

# Regulatory Challenges and Mitigation for Account Services Offered by FinTech

*Abhishek Mahalle*

*School of Management and Enterprise  
University of Southern Queensland  
Toowoomba-Australia  
u1104050@usq.edu.au*

*Jianming Yong*

*School of Management and Enterprise  
University of Southern Queensland  
Toowoomba-Australia  
Jianming.Yong@usq.edu.au*

*Xiaohui Tao*

*School of Agricultural, Computational and  
Environmental Sciences  
University of Southern Queensland  
Toowoomba-Australia  
Xiaohui.tao@usq.edu.au*

**Abstract – With an innovation to offer in product & services in the Banking and Financial Services Industry, FinTech have received both attention from investors and regulatory bodies across globe. With a primary objective to improve financial inclusion for unbanked population in emerging economies through mobile devices, Fintech have become new commercial entities that promises to deliver millennium goals of World Bank and G20 nations. The availability of huge user data due to use of mobile devices and its use to generate sales of financial products, FinTech companies and solutions are constantly changing and are unique to each Fintech company. Fintech have devised a business model to provide financial services in the form of payment services, wealth management, crowd funding, lending services, forex services for remittance, digital wallets and digital currencies. The data driven business model, connected customers over mobile phones and several financial services demand new regulatory framework that also protects consumers and prevents systemic risk in economy. In this papers, we have identified the regulatory guidelines issued for various financial product for customers and challenges Fintech will need to solve to provide innovative services. The paper aims to cover the life cycle of products, scope of innovation for Fintech and methods to meet requirements by regulatory bodies. This paper covers the requirements by products in “Account Services” offered by Banking and Financial Services Industry.**

**Key Words – FinTech, Regulations, Banking Services, Big data, Peer-to-peer lending**

## I. INTRODUCTION

Fintech is a part of financial services industry that applies technology to improve financial activities [21]. The term Fintech was already used as early as 1972, the Vice President of the Citibank, Mr. Abraham Leon Bettinger provided the following definition “FINTECH is an acronym which stands for financial technology, combining bank expertise with modern management science techniques and the computer” [21]. With rapid development in network connectivity, use of mobile phones for surfing internet and the use of mobile phones to access bank services has evolved from mere

providing payment services to more sophisticated data driven business models. By analysing the large amount of historical data available from banking services systems availed over mobile phones and combining it with similar amount of data available from other internet platforms by customer provides key insight about customer; this includes personally identifiable information, customer demographic details, customer taste & preferences, demand and consumption of goods & services, travel habits & frequent travel destinations, inclination towards various causes like environment, communities, politics and participation in events. All this information about an individual can be used to provide products and services of bank, to improve financial activity for customer or group of customers [18], to develop product and services only for identified set of customers, to offer more sophisticated products (SME Payment services, Payment channel for wealth management, peer to peer lending, forex remittances and crowd funding platforms) [14], to improve customer experience at the same time generate profit for Banking & Financial Services Corporations [15]. However, considering the demand from regulators and consumer protection laws to provide “Substantive Fairness” [1] while offering product and services, it becomes mandatory for Banking and Financial Services Corporation to remain within boundaries of Acts and Laws. The innovation in business model and financial product & services requires alternative approach to regulatory boundaries. Brummer and Gorfine (2014) [7], detailed about comparison of principle-based regulatory regime and rule-based regulatory regime. However, innovation in financial services further requires meeting regulations specific to country. The engineering in financial products and developing product offerings serviceable over mobile devices may lead to fast adoption and rapid growth in financial markets, which also paves way for systemic risk due to misconduct in lending practices [17]. Considering all these aspects, developing technology platform that meets all of the “minimum regulatory requirements”, yet, modifiable to

support additional requirements due to “innovative” nature of business model becomes a better approach for “FinTech” to serve in market place. The “incremental regulatory framework [16], for iterative business model” [7] in financial services industry sets the theme for growth, scalability and sustainability of FinTech business model [7]. However, financial institution holding authorised deposit taking institutions (ADIs) licenses have market access (established trust with customers, insurance for deposits and customer base), while Fintech have technology access (sophisticated data analytics tools, innovative business model, lower cost of operation, no need of acquire full bank services and thus save license fee) [9]. Both ADIs and FinTech can work together to acquire market and improve profitability.

