Accountancy Business and the Public Interest
ISSN: 1745-7718

Volume: 40
Issue Number:10

DIGITAL TRANSFORMATION- NOT DISRUPTION- THE ADAPTABILITY OF BANKING SECTOR

Dr.BHARATHI RAVI [1], Dr.N.MADHUMITHAA[2], Dr. M. MANIKANDAN[3] and Dr.M.MURUGAN[4]

[1,2,3,4]Assistant Professor, Faculty of Management, SRM Institute of Science and Technology, kattankulathur Campus.

Abstract

In recent years, the development of technology-based banking has been a hot topic in the Indian financial sector. This paper focuses on the emerging trends in Indian banking and investor education as it prevails today and highlights the need to evolve through a dynamic futuristic perception to convert every challenge into an opportunity to its fullest potential. In this context, it seeks to bring out the past and current paradigm ships in the India banking industries and underscore the importance of seamless integration of people processes and technology for maximizing efficiency and competitive positioning. It also highlights the impact of fin-tech developments like the Brought Together Installments Connection point (UPI) and versatile banking applications that have changed client exchanges. The shift from conventional banking to advanced financial stages in India, featuring the effect of Fin-tech developments such as the Adaptive Payment System (APS) and a variety of banking applications. The evolution of mobile wallets in Indian banks, examining the actions important to safeguard against digital assaults and information breaks, and the significance of powerful online protection structures. The impact of the 2016 demonetization strategy on fin-tech reception in India is examined, taking into account expected headway and the provokes that should be tended to. The rising job of cryptographic forms of money and advanced resources in Indian financial area features administrative and reception challenges. The adequacy of advanced on-boarding processes in banks, featuring enhancements in client procurement and decreased on-boarding times.This study concluded that advancement in Fin-tech has paved way to an enormous transformation rather than disruption.

Keywords: Digital Transformations; Fin-tech effect; Unified Payment Interface -UPI;Smart Phones; Disruption.

INTRODUCTION

The much-talked-about technology disruption and the recent invasive fintech effect on the Indian banking sector have their roots in the time of mechanized accounting and the advent of personal computers in the later part of the 21st century. The innovative internet on the World Wide Web paved the way for the integration of banking services both at the wholesale and retail levels. Core banking solutions enabled banks to move away from branch banking and embrace the unique, "Banking from anywhere" Facility that greatly enabled ease of banking for the customer. "According to Gianluca Elia, Valeria Stefanelli, Greta Benedetta Ferilli 2022, Fintech in the banking industry updates knowledge about technological innovation in the banking sector, identifies major trends, and outlines future research directions." The privatization and liberalization of banking licenses, assured in the era of new age banking with corporate banks like HDFC, ICICI, and Axis Bank (Formerly known as UTI Bank) among others making a strong foray into the industry, reducing considerably the dominance of the nationalised bank and traditional private banks.

Breakthrough technology in the form of Automatic Teller Machine (ATM) also mentioned that the customers did not have to visit bank branches or cash withdrawals, resulting in a considerable drop in bank branches. The emergence of payment gateways and the Internet made the transfer of funds online, a preferred option compared to the use of cheques visited to the bank for this purpose. "According to Andreas Crede 1995 here are initiatives to create a secure, cost-effective payment system to support growing commercial activities. Electronic payment systems for large payments have been in operation, but there's a need for a more efficient system for low-value payments due to increasing volumes of foreign exchange and securities trading" However, the evolution has narrated above, was not only slow but also had to grapple with hardware and software issues associated with this form of banking. Moreover, information security and safety of online banking also encountered challenges that called for innovative measures to safeguard the interest of the customers and ensure banking convenience without internet folia.

The unmatched progress in the new millennium with the payment banks entering the field brought a new diamond gem to the banking experience. Traditional banking had to overcome the competitive slot from these application-based and technology-integrated global and Indian fintech initiatives through a dynamic change in mindset and the compulsive need ability to adapt to changes in circumstances. "According to Liaqat Ali and Simran Jit Kaur 2023 Technology has significantly boosted the banking industry by increasing banks' market share and providing customers with easy and quick access to banking services"

