CHALLENGES AND OPPORTUNITIES FOR DIGITAL BANKS & E-WALLETS

[1] Rupinder Kaur
[1] Asst. Professor
[1] Lyallpur Khalsa College, Jalandhar

_____

Abstract : Banking is considered by most as the business of money. However, talk to a banking veteran and he or she will categorically instruct you that banking is a business of customers. This realisation is what ensured that customer centricity is an important value adopted by banks; and it has stood us in good stead. It then follows, that if we are in the business of customer, then our business is shaped by evolving changes in customer behaviour. 2017 was considered by many to be the gloomiest year. However, the year has gone by and the year ahead has been presenting us with both challenges and opportunities.

IndexTerms- **Banking, cloud, challenges, opportunities.**
_____

I. INTRODUCTION

The banking industry is facing continuous changes nowadays. At a time when financial industry analysts are seriously debating if Amazon will get into banking, the banking market is in a state of flux when it comes to technology.The bank industry hasn't got stuck when it comes to new technologies but, every day the evolution is quicker and heavier, what evolves into a continuous out of date technologies. Mobile banking is nothing new, but it is now a "table stakes" experience, especially for younger bank customers, meaning it is a must-have for all banks. According to industry experts and analysts, if a bank does not have a solid mobile app, they are an also-ran. Chris George, senior vice president of client strategy at NYMBUS, a core banking modernization company, states that "The big decision-makers are really leaning on the idea of, 'Mobile technology is taking over and there is a digital-first movement that is taking hold in the marketplace'".

1.1 METHODOLOGY

This research paper tries to summaries the current state of knowledge about banking, problems created by cloud banking and to study challenges and oppertunities in India. The relevant secondary data is collected through various sources such as websites, books and journals.

II BANKING TECHNOLOGY
There are five key banking technology trends that the industry will start facing in 2018.
2.1. Banks Will Enhance Services with External APIs
Banks have made use of application programming interfaces for years, but APIs will increasingly be used to enable new services. As The Financial Brand notes, APIs "provide the gateway for innovative, contextual solutions that would be difficult to offer without open banking." By the end of 2018, 50 percent of global Tier 1 and Tier 2 banks will offer at least five external APIs. Banks are increasingly partnering with financial technology companies via open APIs. Part of that will be driven by regulatory requirements.

2.2. Mobile Banking Will Become More Frictionless
Mobile banking is no longer novel, but will become easier to use and provide more functionality for customers. **Mobile banking** will continue to accelerate past standard banking in customer preference as their digital, user and customer experiences become more enriched and data-informed. This will include consumer-to-business frictionless digital banking, consumer-to-consumer one-click payments, new cryptocurrency opportunities, password-free biometrics, locational services and offers, and conversational interfaces. "Come up with **apps and an online** presence that competes with the ease of use that those other players have come up with. It's no longer acceptable to have a mediocre app."
Chris George, senior vice president of client strategy at NYMBUS

2.3. Artificial Intelligence Will Improve the Customer Experience
Artificial intelligence will help banks automate processes and improve the customer experience. There are organizations beginning to greatly simplify processes through intelligent automation, which in turn helps to expose enterprise data that has been traditionally trapped in complex core systems. There will always be a need for a human and that there will be not totally AI-driven banking systems coming online anytime soon. However, AI can help automate repetitive processes and potentially improve customer service via chatbots. Robots are 50 to 90 percent less costly than offshore or onshore employees, and that banks will increasingly invest in AI to become more efficient while still maintaining strong customer service. There is a growing demand to maintain lean operations while delivering exceptional customer experience at lower costs. Over the next two or three years, banks will add AI capabilities to their apps.

_____

2.4. Security Will Become More Robust via Biometrics

Security is always a concern for banks and will continue to be in 2018. Banks will increasingly seek ways to add new layers of security to their services. IDC predicts that in 2018, spending will rise by 20 percent on next-generation security-based authentication methods, as banks strive to build "digital trust" with their customers. Customers have become more comfortable authenticating payments on their smartphones via thumbprints. Banks will extend that to facial recognition and voice prints. As customers become overwhelmed with trying to remember numerous passwords, biometric authentication methods will help simplify security processes and provide more secure methods of authentication.

