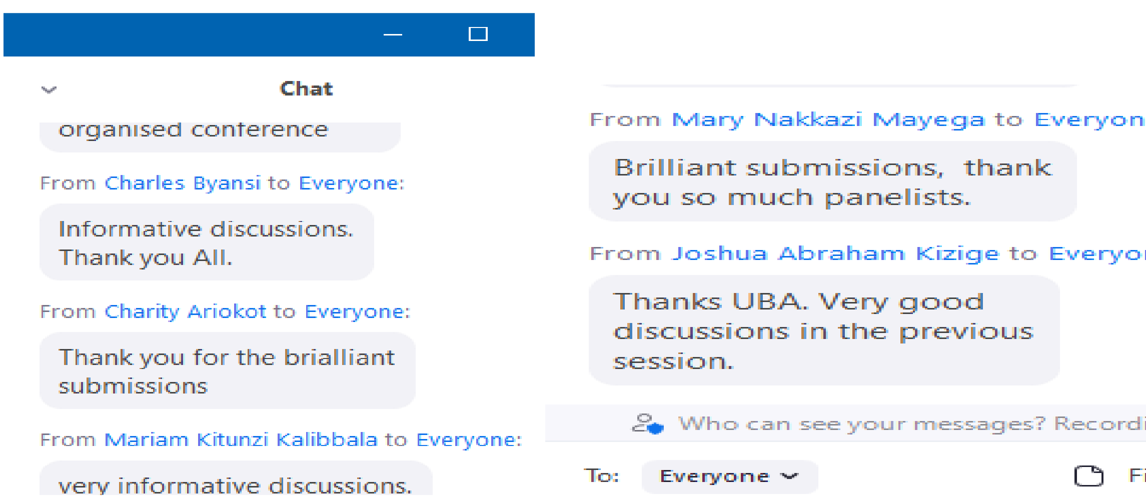
PROCEEDINGS OF THE 4TH ANNUAL BANKER'S CONFERENCE
DATES: 26TH AND 27TH JULY 2021
VENUE: KAMPALA SERENA AND ONLINE ON ZOOM

THEME: ***Bend but do not break: How the financial sector can thrive in the era of the 4th Industrial Revolution***



Conference Proceedings – Day One [July 26, 2021]

Welcome (Safety Moment and rules of engagement) – Michael Niyitegeka

Michael is the ICDL Africa Country Manager for Uganda. He is passionate and practices Leadership Development Business Technology Strategy and Business Advisory services. He holds an MBA from Ms MESAMI Business School and is a Franklin Covey Certified Facilitator. He possesses 19 years of working experience in both the private and public sectors. Michael worked with Makerere University for 12 years in varied capacities as a researcher trainer and head of Corporate Relations. Michael was a member of the ICT Technical Working Group of the Presidential Investor Round Table and the Advisory group for the Government of Uganda on the 4th Industrial Revolution Technologies. He is a member of several technology innovation review panels both locally and internationally. He is a Rotarian and is passionate about mentoring the next generation of technology business leaders.

- Prayer by Patricia Amito
- Took quick note that this year's conference was the 4th conference so far, and is now virtual.
- Those present at Serena, SOPs strictly apply. The masks must stay on.
- Informed everyone that the 4th ABC was live on Facebook, YouTube & Twitter, & Zoom.
- Referred the audience to the virtual exhibitions on Zoom
- Intr.oductory video by media team
- Birth of ABC 2017, always anticipating for the next ABC.
- Came 2020, Covid19 hitting the banking sector, the sector was bent, but never broke.
- Focused on leaving no man, business, or corporation behind, through partnerships. Hence the theme, bent but not broken.

Welcome Remarks by Uganda Bankers Association, Vice Chair - Ms. Sarah Arapta

- On behalf of UBA, welcomed everyone to the 4th ABC, online, running from 26 – 27th July 2021.

- The key focus will be on how technology can be tapped to move the banking sector forward.
- Proposed and observed a minute pause for those affected by covid.
- Banking sector finds itself in the proverbial eye of the storm caused by 4th IR
- Took mote that banking has greatly been affected by technology developments. The aim therefore is to harness the 4th IR and take stock of impact of 4th IR on economy.

- Drove everyone's attention to the need to formulate specific financial sector approaches to new business opportunities, value chains and overall growth of financial sector.
- Highlighted the critical roles of all stakeholders to leverage benefits of 4th IR
- Importantly, 4th IR must be leveraged to reach the vulnerable unbanked population.
- Harness opportunities of the unlimited storage power of 4th IR
- Take note of the evolution of emerging technologies including looking at the strength, weaknesses, the opportunities, and the threats such as cyber insecurity
- Group ideas to raise solutions to this unprecedented pandemic are critical, leverage opportunities of 4th IR and reap positive effects on our economy.

PANEL SESSION 1

TOPIC: Redefining Financial Inclusion& & deepening access to financial services

Moderated by Julie Kugonzebwa Tumuzoire

Is it possible to achieve full financial inclusion? We have an opportunity to bend toward being fruit laden, not heavy laden.

Ms. Julie Kugonzebwa Tumuzoire - *Financial Services, FSD Uganda*
Juliet is a Financial Services Specialist with in-depth knowledge and experience in payment solutions with regards to customer needs products service design and build distribution and delivery channels and reengineering processes operating and business models. She has 13 years of banking experience (of which 10 are at senior management level including 6 years of executive management) with distinguished performance in project change management process improvement alignment and service management.

Understanding what financial inclusion is – Ivan James Settimba

- Joined the conference from Cote De Ivoire
- Opened by noting that there are diverse definitions of financial inclusion; but generally agreed as a situation where individuals, households access financial services in a sustainable manner.
- Key aspect – can people access financial services. This is critical.
- The usage: are transactions happening? This too is an important factor
- Quality of financial services is important – affordability, suitability, and sustainability. It looks at both demand side (users) and supply side (providers).
- Financial inclusion has aspects of formality and informality. In Uganda, there is a lot of push for financial inclusion, meaning access to financial services from institutions that have a bit of supervision.
- We must appreciate, there are those in informal financial services. Aim is to reduce the informal and widen the formal to perpetuate inclusive growth.
- Are financial services social or business impacting? In my view, it offers both. It has great potential to uplift people's wellbeing, if they are able to save, they can deal with shocks. The

Mr. Ivan James Ssettimba - *Head Africa Office, Alliance for Financial Inclusion (AFI)*
Ivan is an analytical focused self-driven professional with numeric analytical research and communication skills. He is a seasoned banker and financial specialist having worked with the Bank of Uganda in different portfolios including Deputy Director Financial inclusion, Assistant Director National Payments Systems Division, Principal Banking Officer and Senior Banking Officer.

pandemic grounded economies to a halt, only those with savings pulled through. Ability to transact in lockdown demonstrates importance of access to formal financial services.

- Having an inclusive financial system has a huge impact on survival, impact to deal with shocks, and afford lifesaving health services.
- Banking, deposits, payments (transfer of funds), insurance services etc.; financial inclusion must be holistic in nature.

MQ: Recommendations to industry in creating awareness: what opportunities are available? How do we ensure financial services users are aware of the risks and are protected?

- It is important that financial service providers work with regulators to roll out financial awareness campaigns. ***Digital realm provides the new gold – Data is the new gold.*** Sadly, people do not appreciate the value of their data, and what it can be used for, the risk associated and accepting the risk.
- Strengthen consumer protection framework. From a financial services provider perspective, financial providers must protect and act in a responsible manner. There is increasing evidence of digital credit borrowers not being treated pleasantly in neighboring countries. We ought to do better. Central bank has come out strongly to provide stop-gap-solutions to struggling debtors.

Academicians and development partners (GIZ, MasterCard, FSD etc.) supporting innovations. Why aren't banks supporting investment in these innovations/ are there board restrictions?

- It is important that all stakeholders in financial system work together to create an enabling environment for innovation to prosper. Banks too do invest in innovation, at the back end, usually not seen at the front-end. There has to be a business case, if not clear, it becomes very difficult to have the bank invest. Where any entity like development partner is able to come in and cushion the risk, it becomes easy for the fin services provider to come in and support this innovation. In the past, banks have supported digitalization of agricultural services thru supporting creation of bases to operate. This required some development partner to de-risk this venture.

Concluding Remarks

- An emphasis on not to leave anyone behind. As financial sector stakeholders, it's our duty. The gender gap needs to be closed, ensure everyone has access to quality fin services. Focus on consumer protection framework, build an environment that encourages innovation. Focus on sustainability of services, and also think very much on green financing to address climate change. We need to prepare; these things are happening. Use the pandemic positives and negatives to learn and prepare to have everyone accommodated.

