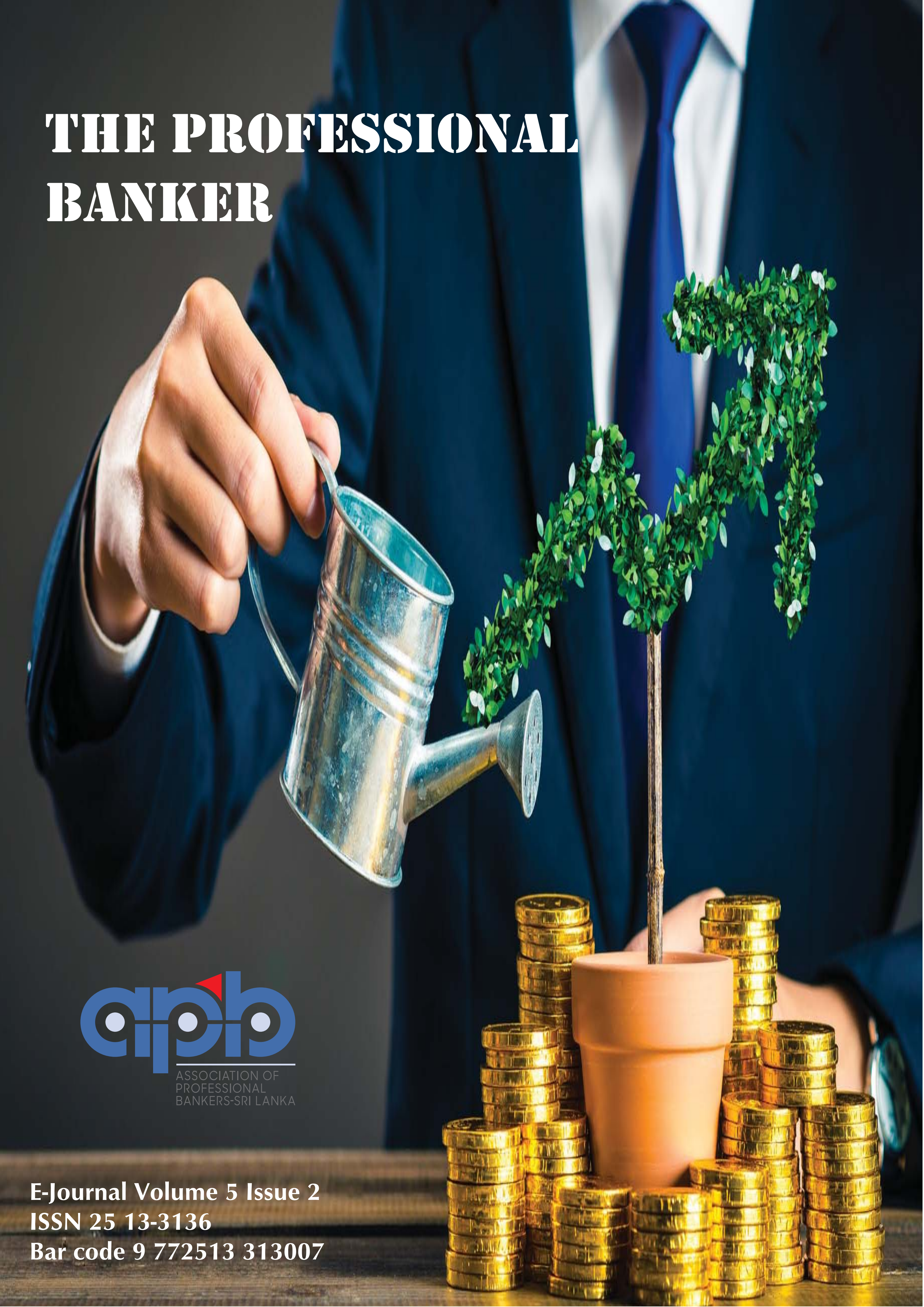
THE PROFESSIONAL BANKER



ASSOCIATION OF PROFESSIONAL BANKERS-SRI LANKA

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OUR VISION

The power of Professionalism in Banking in Sri Lanka

OUR MISSION

To sustain the highest standards of professionalism
and
integrity among Bankers

To Advance the Public Interest

To influence the Achievement of the Highest Ethical Standards and Governance in Banking Industry

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31ST ANNUAL CONVENTION OF ASSOCIATION OF PROFESSIONAL BANKERS – SRI LANKA

























Together









Challenge of

RETAIL CREDIT RISK MANAGEMENT & EVOLUTION OF FINTECH CREDIT MARKETS

Janaka Wijayawickrama

Retail Banking Industry revolves around receiving deposits from and lending money to customers and small businesses. Loans can take the form of home mortgage, instalment loans and small business loans. From the perspective of the lending institution, these individual loans constitute small pieces of large portfolios designed to reduce the incremental risk to any one exposure.

The biggest risk associated with retail banking is credit risk which is the likelihood that a borrower will default on debt.

There are differences between retail credit risk and corporate credit risk. Retail credit exposures are relatively small as components of larger portfolios such that a default by any one customer will not present a serious threat to the bank. A commercial credit portfolio often consists of large exposures to corporations that can have a significant impact on their industry and the economy as a whole. Due to the inherent diversification of a retail credit portfolio and its behaviour in normal markets, estimating the default percentage allows a bank to effectively treat this loss as a cost of "doing business" and to factor into the prices it charges. A commercial credit portfolio is subjected to the risk that its losses may exceed the expected threshold, which could have a crippling effect on the bank. Banks will often have time to take pre-emptive actions to reduce retail credit risk as a result of changes in customer behaviour signalling a potential rise in defaults. These pre-emptive actions may include marketing to lower risk customers. Commercial credit portfolios typically do not offer these signals as problems might not become known until it is too late to correct them.

It is worth considering the dark side of the retail credit risk. An unexpected, systematic risk factor may cause losses to rise beyond an estimated threshold, damaging a bank's retail portfolio through decline in assets and collateral values and increases in default rate. This represents the dark side of the retail credit risk. The lack of historical loss data due to relative newness of specific products, an across the board increase in risk factors impacting the economy overall that causes retail credit products to behave unexpectedly, an evolving social and legal system which may inadvertently encourage defaults, an operational flaw in the credit process due to its semi automated structure that results in credit granted to high risk individuals are the causes behind the dark side of retail credit risk.

How to manage retail credit risk?

Credit Risk Scoring Models, Mortgage Credit Agreements, Cut-off Scores, Cumulative Accuracy Profile and the Accuracy Ratio techniques, Risk Based Pricing (RBP) are some of techniques used in retail credit risk management.

A credit risk scoring model takes information about an applicant and converts it into a number for the purpose of assessing risk. The higher the number, the higher the probability of repayment by borrower and lower the overall risk. Credit Scoring Models facilitate the gathering of an enormous amount of information into a single automated process. A credit risk scorecard will gather information from applications and credit bureau reports and weight it depending on the type of questions answered. The question/entry will ask from a specific characteristic like "number of years with current employer" and the attribute will be the response (e.g. 10 years). Credit Scoring Models will determine positive and negative values and weight each attribute according to past history and the associated probability of repayment.

Developed economies like United States have the following types of models in regard to scoring applications for customer credit.

- Credit Bureau Scores
- Pooled Models
- Custom Models

Credit Bureau Scores refers to an applicant's FICO (Fair Isaac Corporation) score and is very fast, easy and cost effective. Scores will typically range from a low of 300 to high of 850 with higher scores associated with lower risk to the lender and lower interest rates for the borrower. Pooled model is built by outside parties and it is more costly than implementing a Bureau Score Model. However it offers the advantage of flexibility to tailor it to a specific industry. Custom Model is created by the lender itself using data specifically pulled from the lender's own credit application pool. This model allows a lender to evaluate applications for their own products and this type is widely applied in developing economies too.

In assessing an application for mortgage credit the key variables include:

- FICO Score
- Loan to Value(LTV)
- Debt to Income
- Payment type
- Documentation

What is Cut-off Score?

Cut-off Scores represent thresholds where lenders determine whether they will or will not lend money to a particular borrower. The higher the score the lower the risk to lending institution. Setting the Cut-off Score too low presents a higher risk of default to the lender. Setting the Cut-off Score too high may limit potential profitable opportunities by unintentionally eliminating low risk borrowers. Once the Cut-off Score is established, historical experience can be used to establish the estimated probability for a specific product line and the associated loss rate. As estimates are made from longer time horizons (which hopefully capture full economic cycle) a bank may adjust its Cut-off Score to maximize appropriate balance between risk and profitability. Credit Scoring is used as a means of predicting default risk, such that high (low) Scores on the scorecard are assigned to strong (weak) credits. In assessing the performance of the scorecard, a Cumulative Accuracy Profile (CAP) and Accuracy Ratio (AR) are often used. The CAP shows the population distribution on credit scores (and therefore risk) versus the percentage of actual defaults.

Risk Based Pricing (RBP)

Recognizing that charging a single price for a product to all customers regardless of risk levels may lead to adverse selection (i.e. high risk customers attracted to a relatively low price relative to their risk profile and low risk customers pushed away by the higher price relative to their risk profile).Lenders have been moving towards risk based pricing. RBP involves lenders charging different customers different prices based on their associated risk. Although RBP is still in the early stage of implementation in the financial retail sector it has been utilized more frequently in Credit Cards, Home mortgages and Auto loans in United Sates.

Key external and internal factors which account for risk and play into the inherent rates and prices charged by lenders include:

- The probability of take up
- The probability of Default(PD)
- The Loss Given Default(LGD)
- The Exposure at Default(EAD)
- Cost of equity capital to customer
- Capital allocated to the transaction
- Operating expenses of the lender

Evolution of FinTech Credit Markets

What is FinTech Credit?

FinTech Credit is a situation where lenders and borrowers meet by means of an online platform which evaluates the information related to lending and borrowing using Machine learning algorithms or Artificial Intelligence and creates an environment for transactions to happen.

FinTech credit markets are relatively insignificant compared to conventional markets although FinTech has been developing at a rapid speed in the past few years in developed economies like United States. This market has developed due to many reasons which can be categorized as supply side and demand side reasons. Greater automation in loan granting process as well as the use of non traditional data may lead to more timely credit decisions thereby resulting in stronger client service.

The use of an online business model for FinTech platforms typically has small upfront costs and may also result in a high level of standardization(i.e. digital contracts not requiring in person meetings) that would lead to significant cost saving. Of course there may be limits to the amount of standardization in a given geographical location due to its corresponding legal constraints and segmentation of credit markets. FinTech lenders may be able to operate in the same way as conventional lenders, yet avoid their large fixed costs (i.e. branch banking system, significant IT infrastructure) as well as regulatory constraints (i.e. capital and liquidity requirements).

The fact that many customers are now extremely internet savvy and appreciate the ease and timeliness of online banking is a strong argument for further development of FinTech credit markets.

Dark side of FinTech credit markets

Traditional banks have been in online banking world for many years and some customers are satisfied with their existing digital banking services and may not be willing to switch to an unknown digital lender. Many FinTech lenders have not operated through an entire credit cycle of an upturn and a downturn. Therefore considerable uncertainty exists whether emerging FinTech lenders would survive the downturn. Regulatory requirements may vary widely depending on location and could severely limit the growth of FinTech in jurisdictions where the licensing requirements are overly onerous or where interest rate limits apply. With ongoing development of FinTech,the related regulations will change and create significant uncertainty for borrowers who may feel nervous about on line borrowing as a result.