## II. CHALLENGES FOR FINTECH ACCOUNT RELATED SERVICES

The key areas of goals of FinTech, platform design challenges and operating challenges for FinTech while designing and delivering product and services through platform over mobile devices are:[14] [22] [20]

Goals of FinTech Product & Service Design	Business Model and Regulatory Design Challenges	FinTech Operating Challenges
Low Margin	Volatile	Cost
Asset Light	Uncertain	Service Channel
Scalable	Complex	Quality and Efficiency
Innovative	Ambiguous	Privacy, Security and Risk
Compliance light		Service Model

The elements mentioned in above table, their permutation and combinations from design phase to operating phase during life cycle of financial product & services is considered before it is made available to customers. These elements needs to be considered for below critical life cycle of product & services: [8]

1. Diligence in customer identification and rational behind customer identification
2. Disclosures about product & services, Terms & conditions, applicable fee, interest rates, duration of contract and associated risk with funds to customer - From marketing (quote assistance) To after sales service (credit assistance)
3. Document submission and document generation

4. Contract acceptance and digital signatures
5. Payment Gateway availability for fund transfer and receipts
6. Account Operation Services provided during “life of a contract”
7. Communication channel between customer and financial services providing entity for timely redressal of complaints
8. After sales Risk Management Framework for Interest rate risk and non-interest rate risk
9. Report generation and reporting framework as per product for customer & Fintech
10. Insurance Facility available for product and services
11. Terms & Conditions as per Business Model including applicable service fee, amount calculation methods / formulae, net interest rate applicable
12. Additional Account Services available related to existing products (Cross sales mechanism)
13. Account closure and contract termination details
14. Providing Hardship Notice to customer and working for credit products
15. Data storage and retrieval within FinTech platform and from outside sources (including for Key Fact Sheet) [23]

The above discussed elements of design and life cycle of product & services need to meet legal framework that covers Corporations Act, Consumer Protection Law, Criminal Law / Crimes Act, Electronic Transaction Act, Trade Practices Act, Privacy Act / Financial Sector (Collection of Data) Act, Competition and Consumer Act, Consumer Credit Protection Act, Responsible Lending Guidelines and Securities & Investment commission Act, Anti-Money Laundering and Counter Terrorism Financing (AML-CTF Act) and Financial Crimes Investigation Reporting, Interest Rate and Non-Interest Rate Risk. [2] [4] [8]

The business model for Fintech offering for “any” services must consider the design challenges, life cycle of services and minimum regulatory requirements. These are basic requirements apart from “product and service” specific guidelines applicable and innovation in product and / or services. Any conflict in meeting the minimum regulatory

requirements as mentioned in above laws and Acts needs to be resolved to provide Fintech Services with minimum ethical standards [3].

Considering the nature of products & services of Banking and Financial Services Industry and their relation to other areas of economic system, there are must to follow practices which fall under “legal framework” of the country. This defines the boundaries which Fintech cannot breached under the term “Product & Service Innovation”. In the event of not meeting legal framework, Fintech will face below risk issues:

1. Creating a product or service that will promote fraudulent, manipulative and exploitative conduct by businesses schemes / practices (Australian Productivity Commission, 2008)
2. Misuse of services to engage in commercial / business activities which are not permissible by law otherwise
3. Speculation to create asset price bubble [25]
4. Fund Transfer to other country under sanction / restricted in home country
5. Transfer Forex currency in tax heavens
6. Loss of customer data [19] and customer privacy
7. High Risk exposure leading to systemic risk
8. Fraudulent account opening procedures / practices
9. Incorrect reporting of Asset and Liabilities due to poor accounting and assurance practices
10. Incorrect documentation of terms & conditions of contract
11. Insufficient time to customer for price discovery, negotiation and diligence over contract
12. Improper handling of customer complaints and delay in compliant resolution that may result in financial losses to customer (for mark-to-market / variable interest rate products)
13. No arrangement for compensation to customer
14. Incorrect computation of number of days, incorrect interest rate applicable, lower maturity amount (Term deposit accounts), higher repayment amount (loan, over draft, short term - credit accounts), poor forex rates

