JUST-IN-TIME BANKS FOR GEN *i* AND BEYOND…..

Chundika Ariyawansa

Senior Manager Operations - Sampath Bank PLC

1.0 Introduction

The modern financial services industry has been taken over by a storm of changes which is making it impossible to fathom where the industry is heading. The shape of financial services industry commenced its dramatic turn towards sophistication with the advent of IT applications from early 70s. The chart below provides a snapshot on how changes happened over a period of time in commercial banking.

Table 1: Use of Technology in the Organization

	Use of Technology in the Organization			
Impact on the Provision of Retail Finance	*Early Adoption (1864–1945)*	*Specific Application (1945–65)*	*Emergence (1965–80)*	*Diffusion (1980–95)*
Innovation in service offering	• Reduce inter-market price differentials.	• Conversion from branch to bank relationships. • Automated bank statements. • Cheque guarantee cards.	• Growth of cross-border payment. • ATM introduced.	• Supply of non-payment products like insurance, mortgages and pensions.
Operational function innovation	• Increased coordination between head office and branches.	• Reduce cost of labour intensive activities (ie clearing system).	• Automation of branch accounting. • Real time control begins.	• Growth of alternative distribution channels, such as phone banking and EFTPOS.

Source: Morris (1986), Quintás (1991), own estimates

It's a fact that since the dawn of new millennium, the financial services industry has taken a new shape and moved to a new height with the popularity of mobile banking. This has picked up momentum further,subsequent to the global financial crisis in 2007 – 2008, where FinTechs have taken the upper hand. The illustration below gives a glimpse of how Banks have advanced in the technological field.

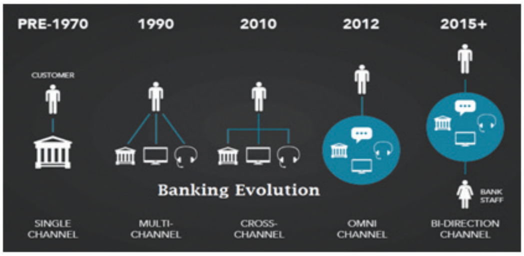

Figure 1: The Way Banks have Evolved Overtime
Source:imarticus.org-August 24, 2017

According to an article published in www.intetics.com/blog, the global banking sector is becoming both more strategically focused and technologically advanced to respond to consumer expectations while trying to defend market share against an increasing array of competitors. A great deal of emphasis is being placed on digitizing core business processes and reassessing organisational structures and internal talent to be better prepared for the future of banking. This transformation illustrates the increasing desire to become a 'digital bank'.

The importance of innovation and developing new solutions that take advantage of data, advanced analytics, digital technologies and new delivery platforms has never been more important. We are seeing organizations innovate in targeting, expanding services, re-configuring delivery channels, delivering proactive advice, integrating payments and applying block chain technology.

These efforts will only increase in 2019, as global financial and tech giants revolutionize the financial services arena. As part of these mega-trends, banks will also experiment with new mobile applications and voice-enabled gadgets to enhance both delivery and contextual personalization. Ultimately, the consumer will be front and centre. As technologies continue to evolve, the banking sector will continue to accelerate its investments in innovation and digital enhancements.

Regarding the above diagram,"Omnichannel" has become a buzzword among many IT professionals engaged in developing software for the financial services industry. What does it mean?

Most experts in the banking industry agree the term omnichannel evolved from the concept of "multi- channel." The earlier term referred to the availability of multiple ways to do one's banking — branch, call centres, ATMs, websites and more recently mobile apps. Consumers would start and end in each of these channels. There was little overlap. Each had its own tech stack. With omnichannel, consumers can float between the channels. For example, people could start in a branch, pick up where they left off on their mobile app at home, then finish the process by phoning the call center with all their progress and information seamlessly transferred along the way.

Ideally the experience would be similar no matter how the consumer engaged. How often do they do that? According to research by McKinsey, people use more than one channel to complete a task upwards of half of the time.