There are few FinTech credit models. They are;

- Peer to Peer Model
- Notary model
- Guaranteed Return Model
- Balance Sheet model
- Invoice Trading Model

The growth of FinTech credit could result in greater financial inclusion and investing in FinTech loans could diversify an investment portfolio. Borrowers such as self employed individuals or small businesses who have historically been restricted in the amount of financing obtained from traditional banks may now have access to sufficient capital to grow their businesses. FinTech could bring out lower transaction costs that will benefit borrowers in the form of lower financing costs and benefit lenders in the form of higher risk adjusted returns. FinTech credit may offer newer and a greater variety of lending options (beyond those of traditional banking), some of which may be more appropriate and tailored to the needs of certain borrowers. The emergence of FinTech as a major player would reduce the level of credit situated in the banking sector. It would serve as a backup source of credit in the economy. For example if there are negative effects those are specific only to the banking sector (i.e. unsystematic risk) which significantly reduce its ability to lend during an economic crisis, then FinTech could potentially come to the rescue.

Risk Associated with FinTech credit

Banks may reduce their lending standards due to increased competition in the lending markets. Also banks may be taking an incremental operational and reputational risk by working with FinTech platforms using electronic credit models and outsourcing IT to third parties. The nature of FinTech credit would make it difficult for regulators to properly monitor activities given the likely lack of reporting requirements and supervision.

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ROAD MAP & DESIGN THINKING FOR SUCCESSFUL TRANSFORMATION

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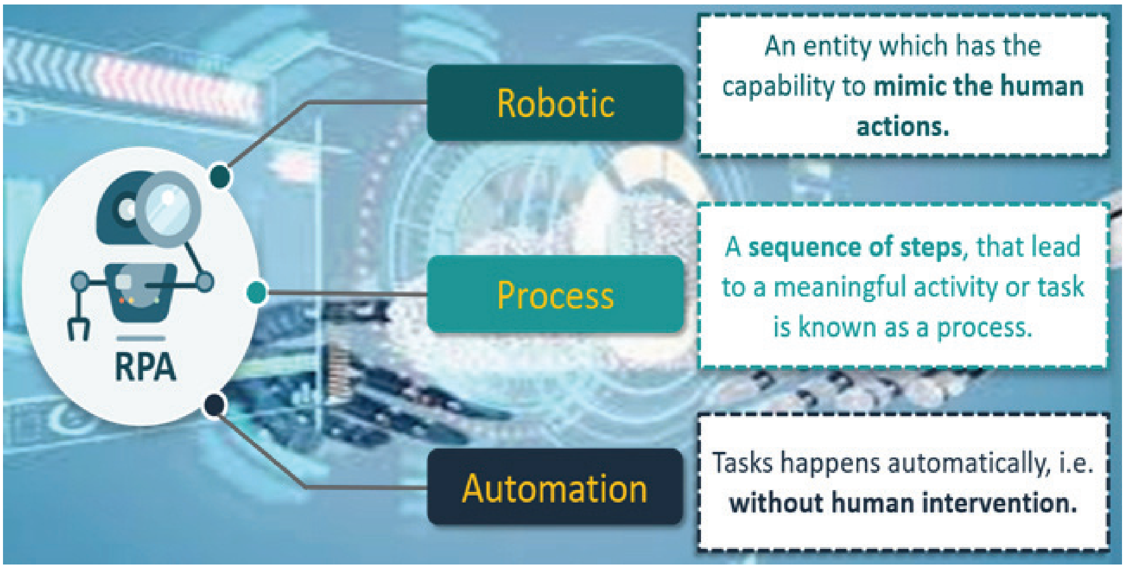
Executive Summary

In today's context banks and other financial institutions, face new challenges with emerging Fintech companies and the other non-financial institutions. Today it really comes down to technology. Banks need to compete with these new challenges in order to keep up with the competition. To do so it is necessary for the banks to re imagine and transform and thereby gain competitive advantage.

Article will explore how to drastically shorten the product development cycles, increase productivity growth, stimulate product and process innovation, and respond quickly to changing customer demands in order to reduce operational costs with optimal performance to tap into the greatest ROI. Also, explore new strategies to ensure that your operational capabilities are flexible and constantly adapting to the current market scenario to avoid loss in revenue and performance.

1. Robotic Process Automation (RPA)

Robotics Process Automation (RPA) allows organizations to automate tasks just as if a human being was doing them across applications and systems. Robotic automation interacts with the existing IT architecture with no complex system integration required.



(Figure 1 – Source from Internet)

Banks can engage BOTs (Software Robots) in back office activities to drastically cut down costs and increase efficiency. With less development time results can be achieved quickly.

1.1 Where can RPA (Robotic Process Automation) fit in?

Engaging BOTs in back-office and front office depends on many factors. Robotic process automation can be applied, to following areas with the state characteristics.

- Repetitive and routine tasks
- Low risk and non-invasive tasks
- Has a high impact or to roll-out a rapid concept

Tasks that require human judgement are not good for RPA.

1.2 Spotting RPA opportunities in a bank

In order to gain value from RPA for a bank, we need to first figure out whether there are enough processes for Robots to take over and the effort can be justified. Given below are some of the guidelines.

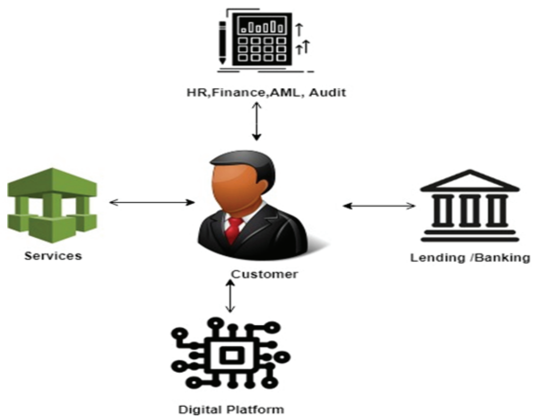
- Look for RPA routines as part of process re-engineering activities in the bank.
  - o Process by process
  - o Look at the balanced view of the business benefit
- Areas where manual work and repetitive work are involved
- Need to bridge various application gaps and integration problems
- Time consuming activities
- Has a clear benefit with a broad applicability

1.3 Benefits from RPA for a bank

- Reduce operating cost and time
- Increase the efficiency and accuracy
- Excess staff can be re-assigned or re-aligned to other productive work
- Agile development helps to produce the results with less time
- Re-usability of BOTs to many tasks 24 by 7
- Intelligence can to be added to the BOTs in certain cases to make the work easy

2. Customer centric transformation

The sole objective of the value proposition is to help customers make their 'dream' of a reality. It is necessary to start any process transformation from a customer point of view. Before starting the design, going through the customer journey of any process is important.



Detailed study of all customer journeys will help a bank to come up with their best products to offer, create a great user interface / user experience (UI/UX) in all customer contact points (Digital/Physical), identify best tools to manage finance, identify lending and partnership offers, save and support customer dreams effectively.

Following guidelines will help as a bank to move towards a customer centric transformation

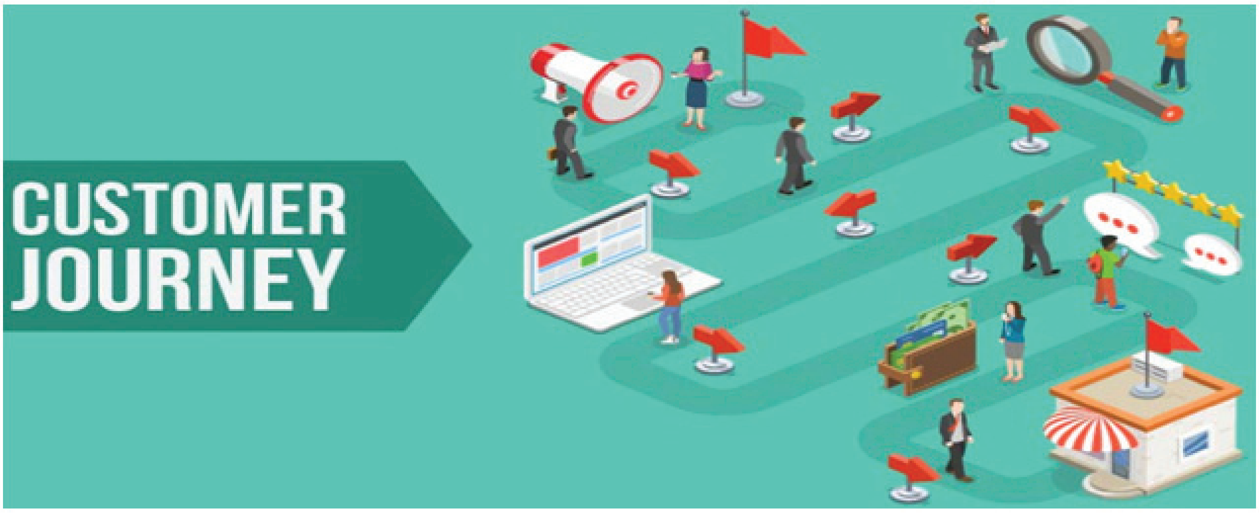
- Define the bank's target operating model

Bank must have a clear definition of how it is going to operate. Banks' strategy towards digitization. It is a critical factor for digital transformation.

- Transform banks people mindset first to achieve efficiency.

Challenge would be mind set change towards it, while delineating the activities front, middle and back office. Disciplined and self-motivated organization culture will help to achieve business goals quickly.

- Standardize processes and activities in the bank, including Technology.
- Describe journeys for all actors starting with end client for any process.
- Monitor customer journeys to identify when to intervene and help the customer.



(Figure 2 – Source from Internet)

- Identify and design customer operations to make it "Zero Failure"
- Be proactive and use of indirect way of asking the question, gather customer experience and feedback
- Use of data driven diagnostic modules to track customer issues and pain points

Each customer journey process should have tracking events to capture what customer is performing or failing. Alert should be immediate and bank should address the customer pain points immediately with the customer.

- Randomized experiments based on control groups and treatment groups
- Build intelligence with data analytics
- Make use of existing vendors to support certain level of transformation and automation
- Build the services for tomorrow
  Eg: - Blockchain, etc
- Hyper Personalization

Hyper personalization is the new baseline for success for addressing banking customer demands for tailored experiences. Consumers want to be treated 'special' in every business relationship.

3. Forward Thinking Back Office – Challenges –Transforming

Banks should be strategically focused, technologically modern and operationally agile in today's rapidly evolving financial eco system. It is time to re evaluate the role of back-office as a revenue generator.

Given below are the trends, challenges and impacts that the banks will face in no time to come. Initiatives and strategies that banks have to take pro-actively to address the impact.

3.1 Trends

- Banking happens through agency model
  Traditional banking concepts will no longer be viable for a bank to sustain long term. With different eco systems, a bank will have to rely on third parties to perform some functions on its behalf.

- Enabled by Mobile

Its banking anywhere but never at a bank. Globally smartphone transactions have surpassed branch transactions but banks are still branch-centric in both organization and design. For the near future, banking will continue to move to digital and the bank tool of choice will be the smartphone.

To be competitive the focus should be towards a mobile enabled bank with full functionality.

- Move to cashless

Globally cashless transactions being on the increase day by day and smartphones have become the mode of payment for everything. In time to come ATM usage as well as credit card usage will drastically go down. Globally customers/people are transforming (some have already in to it) in to this culture.

To be competitive and to get along with global market, banks will have to transform themselves to cater to this market. All financial institutes will have to gear up in near future in order to survive.

- (However) Driven actively by regulators

With the new emerging technologies and services coming up will lead to new regulations. (More on this in the next chapter)

3.2 Challenges

The way people communicate and transact has transformed. Major non-bank players come in to action in the market affecting the financial sector globally. Eventually it will affect the Sri Lankan financial sector. Banks should gear up to handle this impact.

