAPTER 1

What Is Financial Technology?

TECHNOLOGY'S IMPACT ON FINANCIAL SERVICES

Tennis was invented a long time ago. How long ago? Well, it depends upon whom you ask. Similar to a number of other sports, the origins of tennis are unknown. The earliest records of the sport include paintings of European commoners and royals batting a ball around. However, the history of modern (lawn) tennis is clearly documented, as it was first publicly announced in March of 1874 by two British papers. The announcement included a patent for "A Portable Court of Playing Tennis," which included a history of the sport, instructions for how to set up the court, and rules of the game.

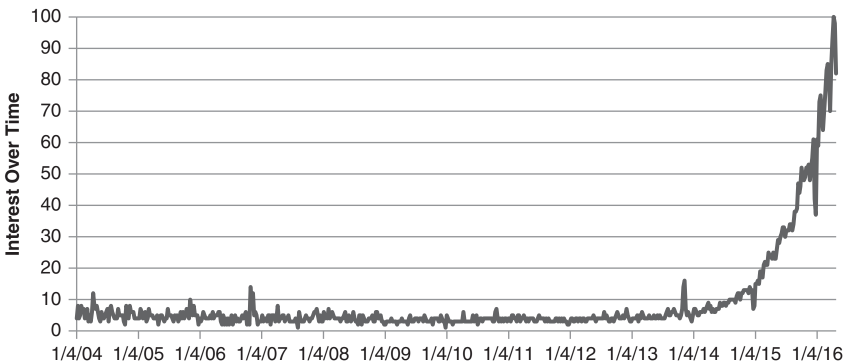
While basic tenets and elements of the game have remained similar over the years, tennis continues to evolve with changes to scoring, court surfaces, equipment, and playing styles. A key driver of these changes is the influence of technology. The development of stronger and lighter materials for a variety of industrial purposes would not at first glance be noted as a key driver of change in tennis, but these changes had a significant impact on the game. Graphite and other stronger, lighter synthetic frames are commonplace in the game today. The last wooden racket appeared in a major tournament in the 1980s. The confluence of technology and design affects balls, court surfaces, and even the pristine grass of Wimbledon. Many players now regularly use high-tech training tools to improve their fitness and stroke mechanics.

Despite these significant advances in the game over the years, tennis is not a sport that is linked with technology and a spectator at Wimbledon today would still recognize the sport if shown images from the tournament in the early 1900s. For these reasons, tennis is often referred to by pundits as being "steeped in tradition" and viewed by outsiders as a game that is slow to evolve. They can point to certain things like players still hitting the same basic strokes and the biggest tournaments still being held at some of the same venues (Wimbledon has had a tournament since 1877).

While we do not foresee those in financial institutions like banks, wealth managers, or insurance companies picking up tennis rackets anytime soon, there are a number of parallels between the evolution of tennis and the evolution of financial services. Like tennis, certain basic tenets and activities of financial services (such as depositing money, paying for goods/services, and borrowing/lending funds) have existed in some fashion for many centuries and are not expected to change in the future. However, a number of changes have occurred in the past and will continue to occur within financial services as technology increasingly intersects with financial services.

There is much excitement around technology and its potential applications within financial services as a number of pundits and analysts foresee a growing number of applications and improvements for the sector. Consumers are also increasingly asking for and adopting new technology applications. While the term *TenTech* (short for *tennis tech*) has yet to grace magazine covers and TV headlines, *FinTech* (or *fin*ancial *tech*nology) has become commonplace in major magazines, newspapers, and TV stories within the financial services sector. The excitement around FinTech is difficult to gauge but the expansion in Google searches of the term *FinTech* and the global dispersion of those searches provide some benchmarks and evidence of the growing level of excitement. (See Figure 1.1 and Table 1.1.)

Given the growing interest in FinTech, let's address a few questions about FinTech: "What is financial technology and who are the players?," "Why is there so much excitement about FinTech?," and "Why is FinTech potentially so important for society?" By examining these key questions, we can gain a keen understanding of the topic.



Numbers represent search interest relative to the highest point on the chart for the given region and time. A value of 100 is the peak popularity for the term. A value of 50 means that the term is half as popular. Likewise a score of 0 means the term was less than 1% as popular as the peak.

FIGURE 1.1 Google Search Trends for "FinTech"

TABLE 1.1 Top Search Trends for "FinTech" by Country

1	Singapore	10	Japan
2	Hong Kong	11	Australia
3	South Africa	12	Netherlands
4	South Korea	13	Canada
5	Taiwan	**14**	**United States**
6	Switzerland	15	Argentina
7	India	16	Spain
8	United Kingdom	17	France
9	Germany	18	Italy

Source: Google Trends

WHAT IS FINTECH AND WHO ARE THE PLAYERS?