2.5. IoT Will Be Deployed on Small Scale

Banks have been dabbling with the Internet of Things and will continue to do so in 2018. There will be more proof-of-concept deployments next year, as banks pick a few high-traffic branch locations to test IoT technologies. Banks need to see how customers will react to sensors in branches.**For example,** a customer could walk into a branch and a bank could use beacons or sensors to authenticate a customer via their biometrics. That could then send a signal to an ATM to pre-stage a cash withdrawal based on the customer's preferences. As soon as the customer inputs their PIN number, the money would be dispensed. Such a frictionless transaction could give customers a "wow" factor and make them think highly of IoT. ATM manufacturers are embedding these capabilities

III DIGITAL-ERA CHALLENGES AND OPPORTUNITIES LIE AHEAD FOR DIGITAL BANKING

In April, Money20/20 Europe brought together the industry's leading FinTech stakeholders to review the challenges and opportunities behind the expansion of digital technology in an extremely dynamic market. This booming industry is rapidly expanding use of such technologies to support online banking and mobile payment - two fields in which Morpho has highly innovative solutions to offer. The shift to digital technology creates a wealth of opportunities:
According to Maxim, the issues facing financial institutions are these five key points:

3.1. Staying connected and relevant to customers
"The industry has to aim for a much deeper understanding of its customers leveraging transactional, social, and other external data."

3.2. Monetizing the digital business
"Monetization will require financial institutions to change existing products, distribution strategies, and marketing and sales capabilities to fit a digital environment."

3.3. Creating an operating environment that drives productivity, speed, and innovation
"Financial institutions locked into aging legacy technology, complex process architectures, and a culture of incremental change will struggle to be relevant to customers and monetize digitally."

3.4. Managing compliance in an era of a rapid change
"Despite regulators becoming increasingly open to the industry's need to digitalize, we see considerable potential for closer collaboration and policy alignment."

3.5. Dealing with digital risk of new dimension
"The policies, frameworks, and technologies that have guarded the industry so far may not be sufficient to address these new and intensifying digital risk." Despite these challenges, Maxim noted that not all financial institutions will follow the same path to digital transformation. Individual organizations will have to find its own "digital sweet spot."

3.6. Biometric and mobile payment (Facial recognition for mobile payment)
Creating high-value digital services: Customer behaviors and expectations have changed radically over the last decade. The trend towards Digital is visible across the board, with the banking industry at the forefront. Customers want to access banking services anytime and anywhere, using the channel of their choice. As mobile devices become mainstream and Gen Y and Gen Z'ers join the ranks of the consumer market, the phenomenon is gaining ground every day. The number of banking-related digital interactions is estimated at close to 300 per customer, and 70% of these transits over a mobile device.* What's more, a "digital" service is not one-size-fits-all.   Customers are looking for highly personalized and customized services, and the digital relationship must directly contribute to retaining their loyalty.

3.7. Digitizing services frees up real time to spend with customers.
Naturally when customers change the way they do business, employees also need to change to keep step. They want to make digital technology work for them, relieving them of low-value tasks in order to focus on the building the customer relationship. Paperless banking services through digital media frees up to 7% of financial advisors' time which can be devoted more wisely to customers.

3.8. Improving operational efficiency and reducing costs
In addition to time savings, financial institutions can generate can save up to dozens of millions of euros through reduced printing and more efficient archiving. Switching to digital can help compensate for the lower margins observed in the banking world in recent years.

3.9. Taking up these opportunities also creates major challenges for financial institutions:
Winning or retaining customers' trust. Trust is naturally the cornerstone of any relationship. It is the essential prerequisite for widespread adoption of digital banking by customers, who must be sure that their identity will not be stolen, that fraudulent payments will not be made from their accounts, and that electronically-signed bank contracts retain the same legal value and validity as hard-copy contracts.

3.10. Optimize user experience.

Today's users are accustomed to streamlined, intuitive customer journeys. In the digital world, the customer experience can definitively swing the balance between two products. Mobile banking must be exceptionally simple and seamless to persuade some customers to make the change from the card payments they have been accustomed to for years and which they trust.

3.11. Manage risk and meet regulatory requirements.

To fulfill risk management obligations, banks must protect themselves from cyber-attacks and combat financial fraud and all forms of money laundering. They must also comply with increasingly stringent regulations.

3.12. Sustainable competitive advantage

One of the most important challenges that has been thrown into focus is the amount of digital banking initiatives that have incremental to no impact on business. Don't get me wrong; I am the fiercest advocate of experimentation; however, I believe that this effort should not be focused solely on cost and features. Cost and product provided competitive advance in the previous era. Our attempts need to be centred on experience. Poor experience leads to poor adoption and eventual failure of digital initiatives.

3.13. Convenience and the death of loyalty

My earlier point above is further exemplified by the fact that we have moved into a post-loyalty world. Consumers are not tied down by the traditional bonds with their service providers. The uber-isation of everything is also forcing banks to change the way they engage customers, who are now exposed to superior digital offerings from technology giants like Google, Facebook, and Amazon. We will need to learn from them, match up to them, partner with them, or perish in front of them.