What should a financial services provider focus on towards financial inclusion? What should the service provider focus on in regard to 4th Industrial Revolution?

- 4th IR is great. It does not only focus on technology, but labors to bring on board all stakeholders. FinTech firms, banks etc. to provide a holistic service to our customers.
- We seek to answer 5 questions as FINCA, and one of them is are we improving household incomes? Are our clients acquiring assets? Are our customers increasing savings? Are we reducing pandemic shocks (resilience over such matters)? Are we creating more jobs?
- The financial services sector is guided by data. 25% of adult population globally are excluded.
- Finscope Uganda data indicates that about 22% of Ugandans are still excluded, more so in rural areas and among the female gender.
- FSD strategy is a guide (NFIS), we try to respond to access, and quality.
    1. Access: Financial services providers focus on easing opening of accounts. Taking initiative to link National ID to accounts. Have one KYC file. Leveraged on agency banking, transact affordably and easily close to their homes. We cannot achieve access if we don't link with players on ground (VSLA & SACCOs)
    2. Credit quality – access to credit is crucial. Cost of delivering is bent on who is a good borrower. Credit information sharing across the fin sector will go a long way to reduce costs of credit decisioning. Alternative credit score to replace collaterals
    3. Digital infrastructure – inter operability is critical to all of us. BOU online payment system

Mr. James Onyutta *Managing Director, FINCA Uganda Limited (MDI)*
James is a seasoned banker professional accountant finance specialist and a certified risk expert. As CEO and Managing Director of FINCA Uganda. He has held various portfolios at senior management including As CEO of Chief Finance Officer both FINCA Tanzania and subsequently FINCA Uganda and Chief Accountant at Finca Uganda.

What is the industry doing to improve financial services?

- There is strong need for banks to invest in understanding customer needs. What does the consumer need to be able to drive the usage of services? Half of the accounts opened go into dormancy.

- On the policy side, NPS allows for sandbox testing – test digital solutions with public at small scale, iterative improvements are accommodated.
- On quality, we have to move away from the approach of investing own systems. Converging of one infrastructure can be leveraged for better services e.g., National ID system. Credit bureaus are limited. People do not easily afford Credit reference Cards.

Dormancy of accounts – is level of dormancy improving?

- Banking services have shifted from counter to digital. The level of dormancy continues to reduce as level of access improves.
- Issue of gender inequality since women are the most unbanked: need to critically address the issue of products and services that will enhance those without the cash, to enable them to get the cash. There are many women participating at grassroots level (VSLAs and SACCOs), thus partnerships with them will go a long way in addressing issues of Gender.

Mr. Timothy Musoke - *Chief Executive Officer, Laboremus Uganda Ltd*
Timothy is a co-founder and CEO of Laboremus Uganda, a fintech delivering digital infrastructure that enables financial institutions go digital. Laboremus vision is to leapfrog financial services on the Africa continent by leveraging technology. Timothy possesses a passion, co-founding Refactory a top tech academy in Uganda. The academy transforms aspiring software developers into industry ready professionals.

Concluding Remarks

- Financial inclusion strategy – progress has been made, but we still have fragmentation at policy level. Access points improved, but grassroot access still a challenge. Tier 4 is served, but Tier 3 still needs addressing these matters. Effort must be focused on those still excluded.

Intervention the Financial Sector can have to address the challenges

“ ***Look beyond the dip*** – Timothy Musoke

- Don't panic and change everything to address the sudden dip. Financial inclusion has been an upward trend, and Covid19 has dealt us the dip.
- There are things financial sector should focus on to address the dip.
- Impact of covid on trend of financial inclusion is large.
  - *Behavioral change – Italy had the lowest usage of e-commerce at 5% compared to Europe at 15% UK and 25% China before the Covid19 Pandemic. Now Italy is on an upward trend.*
- So, e-commerce is the new trend.
- Digital transformation - Financial institutions are aware of the things they need to do. But the urgency now is more than ever. Use of digital tools is going to accelerate. During covid19,

there was surge in digital system use, but systems were not prepared for the surge in Financial Institutions. They must prepare better, invest in change of processes to accommodate digital fast customer.

- Nature of infrastructure needed is to invest in identification infrastructure. Customers won't walk-in anymore, but rather will be more remote. This is critical. Just before March 2020, the UBA and FSD-U, and Central bank started a project to enable financial institutions to get access to digital systems to verify identity of customer by sending ID info to NIRA database to authenticate the customer. Rolled out early 2021, about 50% of financial institutions are onboard.
- We should look beyond UBA members, to VSLAs. SACCOs, FinTechs, etc. to extend services to these partners.

What kind of protection does the user have on their data, shared at industry level? – Trust element

- There is a new data protection Act 2019 – addresses consumer worries on data submitted to different providers. It is meticulously catered for.
- We have a law; so, have the players and guardians of the data taken an initiative to understand what this law is about? Bleach and consequences. It has serious repercussions. Do the enforcers make sure the law is implemented to its full extent?
- Custodians of the law – NITA; has the responsibility to ensure actors affected by it fully understand it. Workshops, media channels, online channels need be used.
- Examples to learn from - Europe GDPR has ensured actors understand. Hundreds of millions of dollars in fines to those not complying. Uganda's law is influenced by Europe GDPR framework.
- Make widespread consumer awareness of the rights of these institutions sharing information. Data providers who willingly give details do not know they have rights especially consent rights. A big gap lies here.

Who will regulate this e-KYC data? (NIRA, NITA, UCC) What about customers who for political reasons are critical about their data being used elsewhere?

- Three parties involved at e-KYC data point. The customer who gives in the ID; then the financial institution which needs to verify that you are who you are. They communicate to NIRA digitally to verify. NIRA is not sharing data, but only verifies data submitted as varied or not. Steps are taken by NIRA to ensure your data is not shared. The bank then keeps a record of you in order to provide you the service requested. No violation by any party at this point.
- Complication can only arise where fin institution just has your NIN and wants more information about a customer. Govt agencies and banking institutions are working on a platform to allow

consent for data privacy; where you have the chance to say Yes or No (ideal). Custodians of the law should ensure penalties are in place if any violations arise.

- If a customer wishes for their data not to be used, the financial services provider may choose not to offer the services.

Concluding Remarks

- Reflection on last 2 years. Quite challenging for everyone, but for fin institutions it's an opportunity to think and reflect how you will come out after the pandemic. Consumers have changed to digital fast. Use this time to prepare for that change. Focus on identity systems, then deal with trust issues. Those are huge areas to focus on.

Which kind of partners in and out of financial sector can offer value propositions?

- There is a clear misconception that giving someone access to a bank account is enough for one to attain a good wellbeing. Let's not forget, financial services are for those with money
- Finscope survey revealed that the reason people don't use fin services is lack of money'
- Government must provide sufficient conditions to allow economic activity that generates constant cashflows. Only then can one see value in opening an account or taking a loan.
- Most Ugandans have intermittent cash flows, and live hand-to-mouth
- A resilience study we undertook showed 1 out of 2 adults could not sustain their standard of living they had pre-lockdown, during lockdown. What happens if lockdown is extended? Such people don't see value in demanding a financial service. We should focus on helping Ugandans have cashflows, only then can they think insurance, loans etc.
- For those using financial services, it is critical to have shared financial infrastructure. Independent service providers (banks willing to go solo) make financial services very costly. Own ATMs, own Agents, etc. move away from differentiated infrastructure (silos) and move to shared infrastructure to take away the huge cost in infrastructure operation and maintenance. E.g.,

Mr. Joseph Lutwama, BA (Arts), MA EPP - *Director Programs, FSD Uganda*
Joseph Sanjula Lutwama is the current Director of Programs at Financial Sector Deepening (FSD) Uganda. Mr. Lutwama is a Financial Markets and Business Strategy Expert with a strong background in Economics and Research. Mr. Lutwama previously was the Director Research and Market Development at the Uganda Capital Markets Authority. He has 15 years' experience in financial inclusion. He started out at the Capital Markets Authority designing and implementing financial education programs before joining FSD Uganda whose major focus is financial inclusion.

KYC infrastructure is clearly not a point of competition. If shared would improve user friendliness and reduce cost.

- Share data of clients – pooled data access means access to industry data than to individual bank data, even if you are the biggest player.
- Payment data should not be a competition issue. It helps us move data from point A to B without having clients to incur costs of transfer, which makes it easy to client to transact, improve competition and deepen the market.
- Internet – reliable internet. Unreliable internet makes it difficult to offer services
- Power – sufficient electricity to apply and use solutions like block chain
- Legal system – everything falls and rises with trust. A robust legal system that ensures implementation of contracts, written or unwritten. Just delayed denies people to enter into contract, especially where in the digital era where the transacting parties do not see each other in the physical.
- Rethink the financial sector regulatory architecture. We have diverse regulators, NPS, UMRA, BoU, FIA etc. Banking borders are now grey, therefore the need to break borders between regulators so as to enable them ably protect the bankers. Twin-pick model - minimize regulatory arbitrage and confusion.