Banking Chabot's and applications by almost all the players in the industries ensure that the ease of banking comes to the fingertips with the smart mobile phone. A tremendous digital transformation opens to new visitor's opportunities along with initiative technologies to handle the resulting challenges. One Time Password (OTP) to strengthen the safety and security of transactions and authentication, Unified Payment Interface (UPI) with end-to-end encryption and ease of payment, application for retail notes online, ease of investing in equities, mutual funds, and bonds as well as fixed deposit or some of the services that can be highlighted from the customer perspective. "According to Vidhya M et al 2021 Analysis of digital payments' value, volume, and growth over the last 5 years includes electronic payment systems such as card payments, NEFT, RTGS, IMPS, and UPI used by the banking industry"

The development of banking software to monitor retail notes and keep a vigilant eye on aberrations in receipt or transaction of funds as a safeguard measure to ensure legality and prevent furtive attempts at money laundering also enabled banks to eliminate human errors. However, the wide growth of black apps providing both short-term and long-term loans with higher rate interest and undesirable hidden costs has become the cause for concern in recent times. "According to Srinadh Swamy Majet et al 2022 as the world continues to prioritize mobility and digitalization, India's digital banking sector is set to grow. However, cybersecurity appears to have been neglected. Recently, the Indian government uncovered a multi-crore money lending scam involving unregulated Chinese apps that offered instant loans on the digital lending platform"

In this context, it is the 39th evaluate the emergent trends in technology-based banking and investor education as it prevails today and highlights the need to evolve through a dynamic futuristic perception to convert every challenge into an opportunity to its fullest potential this paper seeks to bring out the past and current paradigm ships in the Indian banking industries and underscore the importance of seamless integration of people processes and technology for maximizing efficiency and competitive positioning. "According to Kittiwat Uchupalanan. The relationships between competitive strategy and information technology (IT)-based product and process innovation in financial services are dynamic. There are five IT-based innovations: Interbank Online service, Automated Teller Machine service, Credit Card service, Remote Banking service, and Electronic Funds Transfer at Point of Sale service."

REVIEW OF LITERATURE

The ascent of computerized financial stages has empowered clients to perform banking exchanges whenever and anyplace, lessening the requirement for actual bank visits.

Concentrates on showing that versatile financial applications and web-based financial gateways have altogether further developed consumer loyalty and commitment (Puschmann,2017). Fin-tech arrangements influence huge information and man-made brainpower to give customized monetary exhortation and administrations, fitting contributions to individual client needs (Gomber et al., 2018). Mechanical cycle robotization (RPA) and AI calculations smooth out administrative center tasks, lessening manual blunders and functional expenses (Dapp, 2014). Block chain's decentralized record framework improves security, straightforwardness, and proficiency in financial exchanges, especially in cross-line installments (Tapscott and Tapscott, 2016). Fintech has had a pivotal impact in advancing monetary consideration by giving financial administrations to unbanked and underbanked populaces through portable banking and microfinance stages (Ozili, 2018). Open financial drives, driven by administrative changes like PSD2 in Europe, permit outsider engineers to get to bank information, cultivating advancement and contest in the financial area (Zachariadis and Ozcan, 2017). The development of cryptographic forms of money and advanced resources has presented new monetary instruments and speculation amazing open doors, testing customary financial standards (Nakamoto, 2008). The job of fintech is to extend monetary administrations to undeserved and unbanked populaces in India. Portable banking and advanced installment frameworks like Aadhaar-empowered Installment Frameworks (AePS) and versatile wallets have been critical in accomplishing more extensive monetary considerations (Sahay, R, Cihak et al 2015)

The shift from conventional banking to advanced financial stages in India, featuring the effect of fintech developments like the Brought Together Installments Connection point (UPI) and versatile banking applications that have changed client exchanges (Bapat, D 2017)