15. Incorrect assessment of customer and hardship required for debt servicing (loan, over draft, short term - credit accounts) leading on unfair lending practices
16. Over charging and / or incorrect charging of fees, incorrect interest rates application and delay in fund processing
17. Direct or Indirect promotion and sell of unregulated financial instruments (Example: Crypto currencies, convertible debentures and complex derivative products)
18. Unverified transaction leading to money laundering and may lead to terror financing activities

Above mentioned issues and combination of issues will lead to market disruption, affect everyday life of customers, misconduct in financial services industry, poor competition among financial services corporations and FinTech, customer exploitation, misinformed and / or poorly informed customers, systemic risk, asset price bubble, increased risk of fraud, poor fund management and undefined & uncontrollable financial risk in financial market.

### III. MITIGATION FOR FINTECH ACCOUNT RELATED SERVICES

Considering the design complexity of Fintech Platform based on innovative business model, certain parts of fixed life cycle phases of product & services, mandatory legal framework, ethical practices of business conduct, inherent security related aspects of monetary transaction and value, FinTech will have to meet minimum regulatory requirement to operate in Financial Services Industry to provide account related services. Below are areas which can be referred while designing a FinTech business model and platform to minimise regulatory hurdles, promote ethical business practices, to improve trust for customer and create a stable & inclusive financial system in an economy.

1. FinTech needs to clearly demonstrate areas of innovation, purpose of innovation, comparison with respect to existing business practices and conduct of business activities due to innovation. By educating customers about end to end business activities involved due to innovation, Fintech will bring transparency at an introduction and in future method of operation in market place. This will promote proper investigation by regulators and quicker acceptance of services offered by Fintech. In order to retain the

innovation and its use for longer period of time, FinTech can register the copyright and trademarks with intellectual property office to keep business model and offerings unique at market place. Example: If Fintech provides a credit approval time in less than as normally required by any other established financial services entity, then FinTech should provide details about technological advancement, efficient staff and stages involved in credit approval process to ensure transparency of business operations.

2. The service product and services offered by FinTech should clearly mention the intended objective of service. FinTech should be ready with disclosure before and after the launch of platform to avail product and service. FinTech should clearly mention the areas which will not be served through services and keep data required for audit (and investigation purposes). Example: If the Fintech account services are to be used for cross border purchase of assets, equipment, plant & machinery, commodities, chemicals, drugs & medicines, chemicals, financial products and investment products, then the “product specific” guidelines will still be applicable. This should be clearly communicated to customers to promote correct use of monetary resources during cross border transactions.
3. FinTech should clearly demonstrate the “price discovery” mechanism, rational for pricing, latest price, general technological platforms to verify prices, demand & supply of underlined product and factors affecting price of product. This will provide clear guidance to customer about risk involved, duration to compare other products (if applicable), enough time for diligence and decision making, avoid speculative schemes and adjust to market / economic conditions. Example: If the Fintech offers a Crypto-currency (or Black chain related products) or term deposit product, FinTech should provide details to customer about latest (real time) price of products, method to liquidate holdings, time to refund and obligation if the products are not liquid.
4. The fund transfer platforms requires Bank Name and ISBN No. for Branch to create a transfer transaction. If the specific geographical location is not allowed for transfer of funds, then these codes should not be allowed (not displayed) to select while initiating a fund transfer. If there are country specific data

collection, additional customer diligence and reporting is prescribed by the regulators for ADIs, then same should be followed for Fintech. This is to align “interest of the nation”, relationships with other associated nations and in support to security policies of country.