Successfully implementing an omnichannel banking experience may seem like the epitome of customer service success, but it is only halfway there. The best customer experience can only occur if both the customer and the customer-facing teams are on the same page and accessing the same information in real-time, without having to migrate through and between multiple banking systems. Financial products and services are often complex and numerous, resulting in many disparate banking systems that may or may not effectively communicate with each other.

Middle ware and a front-end user experience system that can interface with these different systems and display the information in a user-friendly, coherent manner is required for a bank to be able to deliver a successful customer or member omnichannel banking experience.

Accordingly, this is called "bi-direction channel banking".

The Bi-direction channel banking is the ultimate bank customer and staff member user experience. To create a truly great customer experience, both the customer and the customer-facing support team must have real-time access to a single user interface that allows them both to access the same data and information. Despite the desire of banks to create easy-to-use, self-service products, transactions and services, at some point, customers will need to interact with bank personnel to either resolve a problem, answer a question, provide advice or counsel, or assist with the process. Unlike online retail stores, financial products are often complex, requiring multiple decisions and deep product knowledge and expertise. As such, omnichannel banking is an important initiative, but it must move to bi-direction channel banking.

2.0 Recent Trends in Financial Services Industry

Mohit Joshi, *President; Head, Financial Services, Insurance, Healthcare and Life Sciences, Infosys Limited* in his address to World Economic Forum in January 2019 said that there is a general agreement within financial institutions that digitization is transforming their industries in fundamental ways, but many have yet to grasp the scale and depth of these changes. Today's emerging technologies will not merely speed up transactions and reduce their cost through automation. They will also drive a significant restructuring of the entire financial sector, alter the balance of power between established players and newcomers, and change the way ordinary people manage and spend their money. Accordingly, three technologies will play particularly influential roles in this transformation.

Digital banking is a relatively new term that encompasses ATMs, mobile banking, and online banking, and has expanded to include essentially all banking channels except for the branch (although industry experts like Chris Skinner suggest that the branch and digital channel are indistinguishable). Like most iterations, digital banking started as a single solution – ATMs – but really gained traction when online and mobile banking were introduced and became "must have" solutions.

The result of this iterative process has been the implementation of a "collection" of technology solutions that are intended to allow bank customers and credit union members to digitally interact conveniently and effectively with their financial institution – 24 hours a day, seven days a week, 365 days a year. Let's call this Digital Banking 1.0.

Problems with Digital 1.0 abound. The first problem is a lack of strategic planning as the new technology solutions and channels were introduced. The agenda for digital innovation is being driven by the major national banks and fintech companies that either have the resources to develop the technology or have acquired the technology. Everybody else is following, trying to keep up. As a result, for most banks there is little to no digital strategy; it is all reactionary, and digital implementation is a hodgepodge of disconnected solutions.

2.1 Artificial intelligence advances

The revolution brought by AI will enable financial services organizations to better predict their customer needs and offer unprecedented levels of personalization. Most sectors, including financial services, have recognized that AI-ready business applications are becoming mainstream, and that they help accelerate digital transformation initiatives.

AI's capability to predict outcomes with a high degree of accuracy opens up new possibilities in many areas. In the lending space, for example, business applications with data-driven intelligence platforms powered by advanced machine learning are helping organizations reduce delinquency rates, boost recoveries and improve operational efficiencies. Fortune 500 banks have saved millions of dollars by intelligently automating the reconciliation of fraudulent transactions using data-processing bots and conversational AI technology.

2.2 Blockchain benefits

Blockchain has emerged as a potential alternative mode for payments, clearance and settlement transactions and numerous other financial functions. The details of blockchain technology are somewhat complex, but the benefits for financial markets are very clear:

- Disintermediation – There is no middleman in a blockchain network, and the elimination of middlemen poses a real challenge to many established businesses.
- Transparency – Every participant in a blockchain network has real-time visibility into every transaction, which means parties who don't necessarily trust one another can feel safe doing business.
- Security – Every transaction is cryptographically protected.
- Unhackability – While there is no system that cannot be hacked, blockchain comes very close.
- Automation – Blockchain has another important feature called smart contracts. Smart contracts essentially take action when certain conditions are met. This feature can be used to automate processes such as insurance claims processing, digital order fulfilment and much, much more.