Major non-bank players

- Mobile operators
- E-Commerce platforms
- Social networks and platforms

There are enough and more fintech's and bigtech's that can impact local banks. It's a matter of time that above-mentioned organizations come up with a bank and enter in to financial sector or enter into synergies.

Why are they powerful

- Largest number of users
- Have incredible amount of data
- Can process transactions at much lower cost
- They have access to what banks have access (Financial resources)
- Masters at creating new digital services

Impact

- Banks margins are under pressure
- Impact on profitability
- Will have to take margins down

3.3 Addressing – Drivers of retail bank profitability

Banks will have to take different strategical approaches to address the above challenges and to avoid impact. Below are some of the areas and points that need to be looked in to and transformed.

Customer acquisition and engagement

o Digital acquisition

Moving to complete digital acquisition platform(s) is the future to gain competitive advantage. Banks will have to enhance their digital Infrastructure and integration capabilities to drive the business. This can be through in source, outsource or taking expertise from fintechs.

o Online to offline (O2O)

Extensively explore the O2O capabilities of the bank. Bank can generate online triggers, which prompts customers to go to physical branches, or it can be the other way round prompt use of online platforms. Can use in all areas of the banking transactions.

o Partnerships & Ecosystems

Learning how to collaborate with partners and build ecosystems is one of the most critical areas. Banks will have to develop this area and skills. Need to understand which partnerships your bank needs to win in the era of 4th industrial revolution. There will be no survival without partnerships. One way to acquire the digital capabilities and skills in no time is to engage with fintech's.

o Customer data

Banks do have a lot of financial customer data within them. Question is do banks use them to their own benefit. If not it is time to do analytics on these data to identify patterns trends and forecast. Start taking actions on those to gain competitive advantage, market, enhance customer experience and deliver more.

Banks may have to acquire analytical tools and digital infrastructure if required to deep dive in to data. There are many options in the market for the same.

o Engagement, sales & service process management

These are some of the other areas that need looking in to. Inefficient areas need to be re-engineered for efficiency and improvements. If required enter into new engagements.

Risk Management

A major area most banks neglect when it comes to achieving the targets and goals. Targeting right customers will reduce the cost, risk, fraud and improve collections.

Operations Transformation

o Make money with significantly reduced margins

Reinventing or remodelling the bank's products and services (including digital) to gain significantly reduced margins would be the model to sustain. Banks will have look at the earlier mentioned automation opportunities in doing so.

o Keep enhancing the customer experience

Improving and enhancing the customer experience is the key to future sustainability. It has to be a continuous process where continuous monitoring in needed to identify improvements.

All channels and interaction is points will have to be geared with great user interfaces and to provide a great experience.

Taking immediate action would delight the customer.

Channel transformation and re-usability

It is the customer and not the banks who are driving changes. Customers expect relevant content in relation to what they are doing anytime and anywhere and in the format and on the device of their choice. Keeping the in mind banks must transform their channels accordingly while reusing the digital processes and functions.

Good example would be to reuse existing online account opening functionality in the branches to eliminate back office tasks. Lookup for options of remote account opening, Linking up with social media sites, etc.

- Self-service and assisted self-service

Keeping the customer in mind bank should know when to provide self-service and when to assist the customers in self-service processes. Front office and call center staff may need to train to handle and intervene to support customer paint points.

- Reduce Branch space and move to low cost model

While moving to digitization start reducing the branch space and move to a low cost model.

3.4 Things to think through

- Do banks really know and understand their customer needs?

o Have we asked questions from customers?

Often we banks neglect what customers exactly need from us. Effective mechanism should be in place to capture real customer feedback and needs. The help of analytics can be a good resource to compile the questions.

o What financial information does customer need in future?

Maintaining long-term bond with a customer will become a challenging task for the banks in future. It is now time to help customers with their financials and business and work along with the customer for their future progress. Banks should be able to guide and help on their transactions, decisions and investment opportunities pro-actively. This is one way to make loyal customers.

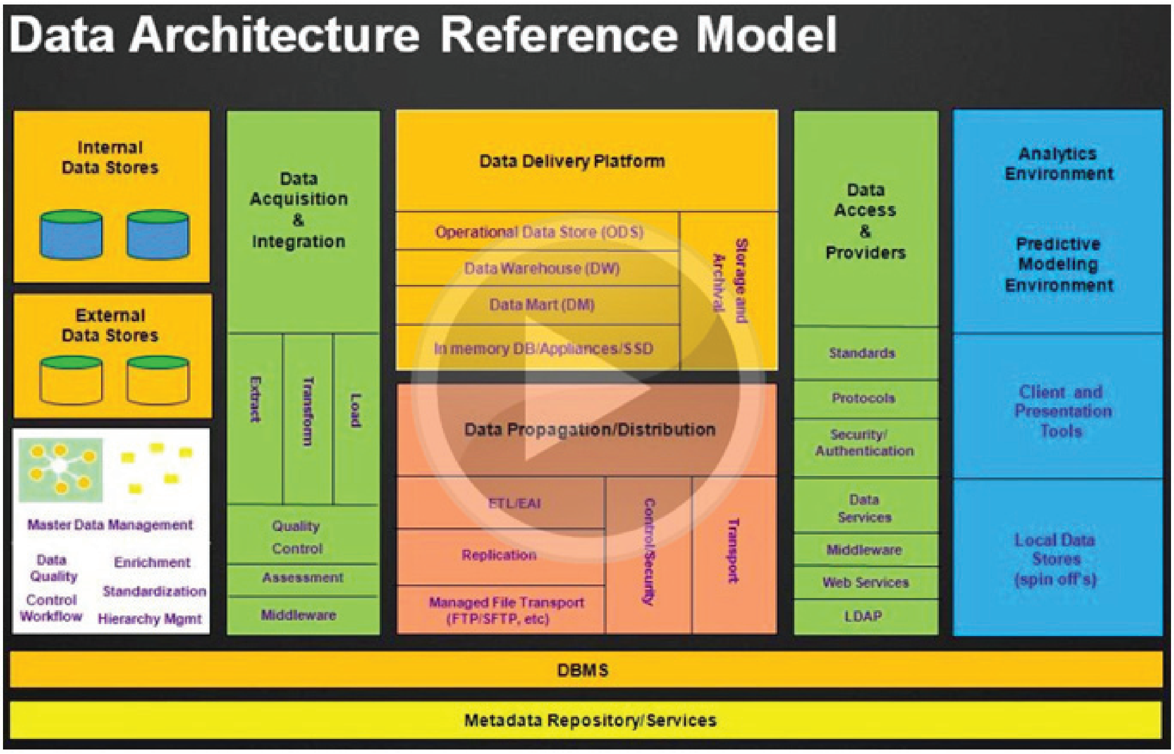
- Thought through customer experience

The customer experience matters most when it comes to service. Staff to be trained to provide a good customer experience. Digital channels should provide good user interface and experience without confusion. Mechanism should be in place to constantly follow up until the end of the transaction and after services.

- Using the customer data architecture

All banks must have a “customer data architecture model” in place and implemented by now. If not its high time to implement. Data from below mentioned areas is mandatory to include in the model. Properly designed architecture will last for a long time and a treasure for the bank. All analytics can be done from this, which is useful from customer acquisition, marketing, creating best products, creating best services, creating value propositions, identifying best partnerships, sourcing information to other parties/systems/visualization tools, such as shared findings, etc.

This is where the deep learning and AI can come in to play for the benefit of the bank. Use these model to predict the customer behaviour.



(Figure 3 – Source: https://www.dragon1.com/watch/272083/data-architecture-reference-model)

o Internal product and usage data

All these are currently available in the bank. It is a matter of where to place them in the model with properly designed architecture along with historical data.

o Banking Data

All banking data is with the bank and from all channels and contact points of the bank.

o Social media

As mentioned social media will be carrying large amounts of data about the customers. This covers all social media sites and applications. These sites provide analytical data based on certain agreements. Some are readily available which the public can use. They provide integration mechanism that can be used to integrate by the banks. Customers external behaviour, professional and business capabilities can be easily gathered from these sources.

o Machine learning and BOTs

Banks internal BOTs running in certain processes, tasks over different applications generate lot of data, which helps to identify many insights. Internal issues, ways of improvements, alerts and monitoring are some of the instant advantages. Proper analytics will give you many opportunities for the bank to explore.

o Devices IOT & engagement programs

Internet of Things (IOT) is already dominating the market and it is widely used for home automation and many other industrial functions. IOT is a system of interrelated computing devices, mechanical and digital machines, objects, animals or people that provided with unique identifiers (UID) and the ability to transfer data over a network without requiring human- to-human or human-to-computer interaction.

Banks are yet to adopt this technology. These inexpensive devices can be used by a bank to provide a better customer experience. Engaging with IOT service providers and linking customer IOT devices (called smart devices) a bank can gain competitive edge over others. Some of the possible service and experience a bank perform are given below.

- Manage your customer car parking lots and share the availability before customer comes to the bank to avoid parking frustration. This can link to the bank's core and make all customer profile data available to when customer comes to the counter. Customers can pre-plan activities. Further customer activities can be predicted by the bank.

- Based on customer IOT devices placed and shared with the bank lot of data can be gathered. It might be water consumption, electricity consumption, stock behaviour, travel behaviour, etc. Based on the data a bank can automate their water bill payments, electricity payments without waiting for the customer to engage.

- Banks can identify customer leisure times, time he or she in at home or working and decide on the best time to send promotion data through different means, etc.

However, as a financial institution, bank should take in to consideration following aspects when engaging with IOT.

- As with any other device connected to internet, there is a potential that a hacker could steal confidential information. With proper implementation of security mechanisms and validations, this can be overcome.

- Since there are no international standard of compatibility for IOT, it is difficult for devices from different manufactures to communicate with each other.

- If there is a bug in the system, it is likely that every connected device will become corrupted.

- With massive numbers of IOT devices, managing the data from those devices will be challenging.

o External Profiling Data

Profiling refers to the process of statistically examining and analysing the content in a data source, hence collecting information about the data. External data will have to be analysed for accuracy and completeness. It helps a bank to assess data quality, discover anomalies in data and to understand the content, structure, relationships, etc about the data in data source we are analysing.

- Get future ready

It is always necessary to explore and look at what the future is going to be with the industrial trends, market places, technology, etc. Educate the management and make provisions to support them to have a sustainable position in the global market.

Following what the Fintech's and Bigtech's do will give you an idea on what will drive the future.

4. Redefining Risk Management for a Digital Future

According to the book Bank 4.0 by Brett King, its banking anywhere but never at a bank. Future will be All – digital, Low – overhead, Mobile – first.

Eventually banks will have to adapt where the digital future is taking in order to be competitive and face the challenges from Fintech's and Bigtech's. There is no exception for Sri Lankan banks.

The analog version will no longer be able to manage the risk in future due to reason given below.

- Risk measures are opaque to front line
- Risk and returns are managed separately
- Risk is managed 'ex post' rather 'ex ante'
- High quantitative functional staff with specialization

- Risk managers do not have in depth knowledge

The shifting landscape points mentioned below will create a drastic risk climate change that needs to be addressed.

- Increase in globalization activities (including digital) has increased the regulatory complexity
- Breakneck speed of financial innovations
- Technological distribution & digitized infrastructure
- Proliferation of data sources & increased complexity
- Complex interrelationships & shifting correlations
- Banking will be something people do and experience

Banks will have to re image risk as a business driver and below are some of the actions that can be implemented.