Historically, FinTech was limited to back-end software of financial institutions (banks, insurance companies, wealth managers, investment banks, etc.). More recently, the term has been expanded to include any technological innovation in finance. We define *FinTech* for purposes of this book as: *companies that primarily use technology to generate revenue through providing financial services to customers either directly or through partnerships with traditional financial institutions*.

With a working definition of FinTech, let's examine the key players and recent trends in the sector. Keep in mind that categorizing a FinTech company can be difficult as it is much like trying to categorize an all-court tennis player as a baseline, serve-and-volley, or counterpunching player. The types of financial services provided by FinTech companies can vary—ranging from technology for traditional financial services such as wealth management, insurance, payments, and banking to newer, innovative areas such as peer-to-peer lending or blockchain technology. There are also a number of technology companies that offer some form of financial services and traditional financial institutions that leverage technology to offer financial services. For example, Apple developed ApplePay, which offers mobile payment services for Apple iPhone users and could on its own be considered a payments or FinTech company. Thus, ApplePay would clearly be classified as a FinTech offering but Apple would likely not be a FinTech company given the expanse of its other non-FinTech products and services with its FinTech offerings comprising only a small proportion of revenues.

Having historically invested heavily in technology, most (if not all) traditional financial institutions offer myriad technology applications. For example, Lloyd Blankfein, the CEO of Goldman Sachs, has referred to

Goldman Sachs as a technology company.[1] Many community banks located in rural markets are often some of the more technologically advanced companies in their community. However, these traditional financial institutions would not be included within our definition of FinTech companies because traditional banking services, rather than technology, serve as the primary revenue driver.

These examples illustrate the difficulty in distinguishing between FinTech and traditional financial services—a trend likely to increase as FinTech companies become more like traditional financial institutions and traditional financial institutions become more like FinTech companies. For example, a few publicly traded banks rely more heavily on technology and less on a traditional physical branch footprint. One such example is Live Oak Bancshares (LOB) or First Internet Bancorp (IBNK). In the online brokerage space, Schwab and E*Trade can be classified as FinTech companies although they have acquired and operate bank subsidiaries offering traditional banking services such as deposit accounts and loans.

While reports vary on exactly how many FinTech companies there are, McKinsey noted that there were approximately 12,000 FinTech companies worldwide.[2] What reports agree on is the number of FinTech companies is growing daily as funding and interest in the sector increases. The universe of publicly traded FinTech companies is a smaller subset, but as seasoned, mature companies, they represent a notable group of FinTech companies. Their public disclosures also provide benchmarking financial information useful in tracking sector trends.

Public FinTech Companies by Niche

On that note, let's take a closer look at the publicly traded FinTech niches. Publicly traded FinTech companies can be broken into three primary niches—Payments, Solutions, and Bank Technology.

- The *Payments* niche includes companies that facilitate and/or support the transfer of money, particularly non-cash transactions. Key sub-niches include *processors* that provide solutions related to the transfer and processing of money and *software/hardware companies* that provide software/hardware that primarily supports the transfer and processing of money. At June 30, 2016, there were 32 publicly traded U.S. FinTech companies in the Payments niche and the total market cap of these companies was $458 billion (with a median market capitalization of $2.8 billion). The top three largest public U.S. FinTech Payments companies include Visa Inc. ($176.9 billion market capitalization at June 30, 2016), MasterCard Inc. ($96.8 billion), and Automatic Data Processing Inc. ($41.9 billion).

- The *Solutions* niche includes companies that provide technology solutions to assist businesses and financial institutions with financial services. Key sub-niches include *outsourced* companies that are third-party providers of FinTech solutions, *payroll/administrative* companies that improve the human resources function through technology, and *content* companies that provide content/research that supports financial services and decision making. At June 30, 2016, there were 33 publicly traded U.S. FinTech companies within the Solutions niche and the total market cap of these companies was $197.7 billion (with a median market capitalization of $3.4 billion). The top three largest U.S. FinTech Solutions companies included IMS Health Holdings Inc. ($12.5 billion market capitalization at June 30, 2016), MSCI Inc. ($7.4 billion), and Jack Henry & Associates ($6.9 billion).
- The *Technology* niche includes companies that provide software and services to one of three different financial services subsections, including Banking, Investments, and Healthcare/Insurance. At June 30, 2016, there were 22 publicly traded U.S. FinTech companies within the Technology niche and the total market cap of these companies was $55 billion (with a median market capitalization of $1.6 billion). The top three largest U.S. FinTech Technology companies included Intuit Inc. (market capitalization of $28.6 billion at June 30, 2016), Fiserv Inc. ($24.2 billion), and Fidelity National Information Services Inc. ($24.1 billion).