2.3 Cloud computing spreads

As cloud technology evolves and becomes more sophisticated, its role in the financial sector also evolves, from a cost cutter for peripheral systems like HR, procurement and receivables to a business enabler that can bring flexibility and innovation to traditionally on-premise systems. DBS Bank, the largest bank in South-East Asia, is a case in point. The bank has moved almost 50% of its compute workload to the cloud.

The migration of core systems to the cloud is in part driven by technology giants such as Google, Amazon, Facebook and Alibaba. All of these companies (and many others) have developed proprietary cloud assets, with database, infrastructure and application offerings that are available on an "as-a-service" basis. Performance and availability service level agreements for these cloud-based offerings now rival those available from on-premise solutions, while security – which is essential in building and maintaining consumer trust – is equivalent or even better.

According to a blog published on *Digital Transformation and Its Impact on the Financial Services Industry on July 26, 2017;* in the recent years, world's financial institutions have dramatically increased the usage of digital technologies. The appearance of new technologies provides great opportunities for both financial organizations and their customers. Major world's banks offer financial services through digital technologies, including robotics, which help to reduce the costs and simultaneously increase quality. This trend is determined by the demand of modern market as well as fast alterations of the financial environment throughout the world.

According to the article based on the survey of The Economist Intelligence Unit (EIU) the top priorities of banks are as follows;

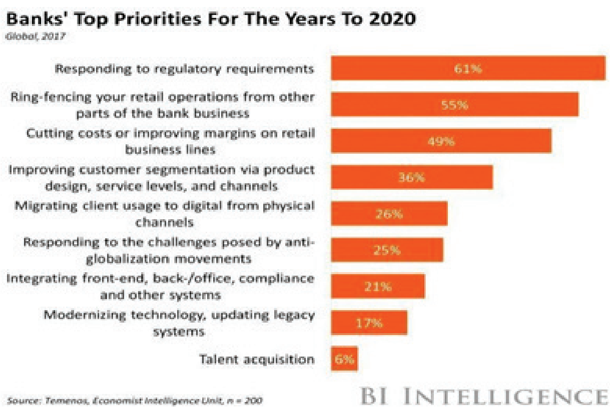

Figure 2: Banks' Top Priorities

As we can observe on the above Figure 2, the main concern is responding to regulatory requirements. Accordingly, banks in almost all the countries spending a lot of money and time to do a lot and implement systems to meet the requirements of the regulator. The question is whether in this process the banks may lose the priority of doing business with the customer which in turn hinders the growth and expansion. Therefore, it has become necessary to have a suitable trade off between regulatory requirements and business developments. Although, banks are in the process of redefining the systems and processes to enable the best cost saving, it can be observed with the introduction of new regulatory requirements, it has become a challenge to have a lean Back office and an efficient Front office.

3.0 How Demographic Changes Affect Financial Services

The present financial market conditions are mainly driven by affluent segments of the society thus making it important to understand the habits and behaviour of this vital segment to move forward. Accordingly, millennials are a reckoning force in the consumer market for financiers.

In terms of their work preferences the millennials are creating a change in how work gets done, as they work more in teams and use more technology. Their social mind-set, however, is also a significant factor. As Leigh Buchanon writes in Meet the Millennials, "One of the characteristics of millennials, besides the fact that they are Masters of Digital Communication, is that they are primed to do well by doing good. Almost 70 percent say that giving back and being civically engaged are their highest priorities."

Millennials have various peculiarities that make them stand apart, such as their active lifestyle, tech-savviness, taking longer to marry, etc. However, out of those set of behaviours, one of them is especially important for the businesses, and that is that 3 out of 4 millennials prefer to spend money on the experiences rather than consumer goods. But the truth is that those are not just millennials, this trend started affecting everyone. Studies show that people are more satisfied when they spend the money on living compared to possessing. It is interesting what could be a reason for such a change because previously possessing a property was prioritized as it served as a safety guarantee.