MQ: Is there a role of private sector service providers to ensure Ugandans have cashflow?

- Support the innovation system. Every one of us has been gifted to innovate. It is only in Uganda where financial institutions are not seriously funding innovations, taking that bet. Until we do so, we shall remain in this cycle of cash flowlessness.
- Finance and support innovation as a means to propel growth. Our commercial banks are designed to be risk-averse, not take innovation bets. We need angel-investments, equity investments, CMA etc. to propel these innovations, as well as insurance services.

On financial inclusion strategy – how far has the financial sector gone to attain the recommendations in the strategy?

- We have made some progress, mainly at increasing access points – mobile money services across the country (payment services); agency banking into peri-urban areas. This increases services to the already banked. The unbanked are a work in progress. The already banked no longer have to walk several kilometers to bank, can access the services at a shop nearby. It implies the banking sector is not aloof and can be accessed.

Concluding Remarks

- As much as financial institutions have provided financial literacy, uptake of digital solutions is low. How do we increase uptake of digital solutions?

- Many things can be done. But critical is building of trust. The fundamental game changer is the absence of physical interaction in building trust. It's very important to have a solid legal system that is able to offer justice in real time, solving complaints arising. The trust layer needs to be addressed. How do you maintain the trust people had when they were still physically able to interact with service providers?
- Much as we have made strides in the banked segment, for those still excluded, we need to create opportunities for economic empowerment otherwise it stays a dream to the unbanked.

A big thank you to all panelists. Appreciate learnings, insights, and recommendations. 4th IR gives the industry an opportunity to thrive and prepare us for growth going forward. – Julie Kugonzebwa Tumuzoire

PANEL SESSION 2

TOPIC: Driving insights through Data Analytics and harnessing opportunities from the unprecedented processing power & storage capacity in 4IR

Moderated by Michael Niyitegeka

Potential opportunities and the power of data? What are we learning?

- There is extra ordinary potential. Research project has conducted in Uganda and Ghana on sophisticated analytics, using machine vision to assess poverty and income dynamics. Very innovate, a huge opportunity to understand our markets, our customers etc. able to understand wealth distribution. The study was sponsored by MasterCard

Mr. Soren Heitmann - *Operations Officer, IFC*
Soren leads the Applied Research and Learning program for IFCs Financial Institutions Group. He works at the nexus of data-driven research and technology to deliver learning and innovation for IFCs Africa advisory services projects on SME Banking and Digital Financial Services applying these insights to increase operational value and realize positive development impact. He has a background in cultural anthropology database management and software engineering. He authored the Data Analytics and Digital Financial Services Handbook and has published research in prominent academic and professional journals.

- Looking at incremental use of data, artificial intelligence and next-generation technologies shouldn't make us think we're not making progress. But clearly, we have a lot to focus on, and there are incredible opportunities.
- Tremendous opportunities in MSMEs, for example, forecast indicates 9 billion USD potential in Uganda, has 300 USD million credit gaps. How do we use digital data on credit rating for SMEs? How do we use such data to support businesses? We have developed credit grading criterial for small businesses in East Africa, about 25,000 businesses. We need to go out and generate those leads, especially where they already have existing customer base. Businesses are using consumer-oriented products. Segmentation of customer base is a great opportunity. Need to know why segments take certain loans, may be find out if they can take other products.
- We must recognize business sector is hard hit, businesses are struggling and reaching out for support. Uganda respondents indicate 90% of businesses are reaching out to financial service providers for help (loan restructuring, small capital loans-) a big plus for Uganda compared to the rest of the continent.
- Use the data for credit scoring and provide solutions for financial inclusion, and help the economy grow.

Is Uganda ready for green financing? In regard to digital transformation (people, processes, & technology); what can leaders do around the people?

- IFC as an organization supports green financing and has opportunities for green financing.
- In regard to leader roles, we need to look at an eco-system; where everyone is a player. Business leaders must start seeing themselves as part of an ecosystem. Management team needs to embrace innovation, empower all team members to have capacity to collect this data as opposed to having data officers.

Should regulators regulate all sources of data to regulate credit reference bureaus? What is the need for Human capital? Who in the organization needs to be on board?

- Need for human capital and data analytics is strong. The need for such a person to make is possible is very strong. This can help build analytical models for your customers. Not everything statistical is helpful though. A small, dedicated team can deliver on this and avail all the advantages.
- Regulators are central, that's non-debatable. Clearly strong data protection needs to be in place. The extent to which we can share data in a protected and secured way will offer everyone benefits. So regulatory guidance is important to create a collaborative environment.
- Encouraging small internal innovation, resulting into small cost savings, transiting into digitalization; and then at macro level promote communication and data collaborations.

Data driven strategies: what do we need to be concerned with and work on – medium term?

- As Experian, we have created data on millions of users. Have data banks in Singapore, USA and SA.

Mr. Paul Nel - *Head of Innovation Experian Africa*
Paul is a corporate journeyman with a passion for entrepreneurship innovation and bringing relevant products and services to the market. Paul has worked in FMCG Financial Services and the entrepreneurial world for over 25 years across Africa, Asia and China. Currently Paul is running the innovation platform for Experian Africa in order to bring opportunity to life

- We sometimes allow complexities to arise from simple common-sense things, which are not complex.
- 4th IR – but what were the first 3? No definite answer. Having accurate data is more critical because it is so easy to confuse the world out there by throwing anything.
- We build knowledge and insights as core to data strategy. We aim at making data comprehensive not complex, but also for data to be fair. Data users must be able to afford technology.
- Privacy and security – functional side of collecting data, but also has the emotional aspect as well. Collection of data is building trust through transparency but must also clearly state what purpose it is going to be put to.
- Access to this data through creating a portal for users to access is also critical. Building trust and taking away the fear of giving in that data is important.
- Inclusion, understanding and innovation; and 3 factors in creating a safe data usage. Inclusion means all users and givers of data are brought on board. What may be good for a financial

institution may not be useful for other parties. From a consumer perspective, utility data, e-commerce insurance etc. are relevant, yet may not be very relevant for the financial institution. We have to address this alternative data, but it is all data. "Chine's food if called food in Beijing, outsider perspective does not matter". We ought to look at data the same way, data driven strategies ought to put this into consideration. Credit scores are important to boost economic growth and survival, so access to fin services is critical for the two aspects. It may not necessarily relate to fin data alone, it also encompasses behaviors of consumers and communities, not just credit history. There is diversity in who gets credit and for what.

- Understanding: assumptions are very bad, verification is critical. Data driven must be driven on foundations of discovery, a responsibility we must embrace. Innovation is not only needed to see change, but to be change. Data driven is now a business model to verify commercial advantage. Technology is an enabler. Uganda stands at an advantage due to access to mobile services.
- Collaboration: nothing will be possible in data driven strategies without collaboration (private sector, telcos, development agencies, investors, fin institutions etc.). This may take time and is costly, but we must bring all on board.
- We need regulatory protection for this to be done effectively. Data driven strategies have to be protected against cyber insecurity; and enhance access to data by consumers. Learning is imperative, knowledge adds value, and fresh learning is encouraged. Experian supports social and commercial data driven innovation.

In Uganda where there is no single source of data; where do we start?

- Experian credit bureau from Uganda can only collect data from financial institutions according to the law. We have to work together to collect this data.

Big database credit reference system attracts wide attention. Has Experian tried to adapt this new trend?

- Experian has explored this substantially across the world. We have endeavored to ensure all regulatory requirements. In Uganda we are still limited by regulatory requirements, hence collecting data requires collaboration of regulators and players. Experian is investing in new trends to understand how best to serve the clients with big data.

Concluding Remarks

- Customer – without understanding customer needs we will be heading nowhere. And that's in view of business collaborations. We live in a time where conversation is critical. Changes in regulation in Uganda is inevitable, and when the changes come, Experian will be ready to embrace the opportunity and collect data from different values and take advantage to support growth. Regulation is there for a reason, to make commercial value work in a regulatory environment – in data driven strategies, we should be able to focus on valuable, secure, commercial but neutral data. We love experimenting, we love innovation, and we love doing new things. There is always value at the end of the day in doing something.

Providing collocation services for all players – telecoms, financial services, mobile money, etc.: How do we transition to 4th IR – issues of trust etc.? Who do we need to talk to, to enable this transition?