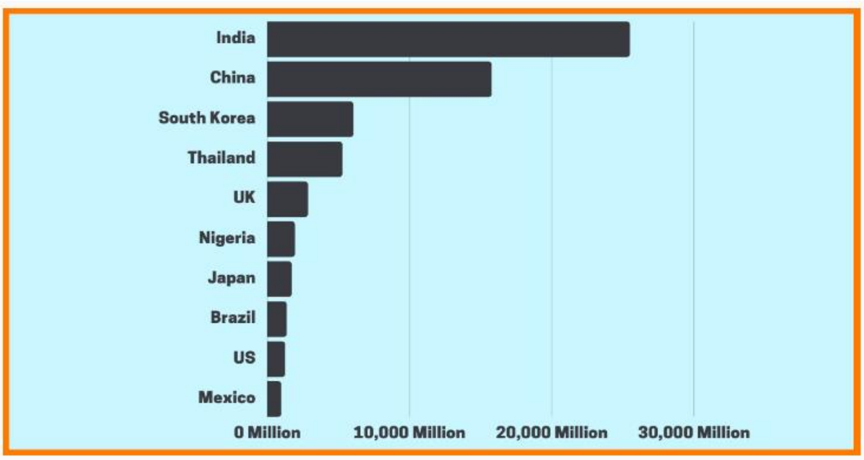
The likely uses of block chain innovation in Indian banking, zeroing in on its capacity to upgrade exchange security, straightforwardness, and productivity, especially in regions like cross-line installments and shrewd agreements (Narayanan et al 2017). The execution of simulated intelligence and AI in Indian banks, featuring their part in further developing client assistance through chat bots, upgrading misrepresentation discovery components, and giving more precise credit scoring. (Mittal R, and Garg P 2020). The quick development of fintech new companies in India and their job in cultivating advancement inside the financial area. The rise of computerized loaning stages, robo-guides, and speculation stages are examined (Purohit, H, and Mor, N. 2016)

The effect of the 2016 demonetization strategy on fintech reception in India. The strategy prompted a flood in the utilization of computerized installments and sped up the reception of fintech arrangements across different areas (Roy, S., and Viswanathan, K, 2017).(Ranjan.J, Bhatnagar V,2018) The network safety dangers related to fintech in Indian banking, examining the actions important to safeguard against digital assaults and information breaks, and the significance of powerful online protection structures .It investigates future possibilities for fintech in the Indian financial area, taking into account expected headways and the provokes that should be tended to. The emphasis is on the coordination of trend-setting innovations like computer-based intelligence, and block chain, and the rising significance of administrative consistency and network protection. Kaur, K., and Choudhary, P. (2019).The reception of biometric validation in Indian banking underscores its part in upgrading security and client accommodation. Kumar, N., and Sharma, V. (2017). The rising job of cryptographic forms of money and advanced resources in the Indian financial area features administrative and reception challenges. Patel, R., and Bhatt, R. (2018).The expansion of portable wallets in India, dissecting their effect on shopper conduct and the financial area. Singh, K., and Aggarwal, P. (2018). Gupta and Sinha (2018) look at the quick development of advanced installment frameworks like UPI and portable wallets in India, which have fundamentally changed the installment scene by working with quicker and safer exchanges.

The adequacy of advanced on-boarding processes in Indian banks, featuring enhancements in client procurement and decreased on boarding times. Chawla, R., and Singh, A. (2019). Computerized finance and monetary consideration have a few advantages to monetary administration clients, computerized finance suppliers, legislatures, and the economy; regardless, various issues continue to happen which whenever tended to can make advanced finance turn out better for people, organizations, and governments. (Dr.N.Dhanraj 2019). This computerized change permits the clients to get to their monetary prerequisites any place they are as opposed to actually going to the bank. The elements of banking areas are diminished from muddled to more improve on the way through the imaginative items in fintech. (Kartika M et al 2022).The fast improvement of innovation affects businesses, including the banking area. Normally, innovation can be upgraded to further develop efficiency and execution. In the financial area, innovation plays a significant part in facilitating the monetary exchange and limiting costs. In the computerized age, the vast majority of individual exercises are directed by innovation, including finishing their monetary exchange. Innovation additionally assists with advancing monetary incorporation. (Diyan Lestari et al 2023)

The Digital Avalanche

While skeptics expressed doubts and concerns about the shift to digital platform for banking transactions, the unprecedented and paradigm shift in terms of innovation and adaptability has been truly spectacular. The silent revolution leading to reduced dependents on cash and greater embracing of digital mode for payments as well as fund transfers, can best be compared to an avalanche that starts with a silent rumble and gathers speed and momentum as it moves down, sweeping away in its wake all resistant with effortless strength. Even the western countries with advanced technologies did not anticipate the levels to which, India could rise in adopting Fintech based innovative solutions that came with highly secured payment systems. The Unified Payment Interface (UPI) that emanated from here is now being made available to our neighbors Bhutan, Nepal, Sri Lanka and even Singapore. The chart given below brings out the move towards cashless transactions with the use of UPI.