3.14. Understanding customer context

The other area where organisations have suffered is trying to superimpose digital solutions on traditional customers. We were fortunate to identify this challenge early and craft a tech centric consumer segmentation approach called DISC (Digital Native, Intelligent, Social, Connected). This allowed us to think of fresh, agile, and relevant solutions that are helping us consolidate our digital leadership.

3.15. Automation and the future of work

One of the most important sociological challenges that has been thrown around is the impact of AI and Robotic Process Automation on traditional workforce. India has a proud legacy of a large service sector, with the likes of Indian Railways, India Post, and SBI being some of the largest employers in the world. Therefore, echoing the thoughts of my earlier articles; as technologist, we need to proceed with care when we adopt automation. It is incumbent on us to understand the impact on jobs and help the workforce transition to newer roles. This will not only be responsible growth, but will have an exponential positive impact in the future.

3.16. Drive innovation

To stay ahead of the GAFAs and FinTechs who are shaking up the ecosystem with their own payment solutions, banks must leverage new technologies (cloud and mobile technologies, biometrics). For nearly 15 years, Morpho has been supporting major stakeholders in the financial sector overcome the security and trust challenges raised by their digital transformation, counting prestigious clients such as ITAU, Caixa Bank, BNP Paribas, Banque Populaire, Caisse d'Epargne and Société Générale, among others.

As the world's leading name in biometrics, Morpho helps financial institutions ensure a trusted and seamless customer journey, from the beginning of the business relationship (identity acquisition) through to the delivery of trusted services (authentication, mobile payment, electronic contracting, secure payment orders, etc.).

IV OPPORTUNITIES LIE AHEAD FOR DIGITAL BANKING

4.1. DISC Customers

The benefits of the DISC customers (mentioned above) is that they are ready sponges for digital solutions. We are no longer in an era where we have to explain the basic technologies that drive our digital offerings. The post-loyalty DISC customer is also seeking to reduce human-based help in favour of digital: self-help. This once again opens up the canvas for banks across product design, service delivery, and customer support.

4.2. Leveraging the power of Social

When I read that Facebook has 2.2 billion monthly active customers, my jaws dropped. What's more incredible is that Facebook is only the tip of the iceberg when it comes to social. The gold mine is using social technology for leveraging internal capabilities. Organisations that are able to identify this and organise efforts around this, will see huge dividends.

4.3. The right time and the right place

Whilst there is so much more to be said about the challenges and opportunities for banking in the digital era, especially in India, here are some important opportunities that we should seize:

- We have the largest penetration of mobile infrastructure than ever before.
- We have a government and regulator that have been promoting the development of a strong digital economy.
- The start-up machinery of India, especially the FinTech boom, has given a chance to all banks and NBFC to connect with agile and brilliant start-ups and take these solutions to their customers.

4.4. Electronic Know-Your-Customer (eKYC) solutions

Take a look at our pioneering solutions from electronic Know-Your-Customer (eKYC) solutions to services for strong authentication, cash management, mobile payment, paperless transaction and data protection over time.

I.   **Attaining app perfection:** There is an immense feeling of power and reassurance while accessing a smartphone application. Smartphones are more personal in nature, progressing to biometric verification, even for actions such as unlocking the screen. Taking this into account, developing applications related to a business becomes crucial in order to retain customers. With banking and financial applications increasingly offering the comfort and luxury of monitoring expenses at any time from any place, organizations that do not tap into this area will certainly lose out on many individuals that will deem the corporation outdated. However, most applications are often ridden with bugs and face severe performance issues. They remain difficult to navigate, at times, and frequently crash. This can be detrimental to the company's progress as it would represent poor quality.

    The Fix: Quality Assurance professionals are trained to inspect, assess, and assure the quality of the software. They become involved in the process early on in the software lifecycle and ensure that applications are delivered with premium quality. In the case of a performance issue despite the rigorous testing, they will be able to tend immediately to the problem and fix the bugs instantly.

II.   **Technology Upgrades:** Five years ago, smartphones wee only just becoming popular. Today, the functionality largely defines the device that is owned. Those who travel frequently on business depend on Apple and Android tablets, those who work as freelancers depend on high quality cameras and digital notebooks, while those who work the 9-to-5 routine prefer robust laptops and high-performance desktops. In addition, we have products like Amazon Echo thrown in the mix, for daily alerts and to perk up the overall lifestyle. Knowing which audience to target is only the half of it; understanding who would use what device under which circumstances is equally important. This means a serious amount of investment for banking and financial entities in digital capabilities and formulating effective digital strategies.