- Digital adoption transitioning starts with the realization that we are all invited to the transition party. If you don't show up, you miss out.
- Traditionally, transition has been driven by one who has money to invest or was innovative to bring the solution on the market.
- As an industry, change in consumer attitude is critical. But on the side of financial institutions and regulators; reality is that one cannot go without the others.
- We need proper policy. Central bank has to play their role to ensure everyone on board, because data recovery in case of disaster is feasible. NITA, FSD and UCC need to ensure data is available. We need to realize that just as the rest of the world, we are working 24/7. Telcos have championed this, through mobile money, prompting banks to follow suit.
- Financial services and Saccos are trying to play catch-up, because everyone has a mobile account. They must get online and do business on the go. Challenge is they are all operating in silos. Integration is very critical to allow players and consumers operate smoothly and make the internet the platform to make this possible.
- Adopt the 4th IR in form of data analytics on KYC to make decisions as a bank on a customer; then you embrace artificial intelligence. Only then can one monitor usage and consumption and be able to propose top-up solutions.

Mr. James Byaruhanga - *General Manager RAXIO DATA CENTRE*
James has over 20 years of experience in the IT industry having served as a manager for several leading telecom companies and internet service providers. He oversees the daily business and commercial operations of Raxio Uganda and works closely with customers to ensure a high quality of service. James carries a wealth of expertise and knowledge about Uganda's market dynamics as well as an extensive network of enterprise and telco connections.

- Banking and internet related finance services without telcos, and data storage is critical. All hands-on deck is critical, but it starts with integration.
- End of day transactions in banks can have primary and secondary locations to allow all back-ups to happen without affecting the platform operations at any one time. Infrastructure should not be a competition, but an enabler. One financial institution is as good as the others.

What is the relevance of Raxio? How can you help banks make significant margin without generating huge costs?

- Raxio is an enabler not a competitor to global players driving the internet and the cloud services. They are looking for a home to brig services to people closer, and Raxio is a home to such. The data centre facility is designed and built to global standards to allow for these service providers to reach you via Raxio affordably.

- Compliance regulation: we want banks to be compliant, have two data sites to have customer and bank information. We provide a disaster recovery option, or an alternative to primary location for business continuity and regulatory compliance. Raxio solution provides an operational expense driven approach, as opposed to capital expenses on own data centres. Cost per kWh at Raxio and the security is way cheaper than trying to do it inhouse, hence allowing the bank to continue more focused business. The end-user then gets a much stable service.

Wont Raxio Lock us in? What is the cost of connectivity?

- We are guilty of not leveraging online sometimes because of cost. Internet should be an infrastructure; we should not be paying for internet. Cost of access, fees and return on investment, plus cost of upstream (transports etc.) all impact on connectivity cost. Local service providers will start to accommodate such costs, for example – who is taxable? Growing the local internet exchange point will lower the connectivity cost, keeping all the data in country hence driving down the cost.
- Data hosting traditionally was individual effort. Today we speak of neutral data centres, like Raxio. We are able to service any customer to enable the markets rather than cripple them. We are cloud-neutral data centre, aligned with everything possible to allow everyone get the services.

How do you work with entities like Experian with back-end capabilities?

- Firm believer that integration on micro and macro level is important. Fintech companies bring on board integration and aggregation, enabling bitcoin and crypto currencies to come on board.
- At the end of the day, everyone is generating data or building data. We are building a home for data. Experian can come in with data analytics to serve the customers. We are in an internet revolution, although commonly referred to as industrial.

How can we have an integration approach that leaves no one behind?

- In many markets we operate (Uganda, Nigeria, and Kenya) as Interswitch, there is a transition journey banks have to make in understanding the opportunities and the potential benefits.
- The 4th IR is breaking down digital boundaries with collaborations and partnerships possible. Banks cannot start to build all products to serve all customers in all parts of the world. But they can build on FinTechs to make it possible. Option one is to try and build that competence internally (own platforms), or option two is to partner with young FinTechs to help you deliver
- Financial institutions are still afraid of new technology. What is it going to do to my business, can I deploy it in my environment? Is it affordable, are my customers safe? Yet, only financial services able to embrace new technology, embrace big data, understand machine learning, embrace new tech are thriving. This gives them access to assistance, gives them access to their customers and their data. Case example of Nigerian partnership (banks and telcos) to deliver consumer and

financial services (loans) to customers who were initially unserved by financial institutions. 200 million people, 160 million unserved, yet most commercial banking is going into consumer lending.

- As Fintechs talk of credit score (which is great), Africa's biggest problem is KYC data. Who is the customer? How do we know he is the customer? Being able to pull data from telcos, banks and social media we were able to pull data and answer 4 key questions.
    i. Who is the customer, and how do we validate their identity?
    ii. Will they pay?
    iii. Can they pay (financial flows)?
    iv. What will the customer need? (Farming, school, help etc.)
- You need to create frameworks that allow players within the sector to share data. Uganda could consider some form of group banking network.
- There is need to identify data protection rules e.g., European Union GDPR.
- Banking FinTechs – without the fear that once they are successful, they will take over financial institutions. Use the growth these companies achieve to also grow the financial institutions.
- The need to guide some of the tech companies thru compliance and regulatory implications.
- Need to stay cognizant of cyber security risk as banks take on FinTechs into the ecosystem.
- Compliance – opening the doors to tech company partnerships raises fears of compliance issues with regulators. There is need to make sure Fintechs being brought on board comply with regulatory provisions.
- Data protection framework that allows anonymization of data is important.

De-constructing of data management – what data at bare-minimum is shareable in financial sector? How did InterSwitch get financial players to agree to share data?

- One of the core principals is that the customer must consent. There is no minimum, for as long as there is consent.
- Getting banks to agree to Interswitch and share data was largely a banks initiative in a bid to deliver innovation in the market and ensure everyone is a player. Interswitch offers a mutual solution. In other markets, it is driven by Central banks, and bankers' associations.

Concluding Remarks

- The 4th IR is here, Africans should not be left behind again- as leadership of the industry, we have a responsibility to the entire continent to ensure we are not left behind again.
- Partnerships (Telcos, Fintechs) - gives you an opportunity to understand yourself and your customers, everyone can get a better quality of life than they have today.
- Look at ourselves as an Ecosystem so as to build trust, establish guardrails.
- Leveraging on shared infrastructure to reduce the cost and deliver better value to customers.

The opportunity technology has given us to make this webinar possible is evidence that we are not broken. – Michael Niyitegeka

Day 1 Closing Remarks

Thanks to panelists and hosts.

Key takeaways:

1. Collaboration
2. Shared infrastructure
3. Digital literacy
4. Breaking boundaries

Any business that has been able to survive, even in a loss, take it as a bonus. Surviving in this era is a bonus. Bend, but don't break. Looking to tomorrow, which will be an even richer day. Wilbrod Humphreys Owor

ZOOM NUMBERS – DAY ONE

- Total Attendees - 700
- Peak numbers - 611

Conference Proceedings – Day Two [July 27, 2021]

Welcome (Safety Moment and rules of engagement) – Michael Niyitegeka

Prayer by Charity Kesiime

Welcome Remarks by Uganda Bankers Association Chair and CEO - DFCU Bank – Mathias Katamba

- Observed protocol and took note of key persons present (Central Bank Governors, Government ministries, banking sector, financial institutions, academia etc.)
- Appreciated all for honoring UBA invitation
- Called for a minute of silence in honor of those affected by the pandemic.
- Welcomed the Keynote speaker Dr. Patrick Njoroge (Kenya Central Bank)
- ABC is key invent, and medium-term strategy focuses on growth of payment space; and championing initiatives of financial depending, and penetration to create a high impact on economy
- Vibrant financial sector is key for economy to succeed in 4th IR
- Key to success is engagement with stakeholders, such as those present in this ABC.

