





Next Generation Financial Services



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How Technology is Providing Valuable Lessons

Early in my career, I had the privilege of working for a firm that spent considerable time with a young Jeff Bezos, researching Amazon.com and chronicling his emerging business thesis for our customer base of Fortune 500 chief strategy officers. In the days leading up to Amazon's IPO, Jeff wrote in a letter to shareholders, "We will continue to make investment decisions in light of long-term market leadership considerations rather than short-term profitability considerations or short-term Wall Street reactions... We will make bold rather than timid investment decisions where we see a sufficient probability of gaining market leadership advantages. Some of these investments will pay off, others will not, and we will have learned another valuable lesson in either case." Though none in our firm who were involved in this research were surprised to read Jeff's contrarian stance, I suspect a handful of public equity investors took umbrage.

In spite of questioning the tech sector's approach to building businesses, it is fair to say the growing use of the internet by the mass market and the technologies that emerged across the 1990s were transformative for Financial Services. Well-known industry pundit Bill Ullman wrote in a blog post:

"Today, we take for granted industry giants like Schwab, Fidelity, TD Ameritrade, E*Trade, Interactives Brokers and even Vanguard and the trillions (yes, trillions) of dollars in online brokerage accounts. But 20 years ago, the picture was not so clear: winners had not emerged; the technology was in its infancy; brands were immature, untested or unknown; the reactions of incumbents were unclear; and dozens of small online firms proliferated throughout the country."

Not only did the internet play a key role, but developments in technology related to data processing and analytics, telecommunications and academic research across the 1990s set the stage for today's expanded use for emerging technologies in Financial Services. During this time of advancing technology, Financial Services firms improved their back-office functions, somewhat digitized their delivery models and built new products. At the same time, mobile phones became increasingly ubiquitous, paving the way for on-the-go payments, analytics and investment advice.

Though two decades in the making, I would argue it is only recently that the digital economy has revealed a significant wedge between the historical operating model of incumbent Financial Services firms and the expectations of their clients. Where legacy firms have been built on closed systems, scale and hierarchy, the next generation of entrants into Financial Services are proving capable of intersecting tech with data and mobile to provide a more desirable, personalized, seamless and open Financial Services experience. Efforts to improve Financial Services through the application of technology is widely referred to as "FinTech."

The term FinTech also broadly captures an operating environment that, according to CNBC's Andrew Ross Sorkin, presents "a near-revolution of new technologies aimed at upending all parts of the financial world, including payments, wealth management, lending, insurance and currency." It is not a stretch, then, to suggest FinTech is transforming how Financial Services is conducted around the globe and how competitors come not just from the entrepreneurial community, but from every industry.

Increasingly, incumbent firms like Goldman Sachs and PNC are competing with tech-savvy, nontraditional firms like Home Depot, who is actively lending to customers at the point of sale, or Google and its newly launched checking account product. FinTech has broad application to the Financial Services industry, but the same is true for other industries as well. It is no surprise that FinTech simultaneously brings visions of disruption and opportunity to an industry where investments in its technology infrastructure is long overdue.

Interestingly, many see FinTech as a transient term because of the inevitable rise of cooperation between industry incumbents and start-ups that have become more commonplace in recent years. Research from The World Economic Forum recently highlighted positive advancements made possible by the emergence of new technologies and entrants, including:

- Automating activities across the value chain, whether it be manually calculating end-of-day mutual fund Net Asset Values (NAVS) or incorporating advanced algorithms and computing power to risk models, reducing errors and yielding to a cost-efficient, faster and more scalable financial services sector.
- Streamlining infrastructure as platforms integrate new technologies, enabling Financial Services firms to aggregate and analyze client information and further leverage connectivity to reach more clients more efficiently with more targeted products. Early adopters report an important consequence of these efforts is marginal cost reduction, broader financial services access and more transparency.

- Increasing exponentially the use of data to better understand customers, risks and markets.
- Building highly targeted products that unbundle the offerings; historically, a competitive advantage for large firms.
- Removing intermediary layers between customers and institutions to expand access to products and services at lower costs. Interestingly, some industry researchers are projecting this trend to be the most impactful and could possibly drive a large contraction in the industry as technology enables individuals to interact directly with one another.

2017 and a 329 percent increase over five years.

What does this significant investment in technology mean for the future of Financial Services? Here are three thoughts on what the future of the industry looks like:

A More Transparent Financial Services Industry Means More Business

Regulators in the U.K., Europe and across Asia have pushed for a more open system where entrepreneurs can seamlessly connect to a financial services core while simultaneously addressing matters of personal data privacy. This movement

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From my recent experiences leading innovation efforts at large, globally significant Financial Services firms, I can personally attest that challenges to the adoption of truly emerging technologies remain. Yet, we cannot ignore the inevitable. The application of advanced technologies to Financial Services is happening in many areas. It is not just evolving the industry but rapidly and fundamentally changing it.

The venture capital sector appears content to fuel this revolution. Most reports have concluded that 2019 was a banner year for attracting investment capital to FinTech. There was more investment in the first half this year than all of 2018. This comes on the back of a record year of investment in 2018 – Innovate Finance reported that \$36.6 billion of new venture capital was invested in the sector across 2,304 deals, a 148 percent increase from is being spurred by the adoption of regulatory-based "FinTech Sandboxes" and is thought to be a far more efficient approach to developing personalized services like lending, financial products (investable, insurance, or both) and other solutions tailored to the individual based on their unique situation. Though counterintuitive, I think these steps will ultimately drive competition and transparency as much as it will help the individual, which is a good thing.

Man vs. Machine Will Necessitate New Thinking

Today's markets are more complex than the empirical models long used to describe them, with the ideas of "rational" and "biased" giving way to technologies that can measure "fit" and "adaptable." But, even with the emergence of futuristic technologies

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like Artificial Intelligence and Natural Language Processing, or, perhaps, because of them, capital markets investors face ever growing obstacles to their success. On the other hand, it is fair to ask if tech can outperform markets if investors who presumably still have their hand on the market's rudder are inherently unpredictable, irrational and inefficient. There will be a movement by academics and industry to update conventional heuristics to reflect a world where machines can move markets in the flash of an eye.

The Concept of Digitizing Trust is Taking Hold

Countless economic cycles affirm trust is a necessary, positive determinant of the public stock and bond market depth and liquidity. Now, with the rising use of open source, blockchain and cloud computing by smart entrepreneurs, regulators and some large institutions, it is entirely possible that market participants' trust may be distributed across bits and nodes. This willingness to trust, more than traditional market mechanisms, has the potential to revolutionize the process by which core assets – stocks and bonds – are created and custodied. The issuance and recordkeeping process remains highly manual, paper intensive and intermediaries extract rents at every stage. It's not too far of a stretch to suggest that capital formation will routinely happen outside of existing exchanges, long a bastion of trusted investment opportunities. I would even project that friction, risk and information asymmetry will paradoxically decrease by decentralizing the capital markets.

With these ideas top of mind, I can understand why Amazon's culture of business experimentation and its willingness to accept the inevitable, periodic failure has been a key element of their success. Though this culture of "fail fast" permeates the tech sector and is credited with driving incredible innovation, it is one that is still rightfully viewed with suspicion by the Financial Services industry. On the other hand, it is one I am accustomed to and judiciously encourage in my own FinTech start-ups. We are fortunately in the nascent stages of finding the right balance building the systems, culture and regulatory framework to fully lever the explosion of technology and data. All of this makes for an exciting future in Financial Services.