5. The reporting of financial data, Net profit and taxable income should follow the reporting standards as prescribed by the tax authorities. All associated companies of FinTech (subsidiaries), nature of association (holding company, trading corporation), shareholding structure, primary location of operation, taxation treaties between two countries, key personnel (Chief executive officers, Chairman, Managing directors, independent directors), auditors (if applicable), accounting firms, solicitors, company secretary and primary objectives of company formation should be disclosed to tax authorities. The event to tax liabilities and payable country should be sought in advance to avoid conflict or cases raised in future. This is also to prevent loss of Forex, currency reserves, forex manipulation and loss of revenue to government. FinTech providing Forex services and / or temporary holding of value on behalf of party for transfer in exchange of fee without holding license to trade in Forex market should adhere to guidelines of central bank.
6. Irrespective of innovation in business model, all countries enforce data privacy and confidentiality for individuals participating in economic and financial activity. FinTech poses greater threat as it receives data not only from customer but also from external websites. This data can be combined to know more personal information about customer. FinTech should be proactive in order to receive “customer consent” to use multiple data sources. FinTech should communicate clearly to customer about sources of data, analytical methods / tools deployed, the details which FinTech trying to identify without taking too much time of customer (to promote customer convenience) and purpose to use analysed data, benefits to customer for sharing data (and any incentives in future). This way FinTech will not only promote the customer privacy, but also promote customer trust and customer privacy in data sharing.
7. FinTech offering lending and credit services (through peer to peer loans, credit cards, short term lending

facilities / overdrafts) should follow the risk management framework as proposed by regulators and central bank. The risk management framework will ensure customer diligence, propose appropriate product, disclose fees & interest rates, past due computation methods, assets categorization (non-performing assets - NPAs), risk buckets, risk capital requirements and collections & settlement. Irrespective of innovative nature of lending practices, the total exposure to financial system and repercussions on failure cannot be ignored. FinTech must establish the risk management framework as applicable to credit products.

8. The “Know Your Customer” (KYC) guidelines provide detailed information for each type of entity established in financial system. FinTech must establish the platform and be ready to upgrade as required with change in entity type (and / or customer circumstances) for account opening or change in account type. This will confirm to keep informed up to date, accurate and need to know basis. Proactively educate customer about privacy protection and impact of privacy breach will help customer make informed choices in data sharing.
9. Reporting of asset & liabilities of customer are directly related to deposit and credit product offered by Fintech. Customer diligence for commercial entities, credit worthiness, credit score and maximum borrower capacity will help correct accounting within Fintech and conform to assurance standards. This will help keep record of asset & liability position, assess impact of economy downturn, proactively plan buffer to economic shocks and make Fintech platform a sustainable business model. Fintech should have adequate platform to manage these details for itself and customer.
10. The innovative nature of Fintech business model when it digresses from standard business practice must be incorporated in contract signed by customer. The contractual agreements will confirm the guidelines and expected behaviours (and actions) in changing circumstances. The contract is one instrument that covers all areas of services offered to customer, so it needs to be framed keeping the basic services offered and changing scenarios. The contractual agreements must also cover the communication, complaint resolution, penalties and clause that highlight direct

financial impact to customer. FinTech can also provide better services by educating employees about differences in handling of contracts compared to traditional financial services companies, so improve customer experience and build brand value.

11. Once the customer has been offered a product or service offer, Fintech must provide the disclosure document detailing product details and must mention the time for which offer is valid, this will provide duration available for user for diligence. FinTech must also communicate to user that available time frame is for customer to use to evaluate product, compare pricing in market and assess on own to confirm product suitability as per needs. This will help customer understand the nature of product and align it with own needs. This will create more transparent business method for Fintech.
12. Fintech have to provide dedicated platform and staff to handle customer complaints for timely addressable issues reported. The Fintech Platform should provide the time frames (service level agreements) required for resolution. This is not only to meet regulatory requirements, but also to keep customers informed about the delay they should expect due to volume of complaints. The dedicated customer complaint redressal mechanism will ensure additional channel over mobile phone to reach customers, apart from phone and emails.
13. As per the product & service disclosure and contract form, if there is no provision to compensate customer for financial losses, there is no insurance available against the risk and customer has to refer outside for insurance or risk mitigation, then it should be mentioned in separate “Clauses or Section”. This will keep customer informed about expected financial losses and additional cost required to afford insurance services. The customer will be informed for losses and can make provisions on its end. This way FinTech will prevent customer from being misinformed.
14. The Fintech has to adopt a solution which meets the guidelines proposed by regulators for mathematical computation. This is to ensure that innovative solution offers the same financial computation methods as per financial industry standards. This will help reduce the number of complaints for incorrect computation of amounts, incorrect charging of fee, incorrect number of days and total life of contract.