- Theme is relevant and presents both opportunities and challenges globally and at home
- At blink of tech evolution that has altered how we live and relate with one another; 4th IR is distinct because of its impact; it is disrupting every sector in every country. It is able to transcend infrastructure challenges for example financial services can grow at the rate of mobile telecoms.
- Emerging tech breakthroughs will fuel this growth, gives our economy an opportunity to leapfrog

- Proliferation of disruptive technology has impacted financial services the most in how we deliver our services
- Has changed not only what we do, but who we are – sense of privacy, time devoted to work and leisure, way we engage, our security, our relationships, and all opportunities there in as well. It may affect inter-human relationships
- Need to redefine financial inclusion putting in context the vulnerable people like refugees
- How do we take advantage of speed, storage space capacity etc. offered by the tech developments?
- The tech developments have also offered cybercrime risk
- Customers at epicenter; A number of things need to change, to be designed according to the needs of customers, powered by the IR
- Collaborative innovation brings the need to design services with the customers in mind. All of us are responsible to guide this evolution
- Acknowledge the lockdown circumstances we find ourselves in as Uganda. Many individuals are no longer able to sustain livelihoods, businesses are crumbling, and sectors like tourism and education will take longer to recover.
- Sector submitted set of proposals to cushion persons and businesses who took loans
- If lockdown continues with no wider macro-economic interventions, the covid19 economic effects will hit hard
- Vaccination is needed, but efforts must be doubled to get the economy functioning in the new normal
- All leaders need to understand the changing environment and challenge the assumptions of current work approaches
- Conveyed gratitude to Governor and team for continually supporting and driving the financial sector e.g., regulatory sandbox
- UCC, IT authority and other government agencies are acknowledged. The role of government is vital
- All partners like Mastercard and Experian are acknowledged.
- All speakers, hosts, panelists and all guests are acknowledged and appreciated.
- Count on your continued support and bringing to life all recommendations from this conference.

Remarks from Official Sponsor – Mastercard Division President, Sub-Saharan Africa – Mr. Raghav Prasad.

- On behalf of Mastercard, a pleasure to welcome everyone to this Annual Bankers' Conference
- Acknowledged key persons that have spared their time to be part.

- Proud to be lead sponsors yet again of this year's ABC, appreciated UBA for the opportunity
- Appreciated Bank of Uganda for the strong leadership of banking industry
- This conference reflects the forward-thinking approach of banking industry. Ongoing development of payment tech and data driven insights fall within Mastercard focus
- Building digital and financial inclusion, ensuring safe and secure digital transactions, and enabling faster digital informed decision making.
- 2017 fin scope show increase from 65% to 78% financial services penetration.
- Focus on innovative and collaborative approaches in financial inclusion. Mastercard is active in these areas, such as support to small farmers through Mastercard farmers network platform
- Partnership with Airtel, MTN and Samsung will improve smart connectivity
- Continue to bring new payment technologies on the market, and look forward to launching QR code payment technology
- Focus on Cyber security by availing access to the best cyber security tools, and data analytics.
- Data analytics is central to Mastercard investments over the decade.
- Mastercard looks forward to continued partnership with UBA, BoU and other stakeholders in this 4th IR

Remarks from the Permanent Secretary, Ministry for ICT & National Guidance – Mr. Vincent Waiswa Bagiire

- Protocol observed; appreciated the organizers of ABC and happy to be part again. The theme is in line with Ministry of ICT aspirations in NDP 3 and is also in line with National strategy for 4^{th} IR.
- Banks have traditionally been faster in adoption of technology, leading to increased productivity and convenience to customers - Big data, blockchain, artificial intelligence etc.
- Fintech is facilitating this possibility
- Min of ICT is working on IT infrastructure to improve interconnectivity, interoperability

- Started by integrating government systems that used to operate in silos
- We will ensure to address matters of information integrity
- Work on National IDs to enable KYC data
- Work on internet connection to ensure connectivity in every parish
- Govt is working on power as key to powering data recovery centres, and government has 3 state of the art data recovery centres.
- The role of the banking hall is disappearing, innovative banking taking shape. ICT hub in Nakawa where the pool of developers have operating space.
- Working with partners to bridge the HR capacity in artificial intelligence and IT
- Cybercrime must be easily detected. Banks have taken the lead in offering cyber security trainings
- Working with Uganda Police force to support cyber investigations
- In regulation, banking fraternity should comply with Data Protection Act
- Preliminary review of cyber regulations to align them with 4th IR.
- Appreciated banking fraternity in organizing this 4th ABC
- Pledge to continue supporting ICT ministry and banking sector even as he moves on to foreign affairs.

Remarks by the Governor Bank of Uganda – Prof. Emmanuel Tumusiime-Mutebile

- Protocol observed with special acknowledgement to Dr. patrick Njoroge
- Noted the theme bend but not break could not have come a better time than now.
- Tech innovations worldwide has been critical in navigating the hurdles of covid19 on financial sector
- Seamless access of financial services and sustained continuity are attributed to tech developments
- Changing financial ecosystem has offered opportunities and risks.
- Financial inclusion in Africa, EAC and in Uganda, is fueling poverty eradication and inclusive growth. Has led to dramatic reduction in operating costs and increased efficiency of financial services. It has improved financial sector understanding of customer behavior and needs allowing for personalization of customer services

Prof. Emmanuel Tumusiime-Mutebile - *Governor, Bank of Uganda*
Emmanuel Tumusiime-Mutebile is a Ugandan economist and banker. He is the governor of the central bank of Uganda. He was first appointed to that position on 1 January 2001 and was this year 2021 re-appointed to serve for another five-year term. He is the longest serving chief executive in the Bank of Uganda's history. He is credited with many of the sound economic policies adopted by the Uganda government at the urging of the central bank during the 1990s and the first decade of the 2000s. Tumusiime-Mutebile is the chancellor of the International University of East Africa a private university established in 2011 with an urban campus in Kampala Uganda's capital.

- These developments overtime should result in reduction of the costs of financial services; and the costs, although declining have remained high.

- Tech-enabled user devices may increase the gap in financial services due to limited IT infrastructure
- Data analysis and access in 4th IR increases data protection risks, privacy risks, cyber security risks, and the pace of Fintechs presents regulatory challenges.
- Issues related to enforcement of domestic regulatory frameworks – how to place the economy to benefit from 4th IR whilst taking note of the risks
- 4 key questions – how does tech supplement labour and not replace it? How can we have a reliable efficient and affordable infrastructure?
- Initiatives to provide an enabling environment – National Payments Act enacted in Uganda; National Task Force on 4th IR with draft strategy drafted for adoption
- Discussion in this conference should supplement BoU efforts
- Welcomed Keynote speaker (who is also Chair EA Monetary Affairs Committee); appreciated him for prioritizing Uganda's ABC.

Keynote Address

Topic: Bend but don't break: How the financial sector can thrive in the era of the 4th Industrial Revolution

By Dr Patrick Ngugi Njoroge

GOVERNOR CENTRAL BANK OF KENYA

Dr. Patrick Ngugi Njoroge - *Governor, Central Bank of Kenya*

Patrick Ngugi Njoroge is a Kenyan economist banker and the 9th governor of the Central Bank of Kenya. He entered the University of Nairobi in 1979 graduating with a Bachelor of Arts in Economics in 1983 and a Master of Arts in Economics in 1985. From 1987 until 1993 he studied at Yale University graduating with a Doctor of Philosophy in economics. He worked in Nairobi as a planning officer at the Kenyan Ministry of Planning from October 1985 until August 1987. Following his PhD studies he worked as an economist at the Kenyan Ministry of Finance from March 1993 until December 1994. From April 1995 until October 2005 he worked at the International Monetary Fund (IMF) in Washington D. C., first as an economist and later as a senior economist. From November 2005 until December 2006 International Monetary Fund (IMF) Ex-Officio Member of the Board of Governors Financial Stability Board (FSB) Member of the Regional Consultative Group for Sub-Saharan Africa.

- Protocol observed; appreciated the invitation from BoU Governor
- The 4th IR is transformative. It presents stormy times, but we attempt to stand firm, accommodate some of the pressures with the grace of the palm tree analogy– bend but not break
- 3 key issues: entrenchment of globalization (global value chains, regional blocs – EAC and AfCFTA)
- Globalization of currency – USD; Cost of globalization must be addressed.
- Mobile banking to blockchain tech and internet of things is transforming lives and livelihoods
- Transformational financial inclusion stories replicated across the continent due to digitalization
- Digitalization has enabled access to other essential services like health and education
- Technology and innovations are being adopted at exponential rate, making developers compromise on quality of their products

- Adverse impact of climate change has become evident – prompting amplified aim to reduce GHG emissions, needing financing to make it possible
- Banks may be left with stranded assets if they do not move to zero emissions
- How will bankers bend without breaking?
- How will banks develop fit-for-purpose business models bending their way passed hurdles in the field of play?
- Identify walls to navigate: do not forget it is about people, people centricity takes place in products and services development. MSMEs, Women and Youth have borne the effects of the pandemic. Reviving these is imperative for banking sector. Second is that innovation presents opportunities and risks. – How do we maximize opportunities while minimizing risks? Data analytics, data mining, cloud systems are opportunities for banks to reap from. Cognizant of cybercrimes on solar plants, gas pipelines, online scams, identity theft etc. insider threat must be eliminated.
- We must build a circle of trust and coordinate cyber responses.
- Governance in the edge of 4th IR should also be about public good, e.g. supporting good behavior in financial markets such as foreign exchange rates (avoid short term profitability gains to disrupt long term societal good). Terrorism in Kenya took advantage of EMLFT weaknesses in banking sector.
- We must all act with courage to do the right thing, not just survive but thrive.
- We are in a marathon, not a sprint.
- The financial sector must and will find a way to bend without breaking in this new age.