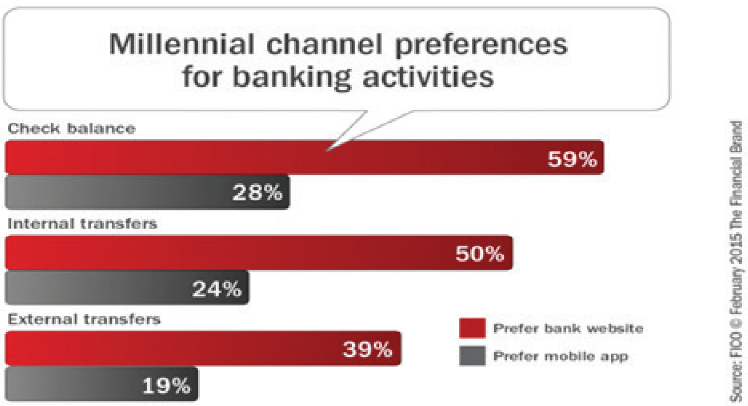

Figure 3: The millennial channel preferences for banking

The research shows that millennials are so omnivorous in their point-of-sales that as a generational demographic, they're the most likely to make use of every avenue of purchasing available to them. In fact, younger millennials (aged 20-23) on the cusp of Gen Z are more likely to shop in a brick and mortar store when compared to older millennials (aged 32-35,) who are the most likely within the group to buy via mobile. And overall, when millennials shop for something both online and in a store, they are much more likely to make a purchase in a store than they are online. But while the myriad of online stores and buying options today have offered millennials the ability to be more selective with their purchases, the options can get overwhelming as millennials tend to prefer browsing for products across brands rather than settling on an option and purchasing it.

It was found that 82 percent of millennials say word-of-mouth is a key influencer of their purchase decisions. Seeing shopping as a social event is another trait that strongly characterizes the millennial market and sets it apart from older generations. In stark contrast to Baby Boomers, research shows that millennials enjoy shopping and see it as fun and relaxing activity to be shared with friends and family. According to Gen Buy, the grand majority of millennials report that they shop with other people at least half the time, and 60 percent consider advice from their friends when deciding what to buy.

Of course, the social consumer experience is not only limited to shopping mall excursions but social media as well: 68 percent of millennials admit to being strongly influenced by social media posts while 84 percent say user-generated content has at least some influence on what they buy.

Retailers should recognize that social media is extremely important to millennials in their purchasing journey because even though they value the opinions of family and friends, they seek out the experiences of other consumers above all. Not only do 90 percent of millennials research product reviews online, most tend to rely on other consumers' reviews on retailers' sites over those of people they know. By taking advantage of all these forms of recommendations, it's no surprise that 82 percent of millennials say word-of-mouth is a key influencer of their purchase decisions.

Like Gen X, Gen Y is also skeptical of overbearing marketing tactics. Millennials tend to reject retailers who constantly push products through messaging and instead prefer authentic interactions with sales associates who happen to also be consumers of their retailer's products. Millennials are also likely to interact with brands and retailers through social media sites such as Twitter and Facebook in order for their voices to be heard.