Real-time transactions of different Countries in 2020

It is evident from the chart shown above that India was far ahead of other countries including the United Kingdom and the United States of America as far as digital money was concerned. Countries like China, UK, Japan and USA lagged behind India during the period of Covid 19 Pandemic highlighting the fact that India has begun its journey towards paperless E-money even form 2020.

The progress continued, unabated and in 2022 India moved up the value chain in digital transformation and key payments as exhibited in the table below.

S.No.	Country	Number of digital transactions (in Millions)
1	India	89.5
2	Brazil	29.2
3	China	17.6
4	Thailand	16.5
5	South Korea	8

India led the path to digital revolution with over 89 million transactions leaving its peers at least 60% behind with Brazil coming a poor second with over 29 Million transactions and China tottering in the third place with only just above 17 Million transactions.

The Quick response (QR) code on slot

The journey towards an impending digital coup was like a marathon in the initial stages with the use of debit and credit card at the point of sale, Bradma machines and later for online shopping. However, it became a sprint with the introduction of UPI and QR code that rendered the use of cash completely irrelevant even at the lowest levels of economic activity. For instance, the flower vendors, vegetable and fruit vendors on the road side as well as people in the market place quickly embraced the digital movement and preferred “scan and pay” rather that handling cash. The robust progress in the past has enabled India to achieve a 46% share in the global digital payment market. This is bound to leap towards a higher level with deep penetrations into rural India and help the country to close the gap with Norway that only uses 2% cash in all transactions.

The Challenge to Indian banks

There is a popular view that progress is the exchange of one form of nuisance for another, but that has not prevented us from progressing. The disconcerting and mushroom growth of unregulated lending Apps have become the weeds that need to be controlled if not completely eliminated. These Apps offer short-term and long-term funds with much higher rates than banks and also conceal the hidden costs much to the peril of organized borrowing. The ease of procuring funds without much delay, encourages consumers to borrow money from these Apps and face financial stress later. This has become a matter of concern even through the Reserve Bank of India which has warned people to deceased from the temptation to borrow money from these black Apps, has come out with regulatory guidelines to monitor these Fintech Apps even in 2022. The ease of borrowing has compared to Brick and Mortar banking system has made it difficult to resist the offers. As a result, here is a considerable decline in household savings and steep increase in borrowings particularly among the millenials. The impact of this is brought out by data from RBI released on 27Jun2024.

Components	2013-2022 (in % (Average))	2023 (in %)	Increase\Decrease (in %)
Household Savings	20	18.4	-1.6
Net Financial Savings	39.8	28.5	-11.3
Household Debt	33.3	40.1	6.8

Although the spike in household debt and the fall in household savings was largely attributed to job losses, lay-off and the inevitable lockdown, triggered by Covid 19 pandemic, the surge in consumers spending with borrowed money or even Equated Monthly Installment (EMI) has mostly contributed to this undesirable imbalance even if it is low compared to other countries in the world. The Indian model has always encouraged savings first and spending later as compared to spend first and save for it later which includes the unavoidable interest elements.

However, the mindset of the younger generation in the age group of 18-45 (that accounts for over 60% of the Indian population cohort) has begun to place more emphasis on precise consumption as against future savings. Impulsive buying through online retail outlet has become an entertainment and its graduating to become an addiction. For nothing better to do the consumers atleast go to Swiggy or Zomato and spend money on junk foods. This is amply evident from the surge in digital transactions on a daily basis as shown by available data over the last 5 years.

A recent report by Ernst and Young (EY) noted that there is a 40% decline in foot falls in bank branches on an average based on a survey. Although this has rendered the job of bank staff easier, the great opportunity for cross selling seems to have taken a back seat but the increasing emphasis on high street banking is also viewed as an opportunity that has emerged out of this phenomena. A manager and his staff in a branch are now able to spend more time on building relationship either in the physical or virtual form and are seizing the opportunity for meaningful interaction and a promotion of financial instruments particularly aimed at mobilizing investment. While customers tend to ignore or discourage telemarketing, they continue to engage with their relationship manager on a personal note to make informed decisions in choosing an investment proposal such as a systematic investment plan (SIP) or investing in tax saving instruments based on their manager’s recommendation. The fact that there is an explosion of such information online has mostly led to confusion of choice and hence a personal touch from the trusted banker goes a long way in the process of making judicious investment decision.