In addition to the FinTech niches noted above, there are other publicly traded companies in the United States that have significant FinTech offerings and would also meet our definition of FinTech companies such as *online brokers* and *alternative online lenders*. At June 30, 2016, four U.S. FinTech companies within the Online Broker niche were publicly traded (The Charles Schwab Corporation [SCHW], TD Ameritrade [AMTD], E*Trade [ETFC], and Interactive Brokers Group [IBKR]) and the total market cap of these companies was $57.3 billion with a median market capitalization of $10.8 billion. At June 30, 2016, two U.S. FinTech companies (OnDeck Capital [ONDK] and Lending Club Corporation [LC]) within the Alternative Online Lender niche were publicly traded and had market capitalizations of $364 million and $1.6 billion, respectively.

As you can see, the scope of the FinTech industry is vast with a number of publicly traded FinTech companies to analyze in order to track developments and investor sentiment. For bankers, managers, and investors in traditional financial services companies, this rise of FinTech and its vast scope of company type (for both public and private FinTech companies) is a challenging strategic threat to assess. Many FinTech companies are essentially unbundling the bank's core services and leveraging technology to provide a unique solution only to one particular service (such as payments, lending, billing, underwriting, investing, or compliance). While the majority of FinTech companies do not offer all of the services that even a small community bank does, collectively they are a formidable competitor. This presents a difficult problem for banks and other traditional incumbents to combat since competition is coming from a variety of areas and addresses a number of core services.

FinTech and U.S. Financial Institutions

While there are a number of potential applications for technology in other industries, there are a few basic elements of the financial services industry that make it particularly attractive for technology. For example, the business models of traditional financial institutions like banks, insurance companies, and wealth managers are unique from one another but share common characteristics. Because this book is focused on financial institutions specifically, let's explore the common characteristics of financial institutions and the role that FinTech can play.

Profitability The first common characteristic is profitability. Financial institutions have historically been profitable and collectively are in a highly profitable segment. Savvy technology entrepreneurs and venture capitalists are recognizing that these market conditions in other industries have historically enabled technology companies to develop and prosper.

To gain some perspective on the size and profitability of financial services, consider that the financial services industry adds the largest proportion of value to U.S. GDP (Table 1.2).

With the exception of tobacco, banks were the most profitable (as measured by net income as a percentage of revenue) of any industry. Other related financial services industries, like asset managers and non-bank financial services and insurance companies, were also highly profitable and in the 96th and 93rd percentile respectively (Table 1.3).

Basic Necessity Another common characteristic of financial institutions is that the financial services they offer are a basic necessity. While one can imagine a world where the delivery vehicle for companies that provide basic financial services is different and largely digital, it is hard to imagine a world without financial services for payments, deposits, lending, borrowing, and investing.

Regulation Regulation is yet another common characteristic of financial institutions and that regulatory burden has increased over time, particularly

TABLE 1.2 Value Added to U.S. GDP by Industry (billions of dollars)

	2015	% of Total
Gross domestic product	17,947	
Private industries	15,623	
Agriculture, forestry, fishing, and hunting	196	1%
Mining	305	2%
Utilities	288	2%
Construction	717	4%
Manufacturing	2,168	12%
Wholesale trade	1,080	6%
Retail trade	1,050	6%
Transportation and warehousing	528	3%
Information	868	5%
Finance, insurance, real estate, rental, and leasing	**3,636**	**20%**
Professional and business services	2,192	12%
Educational services, health care, and social assistance	1,492	8%
Arts, entertainment, recreation, accommodation, and food services	704	4%
Other services, except government	400	2%
Government	2,324	13%

Source: Bureau of Economic Analysis Release Date: April 21, 2016

TABLE 1.3 Net Income as Percentage of Revenue of Financial Institutions

Industry Name	Net Income–Based Net Margin	Rank (1–95)	Percentile
Bank (Money Center)	24.48%	2	99th
Banks (Regional)	24.33%	3	98th
Financial Svcs. (Non-bank & Insurance)	14.82%	5	96th
Insurance (General)	10.49%	49	49th
Insurance (Life)	7.13%	36	63rd
Insurance (Prop./Cas.)	9.82%	29	71st
Investments & Asset Management	3.69%	8	93rd

Source: Aswath Damodoran, http://pages.stern.nyu.edu/˜adamodar/New_Home_Page/datafile/margin.html