- Embed risk processes in to core business processes to eliminate friction
- Collect risk evaluation inputs at digital point of origin
- Educate front-line staff on key risk parameters
- Publish risk assessment results to front-line and customers.
- Make risk decision making faster and near real time for greater client satisfaction.
- Stop set of bad habits gets implemented with new set of bad habits with new implementations
- Reinventing should be permanent and long lasting
- Do continuous behavioural data collection and analytics, take action then and there

5. Addressing current regulatory developments

Moving towards digital transformation will lead to new regulations that financial organizations must ensure compliance. Below are some of the challenges that will have to be overcome for the banks.

Challenges

- Cost of regulations
- Regulatory demand will increase in future
- Regulatory fragmentation
  - o Rule based
  - o Principle based
- Regulatory divergence

Where are regulators going?

- Digital regulations / Will be digitized
- Cooperation / Seeking equivalence
- New emerging risks (lead to future regulations) eg:- AI, Crypto currency
- Scrutiny / Demanding more details

6. Structure of RPA / Transformation Unit

In order to make all of the above strategically successful in a bank, there should be a great leadership and top management commitment. An operation and management structure should be in place in the bank to carry out all of the above.

A typical structure of a RPA/Transformation unit is shown below. Almost in all organizations, the RPA/Digital Transformation unit operates separately and under direct purview of CEO/COO.

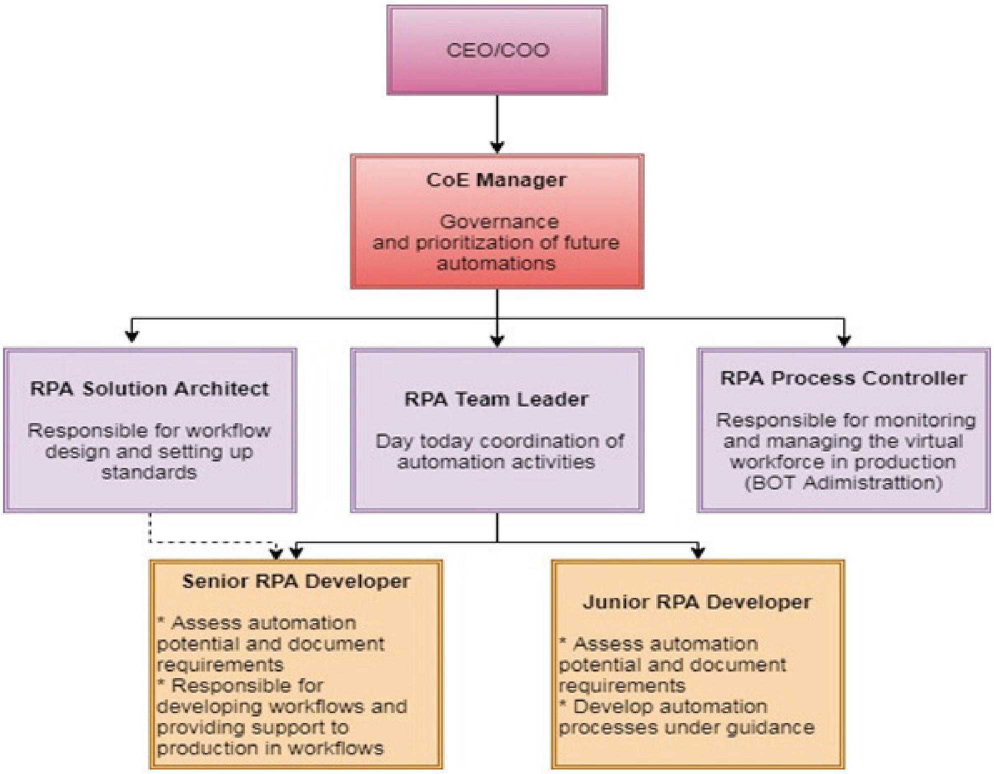
The unit often called as CoE (Center of Excellence), which is headed by a CoE Manager is responsible for Governance and prioritization of future automations. Based on the coverage and the requirements hierarchy may expand with top decision makers coming in to picture from different business areas. Quick decision-making and roll out plans are the basis for pointing. The CoE acts in an agile and innovative fashion. It operates with the understanding that being faster than the competition is the only route to success. Speed and agility matters. The team comprises of carefully selected members from the organization who are knowledgeable and experienced. However the BOT developers many not be the case always but have the willingness to quickly learn new technologies.

While the infrastructure responsibility remains with Information Technology, the ownership of the robots will remain with the RPA/Transformation unit. Any change to existing robotic processes to be done under the instruction and authority of the respective business unit.

Common features

- All actions from process identification to development and deployment are in a single place.
- Centralized team in one location and deploy efforts remotely.
- Standardization as a rule (including development standards)
- Engage in process re-engineering, before RPA
- BOT administration and management
- The knowledge shared internally on a regular basis from past projects.

Unit Structure



In the current context, RPA has an impact in the business world. The trend has been from Proof of Concept to Pilot and now to Center of Excellence.

7. Conclusion

Banks will have to access the challenges and the impacts in no time to come with the digital disruption. It is time to undertake digital transformation. The process is challenging because it requires bank wide changes driven by a customer focus.

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He commenced his career at Seylan Bank PLC. In 1996 and subsequently moved to National Development Bank PLC in 2002 and counts more than 23 years in the banking industry.

Ranga prior to taking up the current position at the Transformation Unit was attached to the IT Department as Manager Information Technology / Head Banking Application Support, Project Management office and Business Analyst Team during which time period he overlooked all banking applications and support for the entire bank develop and implemented banks application strategies, policies and procedures along with the overall IT strategy of the bank. He also headed the Project Management Office and Business Analysis Team.

During his years of service in the banking industry he has gained valuable exposure to IT Operations, Business Process Automation, Robotic Process Automation, Solution Development, Data Warehousing, System Development, System Migration, System Integration, Cost Control Leadership and Developing Teams Long Term Planning, IT security, Business Process Re-engineering IT Project Management Lean Management.

He is a Member of the British Computer Society and Chartered IT Practitioner (MBCS-CITP).

GREEN BANKING PRACTICES DISRUPT CONVENTIONAL FINANCIAL SYSTEM

Denis Olaboduwa

Introduction

Today's business is all about being green. Almost everyone keeps talking about how greening their strategy, packaging, or techniques are, from multinational companies to single owned firms. But green business is in its infancy, and the future of being green will undoubtedly distil down to some very real and definable goals and practices. Various financial services that have adopted green business are banks, credit card companies, insurance companies, consumer finance companies, stock brokerages and investment funds.

In many cultures, "Green" is an affirmation of life. It indicates growth, fruitfulness and spiritual rejuvenation. Being Green ...is growth. It is becoming more efficient in the operation of your personal and business life by "eliminating wasteful spending based on habits that no longer serve your purpose". Being Green…is being fruitful. It is taking advantage of new technology, tools and trends that improve your personal and business life at a fraction of the cost of traditional methods.

The increase of greenhouse gases emissions produced by human activities has triggered global warming. Global warming has created many natural disasters that threaten people in certain areas. Moving to a prosperous low carbon economy can drive innovation, boost productivity and generate new employment which are well-paid. Our country's periodic causes of natural disasters remind us that Sri Lanka is one of the world's most susceptible nations. According to Global Climate Risk Index on 2017, we were ranked as second place in terms of climatic risk. We are unable to combat natural disasters. We can ensure that natural disaster causes do not occur again. But while climate change's effects are increasingly a risk to the country's health, economy, and environment, economists also recognize financial rewards from controlling climate change and developing a low-carbon economy.

Banks can provide important leadership for the necessary economic transformation to provide new opportunities for financing and investment policies and portfolio management to create a strong and successful low carbon economy. It is clear to economists that substantial private-sector funding is needed to achieve the level of investment needed to control effects of climate change.

Until a few years ago, most traditional banks did not practice green banking or actively seek investment opportunities in environmentally-friendly sectors or businesses. These approaches have only lately become more common, not only among smaller alternative and cooperative banks, but also among diverse providers of financial services, asset management firms and insurance companies. Although these companies may differ with regard to their stated motivations for increasing green products and services (e.g. to enhance long-term growth prospects, or sustainability principles on which a firm is based), the growth, variation and innovation behind such developments indicate that we are in the midst of a promising drive towards integrating green financial products into mainstream banking. Further, those industries which have already become green and those which are making serious attempts to grow green, should be accorded priority in lending by the banks.

Green banking relates to the banking business carried out in such fields and in such a way as to help reduce external carbon emissions and internal carbon footprint in general. In order to help reduce external carbon emissions, banks should fund green technology and projects to reduce pollution. Although, banking is never considered a polluting industry, the present scale of banking operations have considerably increased the carbon footprint of banks due to their massive use of energy (e.g. lighting, air conditioning, electronic/electrical equipments, IT etc.), high paper wastage, lack of green buildings etc. banks should adopt technology, processes and products that significantly reduce their carbon footprint and create a sustainable business. Green banking implies encouraging environmentally friendly practices and reducing the carbon footprint of banking activities.

This comes in many forms viz. using online banking instead of branch banking, paying bills online instead of mailing them, opening of commercial deposits and money market accounts in online banks etc. Green banking helps to create effective and far reaching market based solutions to address a range of environmental problems, including climate change, deforestation, air quality issues and biodiversity loss, while at the same time identifying and securing opportunities that benefit customers.

History of Green Banking

As environmental problem gain more attention, all industries including financial services, are coming under pressure to introduce "green" measures. While green banking is not yet a key reason for most customers to select one financial institution over another, customer demands and increased awareness of the environment drive a number of financial institutions to green. Environment is a key focus amongst ethical banks (in this field specially called sustainability or green banks) as well as amongst many conventional banks that wish to appear more ethically oriented or that see switching to more environmental practices to be to their advantage. In general, bankers consider themselves to be in a relatively environmentally friendly industry (in terms of pollution and emission). Green Banking is any form of banking from which the country and nation gets environmental benefits. A conventional bank becomes a green bank by directing its core operations toward the betterment of environment. The banking sector can play an intermediary role between economic development and environment protection by promoting environmentally sustainable and socially responsible investment. The notion of green banking has emerged in the western countries. Green Banking was formally started in 2003 with a view to protecting the environment. Then the Equator Principles (EPs) were launched and were initially adopted by some leading global banks, such as Citigroup Inc, The Royal Bank of Scotland, Westpac Banking Corporation. In March 2009, Congressman Chris Van Hollen of USA introduced a Green Bank Act with the aim of establishing a green bank under the ownership of the US government. The purpose of the Green Banking initial decision was to minimize the paper use in banking work because producing kinds of paper led to cutting down of trees as raw material (minimizing the green forestation). There are two ways of adopting green banking practices. One is in-house green banking; another is practice by the bankers in their business area. Creating clean and hygienic banking environment, green building, reforestation, online banking, waste management, installation of solar panel on the rooftop of the bank and using high mileage vehicles, reducing sound pollution, using webcam for video conferencing instead of physical meetings, online statements, emailing documents are included in the in- house Green Banking. Financing green projects like Bio- gas Plant, Solar/Renewable Energy Plant, Bio-fertilizer Plant, Effluent Treatment Plant (ETP), Projects having ETP etc, working on specific green projects, voluntary activities of banks are major practices by the bankers in their business areas. Green banking undertakes proactive measures to protect environment and to address climate change challenges while financing along with efficient use of renewable, non-renewable, human and natural resources.

Why is green banking important?

Green banking seemed just like an initiative until recently, and such environmental concerns did not really seem relevant to the activities of a bank. Initially, a bank that checks the environmental value of its client would have been regarded as prying in to a private business. However, now the perception looks towards how this brings risks to their business. Although banking and financial institutions are not directly affected by the environmental degradation, there are indirect costs to banks. Credit, legal and reputation risks have constantly been haunting these banks unless such initiatives are taken.

