DIGITAL TRANSFORMATION AND TECHNOLOGICAL ADVANCES IN FINTECH

Dr. Jitendra Kumar*

ABSTRACT

Over the last decade, however, a new source of innovation in financial services has emerged from financial technology startups ('fintechs') and technology companies ("techos"). They are unencumbered by complex and costly to maintain legacy systems. They can focus on creating single-purpose solutions, designed to offer an improved experience within just one product or service. They are more in tune with the peer-to-peer (P2P) culture engendered by the explosion of social media.

KEYWORDS: Digitalization, E-Commerce, Collaboration, Fintech Services Adoption.

Introduction

We've witnessed the arrival of new currencies, technologies, business models and forms of transactions; all within an environment of global economic upheavals and increasingly comprehensive regulation. The most significant change has been the arrival of new players; non-bank financial institutions (NBFIs) that bring a groundswell of innovation and are turning market models on their head.

A common assumption is that FinTech firms struggle to translate innovation and great customer experience into meaningful numbers. In contrast, our findings reflect considerable consumer appetite for new and innovative financial service products that take advantage of new consumer technologies, such as mobile and cloud. Nowhere is that more apparent than in the historically underserved emerging markets, with China and India leading FinTech adoption across our study. In this report, we lay out our findings from the EY FinTech Adoption Index and also present some fascinating stories of FinTech entrepreneurs who have reached real consumer adoption.

Key Consumer Themes

FinTech has Achieved Initial Mass Adoption in Most Markets

The average percentage of digitally active consumers using FinTech services reached 33% across the 20 markets. Benchmarked to academic theory on innovation adoption, it suggests that FinTech services have reached a milestone in being adopted by the "early majority" of the population. 3 There is evidence of increasing awareness: for the six markets where a comparison is available, 84% of customers are aware of FinTech services in 2017 compared with 62% in 2015.

F inTech Users Prefer using Digital Channels and Technologies to Manage their Lives

Unsurprisingly, use of FinTech products and services is higher among younger consumers. Those with the highest use, 25- to 34-year-old consumers, are not only tech-savvy "digital natives," but are also at the age where they have a greater need for financial services. In some markets, they have not developed many strong relationships with incumbent providers, and are willing to consider non-traditional options as alternatives.

^{*} Head & Dean, Faculty of Commerce and Management Studies, Maharishi Dayanand University; G.G.D.S.D. (P.G. & Research) Centre, Palwal, Haryana, India.

FinTech Users Prefer using Digital Channels and Technologies to Manage their Lives

What distinguishes a FinTech user from a non-FinTech user? Demographic and behavioral patterns suggest that financial services consumer relationships are changing. Observation: Use of FinTech products is highest among young adults at an early stage of their career. As figure 8 indicates, the demographic mostly likely to use FinTech are 25- to 34-year-old consumers, followed by 35- to 44-year-olds. FinTech use declines with consumers aged 45 years and older.

The Drivers of Success

Low setup costs and plentiful funding make FinTech a fertile area for start-ups. That is the good news. But, in an increasingly crowded marketplace, start-ups must develop services and deploy them effectively in the market before their funding runs out. When it comes to gaining customer traction, we do not believe that there is any consistent recipe for success. Rather, we see a range of drivers that support rapid growth. As many new FinTech firms are building completely new businesses from the ground up, they have the opportunity to put customer adoption and traction at the heart of their strategy, linked to their singular focus on the customer proposition. In our experience, this means that the DNA of FinTech firms is different from that of incumbent financial services providers, which appeals to those apt to be FinTech users. As FinTech firms mature, their focus on the consumer becomes a key area of competitive strength, alongside their use of technology to reduce costs and accelerate customer traction. Gaining customer traction is fundamental to growth for any business, but is particularly relevant for FinTech start-ups who rely on it as a key metric for raising investment funds. FinTech firms measure traction initially by registered or active users, moving to customer acquisition cost and unit economics as they develop. It should also be supported by balanced growth across other areas of the business, including suitably robust support functions that develop alongside customer growth, and can manage and mitigate risks