Questions to Keynote Speaker

With regard to people and institutions we work with, how can you have a bank prepare the people to deal with this 4th IR?

- How Banks relate to people is fairly different from NGOs. What keeps you up at night – IT, Large borrower, ROEs, End of Quarter etc. That's the problem. It should be the customers. What are you doing to serve the customer right? If that is done, the rest will fall in place. Deal with the pressure to be the first to launch a product – but ask yourself how that product will affect the customer? Half-baked products disinterest customers and attract cyber insecurity. Focus on the customer. Kenya and Uganda, and Africa runs on SMEs. How shall we deal with SMEs? We must do the heavy lifting to work with that SME. When resolved, you have royal customers. Banks that have succeeded have been close to customers. Those focused on corporates only die fast. Banks that can transform themselves like eagles will thrive, those that just want to be big like dinosaurs will die.

Sector collaboration – How do we collaborate without breaking because we are competing?

- Marathon running is an individual sport on the outlook, but 99% of the runner is nothing compared to 1% of the team. The star runner never trains alone, he trains with the team. We need to disassociate from this notion of competition. It is a zero-sum game. Allowing several transactions across the sector is good for the consumer, but we cannot do it without collaboration.

PANEL SESSION 3

TOPIC: Tracking Developments in the Payments Space: Emerging Trends and future outlook

Under the 4th IR, we see a progression of banking into an online platform. – Michael Niyitegeka

Moderated by Michael Niyitegeka

Potential opportunities and the power of data? What are we learning?
How will regulators (BoU) continuously adopt this changing environment and platform for enabling payment platform?

- The consequences of not adapting to tech change are far greater than those for adapting
- As regulators we have to acknowledge and accept that tech runs faster ahead than regulation. As regulators we should not be tempted (be averse) to regulating tech but regulate products and services they create. When focused on products and services, our concerns are limited.
- Our focus should be on how comprehensively identified are the risks of those services? How efficient are the mechanisms to deal with the risks (non-diversifiable risks)?
- In the event of the unknown unknowns, what amount of reserves are you holding to minimize those risks on your balance sheet (should they materialize)?

Dr. Tumubweinee Twinemanzi - *Executive Director Supervision, Bank of Uganda*
Tumubweinee Twinemanzi is a Ugandan economist and central banker who effective 7 February 2018 serves as the Executive Director of the Bank Supervision Directorate of the Bank of Uganda the country's central bank and national banking regulator. Prior to his appointment to his current position he served as the Director of Industry Affairs and Content (Economic Affairs) at the Uganda Communications Commission (UCC).

MQ: On issue of people skill gaps, highlight the risk management control the regulator must give the industry to create the trust.

- Fintechs or Techfins are always focused on the upside (benefits). Every benefit, there is a downside. As a regulator we are moving entirely to risk based management. To what extent have you clearly identified potential sources to risks for your business model e.g., half-baked interventions? Identifying existing risks and emerging risks on the horizon is key. How ready are you to deal with risks when they materialize? Do you understand the risk so as to either take it on or pay an insurance service to take on? Some risks can never go away completely, but you can areolate the effects of those risks? Systems, structures, technology, and people to minimize those risks if they occur is critical.

- Central banks are in the worst position to understand these technologies. We need a shift from post-mortem to risk forecasting and providing relevant support mechanisms,
- We need to keep up with tech pace, not allowing it to run too far. We may not be at pace, but we must ensure our interventions are not outdated.

In this 4th IR, what is the regulators plan in enabling cloud hosting services? There are various high-cost unbundled components provided by private players, how will the issue of pricing to ultimate user be regulated?

- Cloud computing – the regulator's role focusses on 3 parts.

i. How comprehensive is your risk register in adopting this new tech?

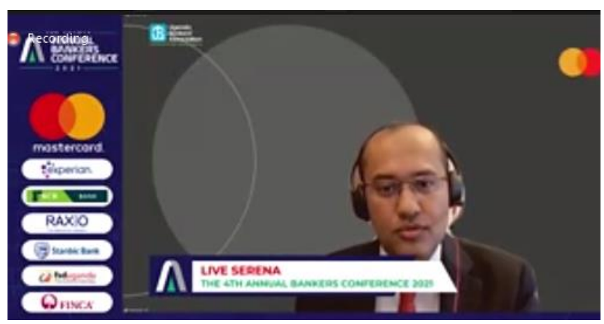
ii. What kind of risk mgt mechanisms have u put in place to manage and areolate the risks in case they materialize?

iii. How much capital are you setting aside to deal with the risk in the event that risk materializes (not to affect continuity)? How are u dealing with concentration risk? If you have access to transactional data, will you give same access to supervisory regulation? The data privacy and protection act 2019 was largely an adaptation of data privacy in the EU. Where will data be resident? The law allows data to be domiciled elsewhere for as long as data protection laws are equal or greater to the ones here. Cloud computing is not about storage but security of information they host on your behalf. We are adjusting regulatory focus to services and risk component section.

- Issue of price: attempting price regulation needs comprehensive assessment of one's cost structure. Inherent structural inefficiencies are also priced. You can manage price regulation not directly but looking at conduct issues. Regulating price is not the place of the regulator.

How do you come in to support fin services industry to ensure growth in a fast-growing tech environment?

- A new ecosystem has taken over the traditional way of how people shopped and lived. The pandemic has been a catalyst of change. Pandemic changed consumer habits in payments, avoiding cash to stay safe from Covid19. This behavior will not go away.
- MC new payment index survey. 90% of people in KY and NGR are considering new payment systems. (I billion e-payment transactions globally in 1st quarter). This is the future way of doing things. It is contactless and considered safer from the



Mr. Shehryar Ali - *Country Manager East Africa, MasterCard*
Shehryar is an experienced payments & digital financial solutions expert with over 19 years of experience working for well reputed banks in Africa & Asia. He started his career at Citibank Pakistan, followed by a decade at Barclays and Mashreq Bank in Egypt. More recently, he was heading the Retail and SME Banking business at Bank One, Mauritius. Shehryar is a graduate of University of Texas at Austin, specializing in Computer Sciences. Over his career, he has launched many firsts and successfully led Credit Card issuing/acquiring, Ecommerce, Mcommerce, consumer lending, Retail and SME business. He has designed open payments platforms and launched X-border propositions through Partnerships with FIs and third-party service providers.

health perspective. Domestic trend growing by 38% in Africa and Middle east

- Rise in online and digital payments are being attacked with malicious acts. Cybercrime is now a 1 billion USD industry globally.
- Data security is becoming a critical challenge, and the banking sector must preserve some customer rights, including the power to be forgotten – removing yourself from the system. Collect only the minimum data required.
- Promote inclusion and not exclusion

MQ: What interventions can be put in place?

- Analogy of a triangle (one side is man vs nature; and the other side is fin & social inclusion). At the base is sense of short-termism and commercial focus which is no longer sustainable. We cannot set quarter to quarter goals. We must set 4-5 year plans that balance man vs nature parts. You can only do well by doing good.
- If we are to return to 5-6% growth rates in East Africa, we must have the SME sector vibrantly contributing. SMEs represent 90% of business contribution to economy.
- Tech ecosystem can be sustainable and lead to economic growth.

The right to be forgotten concept: How does it intersect with the need to be remembered especially in term of borrowing behavior?

- It is a balancing act at best. We are in the era of open banking. Right to be forgotten allows you to pull out of one platform and go to another if you feel you are not being served.

What financial institutions are doing using 4th IR to harness fin services and payments, whilst doing the role of Fin institutions.

- 4th IR has brought great promise and peril

Ms. Anne Juuko - *Chief Executive Officer, Stanbic Bank Uganda*
Anne Juuko is the Chief Executive of Stanbic Bank Uganda - with regional and global expertise in banking for over 20 years. She has been a part of the Standard Bank Group for over 8 years having joined as Head of Global Markets for Stanbic Bank Uganda. In 2017 was appointed Head of Corporate and Investment Banking Standard Bank Namibia and served on the Executive Committee to drive the strategic vision and deliver on business priorities for the Corporate and Investment Banking division.

