

FINTECH & ITS APPLICATION IN FINANCIAL SECTOR

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Abstract— This study methodically attempts to evaluate the current level of penetration of Fintech applications in the Financial sector through interviews with industrialists, retail and investment bankers, fintech startups, users and avoiders of fintech applications. An attempt is made to create a case by case approach to generate context specific information, which can act as valuable database for firms and individuals considering new green field investments in fintech applications. It also attempts to outline factors and constraints firms considering upgrading to newer fintech applications are likely to encounter. This study is significant because of its conscious choice to not paint a one size fit all perspective, which outlines either narrower instances of select fintech applications or extremely broader variables like strategic significance, impact on business model, etc. This study is all the more relevant because it thrusts the center of attraction to the user and the beneficiary of fintech applications

Index Terms—fintech applications, financial sector, business model

I. INTRODUCTION

The interdependence between financial services and technology is visible like never before. Though Financial products have retained their core characteristics (with constant evolution to meet customer needs), the mode through which they are delivered in the fintech era has thrown up an emerging world order in the financial services industry. This emerging world order has already thrown up unique possibilities and challenges, with many more to come. Fintech's impact is visible across all divisions of the financial sector be it retail or investment banking or insurance. In the retail banking space, extensive application of cutting edge technology in the financial sector is catalyzed by successive government's push for digital payments to increase transactions' transparency & many startups have rightly spotted the opportunity at the ripe time and are catering to multiple activities across the entire value chain of the financial services industry. Advent of payment gateways, NIFT, SWIFT, etc have simplified money transfer & reduced the servicing time substantially. In the investment banking space, characterized by exorbitant employee compensation costs, technology is being extensively deployed in all front, middle & back office activities to increase return on equity. Several Regtech startups have facilitated investment banks to collect and process massive databases to fulfill due diligence

in an industry with stringent compliance requirements. Advanced Analytics & Artificial Intelligence has helped investment bankers make better decisions because what gives the edge in investing is ability to process data and predict price movements by figuring out anomalies in available databases. In addition, Fintech helps in gamification of extreme situations from history like economic meltdown to gauge investor reaction and understand investor risk appetite. Machine learning is also used in understanding investor sentiment by decoding social media tweets & shares. Analytics also facilitates better asset pricing to reduce underwriting risks of investment banks. In the back end offices, platforms providing post trade processing has reduced dependence on redundant headcounts in an industry characterized by high employee compensation costs. In the insurtech space, advancements including AI innovations and algorithms will likely individualize risk selection and pricing. This would result in much needed customization and facilitate the insured party in paying justifiable premiums commensurate with the risk exposure.

Though the picture painted above may look spectacular, it's important to methodically evaluate the extent to which these possibilities are being tapped into. In other words, it's important to understand few pertinent questions like to what extent is Fintech being deployed? What's its impact on processes & people (bankers, customers, industries trade & commerce)? Among existing applications of Fintech, are there avenues for process improvement. How feasible are these process improvements & what new challenges will it throw out? What are the areas where it can potentially be deployed & reasons why it is presently not being deployed to the optimal extent? These questions would be the broad objectives of my research.

II. LITERATURE REVIEW

Fintech as it is popularly conceptualized in industry & academia as strategic coupling of Technology (primarily information technology) & Financial services has shot to immense popularity among Industrialists, Bankers, Governments & regulatory authorities, customers & other users of fintech applications in less than a decade of extensive application. Empirical studies have largely focused on following aspects of Fintech solutions. Some scholars have emphasized that Fintech as an industry has truly extensive and permeable boundaries. In other words, Financial Technology or Fintech refers to technology enabled financial solutions which isn't confined to specific

sectors & instead covers the entire gamut & scope of services and products traditionally provided by the financial sector (Arner, DW, Baberis, JN, Buckley, RP, 2015) [2]. The above definition or perspective of Fintech is significant because of the following reasons. First and foremost, it emphasizes the importance of relevant application of technology. Second & foremost, it stresses upon the fact that financial services can be provided by players outside the traditional financial sector. Few other schools of thought have emphasized that the relevance of Fintech is most felt in its ability to create & popularise new financial instruments enabled by institutional, product & process innovation (FarhaHussain, 2015). The above perspective of Fintech solutions places the emphasis on ultimate deliverables to enhance user satisfaction made realisable by a strong culture of innovation. On the other hand, few other scholars have emphasized on sophisticated value added features Fintech offers like mobility & need for reliable IT systems which form the bedrock of efficient service delivery (Kim, Y. , Park, Y.J. .& Choi, J., 2016 & McAuley, D, 2015.). The above perspective outlines what an effective Fintech service provider can seek to achieve. Few other perspectives have confined themselves to broader strategic significance & impact of Fintech on strategic business model innovation & Fintech's ability to disrupt industries.

From above, it's interesting to note that sufficient empirical data hasn't been generated understandably because it's a nascent industry. This has resulted in most studies focusing on polar opposites of either the strategic implication on certain industries or the micro level operational breakthroughs. This presents an interesting opportunity for further research on a case by case basis to understand present possibilities & challenges, along with a framework to foresee Fintech's future trajectory.

III. METHODOLOGY

The study involves extensive literature review, in depth interviews with retail & investment bankers to identify and illustrate specific cases of fintech deployment to contrast traditional and contemporary work environment. Avenues for potential fintech deployment were also explored. The study involved in depth interviews with existing fintech users ranging from industrial outlets, insuretech firms, common people & bank officials among others to understand their perspective on present level of penetration, existing and future opportunities & challenges. Non-users of Fintech applications were interviewed to identify challenges, skepticism & awareness levels.

IV. OUTCOMES

This study probed the current penetration of fintech by examining existing applications on a case by case basis through extensive field work and interviews with bankers, customers, businessmen & other users of fintech solutions. Future possibilities were also tested & examined to comprehend the future trajectory of this field and its subsequent wide ranging impact.

Some of the salient findings from this study were as follows. Businessmen and Industrialists felt that speed of

transactions has substantially increased. They however had concerns about data privacy. Middle level managers conveyed that they found it extremely difficult to convince the top management to discontinue existing fintech obsolete fintech applications and upgrade to newer ones. Bankers and Managers also expressed concerns of job loss and need to constantly upgrade their existing skills. Investment bankers expressed that superior analytical tools available in the fintech era has increased accuracy of decision making but also expressed concern that IT is taking over human intelligence. They also expressed that many of the decisions still taken rely extensively on already existing databases. Many elderly citizens expressed discomfort and suspicion towards payment gateways.

V. CONCLUSION

Fintech has already gained traction on the back of government's push to discourage cash transactions to improve transparency. This industry understandably has no strict boundaries because existing applications are extensive. This arbitrariness in role definition has resulted in regulatory arbitrage & has thrown up novel challenges like data privacy, proliferation of spurious non-regulated financial service providers. Though many of the inefficiencies in the traditional financial sector are being slowly rooted out, the aforementioned challenges require attention.

Existing empirical data is minimal and has focused on polar opposites of strategic implication on broader variables like business model adaptation or on narrower instances of Fintech deployment. This necessitates & presents an opportunity for case based study to understand the impact of fintech on users and non-users of Fintech solutions to generate more data & insights which will clarify many of the lingering questions like Fintech's ability to replace physical & human capital, minimum viable scale for effectiveness, regulatory arbitrages, customer & industry suspicion due to data privacy concerns among many other dimensions this nascent industry has thrown wide open.

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