

FINTECH RISING 2018: Toward a Golden Age in U.S. Markets

The industry is heading toward a golden age, but it will take more than a move by innovators and incumbents to collaboration from disruption to get there.

FinTech revolution is evolving into a phase of innovation in which addressing customer needs, expectations, and preferences takes precedence over disrupting the business models of incumbent financial institutions.

Entrepreneurs are filling gaps in existing services and starting to use new analytical tools to uncover new needs. Smart bankers are paying attention.

But that isn't enough. "We have for too long been making too much money on the slivers of finances where there is friction," says Bradley Leimer, a FinTech investor and former community bank technology officer. "Banks that solve and automate the day-to-day spending and savings-to-multigenerational wealth-management game will win it all.

This report covers the new possibilities in finance in the primary segments of the U.S. FinTech market.

Capital Markets

The dramas of volatility in the price of bitcoin and scams in "coin"-offering fundraising schemes overshadow legitimate cryptofinance developments.

It looked like FinTech in the capital markets sector would both intensify and become more pragmatic. Excitement and hype around blockchain technology would give way in 2017 to real proofs-of-concept and initial implementations. Then came bitcoin and Initial Coin Offerings.

During 2018. the focus will remain on cryptoassets. Interest remains in blockchain technology, to be sure, and implementation activity should remain steady as pilots start to come to fruition

Payments

Customers expect immediacy yet the success of 40 year old payments systems holds back innovation in the U.S. while the rest of the world moves forward.

That's not to say that the payments segment of FinTech is moribund in the United States or elsewhere. Business in the oldest FinTech market is thriving as the industry matures and incumbent market participants seek to digitize their networks and systems.

Lending

FinTech lenders fill financing gaps that banks leave in small-business and consumer lending. Collaboration with online lenders can keep customers with the bank.

Research from Harvard University and the Federal Reserve System show that small business lending needs are underserved by banks. Low rates since the financial crisis have done little to increase lending, even as credit improves. Banks, for their part, find it difficult to make small loans profitably. Outdated technology and manual procedures are part of the cause, though stringent regulations on capital and risk standards have not helped either.

Wealth-Personal Financial Management Most families still do not have sufficient insight into expense, saving, and retirement management.

The financial health of American families is gaining the attention of FinTech firms and the larger financial services firms that traditionally focus on higher-margin consumers. While the highest earners and wealthiest families have no short supply of professional advice to build and transfer their wealth, most U.S. consumers fall below the level where wealth management firms and professionals can profitably advise them. Therein lies the opportunity.

Regulation

The regulatory woes of cryptocurrencies and ICOs have been entertaining. Data breaches and the lack of a U.S. data and identity regulations have not.

Regulators worldwide are working to define new regulatory regimes to fit today's rapidly evolving technologies. In the United States, both federal and state regulators are sorting out oversight jurisdiction, but it's slow.

Banking

Artificial intelligence and blockchain are the keys to a banking future that starts in the computing cloud.

There's a lot of important talk about AI, machine learning, and blockchain in banking. Yet the most pragmatic technological advancement in banking, moving into wider production use today, is this: the cloud. Combined with realtime payments and robotic process automation, cloud technologies can remove more friction from the customer experience than the next-gen technologies. They are the low-hanging fruit of a bank's digital transformation.

FinTech Marketing and Sales

International FinTech startups are looking to the United States as a vast consumer and business market for their applications and services. Despite the difficulties posed by a dual regulatory system, in which multiple federal regulators join agencies in all 50 states, the wealth and size of the market beckons.

The Year in FinTech: 2018 Predictions

A major central bank will issue a cryptocurrency. I'd like to think it will be the Bank of England. For one, the U.K.'s central bank has been studying cryptocurrencies for some time. Second, the Financial Conduct Authority is widely regarded as the most innovative regulatory agency in the world and does more to encourage FinTech than most. Last, the threat that Brexit poses to London's position as a

financial center seems more pronounced than ever. Nothing pushes innovation forward like a crisis.

Identity will become the first "killer app" of blockchain technology. There have been too many major credit data breaches in the United States over the years, and they only get worse. Blockchain technology seems perfectly suited to put identity information under the control of individuals and even enable individuals without a credit history to establish a verifiable financial and personal identity.

Banks will continue at a steady pace toward digital systems. As faster payment systems come online in the United States, the risks of immediate settlement will spur investments in security. Smart banks will invest in software that improves customer experience, buying systems and expertise from FinTech firms. Absent a crisis and in an easing U.S. regulatory environment, experiments will reign. New business use cases, like legalized cannabis and cryptocurrency trading, may spur banking innovation, especially where state banking regulators take action.