Credit Risk

It may occur indirectly where banks lend to clients whose companies are adversely impacted by pollution clean-up costs or changes in environmental regulations. The expense of meeting fresh emission demands may be high as to shut down some businesses. Credit risks may be higher due to the likelihood of customer default due to uncalculated capital investment expenses in production facilities, market share loss and liability claims by third parties. Credit risks are also associated with lending on the security of real estate whose value has faller due to environmental issues (additional loss in the event of default). In addition, risk of loan default by debtors due to environmental liabilities because of fines and legal liabilities and due to reduced priority of repayment under bankruptcy. In a few cases, banks have been held responsible for actions occurring in which they held a secured interest.

Legal Risk

Legal risk can happen in various ways. Of course, banks like other industries are at risk if they do not comply with appropriate environmental legislation themselves. But more specifically, they are at risk of direct lender liability for clean-up costs, or claims for damages, if they have actually taken possession of contaminated or pollution causing assets. A scheme of environmental management enables a bank to decrease hazards and expenses, improve its image and take advantage of opportunities for earning income.

Reputation Risk

In all likelihood, due to growing awareness about environment safety, banking institutions are more prone to lose their reputation if they are involved in big projects, which are viewed as socially and environmentally damaging. Reputation risks are involved in the financing of ecologically and ethically questionable projects. The adoption of green banking strategies will help the bank to deal with these risks involved in their business operation.

Steps in Green Banking

Policy Formulation and Governance

Banks should formulate and adopt broad environmental or Green Banking policy and strategy approved by their Board of Directors high-powered board of directors for scheduled banks and a high-powered committee comprises Regional chief of Global Office and top management members, including CEO for Foreign Banks, which should be accountable for reviewing environmental policies, strategies and programs for banks. Banks should approve a considerable fund in their annual budget allocation for green banking. Banks need to set up a distinct Green Banking Unit or Cell to design, assess and manage the bank's related green banking issues. A senior executive should be assigned with the responsibility of heading the unit. The unit will report to the high powered committee from time to time.

Incorporation of Environmental Risk

Banks should comply with the instructions stipulated in the detailed guidelines on Environmental Risk Management (ERM) in consideration of a part of the Green Banking Policy. Bank shall include Environmental and Climate Change Risk as part of the current credit risk methodology prescribed to evaluate a potential borrower. This will include integration of environmental risk, audit guidelines and reporting formats in the check lists. All of this will help mainstream Environmental Risk that cover possible sources of Environmental Risk such as Land use, Climate change related events (cyclone, drought), animal diseases/pathogens such as avian influenza, solid waste including waste feed, animal waste, carcasses, sediments, wastewater discharges, hazardous materials, etc will be reviewed under Environmental Due Diligence (EDD) check lists.

Initiating In-house Environment Management

Banks should prepare an inventory for the consumption of water, paper, electricity, energy etc. by its offices and branches in distinctive places. Then it should take measures to save electricity, water and paper consumption. A 'Green Office Guide' or at least a set of general instructions should be circulated to the employees for efficient use of electricity, water, paper and reuse of equipment. In place of relying on printed documents, online communication should be extensively used (where possible) for office management and make sure that the printers are defaulted to duplex for double-side printing to save papers. Banks may apply Eco font in printing to decrease ink usage, use scrap paper as notepads and avoid disposable cups to become more eco- friendly. Installation of energy efficient electronic equipment and automatic shut down of computers, fans, lights, air coolers etc., will help reducing electricity consumption. Energy saving bulbs should replace normal bulbs in branches/offices of the banks. Banks should make plan to use solar energy at their premises to save electricity. Banks should take steps to save energy from corporate business travel and encourage employees to purchase energy efficient cars (that consume less fuel) that can reduce gas and petroleum consumption.

Introducing Green Finance

Eco friendly business activities and energy efficient industries will be given preference in financing by banks. Environmental infrastructure such as renewable energy project, clean water supply project, wastewater treatment plant, solid & hazardous waste disposal plant, bio-gas plant, bio-fertilizer plant should be encouraged and financed by banks. Consumer loan programs may be applied for promoting environmental practices among clients.

Creation of Climate Risk

Banks should fund the economic activities of the flood, cyclone and drought-prone areas at periodic interest rates without charging extra risk premium. Banks should, however, evaluate their environmental hazards to finance industries in various fields to create a Climate Change Risk Fund. This will be used in case of emergency. Bank should ensure regular financing flows in these vulnerable areas and sectors. The fund could be created as part of banks' CSR expenses.

Introducing Green Marketing

Green marketing is the marketing of products that are presumed to be environmentally safe. Green marketing incorporates a broad range of activities, including product modification, changes to the production process, packaging changes, as well as modifying advertising. It refers to the process of selling products and/or services based on their environmental benefits. Such a product or service may be environmentally friendly in itself or produced and/or packaged in an environmentally friendly way. Banks should use environmental causes for marketing their services to consumers. Green marketing is expected to help awareness development among common people.

Online Banking

Online banking is the practice of making bank transactions or paying bills via the Internet on a secure website of the respective bank that allows the customers to make deposits, withdrawals and pay bills. Banks should give more emphasis to make the easiest way to help environment by eliminating paper waste, saving gas and carbon emission, reducing printing costs and postage expenses.

Supporting Employee Training, Consumer Awareness and Green Event

Employee awareness development and training on environmental and social risk and the relevant issues should be a continuous process as part of the bank's Human Resource Development. Awareness development among consumers and clients would be a continuous job of a bank under its marketing department.

Sector Specific Environmental Policies

Banks need to formulate strategies to design specific policies for different environmental sensitive sectors such as Agriculture,Agri-business (Poultry & Dairy), Agro farming, Leather, Fisheries, Textile and Apparels, Renewable Energy, Pulp and Paper, Sugar and distilleries, Construction and Housing, Engineering and Basic Metal, Chemicals (Fertilizers, Pesticides and Pharmaceuticals), Rubber and Plastic Industry, Hospital/Clinic, Chemical Trading, Brick Manufacturing, Ship breaking.

Green Strategic Planning

A bank should determine green targets to be attained through strategic planning. Bank should determine a set of achievable targets and strategies, and disclose these in their annual reports and websites for green financing and in-house environment management as well. For in-house environment management, the target areas should cover attaining energy efficiency in the form of the use of renewable energy, reduction of electricity, gas, and petrol consumption, reduction of Green House Gas(GHG) emissions, issuance of e-statements, electronic bill pay, saving papers, environment friendly office buildings etc. For Green Financing, the target areas should cover reducing loans for certain environmentally harmful activities, attaining a particular percentage of environmental loans as percentage of total, introducing eco-friendly financial products etc.

Setting up Green Branches

A Green Branch should be featured by the provision of the maximum use of natural light, use of renewable energy, use of energy saving bulbs and other equipment, reduced water and electricity use, use of recycled water etc. Such a branch of a bank would be specifically designated as a 'Green Branch'. A Green Branch will be entitled to display a special logo for easy identification.

Improved In-House Environment Management

Strategy of reuse, recycling of materials and equipment and source reduction and waste minimization strategy should be a part of in-house environmental management. Banks should increasingly rely on virtual meeting through the use of video conferencing in lieu of physical travel which would help saving cost and energy.

Formulation of Bank Specific Environmental Risk Management Plan and Guidelines

A bank should develop and follow an environmental risk management manual or guidelines in their assessment and monitoring of project and working capital loans. In addition to the compliance of national regulation the bank may set internationally accepted higher environmental standards. In this connection, Green initiatives by a group of banks will not only be effective but will also offer competitive advantage. Bank alliances may prepare standard and guidelines for themselves for improving Green Banking practices.

Rigorous Programs to Educate Clients

Clients and business houses should be encouraged and influenced to comply with the environmental regulations and undertake resource efficient and environmental activities. Banks should introduce rigorous programs to educate clients.

Disclosure and Reporting of Green Banking Activities

Banks should begin to publish autonomous reports on Green Banking and Sustainability reports illustrating past performance, present operations, and future projects. It is necessary to disclose updated and comprehensive data on the environmental operations and performance of significant customers of banks.

Designing and Introducing Innovative Products and Services

Alongside avoiding negative impacts on environment through banking activities, banks are expected to introduce environment friendly innovative green products to address the core environmental challenges of the country. Following are some of the options that banks should offer to their customers, if they are not offering already:

- Electronic and telephone banking, facilitating customers to perform most of their banking needs anytime, anywhere
- Automatic payments reduce the need to write and send cheques by mail
- Electronic (paperless) statements, product information, guides and annual reports to customers and stakeholders

- Offering and promoting mutual funds that focus investment in 'green' companies
- Offering a special line of credit to help homeowners invest in energy-efficiency upgrades for their home
- Offering credit cards co-branded with environmental charities.

Reporting in Standard Format with External Verification

Banks should publish independent Green Annual Report following internationally accepted format like Global Reporting Initiatives (GRI) targeting their stakeholders. There should be arrangement for verification of these publications by an independent agency or acceptable third party.

Benefits of Green Banking

Avoids Paper Work:

Paperless banking: almost all banks in the world are computerized or operate on a core banking solution (CBS). Thus there is ample scope for the banks to adopt paperless or less paper for office correspondence, audit, reporting etc. these banks can switch over to electronic correspondence and reporting thereby controlling deforestation.

Creating Awareness in Business People about Environment:

Many NGOs and environmentalists are propagating environment consciousness among the public in general by arranging awareness programs and organizing seminars etc. Banks may associate themselves by sponsoring such programs. Besides, many corporate bodies are organizing similar programs in their own line of business such as "free pollution check program" organized by a car manufacturer. Banks may tie with such corporate. These will help to brighten the image of the bank.

Loans at Comparatively Lesser Rates:

Banks can also introduce green bank loans with financial concessions for environment friendly products and projects such as fuel efficient vehicles, green building projects, housing and house furnishing loans to install solar energy system etc.

Environmental Standards for Lending:

Banks follow environmental standards for lending: this is really a good idea and it will make business owners to change their business to environmental friendly, which is good for our future generations.

Use green checking accounts

Customers can check their account details through ATM machines provided in bank kiosks or special touch screens in the branches of different banks. This can be called green checking of account. Often usage of online banking services like online bill payment, using debit cards for payments against payments, and online statements help the environment against detritions. Banks should promote green checking by giving some incentives to customers by giving higher rate of interests, waiver or discount in fees.

Confronting Challenges to Going Green

Green banks support wonderful causes; they do face a lot of challenges as for-profit entities. Just like those socially conscious and environmental mutual funds, they are expected to encounter more obstacles than typical run-of-the-mill bank.

(i) Diversification matters

Green banks will be screening their customers and naturally, they'll be limiting and restricting their business to those entities that qualify. With a smaller pool of customers, they'll automatically have a smaller profit base to support them. If they focus their loans on certain industries, they open themselves up to being much more vulnerable to economic shifts.

(ii) These banks are still startups

Apparently, it takes 3 to 4 years for a typical bank to start making money. Many green banks in business today are very new and are still in startup mode. It doesn't help that these banks are trying to get their footing during a recession.

(iii) Banks are "specialized"

Again, while the main goal of a green bank is to do good by supporting those who are taking care of the environment, the question here is — just how much money is there in these businesses and in the eco-friendly industry? Saving the environment does not necessarily equate to "making a profit". Hopefully though, this premise is proven wrong in this case and that green banks prove that they can survive, even as they face restrictive requirements for doing business.