15. The customer diligence based data driven business model must work in synchronization with qualitative assessment of customer. This will ensure fair customer evaluation is completed and customer is fit for product. This will help to arrive at correct financial position of customer and propose right product, hence reduce customer and Fintech risk in customer default.
16. While computing the penalties, service fee and deductible amount from customer account, Fintech should provide fair assessment of arriving at amount. The amount may differ from industry standards and may be on higher end considering unique business model, however, this is in return of services offered to customer. The clear communication of higher fee and charges must include separate disclosure and contract agreements. The delay in fund processing and transfer of amount may be subject to customer consent and driven by market rates applicable, this must be communicated to customer to avoid poor customer experience.
17. Wherever applicable, if the product & services offered by FinTech are not regulated or do not have any supervision from government, then FinTech should mention this clearly. In the event of conflict with Fintech, customer should be guided towards correct conflict redressal mechanism to prevent consumer through consumer protection laws. The Unregulated instruments are often provided with document highlighting risk. While accepting an investment for such product, FinTech must complete a double check over phone or email (or other communication channel) with customer to avoid misinformed customer and to promote ethical business practices.
18. Considering the importance of national security and to prevent financing of activities which poses threat to national security (directly or indirectly), all product and services, their life cycle, record keeping and reporting must be pre - planned and executed. This will help to provide information to security agencies and law enforcement agencies in the event if monitoring is required and / or untoward event is reported.

Above mentioned are areas which FinTech has to consider while designing product and services for account facilities. Though the ADI license may not be applicable but inherent nature of product demands the other legal aspects to be considered while designing / inventing product and service.

#### IV. CONCLUSION

The technological advancements, large connected & networked mobile device users and availability of data from various external sources have given plenty of scope to identify and fulfil customer needs. This will improve financial services, customer experience and lower the overall cost for customer. This also helps to reduce cost of managing Fintech entity, however, there are direct and indirect ethical, legal and technical aspects attached to financial services industry. This requires “substantive fairness” while offering account services to customers. FinTech will have to adopt these minimum services quality standards even with most innovative and cost effective product and service.

#### V. FUTURE SCOPE

This paper provides the regulatory requirements for Fintech while providing the account services to customer. Considering the constant innovation and variety of services available, further research can be done on minimum mandatory regulation required for payment services, insurance services, crypto-currency offerings and wealth management services provided enabled Fintech Platforms.

#### VI. REFERENCES

- [1] APRA, (2016), ‘APG 223 – Residential Mortgage Lending’, *October 2016*, pp. 7-27
- [2] APRA, (2019), Retried from: <https://www.apra.gov.au/adi-standards-and-guidance>, Accessed date 01-May-2019
- [3] Arner D., Zetzsche D., Buckley R., Barberis J., (2017), 'FinTech and RegTech: Enabling innovation while preserving Financial Stability', *Georgetown Journal of International Affairs* 47, *Volume 18(3)*, pp. 47-58
- [4] ASIC, (2010), ‘ASIC implementation of the credit legislation: Responsible lending conduct’, *February 2010*, pp. 5-22
- [5] Australian Productivity Commission, (2008), 'Review of Australia's Consumer Policy Framework', *Inquiry Report No. 45 (2008)*, *vol. 1*, p 63
- [6] Australian Productivity Commission, (2008), ‘Draft Report Competition in the Australian Financial System Overview & Draft Recommendations’, (*Jan 2018*), pp 28-29
- [7] Brummer C. and Gorfine D., (2014), 'FinTech: Building a 21st-Century Regulator's Toolkit', *Centre for Financial Markets, Milken Institute Policy Research, October 2014*, pp. 6-8
- [8] COBP, (2018), ‘*Australian Banking Association – Code of Banking Practice*’, *September 2019*, pp. 14-64
- [9] Drasch B. J., Schweizer A., Urbach N., (2018), 'Integrating the ‘Troublemakers’: A taxonomy for cooperation between banks and