That may not be enough. For U.S. markets, there is much more to go. Consider China, as described by in the May 2018 issue of American Banker magazine:

"Even the smallest merchants on the street, they don't want cash," reports the head of Citigroup's consumer bank in China. "If you're a banker in the United States, trying to envision what consumer banking could be like, this is pretty close to the end state. . . The level of convenience, 24/7, is well beyond what you can deliver through a traditional banking model."

As Chris Skinner, banking consultant and author of Digital Human, put it to me: "We're about three minutes to midnight in the data centers of banks, three years before it's too late to change. Do you really think a bank can survive in 2025-26 with fragmented systems from the 1970s that are unintegrated and cannot provide a single view of the customer?"

Toward A Golden Age of FinTech

Financial technology is heading into its next inflection point. The financial services industry's last transformation, mobile and digital systems and apps, is morphing yet again into the age of platforms and machine learning.

The FinTech revolution is evolving into a phase of innovation in which addressing customer needs, expectations, and preferences takes precedence over disrupting the business models of incumbent financial institutions.

Entrepreneurs are filling gaps in existing services and starting to use new analytical tools to uncover new needs. "It's a golden age of FinTech," says Rob Pinkerton, chief marketing officer, Morningstar.

Pinkerton spoke at the Morningstar FinTech Forum, held on May 24, 2017, at Morningstar's New York office. The forum featured a panel of experts with a variety of perspectives on the opportunities and challenges of building and marketing products for traditional and unchartered financial services markets.

As entrepreneurs increasingly understand financial services, the FinTech story is shifting. From its beginning, the financial technology story followed the narrative of the disruptive Silicon Valley startup challenging the sleeping legacy incumbents. FinTech companies and platform giants are making inroads in financial services: robo-advisors have built successful apps for investment management and social platforms like Apple and Google have integrated payments.

At the same time, incumbent financial services firms are focusing on innovation and learning to behave like startups. They are building or buying technologies developed by FinTech firms, especially in asset management.

"The financial technology story went from disruption to collaboration," says Thomas Jankovich, principal, the Doblin

consultancy. "We are at the next stage of development. There is a love affair between incumbents and startups. Incumbents are infatuated with shiny startups and technologies, and startups are in love with incumbents' ability to scale. But neither of them are configured to engage. They are incompatible, and that's the next evolution."

The success of the initial evolution of FinTech generally is measured by the amount of venture investment in the industry. Venture investment in FinTech reached \$17.4 billion globally in 2016, nearly an 11% increase over 2015, according to Pitchbook, which provides data on M&A, private equity, and venture capital investments. Investment has been slower in 2017 but is expected to increase, as more mature FinTech firms attract institutional capital.

What a "Golden Age" Means

In this report, "golden age" has an economic and developmental meaning. It comes from economist Carlota Perez and fit in her framework for the deployment of technology and capital in society.

The golden age is a time when a new technology is in the early deployment phase, a mode she calls "synergy." It is a period of good feeling that marks the "turning point" from a period of frenzy leading into "a more harmonious growth process including most sectors of the economy"

Not there yet, especially for cryptoassets, but heading there. Venture capitalist Fred Wilson, where I learned of Perez's work, provides simple explanation of the phases of a technological revolution and a guide to analyzing the current state of development.

For the complete analysis, see <u>Technological Revolutions</u>. and <u>Financial Capital: The Dynamics of Bubbles and Golden</u>. Ages. The title itself suggests more or less where we are in Perez's fifth cycle, the Age of Information and Telecommunications, which began with the announcement of the Intel microprocessor in 1971.

FINTECH RISING 2018	1
Capital Markets	
Payments	
Lending	
Wealth-Personal Financial Management	
Regulation	2
Banking	2
FinTech Marketing and Sales	
The Year in FinTech: 2018 Predictions	2
Toward A Golden Age of FinTech	
A Different Breed of Entrepreneur	
Focus on Customers, Not Products How FinTech Delivers Value	
Data and Analytics Drive FinTech	5
CARITAL MARKETS	0
CAPITAL MARKETS	
Crypto Goes Institutional?	8
The Present Future of Tokenized Fundraising	9
The Requirements for Going Institutional	
A Monetary Irony	10
Blockchain, Baby!	11
Crypto Currents: A Short Introduction	
FinTech Profiles: Capital Markets	15
Blog	
Chain	
Circle	16
Coinbase	16
IEX Group	16 16
	16 16 17

PAYMENTS POSSIBILITIES	18
The Rise of Customer-	
Focused Payments Schemes	
Broadening Bank Services	
Locally Focused International Payments	
B2B Payments	
Simplifying Cross-Border Payments	
Faster Payments Power	21
The Payments Elephant	22
Payments for Pot	23
Cannabis Banking Difficulties	23
A Cannabis Payment Clearinghouse	
The Trouble with Mobile Payments in the United S	tates 25
Transit Payments	
Apple Pay	
P2P Payments	
The Chip	
In-App Payments	
FinTech Profiles: Payments Firms	
Braintree Currencycloud	
Dwolla	
LevelUp	
Pangea	
PayPal	
Square	
Stripe	
Token	
TransferWise	
Venmo	
Xoom	33