(iv) Operating expenses and costs are higher

Green banks require specialized talent, skills and expertise as well, due to the kind of customers they are servicing. Employees, such as loan officers, need to have additional background and experience in dealing with green businesses and consumers. Plus, giving breaks to such clients via discounted loan rates can eat at their profit margins.

(v) Reputation Risk

In all likelihood, due to growing awareness about environment safety, banking institutions are more prone to lose their reputations if they are involved in big projects, which are viewed as socially and environmentally damaging. There are also few cases where environmental management system has resulted in cost savings, increase in bond value etc. In few cases the environmental management system resulted in lower risk, greater environmental stewardship and increase in operating profit. Reputation risks are involved in the financing of ecologically and ethically questionable projects.

Environmental Management by the Green Banking Institutions

Now a days, most of the commercial lending process in different parts of the world scrutinizes projects with a set of tools by incorporating environmental concerns in their day-to-day business. The financial institutions should encourage projects which take care of following points while financing them (a) sustainable development and use of renewable natural resources (b) protection of human health, bio -diversity, occupational health and safety, efficient production, delivery and use of energy (c) pollution prevention and waste minimization, pollution controls (liquid effluents and air emissions) and solid and chemical waste management and (d) there should be a third party expert to draw up the environment management plan.

They should keep following aspects in mind while financing any projects.

- Analyzing the project in terms of scale, nature and the magnitude of environmental impact. The project should be evaluated on the basis of potential negative and positive environmental effects and then compared 'without project situation'. There should be an Environmental Impact Assessment (EIA) of each project recommending the measures needed to prevent, minimize and mitigate the environmental negative impact before financing the projects.

- While investing or funding the projects, the financial institutions should assess the sensitive issues like vulnerable groups; involuntary displacement etc and projects should be evaluated in terms of environmentally important areas including wetlands, forests, grasslands and other natural habitats.

- Banking institutions need to evaluate the value of real property and the potential environmental liability associated with the real property. Therefore, the banks should have the right to inspect the property or to have an environmental audit performed through the life of the loan.

- Banks also need to monitor post transaction for the ideal environmental risk management program during the project implementation and operation. There should be physical inspections of production, resources, training and support, environmental liability, audit programs etc.

- The next round of evaluation includes loan structuring, credit approval, credit review and loan management. Further banks have annual audits, quarterly environmental compliance certificate from the independent third party and also from the government.

- Further the banks can introduce green bank loans and products like (i) investing in environmental projects (recycling, farming, technology, waste, etc) for example reduced -rate of interest on loans to homeowners who install a solar energy system (ii) providing option for customers to invest in environmentally friendly banking products (iii) investing in resources that combine ecological concerns and social concerns.

Recommendations

- Green banking as a concept is a proactive and smart way of thinking with a vision for future sustainability.
- Banks should ensure financing in projects that are environment friendly or ethical in nature. Investment should be increased for projects such as installing solar energy plant, bio-gas, bio-fertilizer plants, Effluent Treatment Plant (ETP)
- When a loan is granted, the interest of that loan is comparatively less with normal banks because green banks give more importance to environmental friendly factors - ecological gains.
- Natural resources conservation is also one of the underlying principles in a green bank while assessing capital/operating loans to extracting/industrial business sector Investment should only be given after the environmental or climate risks of particular project. Banks should introduce new environment friendly products such as Green Home Loan, Green Car Loan and others in this regard.
- Deposits of clients are the main sources of capital for the banks. To collect money from the clients, banks provide different deposit services. All of the deposit products should be made environment friendly and should be brought under on-line management.
- Use of paper encourages flattening of plants and lead the environment to destruction. Considering the environmental risk, banks should minimize the use of paper otherwise introduce the use of eco-friendly paper. They should stop unnecessary printing and use both sides of papers and eco-fonts while printing. Green banking avoids as much paper work as possible and relies on online/ electronic transactions for processing so that we get green credit cards and green mortgages. Less paperwork means less cutting of trees. It also involves creating awareness to banking business people about environmental and social responsibility enabling them to do an environmental friendly business practice.
- Banks should start E-recruitment system and provide salary and bonus to employees through on-line system. In addition banks should train their employees as environment specialists and welfare workers along with making them skilled bankers.

- Banks can play direct or indirect roles in combating natural disasters. After such diverse situation banks can provide financial support, aid and interest free loans etc. to support the sufferers to survive in the newer environment.
- Banks should arrange seminar's and symposiums to make their clients conscious regarding Green Banking as well as to introduce their Green Products and services therein. This can eventually make the clients adapt to the Green Banking activities
- The value proposition for corporations to go green includes many of the same issues as that for individual consumers but on a much larger scope and with additional concerns. Corporations may share a desire to reduce carbon footprint and enhance security by eliminating paper waste, but they are also extremely concerned with eliminating or decreasing errors due to manual processing and in creating a profitable bottom line. For these reasons and more, corporations are actively pursuing green programs and land many companies are taking active steps to reduce waste, implement sustainability measures and increase profitability by going green

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Mr. Olaboduwa started his career with Courtaulds Clothing as Management Trainee and then joined National Savings Bank as Management Trainee and held the position of Senior Manager, Chief Manager in several Branches. Currently he is reading for his Doctor of Business Administration, University of Kelaniya under area of Green Human Resource Management.

MARKET UPDATE

Local Outlook

Policy Interest Rates

The Monetary Board of Central Bank of Sri Lanka (CBSL) at its meeting held on 28th November 2019 decided to maintain the Standing Deposit Facility Rate (SDFR) and Standing Lending Facility Rate (SLFR) at their current levels of 7.00 pct and 8.00 pct respectively.

Market Interest Rates

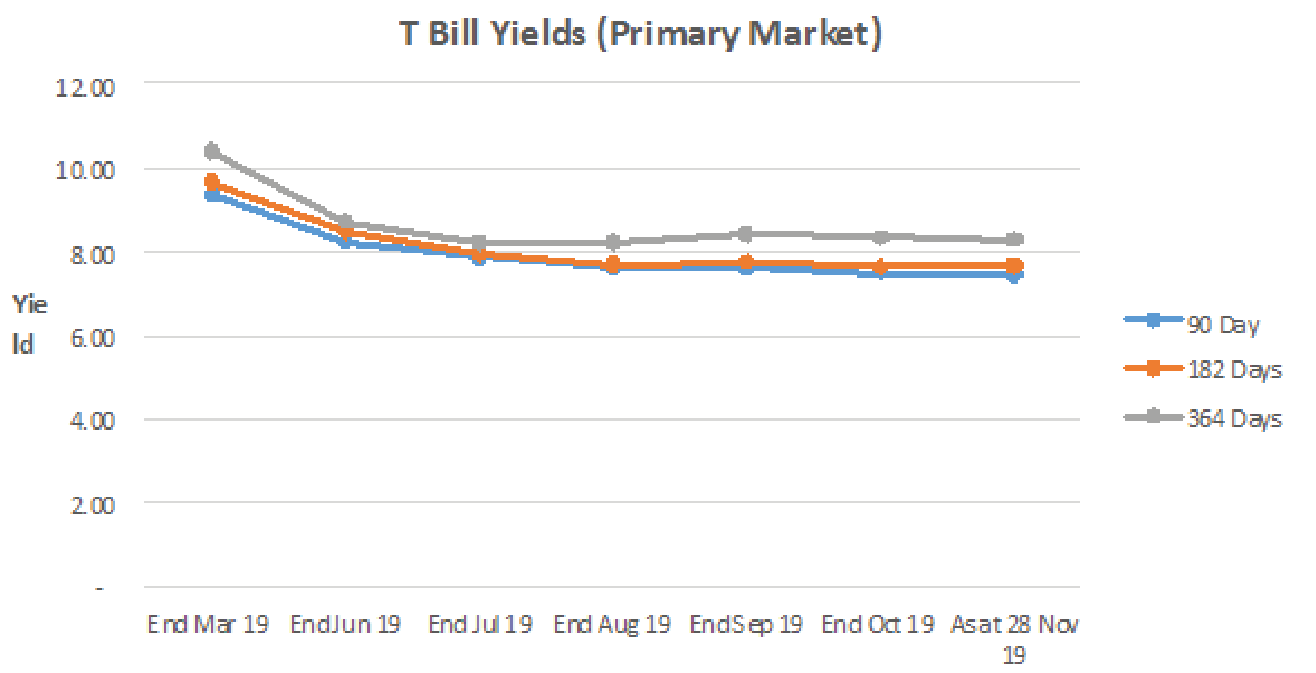
As per CBSL, market lending rates are adjusting downwards responding to the relaxation of Monetary Policy and the imposition of caps on lending rates. A further decline in market interest rates is expected in the period ahead in line with the measures taken so far and also on account of the recent reduction in effective tax on the banking sector.

AWLR is projected to decline by around 120 basis points to below 12.50% by March 2020.

We reproduce below a table prepared by CBSL which tracks interest rates from March to November 2019. Decline in interest rates are observed in treasury bill yields, lending rates and deposit rates during the said period.

Interest Rate (%)	End Mar 19	End Jun 19	End Jul 19	End Aug 19	End Sep 19	End Oct 19	As at 28 Nov 19
Policy Rates of the Central Bank							
Standing Deposit Facility Rate	8.00	7.50	7.50	7.00	7.00	7.00	7.00
Standing Lending Facility Rate	9.00	8.50	8.50	8.00	8.00	8.00	8.00
Average Weighted Call Money Rate (AWCMR)	8.51	7.86	7.70	7.43	7.45	7.45	7.39
Treasury bill yields (Primary market)							
91-day	9.39	8.24	7.85	7.63	7.62	7.49	7.45
182-day	9.67	8.49	7.94	7.70	7.75	7.65	7.67
364-day	10.40	8.70	8.21	8.22	8.41	8.35	8.29
Lending Rates							
Average Weighted Prime Lending Rate (Weekly)	12.23	11.52	10.89	10.66	10.49	10.44	10.20
Average Weighted Lending Rate (AWLR)	14.49	14.36	14.22	14.04	13.91	13.71	-
Average Weighted New Lending Rate (AWNLR)	14.64	14.43	13.91	13.84	13.50	13.19	-
Deposit Rates							
Average Weighted Deposit Rate (AWDR)	8.98	8.94	8.88	8.73	8.51	8.37	8.27
Average Weighted Fixed Deposit Rate (AWFDR)	11.11	11.07	10.97	10.74	10.46	10.27	10.14
Average Weighted New Deposit Rate (AWNDR)	11.42	9.85	8.58	8.40	8.41	8.66	-