Business Models that Drive Mass Adoption

Revolutionize the Economics of a Market

Offer a previously paid-for service free of charge Some successful businesses take an established product or service, rethink the economics of the underlying business with the help of digital technologies and offer it to customers free of charge. They are able to develop an alternative business model and revenue streams; for example, new credit-scoring services are often supported by data monetization or through earning commissions from referrals. Offer a significantly cheaper service In markets where products are largely similar and customers are highly price sensitive, FinTech firms can achieve significant new customer acquisition if they are able to reduce their costs and leverage technology to maintain this competitive advantage sustainably as they grow. As we have seen in the extremely competitive P2P lending market, digital technologies and automation have been key factors in their success.

Create Something New and Compelling

Provide a new type of service FinTech firms can offer consumers new services or provide existing services to a new channel to address previously unmet customer needs. This sometimes moves the customer experience so far forward that a service can fulfill customers' other objectives. For example, a personal current account can become a tool to analyze and manage spending or offer customers the option to invest via equity crowdfunding. However, this strategy may also require significant investment in customer education initiatives.

Distribute Across an Existing Customer Base

Solve a problem for another business A FinTech firm could help a more established business to fulfill currently unmet customer needs, such as enabling the established business to offer their customers a better service. Through this route, the established business becomes the FinTech firm's distributor and the customers of the established business become customers of the FinTech firm. Mobile payment wallets are one example of how an established business may benefit from the FinTech firm's smoother customer journey. Collaborate with businesses that have an existing customer base FinTech firms and other businesses can play to each other's strengths by offering a new product or expanding an existing product to a new segment. For example, FinTech firms may apply a different set of metrics and risk appetites to writing new loans, enabling a retail bank and a FinTech firm to collaborate on providing mortgages to a previously underserved population. This collaboration can involve a partnership or joint venture, or the FinTech firm may obtain investment from, or be acquired by, the existing business. Regardless, alignment of incentives and effective hand-offs between parties are essential

Tools and Technologies for Accelerating Market Advantage

Build Virality or "Word of Mouth" Referrals

Make customers advocates for the business by offering novel and differentiated experiences, FinTech firms can generate momentum through market visibility. Relationships and trust play a critical role in influencing adoption; endorsements from opinion leaders and community champions are vital. Examples of differentiation that has previously worked include establishing referral programs or offering a free related tool that directs attention to the paid product. Add-ons could include targeted introductory offers or upfront free periods. Particularly effective FinTech firms are those able to reach both online and offline social networks.

Establish a Strong Brand Identity

Ensure customers subscribe to and identify with the brand and mission A FinTech firm may aim to build a distinct identity and establish a group with clear boundaries, designations and behaviors, but not necessarily location. This enables them to capture the entirety of a targeted customer segment rather than aim for mass adoption. This is a popular strategy for FinTech firms focusing on the millennial market, who are attracted to businesses with "purpose" beyond profit, and is facilitated by mobile technology.

Focused marketing activity

Target marketing at customer segments and through tailored selection of channels The ability to understand the marketplace and identify key customer segments is key. Core to this strategy is market research, coupled with marketing approaches, such as traditional and digital advertising placements, search engine optimization, blogs and social media. FinTechs that offer highly personalized user experiences particularly benefit from being able to leverage data and analytics to target their intended audience accurately.

A fundamental shift in technology has lowered the barriers for new businesses to enter and compete in the financial services industry, enabling the arrival of many smaller players looking to partner or compete with existing businesses. Successful FinTech firms have built traction into their business models, which narrows the challenge of balancing product development and revenue generation; the use of technology helps them achieve lower run rates and greater efficiencies. Such businesses are better able to persevere through periods without revenue as they develop a product that fits the market, and unlock the right adoption channels, strategies and tools to obtain user growth and, ultimately, generate revenue.