- How do we use tech to improve our intermediation role better? We are yet to do it. We haven't included everybody, just yet. New emerging techs should help us do that.
- Cost of intermediation is a big one. 4th IR has potential to include everyone using new technology
- The peril of 4th IR – what does it actually mean when all these techs come to life? It comes with challenges – the human cost (elimination of bank terrors – what happens to those employees? How do you change them to something else?). We must be cognizant of the challenges. Cyber security is a clear and present danger. The issue of capacity – how do we change HR impact? Where

is the capacity to get these things done? *Education sectors are training more outputs in a direction the industry is not going. This needs to be tackled*.

What challenges the industry faces that must be tackled?

- Cyber security is a big risk, almost unquantifiable. It forms part of what we really need to do.
- Regulatory framework is not yet set well to allow collaboration. Telcos answer to UCC, banks answer to BOU. Why not create a framework to share it and eliminate the KYC cost?
- Education and consumer protection – educate customers to know what's going on, but also educate them to protect themselves. This is a going concern. If inclusion is at the core, all we must be doing should be driving that.
- Data privacy is a concern. All digital transactions are well tracked. How do we give people he comfort that in these new technologies, they will be protected? Banking was built on trust.
- Human element impact – 4th IR unlike the rest is fueled by information. How human beings interact with machines is at the core. Human element is big part for what we need to solution for, whether risks or benefits.

What specific programs is Stanbic doing to drive inclusion in the Uganda market? How can financial services embrace tech to better up their risk management strategies?

- Fin inclusion is at the core of Stanbic. Enterprise restart fund (100 million USD – ABI, IFAD and others). Realized impact of wave 1 was hard on SMEs. Restart fund gives credit, training, and digitalization at very low rate. Agric SACCOs we are lending at 12%.
- It is not enough to throw money at a prob, lend at a rate they can afford (e.g., 10% per month is condemning one to lifetime poverty)
- We are removing the English in banking (language issues to the people you are trying to serve makes them excluded. Hence, the level they can afford, language they can understand, and an area they can reach). Stanbic is also using the incubator to train SMEs to help them develop resilience, understanding what they are doing, and for business connectivity reasons.
- One-farm is another initiative- as banking sector, we are finding ways to de-risk agriculture and make it bankable including insurance.
- Stanbic is open to partnerships (Fintechs and IT companies, Agric specialists etc.). The problem is bigger than Stanbic can solve.
- On the second part of the Question, Data, data, data. The more data you have, the easier it will be.

Fintechs bring up an entrepreneurial aspect. What can Fintechs do to support economic growth and complete the eco-system.

- We have moved over the last 20 years from cheques, RGTS etc. to mobile money, bank agents etc. it is important to note that we are still barely scratching the service, still have unserved Ugandans with limited access to trusted solutions. This affects the economy as a whole.
- Reality is that financial industry and financial sector players have a big role to play in the financial ecosystem.
    i. Talent and job creation – there is a major net skills demand in the payments aspects for the future (cloud engineers, data analytics etc.). Poaching from other players and fintech space has been the approach, but not sustainable. FINSPA is working with UBA to develop a new curriculum to address the gap.
    ii. There is high demand for insights driven by what data tells us. Network providers have a lot of data on unbanked individuals. SMEs are the drivers of Uganda, (over 50000 need credit.
    iii. International trade and remittances – last year was 1.1 billion dollars remittances to Ug but with 11% cost associated. Much higher than EA and Africa average. Cost of delivering fin services means we have to think creatively about shared infrastructure like switches in fin sector.

Mr. Peter Kawumi - *Country General Manager, Interswitch/ Board Chairman Financial Technology Service Providers Association (FITSPA)*
Peter's career spans over a dozen years with roles in technology project fund management business analysis and retail banking including leading the Digital Finance departments in regional and local banks. He has extensive experience in developing and commercializing products new customer acquisition digital channel utilization and scaling plans in consumer services. Peter is a Microsoft Certified Systems Engineer (MCSE) holds a BSc (Hons) in Software Engineering from Kingston University and a Master of Business Administration (with Distinction) from the Edinburgh Business School.

How do we mitigate counterparty risk? – There are different sizes of Fintechs

- The capacity of Fintechs is just as vast. Recent passing of NPS regulations that Fintechs must comply by. There are diff governance structures in Fintechs. Some are complex e.g. MNC Fintechs, others are almost non-existing. The association has embarked on a code of conduct framework that allows members to get prepared for strong regulatory framework, supported by NPS and FSD Uganda. And members are complying. This then allows Fintechs to address counterparty risk in the long term.

PANEL SESSION 4

TOPIC: Confronting Fraud & Cyber Security Risks

Moderated by Michael Niyitegeka

What is Uganda's context of bank cyber security?

- Ug police reports 2019/2020, cybercrime rose 63% between 2018/2019. About 10 million dollars were lost to cybercrime. In Uganda there is more of insider crime in telco frauds, and ATM scams.
- Globally, there is escalation of cybercrime. The cyber risk is estimated at 1 trillion USD. Regionally, the context is identical. Sim frauds, mobile money fraud etc. are eminent.
- We must have these conversations and see how to move forward using the 4th IR.

Mr. Hosea Naturinda Makuru - *Head Information Security, Stanbic Bank Uganda*
Hosea is a visionary Information Security Leader with over fourteen (14) years' experience in Technology Risk and Information Security Management for Banks, FinTech's and Telecoms across different markets in Africa and the UK. He is currently working with Stanbic Bank Uganda as the Head Information Security. He has established Information Security Management Programs, built and managed diverse teams responsible for Governance, IT risk assessments and Penetration testing, designing and implementing controls for Financial Systems, Infrastructure Security, Responding to Incidents, monitoring digital infrastructure for anomalies and suspicious activity, testing controls through audits to ensure they are operating as intended to protect business systems.

Are we seeing Europe originating cross border crime?

- It is difficult to put borders while using internet or talking cybercrime. The ability to work together or collaboration matters. In Uganda we have a platform where we share common compromises and perpetrations. This helps the unaffected banks to put measures to prevent.
- In Europe, threats data is shared across platforms, and is used to support prosecution. The solution strengthens collaboration and working together.

On internal procedures of banks:

1. Realistic push against cyber threat rests in people. Empowering them to deal with the threat before impact is very crucial. Who needs to be trained?
2. In regard to awareness, how far do we go? A bank terror can be source of information to recognize the attack. Training should be for everyone to recognize common tactics of these attacks. We should empower them almost equally.
3. Customers too have to be equipped.

How do we build local developers?

- Nothing stops us from having developers developing from a cyber secure mindset. Work with security resources to ensure information security controls. Security is baked in while developing codes.

Concluding Remarks

There are 4 basic pillars to focus on so as to progress faster as a nation

1. Governance pillar – cyber governance laws
2. Reorientation of our security capability to prevent cyber threat (mean time to respond and limit business/customer impact)
3. Adoption of cloud with pervasive cyber security controls
4. Culture of empowering our people; and using sharing communities like NISA and UBA cyber security association.

What things have you identified from a global cyber security perspective that should keep everyone awake?

- Online banking being the way to go, cashless transactions, and open banking is almost here. Fraudsters identify clients by name and give phone calls to try and take over their accounts. There is need to rely not only on police postmortems but for all players in the community to work in a trusted way. We need a sectoral cyber centre, where competencies are built so as to build trust. That works as a fusion centre, and an early warning system to police and financial players. Financial sector then builds an ecosystem of resilience. **It takes about 3 years to build it, start now**.

Dr. Vilius Benetis - *Cyber Security Consultant*
Cyber security professional, focused on mission to Secure Digital Environments. He has good knowledge of finance sector, energy sector, government sector, defense sector needs for handling cyber threats. Existing experience covers: national cybersecurity strategy, incident response and resolution, centralized forensic labs establishment, OSINT instrumentation, early warning capabilities, cyber-Infosec architect capabilities include: infrastructure design, integration and implementation projects experience (for ex. SIEM, PAM, EDR, authentication, encryption solutions, forensics, GRC). Leads a team of IT/cyber security experts. Active researcher, contributing to ISACA CSX and www.cisecurity.org activities, trainer for ISACA CSX-F. Speaker for different cybersecurity for national and international events on how to achieve sanity in cybersecurity.

The question about realities: how do we begin to intervene at citizenry level?

- What can one contribute individually? Can I run data analytics, can I report? Etc. such initiatives between institutions and citizens are working in Europe.
- Alertness to fraud and being able to report for police to act weighs in. At regulatory level, there can be interactions with affected communities to scale out and understand how best to improve cyber security.

How do we empower a financial institution's management?

- 10% of bank expenditure should be on IT including training. When crime is done digitally, it is likely to be repeated.
- Most money is being lost by business email compromise or hacking or wrong transfer. It requires awareness and being prudent in the way we account for money.

- How do we continuously update the knowledge register across the sector, so that when a crime is done elsewhere it is not repeated…!