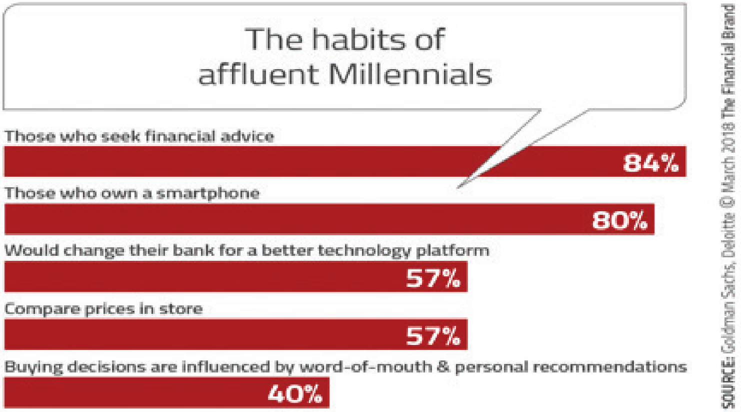

Figure 4: The habits of affluent millennials

The above diagram shows that most of the millennials use smart phones as a habit. Accordingly, based on their techsavvy background they may not need the conventional banking activities as of their predecessors. Hence, they will engage in their banking transactions through mobiles which is more convenient and allow them to do such transactions at their leisure. In addition to that, it can be observed that most of the millennials would seek financial advice from the banks rather than query on petty transactions. Hence, in time to come the brick and mortar banking will be an outdated concept and come to a natural death. In the place of this model, we will find highly complex centralized call centers engaged in helping the millennials to do their banking transactions.

Given the fact that most millennials have been brought up within the context of highly complex digitalized environment, such category of customers visiting a bank branch is very unlikely. Instead, the banks may have to get appointments to visit them to sell their products. As such, one could come to a general conclusion that the brick and mortar model will be a thing of the past.

4.0 Shift from Old Business Model and Money vs. Data

Having considered various aspects of change and innovation that take place in the financial services industry and the consumer behaviour of millennials, one would argue the viability of continuing with traditional financial services/banking model any longer, given the fact that the model has been adjusted to suit different requirements. From the literature already examined, it has become necessary to identify a better business model for banking before they get eliminated from the market place.

As highlighted in Figure 2; the attention of the banks in developing business; i.e., improving customer segmentation via product design, service levels and channels is 36%, a very negligible portion compared to other aspects. However, one should not forget the fact that entire industry survives on this aspect of developing new business channels and identifying the customer segments accurately in order to target them since consumer behaviour continuously evolve. Therefore, it is obvious that there is a serious question of sustainability of the industry in the medium and long run.

> *By 2025, banks could lose 60% of their profits in consumer finance, 34% in payments and small business lending, 30% in wealth management and 20% in mortgages.*
> *— McKinsey*

Given the fact that financial services industry has become a very expensive business, and the new generation of people may not want to visit Banks, it is time to change the model of Banking in order to suit the new ideology and cut down the massive cost structure in built to the system as a parasite.

On this backdrop a new school of thought has emerged of taking a cue from the manufacturing industry. According to a research paper published by Bain & Company, one key choice with implications for the operating model involves where to compete on the value chain spectrum. Banks can focus on "manufacturing" (creating products) at one end of the spectrum or on "distribution" (managing channels and customer relationships) at the other end. Most banks will choose a hybrid of the two, based on their relative strength in individual products, customer segments and internal capabilities. Advances in technology make it easier to unbundle the value chain, and we believe the distinction between manufacturing and distribution will accelerate over time. Financial institutions pursuing a manufacturing intensive strategy include Goldman Sachs, State Street and Black Rock. They aim to build world-class solutions for specific product needs and client segments, including other financial institutions. Succeeding through this model hinges on attaining large-scale product leadership and technological expertise. Some banks are relying on external vendors to perform parts of the process, such as FIS, IBM, SAP and Misys for core banking and product systems; Broad ridge and First Data for servicing and business-process outsourcing; and IHS Mark it, Bloomberg and Thompson Reuters for data and analytics.

The distribution model is attracting many regional and community banks, credit unions and parts of large banks that want to focus on areas where they have a competitive advantage. Distribution-focused banks tend to offer a full product suite, tailored to industries or customer profiles with a combination of nonbank, white-label solutions and partnerships with other banks. That means they out source many products and processes such as credit cards, asset management or insurance, as well as utility-type activities such as mortgage processing. Success with the distribution model hinges on customer analytics, strong customer relationships, channels that are simple and easy to use, and economies of scope achieved by gaining a large share of the customer's wallet.