Applications for the Internet of Things the "Internet of Things"

(IoT) describes the widespread embedding of sensory and wireless technology within objects, giving them the ability to transmit data about themselves: their identity, condition and environment.

Being smarter with smart data Digital technology has greatly increased the volume of data available. However, the banks have found it difficult to use this new data to create value for their customers and themselves. In contrast, online retailers and social media firms have found ways to create value from data. Some of the ways in which online retailers create value from data: n Customer transaction behaviour is used to inform product suggestions, increasing sales and customer loyalty. n Viewing and listening behaviour is monitored to give appropriate advice about new products and services, or to serve third-party advertisements. n Real-time or contextual satisfaction surveying is used to flag when a customer is dissatisfied and to inform appropriate actions to retain them. n Location data is used for security and fraud checks or to offer suggestions, advertisements and offers that depend on the customer's location. Despite substantial investment in data management, financial institutions lag behind firms in other industries. It is not unusual for large banksto spend upwards of \$500 million7 on programmes to address the challenges related to data, yet it is widely acknowledged that these investments have not been translated to increased profits. Banks are not nearly creative or enterprising enough in their attempts to use data to offer better products or cut operating costs. The sheer variety of problems which data can address calls for specialised capabilities which banks often lack. Banks could take advantage of the specialised expertise at fintech companies by engaging these firms to perform the required work or by acquiring them. Partnerships between banks and fintechswould create a powerful combination of information, supplied by the bank, and innovative analytical tools, supplied by the fintech.

Conclusion

This paper analyzes how information technology is transforming individual banks and the entire banking industry. These platforms allow easy participation that often strengthens and extends network effects, while the vast amounts of data captured through such participation can increase the value of the platform to its participants, creating a virtuous cycle. While initially slow to penetrate the financial services sector, such platforms are now beginning to emerge. This research paper provides taxonomy of platforms in finance and identifies the feasible strategies that are available to incumbents in the industry, innovators, and the major Internet giants.

References

- Acharya, V. V., L. H. Pedersen, T. Philippon, and M. Richardson (2016). Measuring systemic risk. The Review of Financial Studies.
- Baker, M. and J. Wurgler (2015). Do strict capital requirements raise the cost of capital? bank regulation, capital structure, and the low risk anomaly. American Economic Review Papers and Proceedings.
- Bazot, G. (2013). Financial consumption and the cost of finance: Measuring financial efficiency in europe (1950- 2007). Working Paper Paris School of Economics.
- Brei, M. and L. Gambacorta (2016). Are bank capital ratios pro-cyclical? new evidence and perspectives. Economic Policy 31 (86), 357–403.
- Cecchetti, S. (2014, November). The jury is in. Cecchetti, S. and E. Kharroubi (2012).
 Reassessing the impact of finance on growth. BIS WP 381.
- Dell'Ariccia, G., D. Igan, L. Laeven, and H. Tong (2016). Credit booms and macrofinancial stability. Economic Policy 31 (86), 299–355.
- Hirshleifer, J. (1971). The private and social value of information and the reward to inventive activity. The American Economic Review 61(4), pp. 561–574.
- Ingves, S. (2015, October). Update on the work of the basel committee. Speech at the IIF Annual Meeting.
- Kashyap, A., R. Rajan, and J. Stein (2002). Banks as liquidity providers: An explanation for the coexistence of lending and deposit-taking. Journal of Finance 57, 33–73.
- Levine, R. (2005). Finance and growth: Theory and evidence. In P. Aghion and S. N. Durlauf (Eds.), Handbook of Economic Growth, Volume 1A, pp. 865–934. Amsterdam: Elsevier.
- Levine, R. (2015). In defense of Wall Street: The social productivity of the financial system. WP Berkeley.
- ~ Lucas, R. E. J. (2000, March). Inflation and welfare. Econometrica 68(2), 247–274.
- Mayer, C. and K. Pence (2008). Subprime mortgages: What, where, and to whom? Staff Paper Federal Reserve Board.