Adaption and Adoption – Are the Banks prepared?

It is interesting to note that any breakthrough in technology is first put to use by the financial sector before the other functions such as marketing, human resources or operations, engage themselves in effective application of such innovation. In particular, financial services make the needed investment to equip themselves with hardware and software requirements to embark on the new platform top enable smooth operations and enhance efficiency. The ability to adapt the changing environment and adopt innovation, in its entirety, is not only a question of the capability to allocate the resources for such capital expenditure (Capex) but also the will to welcome such changes instead of resisting or postponing the inevitable. Since innovative technology is always viewed as a threat to employment and possible job losses on a large scale, there is bound to be resistance to change from the lowest level of the hierarchy. It is the responsibility of the management to set the right tone at the top and ensure participation of employees at various levels in decision making, with the assurance that human resources will not be dispensed with because they are more valuable in terms of natural intelligence as compared to everything that is artificial. On the part of the employees the realization that routine low-end non-core operations are best left to machines while human intelligence should concentrate on envisaging the dynamics of change and be able to create it themselves. It is a good idea to remove the robot out of human resources and empower both for cutting edge cost efficiency and seamless integration of the three important aspects in an organization namely, people, processes and technology. Hence, the banks in India are not handicapped by unrelenting pace of progress because they are well positioned in terms of both resources as well as the will to move with the tide and convert every single challenge into potential opportunities. “Adapt and adopt” seems to be the buzz word in the industry and even the conservative nationalized banks have joined the race with an investment in technology to ensure that they stay in a competition and leverage their rural penetration advantage. Moreover, banking consolidation has also helped in the emergence of large banks with more sophisticated outlook towards impending changes in business model.

Banking on autobahn

A well-oiled financial system with unclogged channels of money flow is an essential prerequisite for rapid development and take-off. A country with a population of almost 1.5 billion need to ensure the system is not bogged down by inadequate financial network and out dated structural framework. In the last 77 years after Independence, Indian financial system has evolved to overcome these issues and is now well on the way to rapid progress with sincere efforts through prevent leakage in money flow. Hence, it is the time to press the pedal hard with full steam. The road ahead is apparently unrestricted and the Indian banking system is well equipped to deliver the much needed impetus for financial inclusion and inclusive growth. Alternate channels of delivery for credit and encouraging means of mobilization of savings are the twin requirements to foster sustainable development. Armed with digital capabilities the bankers in India are optimistic that they would act as catalysts in assuring in an era of goldilocks economy that is an ideal high growth low inflation condition. The prospect of a smooth transition to digital finance and declining use of paper money has become a reality and is just around the corner. However, the balance between the virtual and physical banking is likely to be maintained for atleast another two decades before technology absorbs tradition in all its entirety. The rate of progress in India is largely driven by evolving system of financial inclusion with a well- conceived digital framework. So the banks would be in a position to exploit the advantage of a strong rural presence and promote their products among the masses with more disposable income in the days to come.

CONCLUSION

The ambitious target to achieve a dollar 5 trillion economy is not an unattainable dream anymore. The fact that more and more millions of people are lifted above poverty is a clear indication that the synergies of progress are trickling down to the lower levels of the economic strata. However, financial inclusion should not be viewed in isolation but should become the part to bring about inclusivity in terms of regions and sections of society to maximize the beneficial efforts of planned progress. In the early part of the new millennium, “Taking India to the world” was the popular maxim and the country was successful in doing this. While economic growth remains paramount, sustainable development must not be sidelined. Integrating green technologies and promoting renewable energy sources ensure that the path to a $5 trillion economy does not compromise environmental integrity. Government initiatives encouraging sustainable industry practices underline the dual objectives of economic and ecological viability.Since the world seems to like what it has seen of India, it is now the time to bring India to the world and hasten the rate of progress with a well-structured digital economy,Achieving a $5 Trillion Economy: A Realizable Ambition.