LENDING	35
The Digital Future of Small-Business Lending	35
How Online Lending Partnerships Work	
Monetize Declines	
Partner on Lending	37
License Technology	37
How Intrust Bank Collaborates	20
with Funding Circle	
Filling Credit Gaps Inefficient Lending Processes	
Technology Collaboration	
The Mortgage Blockchain	
FinTech Profiles: Lending Firms	
Avant	
Enova	43
Kabbage	
LendingClub	
LendUp OnDeck	
Prosper	
SoFi	
WEALTH/PERSONAL	
FINANCIAL MANAGEMENT	46
Seeking Assets	46
Millennial Dreams	
Where the Assets Are	
A Serious Responsibility	48
Planning for Health Risks	48

FinTech Firms: Wealth/Personal	
Financial Management	
Acorns	
Aspiration	
Betterment Credit Karma	
Geezeo	
Gradifi	52
Mint	
Moneythink	
NerdWallet	
Nutmeg	53
Qapital	53
Quovo	
SoFi	
Wealthfront	54
DECLII ATION	
REGULATION	55
Slouching toward	
Regulated Cryptoassets	56
Regulatory Roulette	56
Regulated Tokens and the JOBS Act	57
Regulation Creates FinTech Opportunities	58
Central-Bank Digital Currencies:	
Not Quite Ready for Prime Time but Rehearsing	50
Crypto Just Isn't Money	
But Central Bank Crypto May Be Useful	
• • •	00
Equifax, Wells, and Facebook	
Debacles Breach Data and Trust	
The Banality of the Equifax Breach	
The Data Stakes are High	
The State, Identity, and Blockchain Technology	63

FinTech Profiles: Risk and Regulation	64
ACH Alert	
Feedzai	64
InAuth	65
Rippleshot	65
Trunomi	65
BANKING	66
Frictionless Banking	66
The Bank as Marketplace	67
The Bank User Interface	68
Current and Future Gaps	72
UX Strategies for Small Banks	73
FinTech Profiles: Banking Systems and Applications	
Akouba	
Avoka	
Backbase	
D3 Banking Technology	
Envestnet Yodlee	
Mambu	
MeniganCino	
Plaid	
Thought Machine	
Thought Wachine	70
FINTECH MARKETING & SALES	79
5 International FinTech Startups Look to U.S. Markets.	
Direct Sales	
Bank Marketplace	
White-Label Sales	
Social and Community Marketing	81
Direct Application Marketing	81
Developer Marketing	82

Global Markets	83
Verrency	83
Limitless	
ReAble	84
Trivial	84
TrustNote	85
REFERENCES	86
INTRODUCTION	
CAPITAL MARKETS	86
PAYMENT POSSIBILITIES	
LENDING	91
WEALTH / PERSONAL FINANCIAL MANAGEMENT	93
REGULATION	96
BANKING	98
FINTECH MARKETING & SALES	100
About the FinTech Rising Survey	101
Disclosures	
Soundtrack	
Acknowledgments	102
About Canright	
3	

Order FinTech Rising 2018

Smart financial executives are paying close attention to the revolution in financial technologies that is reshaping money and finance worldwide. Innovators and incumbents are moving into the next phase, marked by collaboration where customer needs, expectations, and preferences take precedence over disrupting business models of incumbent financial institutions.

Entrepreneurs are filling gaps in existing services and starting to use new analytical tools to uncover new needs. FinTech Rising 2018 focuses on the changing business context of financial services.

This 100+ page, meticulously researched report gives an overview of the most dynamic changes to financial services in decades. It's the financial executive's guide that gives you:

Pragmatic and realistic viewpoints on digital currencies and cryptoassets. Understand how investment professionals are working to integrate this new asset class into mainstream investment strategies and trading approaches.

Insights into the directions financial-services incumbents and financial-technology innovators are charting in U.S. markets. Capitalize on the trends in the principal U.S. FinTech market segments: capital markets, payments, lending, wealth and personal financial management, regulation, banking systems, and marketing & sales.

Profiles of the leading firms in each FinTech market segment, including a measure of how aware financial professionals are of the listed innovators. Find opportunities to make your organization more efficient, service customers more effectively, or invest in innovative ideas shaping the future of finance.

Order Now!

Multiuser PDF, \$249.95

http://bit.ly/GETFTR2018

Amazon Kindle, \$34.95

http://bit.ly/FTR2018-Amazon