Source: Central Bank of Sri Lanka



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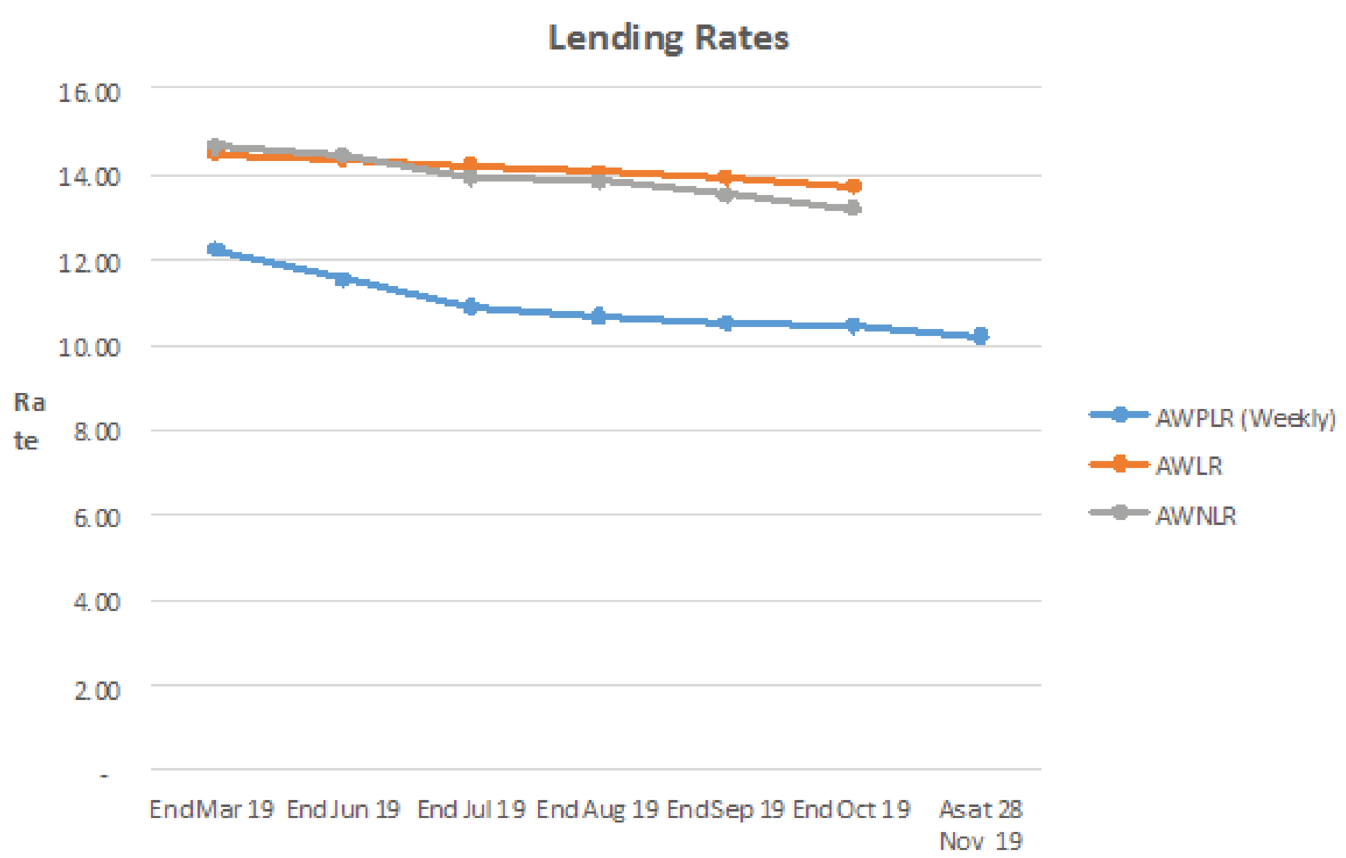

Lending Rates
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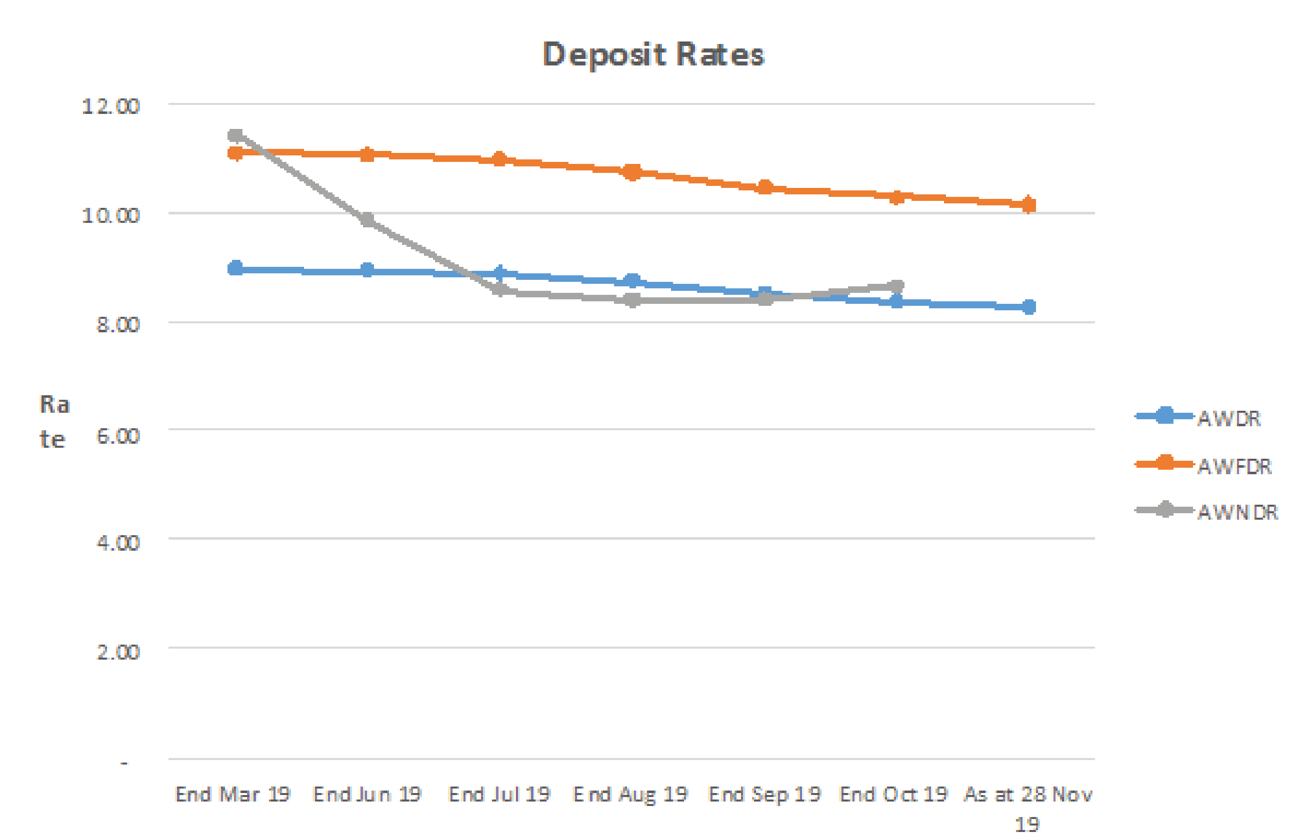

Exchange Rates

The rupee has appreciated against the USD by 1-0 pct thus far during the year. Gross official reserves are estimated at USD 7.8 Bln at the end of October 2019, providing an import cover of 4.7 months. Imports have declined during the year but modest economic growth is predicted to be modest during the remainder of the year. CBSL indicative exchange rate for USD/LKR stood at 176.24 on 31st July 2019, whilst the figure for 29th November 2019 stood at 180.43.

Inflation

Headline inflation, as measured by the year-on-year changes in Colombo Consumer Price Index (CCPI) as well as National Consumer Price Index (NCPI) accelerated due to increased food prices. CCPI Stood at 5.4% and NCPI was 5.6% during October 2019.

Effective Tax Rate

The overall effective tax rate on banking and finance companies will be reduced by 9.00 pct to 43.00 pct from 52.00 pct with the removal of Debt Repayment Levy and Nation Building Tax (NBT).

The recent tax cuts will also see the abolition of 0.05 pct debit tax on transactions.

Global Outlook

US Economy

The US economy expanded modestly from October to mid-November and the outlook for growth was generally positive while labor markets remained tight across the country.

The Fed has cut interest rates three times this year in an effort to protect the economy from the trade dispute with China, slowing global growth and a slump in business investment.

US consumer confidence fell in November for the 4th straight month amid concerns about current business conditions, but the index is still consistent with an economy growing at moderate pace.

Fed chair Powell said that "Monetary Policy is well positioned to support a strong labour market and help reach the 2% inflation target". This is a hint that interest rates will remain steady.

UK economy and Brexit

Ever since the UK voted to leave the EU in 2016, productivity in the UK has fallen at its fastest pace in 5 years and investments have stalled.

UK will conduct a general election on 12th December and its outcome will definitely have an impact on Brexit and UK's future.

As things stand there are clear routes to deliver Brexit and routes of scrapping it.

The easiest and cleanest way to deliver Brexit is if Prime Minister Boris Johnson (Conservative Party) wins a majority and gets his Brexit deal through Parliament.

The next simplest route – at least as far as the legislation goes is no deal. For this to happen the parliamentary deadlock would continue with no clear winner and UK would leave the EU on 31st January 2020. Finally, there is a Labour Brexit. If Labour ends up in power, then they would renegotiate a new Brexit deal.

Bank of England (BOE) Deputy Governor Ramsden said last month that weak investment has eaten away at UK's growth potential to the extent that the economy is now too inflation prone to allow the BOE to cut interest rates.

The Pound should remain volatile.

Euro Zone

In the Euro Zone, weaker global demand has dampened growth notably. The German economy in particular is in a grey area between meagre growth and recession.

In the short-term the ECB's expansionary measures should weigh on EUR/USD, but EUR/USD is expected to rise in the long-run.

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Rihaan Shakoor

Mr. Rihaan Shakoor, currently functions as the Deputy Chief Dealer, Bank of Ceylon Treasury. He has also served as the Chief Dealer, Bank of Ceylon (UK) Ltd. He holds a Bachelor of Management Degree, a Post Graduate Executive Diploma in Bank Management, Associateship of the Institute of Bankers (Sri Lanka) and the Dealing Certificate from ACI.

"BANKING IS NECESSARY; BANKS ARE NOT" – (BILL GATES)

Taamara De Silva

To those who say that Apple did not kill the music industry, being forced to buy the entire music album did, Amazon did not kill retailers, long queues at the local store did, AirBnb didn't kill the hotel industry, limited availability of hotel rooms did, Uber didn't kill the taxi business, waiting to flag a ride home did. Technology alone is not necessarily the biggest disrupter. Customer experience is.

Without doubt, sophisticated technology and data-driven insights can considerably improve the banking experience, making it simpler, easier and more secure for customers. But if we were to combine the trust of our customers with the convenience technology offers, we will undoubtedly create "banking of the future."

The revolution begins

Gone are the days the banking license was required to do banking, entry barriers are now shattered, competition from fintechs&telco's has escalated in leaps and bounds, block chain has emerged as an alternative platform, now even more accessible than ever. Customer demand is at its peak and it can get only more demanding.

While the strategic landscape has changed for good, the banking industry in Sri Lanka is fragmented by a host of institutions flurrying to provide that unique & desired customer experience. The approach varies with some banks making incremental changes, while others embracing a more radical realignment. For a few banks, the creative element is achieved from investment in building internal capabilities, while others collaborate with third parties.

Disruption becomes a constant

We witness examples of cross-industry incubation and technology accelerator labs where ideas can be nurtured and tested in experimental environments. The approaches taken in disrupting the banking model are novel and diverse from bank to bank but most definitely share one common goal: to achieve that "perfect" customer experience. In an era of exponential change, the speed to market becomes the most critical factor in meeting the rapidly evolving needs of customers, defending increasing competitive pressure and managing specific challenges of banking especially in a developing country like Sri Lanka.

Profiling the customer

Demographically, Sri Lanka hosts a dynamic age structure that includes 42.6% population that falls within the age bracket of 25-54 years. Birth rate increased during the last few years resulting in the 0-14 year old age bracket hitting 24.1% of the total population. It is evident that these demographics are concentrated around Millennials' who have naturally, demonstrated tendencies to be more dissatisfied with existing services, less loyal, and more likely to be driven by price and convenience. These digitally native, more entrepreneurial customers will conveniently demand for new products and services as their income levels rise and technology advances.