	Manufacturing focus	Hybrid	Distribution focus
Ambition	Best-in-class production and processing of banking products	Growth in select core markets via distinct products, customer segments, geographies	Best-in-class client insight, and management of channels and relationships
Where to play	Best-in-class solutions for specific customer segments, including other banks	Distinct choices of products, according to customer segments and geography	Full product suite, bundled and tailored to the sector and size of the customer with white-label solutions
How to win	Economies of scale; high fixed costs require large volumes to hold down unit costs	Both scale and scope; manufacturing in core local markets and distribution in select overseas markets	Economies of scope; high cost of acquiring clients makes a large share of wallet essential
Examples	Black Rock, State Street, Goldman Sachs, parts of JPMorgan Chase	Many large banks in their home markets	Community banks, smaller overseas branches

Source: Bain & Company

Figure 5: Value chain spectrum

Just as banks have been relearning the art of strategy to build competitive advantage, they also must develop operating models uniquely suited to their strategy, rather than models based on generic industry bench-marks. Banks will have to rethink the role, structure and processes of critical functions such as IT, risk and compliance. For instance, more banks are moving to open architecture, which means they no longer have complete end-to-end control internally of their IT systems or data. This trend has been spurred by the migration to cloud solutions and will further accelerate with the spread of distributed ledger technology, smart contracts and open application programming interface (API) systems that integrate activities across the financial system. Banks will have to redesign processes to understand and monitor activities handled by external providers, not by the bank itself.

Apart from the strategy the latest trend in banking is about data science. Its true that the amount of data a financial institution/bank holds containing important behaviour patterns of consumers is the key to the success. We take a very good example of how data analytics and predictive behaviour patterns can trigger new market opportunities by simply looking at companies like Amazon.com eBay.com and Alibaba.com. Those companies prompt the customers with the latest from their offerings based on the previous purchase patterns. As such, it is time to develop such a strong interactive IT system which facilitates the consumers to do their purchase at their convenience and if possible, with some customization.

5.0 The Way Forward

In time to come the financial services industry/banking should follow the concept of just-in-time with self-service models like Uber and Alibaba. The product or service can be initiated at one point and the delivery happens at another point by a different entity or individual. As such the above-mentioned manufacturing vs distribution focus business model ideally suits the banks in many ways. Depending on the specialization and economies of scale the financial institution/bank can choose which focus to be taken.

Another important aspect to consider in the case of web based interactive financial model is the possibility of cross-selling products that are either complementary to the offerings of the product range of the financial service provider or even other products with the customer's consent; i.e.; Insurance products, FMCG products, utility etc. It is not just settlement of bills but purchase of the product or service through the same site.

When a model of this nature, which is plug and play, the work culture of the financiers would drastically changed to become part timers where they may not have a place called office, instead in case they need to meet the customers the meeting point is a public place like a restaurant, pub etc.

The living example of this model is Atom Bank of UK. The Atom Bank (Atom), the 'Uber of online banking', was one of the most innovative digital-only banks in the world as of 2016. Known as the first 'mobile only bank' in UK, the bank opened for business in the second quarter of 2016. The start-up received its banking licence in 2015 and officially launched its mobile apps (iPhone and iPad app), considered as the only way the customers would be able to interact with the bank. Instead of a physical branch, the customers would be able to access their bank account with the help of smartphone, tablet and phablet. According to experts, this was the start of a remarkable transformation of the traditional banking landscape and Atom was planning to emphasize on customer services by keeping its operational cost low.

In the initial phase, the bank offered fixed rate savings accounts and loans specifically to the small and medium-sized businesses with the help of intermediaries. It was planning to launch a range of products such as current accounts, overdrafts, instant savings, debit and credit cards by the end of 2016. In spite of these lofty ambitions and innovative banking initiatives, Atom might face stiff competition from the big four i.e.; Lloyds, HSBC, RBS and Barclays in the UK. Even Atom would face difficulty in differencing itself from the rivals by interest rate, which was already low across the globe. The case would discuss the 'neo banking' business model of Atom. It would also analyse the factors that could make or break Atom's ambitious business model.