- fintechs', *Journal of Economics and Business*, 100 (2018), pp. 26–42
- [10] Gaia K., Suna X. (2018), 'A survey on FinTech', *Journal of Network and Computer Applications* 103 (2018), pp. 262–273
- [11] Ghazali N., Yasuoka T., (2018), 'Awareness and Perception Analysis of Small Medium Enterprise and Start-up Towards FinTech Instruments: Crowdfunding and Peer-to-Peer Lending in Malaysia', *International Journal of Finance and Banking Research*, Vol. 4, No. 1, 2018, pp. 13-24
- [12] Hochstein, M., (2015), 'Fintech (the Word, That Is) Evolves', Accessed 19 October 2016.  
<http://www.americanbanker.com/bankthink/fintech-the-word-that-is-evolves-1077098-1.html>
- [13] Hochstein, M., (2015). 'Friday Flashback: Did Citi Coin the Term 'Fintech'? Gems from our archives', Accessed October 19 2016.  
<http://www.americanbanker.com/bankthink/friday-flashback-did-citi-coin-the-term-fintech-1076875-1.html>
- [14] Lee I., Shin Y., (2018), 'FinTech: Ecosystem, business models, investment decisions, and challenges', *Business Horizons* (2018) 61, pp. 35–46, retrieved from <http://dx.doi.org/10.1016/j.bushor.2017.09.003>
- [15] Leong, K. and Sung, A., (2018), 'FinTech (Financial Technology): What is It and How to Use Technologies to Create Business Value in Fintech Way?', *International Journal of Innovation, Management and Technology*, vol. 9, no. 2, pp. 74-78. Available at:  
<http://www.ijimt.org/index.php?m=content&c=index&a=show&catid=93&id=1138>
- [16] Navaretti G., Calzolari G., Pozzolo A., (2017), 'FinTech and Banks: Friends or Foes?', *European Economy Banks, Regulation, and the Real Sector*, 2017.2, pp. 11-162
- [17] Ozili P., (2017), Impact of digital finance on financial inclusion and stability, *Borsa Istanbul Review* 2018, 18-4, pp. 329-340
- [18] Philippon T., (2016), 'The FinTech Opportunity', *National Bureau of Economic Research, NBER Working Paper No. 22476, August 2016*, pp. 2-15
- [19] Románova I, Kudinska M., (2018), 'The Payment Services Directive 2 and Competitiveness: The Perspective of European Fintech Companies', *European Research Studies Journal*, Volume XXI, Issue 2, pp. 2-20
- [20] Saksonova S., Kuzmina-Merlino I., (2017), 'Fintech as Financial Innovation – The Possibilities and Problems of Implementation', *European Research Studies Journal* Volume XX, Issue 3A, pp. 961-973
- [21] Schueffel P., (2016), 'Taming the Beast: A Scientific Definition of Fintech', *Institute of Finance*, pp. 1-24, retrieved from <https://ssrn.com/abstract=3097312> or <http://dx.doi.org/10.2139/ssrn.3097312>, Accessed date 03-Apr-2019
- [22] Tatjana V., Iela M., (2016), 'Commercial Banks and FinTech Companies in the Digital Transformation - Challenges for future', *Journal of Business Management*, Vol. No.11, pp. 25-32
- [23] The Office of Parliamentary Counsel, Canberra, (2009), 'NCCP (2009)', *National Consumer Credit Protection Act 2009, No. 134, 2009, Compilation No. 15*, Compilation date: 1 July 2017, Includes amendments up to: Act No. 45, 2017, Registered: 3 July 2017, pp. 152-157
- [24] Wonglimpiyarat J., (2018), 'Challenges and dynamics of FinTech crowd funding: An innovation system approach', *Journal of High Technology Management Research* 29 (2018), pp. 98–108
- [25] Zetzsche D., Buckley R., Arner D., (2017), 'The ICO Gold Rush: It's a scam, it's a bubble, it's a super challenge for regulators', *University of New South Wales Law Research Series, Working Paper Series*, 2018 – no. 18, Paper number 2017-011, pp. 2-12