References

1. Ali, L., & Kaur, S. J. (2022). From traditional banking to technology-enabled banking services in India: a study of bank customers’ perceptive. J for Global Business Advancement, 15(4), 447. https://doi.org/10.1504/jgba.2022.130419
2. An Experiential Security Assessment For Weaknesses In Indian Mobile Loan Apps After India Busted A Multi-Crore Loan App Scam. (2022). Webology, 19(2), 4962–4964.
3. Bapat, D. (2017). "Impact of e-banking on traditional banking services." International Journal of Advance Research in Computer Science and Management Studies, 5(8), 18-22.
4. Crede, A. (2006). Electronic Commerce and the Banking Industry: The Requirement and Opportunities for New Payment Systems Using the Internet. Journal of Computer-Mediated Communication, 1(3), 0. https://doi.org/10.1111/j.1083-6101.1995.tb00171.x

5. Dapp, T. F. (2014). Fintech – The digital (r)evolution in the financial sector. Deutsche Bank Research.
6. Elia, G., Stefanelli, V., & Ferilli, G. B. (2022). Investigating the role of Fintech in the banking industry: what do we know? European Journal of Innovation Management, 26(5), 1365–1393. https://doi.org/10.1108/ejim-12-2021-0608
7. Gomber, P., Kauffman, R. J., Parker, C., & Weber, B. W. (2018). On the fintech revolution: Interpreting the forces of innovation, disruption, and transformation in financial services. Journal of Management Information Systems, 35(1), 220-265.
8. Gupta, P., & Sinha, R. (2018). Journal of Financial Services Marketing Chawla, R., & Singh, A. (2019). "The impact of digital onboarding on customer acquisition in Indian banks." Journal of Financial Services Marketing, 24(2), 75-85.
9. Karan, A. (2022, March 14). Top 10 Countries Leading in Real-Time Payments. StartupTalky. https://startuptalky.com/top-real-time-payment-countries/
10. Kaur, K., & Choudhary, P. (2019). "Future of FinTech in Indian Banking Sector: Opportunities and Challenges." Journal of Economics and Business Research, 25(2), 123-135.
11. Kumar, N., & Sharma, V. (2017). "The impact of biometric authentication on the banking sector in India." Journal of Banking and Financial Technology, 1(2), 63-75.
12. M, V., & T, S. V. (2021, May 24). A Study on Evolving Digital Transformation in Indian Banking System. https://supublication.com/index.php/ijcsbe/article/view/972
13. Mittal, R., & Garg, P. (2020). "AI and Machine Learning Applications in Indian Banking Sector." International Journal of Engineering and Advanced Technology, 9(4), 247-254.
14. Nakamoto, S. (2008). Bitcoin: A peer-to-peer electronic cash system. Bitcoin.org.
15. Narayanan, A., & Sarkar, A. (2017). "Blockchain and its potential in the Indian Banking Sector." Journal of Internet Banking and Commerce, 22(3), 1-15.
16. Ozili, P. K. (2018). Impact of digital finance on financial inclusion and stability. Borsa Istanbul Review, 18(4), 329-340.
17. Patel, R., & Bhatt, R. (2018). "The potential of cryptocurrency and digital assets in Indian banking." Journal of Digital Banking, 3(4), 343-356.
18. Purohit, H., & Mor, N. (2016). "India's FinTech Opportunity." Stanford Social Innovation Review.
19. Puschmann, T. (2017). Fintech. Business & Information Systems Engineering, 59, 69-76.
20. Ranjan, J., & Bhatnagar, V. (2018). "Cybersecurity in the Indian Banking Sector: Challenges and Solutions." Journal of Financial Crime, 25(2), 436-448.
21. Roy, S., & Viswanathan, K. (2017). "Demonetization and its impact on Fintech companies in India." IIMB Management Review, 29(2), 106-121.
22. Sahay, R., Cihak, M., N'Diaye, P., & Barajas, A. (2015). "Rethinking Financial Deepening: Stability and Growth in Emerging Markets." IMF Staff Discussion Note.
23. Singh, K., & Aggarwal, P. (2018). "The growth of mobile wallets in India: An empirical study." Journal of Financial Services Marketing, 23(1), 56-67.
24. Tapscott, D., & Tapscott, A. (2016). Blockchain revolution: How the technology behind bitcoin is changing money, business, and the world. Penguin.
25. Uchupalanan, K. (2000). COMPETITION AND IT-BASED INNOVATION IN BANKING SERVICES. International Journal of Innovation Management, 04(04), 455–489. https://doi.org/10.1142/s1363919600000238
26. Zachariadis, M., & Ozcan, P. (2017). The API economy and digital transformation in financial services: The case of open banking. SWIFT Institute Working Paper, 2016-001.