Reinventing the customer experience

Banks who do not get their innovation programs right might as well become irrelevant as business beyond banking calls for banks to become more entrenched in customers' day-to-day lives. "The more times we connect, the higher the potential to form a long-term relationship with the customer, which reduces the likelihood that they will switch banks." as quoted by a CEO. Emirates NBD for example launched "Liv", a lifestyle-oriented" bank for Millennials, delivering a very distinctive customer experience through digital banking focusing on the new generation.

Disruptive technologies continue to impress

Fintech businesses such as Alibaba, Tencent& Baidu are already expanding beyond payments to offer customers investments, deposits and insurance. Sparked by innovation, smart banks around the world are introducing fresh thinking in a bid to stay abreast of the competition. Their aim is to improve the customer experience and capture new markets.

Building brilliant banking ideas

In Indonesia for instance, "floating banks" are acquiring new customers by traveling to nearby islands while polish customers can now use a smartphone app to request a "mobile ATM" — stored within an electric BMW i3 — to come to them at a specified place and time. In Kenya, banks are partnering with mobile network providers to evaluate the credit risks of first-time bank customers through transaction history, already completed KYC checks & due diligence.

Similarly, one of the most striking uses of GPS technology was to limit the risk of loan default &recently won an innovation for social, sustainable and responsible banking. This involved an IOT device in a newly financed car with the capability to identify the exact location of the car and deactivate the engine if a customer repayment fell overdue limiting potential risks and expanding the universe of consumers who could thus qualify for loans.

Innovating for Tomorrow

At the forefront of this revolution the question is raised, can the banking sector really become the employer of choice for the young entrepreneurs they need? Customer-centric & entrepreneurial staff will continue to challenge banks to create new ideas for delivering products and services to customers and the banks need to commit to transition staff from the typical transactional to a more dynamic advisory role in order to deliver expectations of the ever demanding customer. Humans will be customers only for 1% of their time and remain "human" during the balance 99%. If banks limit their effort to that 1%, not only will they miss the feelings, dreams and ambitions of their customers but fall into the exact same category of their digital counterparts. Robots!

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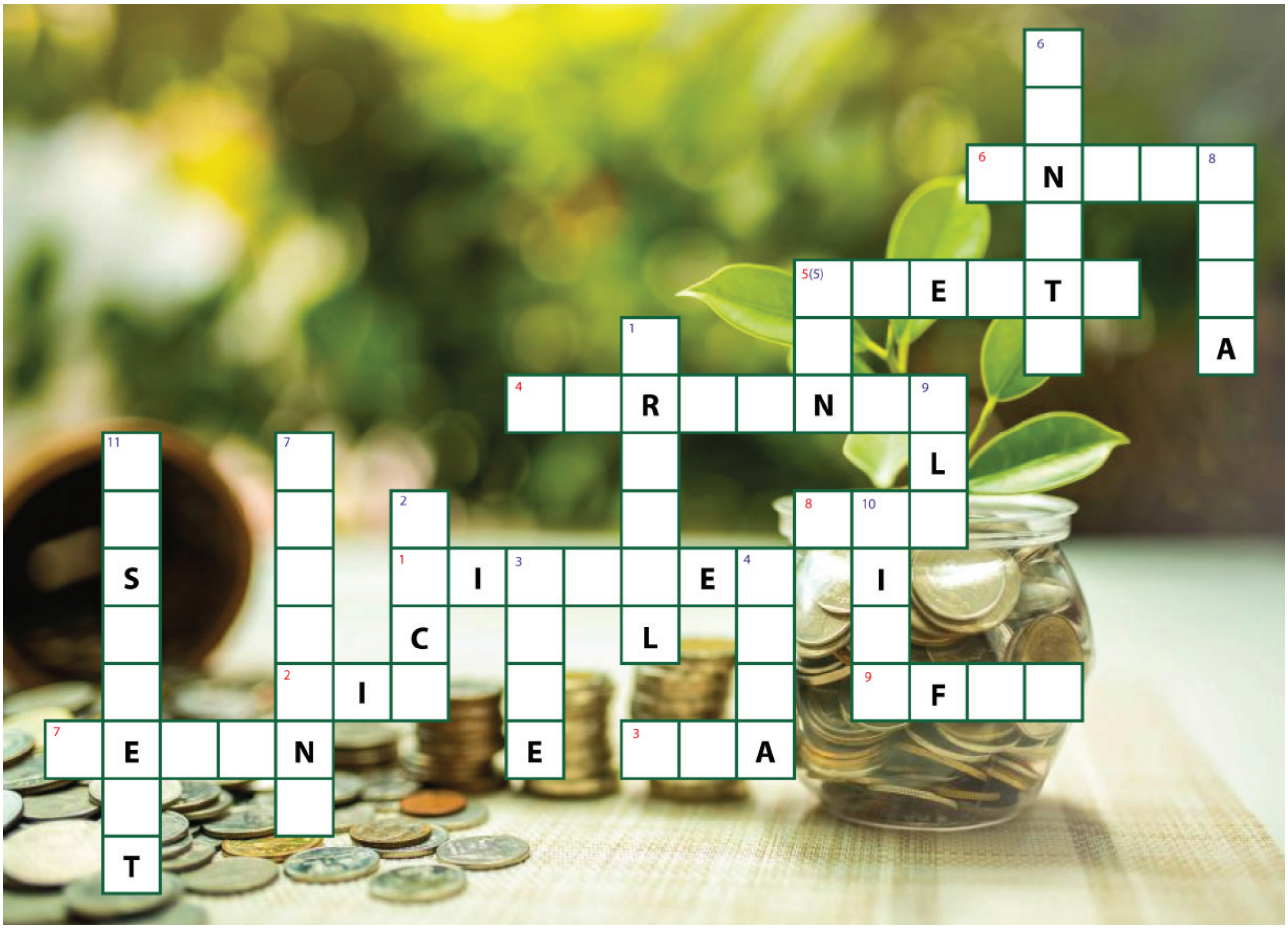
Taamara De Silva

Taamara is a Fund Manager & banking professional with over 10 years of experience in Capital Markets Advisory, Investment Banking, Portfolio Management and Corporate Finance, Qualified with Masters Degrees in Finance & Management Strategy.

PUZZLE ON FOREIGN EXCHANGE REGULATIONS



Horizontal

1. What is the maximum amount of foreign currency that can be brought in to Sri Lanka by any person without declaring to Sri Lanka Customs (in thousands USD)?

2. The account type available for non-residents to invest in Sri Lanka

3. What is the eligible account for a person resident in Sri Lanka to make investment outside Sri Lanka?

4. What is the eligible branch to open IIA accounts in the bank as per the prevailing circular instructions?

5.What is the LKR amount that any person can take out and bring back to Sri Lanka without any restriction? (in thousands)

Vertical

1. What is the purpose that a Sri Lankan PFCA holder can withdraw USD 10,000 in currency notes?

2. To which account that a Sri Lankan resident can deposit his foreign exchange earnings by providing goods and services to non-residents?

3. What is the maximum repayment period (in years) of the loan for Sri Lankans employed in abroad on employment visa against their balance available in the PFCA?

4. One of the account types under the repealed Exchange Control Act and redesigned as Capital Transaction Rupee Account (CTRA) under new Foreign Exchange Act No. 12 of 2017?

Horizontal

6. What is the foreign currency account that could open by a resident non-national in SriLanka under the repealed Exchange control act and re-designated under Personal Foreign Currency Account under new Foreign Exchange Act, No. 12 of 2017?

7. What is the maximum number of the days that BFC account holder can retain his foreign currency earnings without depositing to BFCA or convert in to LKR?

8. What is the foreign currency account that can be opened by a foreign Diplomatic person or a Foreign Diplomatic Mission in Sri Lanka?

9. What is the common abbreviation used for debit/credit /travel card under Foreign Exchange Act, No. 12 of 2017.?

Vertical

5. What is the maximum travel allowance in Foreign currency notes can be issued for a resident in Sri Lanka for travel purpose? (in thousands USD)

6. How many days that a foreign currency travel card holder can retain the uploaded foreign currencies in the travel card without converting into LKR after arriving to Sri Lanka?

7. What is the eligible purpose to obtain a loan facility by a Sri Lankan Permenant Resident (PR) holder or a Sri Lankan Dual Citizen resident outside Sri Lanka?

8.One of the rupee accounts that can be opened by a Sri Lankan work in abroad

9. What is the savings account that should be opened and maintained by a Sri Lankan Dual Citizen to obtain and service a loan facility in LKR to acquire a residential property in Sri Lanka?

10. What is the maximum amount in USD which can be utilized for personal transaction using an EFTC? (in thousands)

11. Sri Lankan student studying in abroad with student visa is considered as a person ………….. to Sri Lanka

Developed by

A de S Pinnaduwage

Mr. A de S Pinnaduwage Deputy General Manager - Compliance, Bank of Ceylon
He counts nearly 30 years' experience in the Bank in various capacities specially in Credit and Recovery fields in the Branch Network. Further, he has served as an Area Manager in the Bank and contributed in various capacities in a number of projects implemented in the Bank. He was a core team member of the Core Banking System Implementation project in 2004 and Project Leader of the leasing automation project, AML/Compliance automation project. He was also the Project Manager of the Bank's Comprehensive AML system implementation project.

He is a Graduate of the University of Ruhuna with a Bachelor of Science (Special) degree in Agriculture Science. He holds a postgraduate Executive Diploma in Bank Management from Institute of Bankers & fellow member of the Institute of Bankers of Sri Lanka.

Kanchana Adikari

Mrs. Kanchana Adikari, Manager Compliance, Bank of Ceylon counts 10 years experience in banking. She is a graduate of University of Peradeniya with a B.Sc (Hons) in Agriculture and a M.Sc. in Organizational Management. She holds a Postgraduate Executive Diploma in Bank Management from Institute of Bankers of Sri Lanka and a merit pass in International Diploma in Governance, Risk and Compliance conducted by the International Compliance Association of United Kingdom. She is an Associate member of the Institute of Bankers of Sri Lanka.

Prior to joining the bank, she lectured Agricultural Economics at Department of Agricultural Economics & Business Management, University of Peradeniya as a temporary lecturer

BANKERS' JOKES

Einstein dies and goes to heaven only to be informed that his room is not yet ready. "I hope you will not mind waiting in a dormitory. We are very sorry, but it's the best we can do and you will have to share the room with others" he is told by the doorman.

Einstein says that this is no problem at all and that there is no need to make such a great fuss. So the doorman leads him to the dorm. They enter and Albert is introduced to all of the present inhabitants. "See, Here is your first room mate. He has an IQ of 180!"
"That's wonderful!" says Albert. "We can discuss mathematics!"

"And here is your second room mate. His IQ is 150!"
"That's wonderful!" says Albert. "We can discuss physics!"

"And here is your third room mate. His IQ is 100!"
"That's wonderful! We can discuss the latest plays at the theater!"

Just then another man moves out to capture Albert's hand and shake it. "I'm your last room mate and I'm sorry, but my IQ is only 80."
Albert smiles back at him and says, "So, where do you think interest rates are headed?"

At a country-club party a young man was introduced to an attractive girl. Immediately he began paying her court and flattering her outrageously. The girl liked the young man, but she was taken a bit aback by his fast and ardent pitch. She was amazed when after 30 minutes he seriously proposed marriage.

"Look," she said. "We only met a half hour ago. How can you be so sure? We know nothing about each other."

"You're wrong," the young man declared. "For the past 5 years I've been working in the bank where your father has his account."

A lady was newly appointed as a clerk in a bank. The manager of that branch was fond of Literature and books. He asked the clerk,"Do you know William Shakespeare?" The clerk replied,"No. In which branch is he working?"

After that the manager only asks her about cheques and drafts.