    The Fix: Software testing plays a key role in ensuring device compatibility with the software, and makes the entity more user-friendly. This invariably leads to more breathing room for exploring the devices that will be able to carry the company's customized software better. This typically saves the corporation millions of dollars and organizations can, subsequently, spend their efforts on figuring out an apt digital strategy.

III.   **Cyber Crime:** Most banking and financial applications are subject to cyber-attacks the most. The reason is obvious, what with money being the unquestionable objective. Fraudsters have been known to be innovative in their endeavors to siphon funds, either as large amounts in a gun-shot, or minuscule amounts from thousands of accounts, over a long period of time. If not money directly, there is always the threat of data being compromised.

    The Fix: Security testing will sniff out the possible points of vulnerabilities that hackers may take advantage of, and offer the appropriate solution. Security testing demands a thorough understanding of the banking system and offers an in-depth knowledge of the internal architecture. Quality Assurance professionals that have expertise over the banking domain are the ones that would best tackle cyber-crime.

IV.   **Spearheading with Innovation:** Spearheading the marketplace by offering innovative services is not just desired, but also required in order to stay ahead of the curve and attract a wide customer base. Especially with a large base of young users, it becomes important to distinguish your company in the ever-growing and competitive marketplace. However, companies are often hesitant to take the leap, as they are aware that things can horribly backfire and cause instant backlash from irate customers.

    The Fix: Software testing can ensure that all the major bugs are tackled as they rise, and thorough analysis is conducted in order to have preventive measures. This will give innovative companies in their respective industries a boost, so that they can continue to explore how to better delight their customer-base.

V.   **Sustainability:** Post successful innovation and implementation, the next pressing challenge to tackle effectively is sustenance. An organization's sustainability as a leader is possible only through synergy. Only when the users acknowledge the value of the product or service will the organizational value skyrocket to success and remain there. In this context, the power of social media is often overlooked. While consistently good reviews uplift the organization to a better status, consistently bad reviews can destroy even an entire empire.

    The Fix: Understanding and leveraging the power of social media, while necessary, can be ridden with issues. Trolls, malwares, and tweets about performance issues can all wreak havoc if not effectively and immediately managed. Software testing personnel can spot real problems and immediately fix the issues, thereby containing the issue. This greatly helps sustain brand image in the long-run.

VI.   **Delivering Quality at Speed:** In the rush of wanting to deliver products and services at an accelerated speed, companies often tend to compromise on the quality. The issue with quality is that there is no such thing as a small bug; a bug is a bug. There have been several instances of organizations knowingly turning a blind-eye to defects in products and software even before the item hit the market.

    The Fix: Robust software testing ensures that the product or software hits the market well in time. By closely analyzing possible software issues right from the requirements gathering stage, quality assurance experts ensure time to market.

V CONCLUSION

Banking and financial services have always been extremely formal in nature, and for good reason. They say "money makes the world go round", and even if the line was intended to be cynical, it remains true for at least all the businesses.

Things are, however, rapidly transforming in the digital era. It is as important that the banks remain as transparent, as their customers remain authentic. The main objective behind integrating banking services with technology is, undoubtedly, convenience. Technology has now become familiar to most individuals, to an extent that it influences their lifestyle. It, then, becomes vital for businesses to distinguish themselves in the digital space with unique offerings. Security remains part of the core services that banks can offer, and for this reason, the interfaces with simplicity work best. More customers are acclimatizing to mobile platforms, and more users are using online platforms at a much younger age. Due to these reasons, there is an undoubted power that can be leveraged through digital channels. In order to tap into the power of digitization, however, there are a number of challenges that need to be overcome. We would like to close with saying that there hasn't been a better time to be in digital banking than now. There will always be challenges, but a tidal wave of opportunities is waiting for those who are willing to head out. Many of today's digital ideas will power large businesses of tomorrow.

REFRENCES

[1] https://asianbankingandfinance.net/banking-technology/commentary/banking-in-digital-era-challenges-and-opportunities
[2] https://www.e-zigurat.com/digital/digitalization-disrupting-the-banking-industry
[3] https://www.bbva.com/en/three-challenges-that-digital-banking-poses-regulators-and-supervisors/
[4] https://www.altoros.com/blog/digital-transformation-in-banking-new-challenges-for-a-new-era/
[5] https://www.morpho.com/en/media/what-challenges-and-opportunities-lie-ahead-digital-banking-20160410
[6] https://www.cigniti.com/blog/6-challenges-digital-banks-e-wallets-2017-overcome/
[7] https://www.researchgate.net/publication/273321920_Benefits_of_Cloud_for_Banking_Sector