The proof of the pudding is in the eating. The viability of above model can only be judged from the performance indicators of the organization which is given below. Although the bank is still in the early stage its progress for shorter period is quite remarkable. The most important indicators are the standard timing given for delivery of the product like Pizza hut.

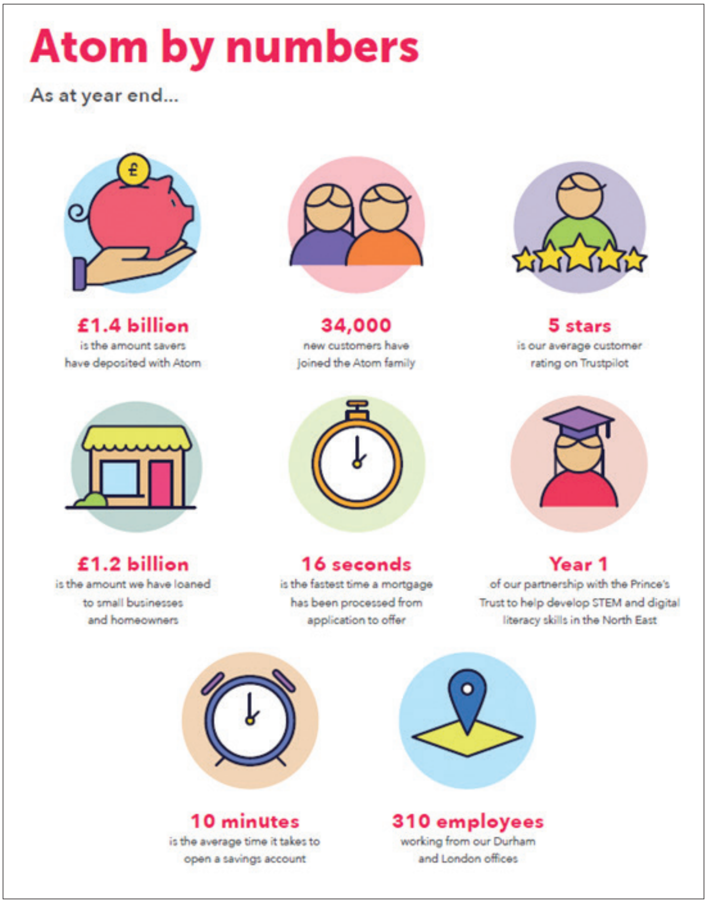

Figure 6: Key performance indicators of Atom Bank
Source: Annual Report of Atom Bank 2017/18, p-6

6.0 Conclusion

The generation beyond Z may never see the brick and mortar model of financial institutions/ banks. Instead, they will learn about it from the internet. By the time that they start banking, there will be no physical currency but cryptocurrency like Bit coin, and the service/product delivery is within few seconds reach which is just-in-time. Apart from that there won't be banks earning thumping profits, instead as the CEO Michael Corbat of City Group pointed out, not only City Group becomes "a technology company with a banking license" but all others who shall fall in line in order to survive.

References

- Atom Bank Annual Report 2017/18.www.atombank.co.uk.
- Bernado, B. Lazo and Douglas Wood, A Historical Appraisal of Information Technology in Commercial Banking, Electronic Markets (2002) Volume 12 (3): 1–12. www.electronicmarkets.org.
- Oslen, T. (et al), New Bank Strategies Require New Operating Models, Bain & Company, 2017.
- Fernando, S., The Voice of Silence: Data Science and Banking, Daily FT, Financial Services/Issues, July 11, 2019.
- Whitepaper on Generating Banking & Financial Services Impact published by Genpact Research Institute, 2016.
- https://intetics.com/blog/digital-transformation-and-its-impact-on-the-financial-services-industry; viewed on July 24, 2019.
- https://www.weforum.org/agenda/2019/01/these-3-technologies-will-permanently-change-the-banking-sector/, viewed on July 26, 2019.
- https://thefinancialbrand.com/77869/innovation-trends-banking-ai-api-personalization-payments/; viewed on August 7, 2019.