Concluding Remarks

- Boost focus on collaboration and trust building. Due to cybercrime, insurers are erasing insurance contracts. Insurance is becoming more expensive.

Snapshot of the magnitude of cybercrime in Uganda?

- Security forces are doing all they can to deal with this. In banking sector, finances are key to their livelihood, and key to economic survival. Therefore, we are looking at a whole spectrum of crime
- There is ignorance and a poor culture. We want the easy life, no one wants the hard part. Telephone hoaxes are picking up details from people. Our data is flying all over, where do these people get our details. Data protection is wanting.
- KYC is used to get to know people better. But hackers can get into your Wi-Fi and get every data they want. When you have a loophole where someone comes in or close proximity, they social engineer and enter your system. We must educate our people in cyber security, and at a quick pace. Banks have started informing customers to take care of your details.
- Behaviors out of office need be commensurate to roles in the bank.
- Lack of ethic and betrayal of trust caused by insider attack. They are hard to trace. Information is traded to the would-be attacker. You are more vulnerable. Who polices the police? Who guards the guard? Who audits the external auditor in case of collusion? If an IT insider is compromised, who can detect it? How do u protect your greatest asset not to be your greatest risk?
- IT people know the vulnerabilities in the system, and threshold levels. And they go quiet? Trust betrayed by those vested with the responsibility nurtures cyber theft.

Mr. Andrew Mubiru - *Director Forensics, Uganda Police Force*
Andrew is the Director Forensic Services for the Uganda Police Force. He is passionate about technological advancements towards combating crime. He is currently leading a team with a mission to; support the administration of justice, enhance the value of forensic science, and inspire the next generation of forensic practitioners. He holds a MSc in Forensic Science from Kings College London. Andrew has 17 years of working experience in public sector as a forensic practitioner. He has supervised several key forensic investigations and testified as an expert witness in numerous cases. Andrew superintends over the Cyber Crime Unit of the Uganda Police Force that has been at the center of combating cyber-crime and related offences. He recently led a multi-agency team that unraveled the mystery surrounding the 2020 mobile money fraud. Andrew is an Affiliate Member of the Chartered Society of Forensic science (UK), a PECB Certified Lead Assessor for ISO17025 and Lead Manager for ISO21500, a Forensic Expert on International Criminal Investigations as part of the Roster of Experts for the Justice Rapid Response based in The Hague.

Recommendations

- We have NISA (National Information Security Advisory Group) that banks need to be part of. The FISPA, UBA, NISA, NITA, UCC etc. need to be brought together to talk about cyber security, including the police.

- We need to create a culture based on trust, added to the culture of surveillance that has been traditional in the banks. Integrity checks are key. There is need for a counter-reporting system that reports to them in case things are not working.
- We need to frame this cyber security issue as an enabler. Password changes frequently and periodically is useful.
- Institutions have to think outside of their circles. The "Pegasus fraud" is a learning. People are not talking to each other. If you are for me, can you be for me?
- We need to recognize and respond to the new way of working. Emphasize not to let down the guard even as technology offers new ways of work.
- Drug testing can go a long way. Lifestyle audit can be done to understand characters of people in the centre of the 4th IR.

Concluding Remarks

- Need national forum to agree on metrics like awareness and standardization – hold others accountable if they have not lived up to that standard.
- Look at our people, talk to them and bring them closer to us.
- Put all staff on drug testing regiment, lifestyle audits etc.

Experiences in prosecution of cybercrime?

- The role does not start on prosecution. We guide the police on how to investigate, including authorization to access bank or telco subscriber information. Then we refer charges or review what police is considering as charges. Only then do we bring cases to court. Initial cases were bleach of trust as a result of connivance with exited staff. How are staff leaving?
- When staff resign, are credentials of staff deactivated immediately? How is HR dept relating with IT? Roles must be documented in the system, even when promotions happen.
- If internal audit is not working, what about external audit? How come such crime can go on for a

Ms. Caroline Marion Acio - *Office of the Director Public Prosecutions*
A Qualified Lawyer, working as a Chief State Attorney, and Head, Cyber Crime Unit in the Office of the Director of Public prosecutions (ODPP), with 20 years of professional practice as a criminal prosecutor, in courts of record, ten years specializing in corruption and white-collar cases, and six at a Senior Management level. Has successfully prosecuted several high-profile corruption cases including cybercrime cases in the country, and several thereafter. Has guided the Police on complex issues regarding digital investigations. Oversees the management of cybercrime cases and other cases involving digital investigations. Holds a Master of Laws in Computer and Communications Law from Queen Mary University of London; specializing in cybercrime, Digital investigations, Information Security, European Union (EU) Data Protection Law, with a deep understanding of the General Data Protection Regulation (GDPR) and other Global privacy legal regimes as well as their practical application to the Administration of Justice; a Post Graduate Diploma in Public Administration and Management; Post Graduate Diploma in Legal Practice, and Bachelor of Laws, among others; A Certified Fraud examiner (CFE) and Certified Information Privacy Professional (CIPP/E).

year? Internal collusions in the brain departments of the organization can be very dangerous since they can cover or hide evidence.

- Banks must be open to send other higher level persons to inform investigations especially where the one suggested is suspected to be involved. Is there a provision for knowledge transfer with IT software contracts other than just training? How is management level involved as a backup for trust?
- Compromise of payment parts
- Local phishing

Capability of court to understand the complexity of cybercrime? Sim-swapping frauds, any successes?

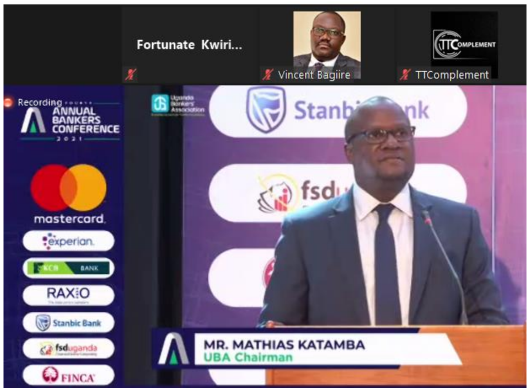
- Training and awareness must cut across, including cleaners (a case of a key logger inserted by a cleaner in the computer to be hacked). Banked consumers must be educated about implications of releasing their information. Shared pin numbers in families seem okay; but are not okay.
- Commercial level cooperation is needed. Right now, commercial banks are not responding timely to requests to support other banks cybercrime investigations. An attack on Bank X is an attack to the entire banking industry.
- Capability of courts depends on how many cases they have handled. The more the cases, the more the experience. Therefore, partnerships should include courts. We could push for a specialized court to handle cyber nature cases. This could result in specialized human resource deployments.
- No successful prosecutions and investigations concluded on sim swapping cases. They are largely conspiracy fraud, cooperation from telcos is still limited. Under the data protection law, we shall improve, and if they do not cooperate, telcos too can be sued.

Concluding Remarks

- Attacks will continue, then we must improve our investigative capabilities to follow the money and return the money. When the law bites, perpetrators will think twice.
- Sensitize the citizens
- Banks should invest in routine forensic investigations and system audits

CLOSING OF CONFERENCE

- Appreciation to the panelists for a job well done
- Acknowledged the high quality of delivery in presentations, conversations and questions.
- Noted and saluted the speakers and panelists of the day before.



Mr. Mathias Katamba - *Chief Executive Officer DFCU Bank Uganda/ Chairman Uganda Bankers Association*
On the 14th May 2021 Mathias Katamba was re-elected to serve a second term as the Chairman of the Uganda Bankers Association. Mr. Katamba is the Managing Director and Chief Executive Officer of dfcu Bank the second largest commercial bank in Uganda. Prior to joining DFCU he was the Managing Director of Housing Finance Bank for 5 years. Mathias has over fifteen years' experience in the Banking and Financial services sector. He holds a Masters of Science in Financial Management from the University of East London UK a Bachelor of Arts in Economics from the University of Greenwich and Postgraduate Diploma in Public Relations from the Chartered Institute of Public Relations

- Emphasized appreciation to Governors BOU and CBK, the various panelists that ably and deeply tackled areas allocated to them
- Saluted the former ICT ministry PS as a captain of the industry and supporting the sector growth.
- Appreciated media houses NTV, NBS, etc. for the live coverage.
- Moderators Michael and Julie for the good job done.
- Acknowledged the quality presentations from the panelists of the day one by one while highlighting a few of the pertinent issues that have tackled so well.
- Saluted online audience and the questions put across.
- In regard to PS address on data infrastructure, connectivity, data centres, the role the financial sector is providing in education is eminent, the PS having benefited from some of them. Noted the shortage of Human Resource conversant with 4th IR.
- BOU Governor speech too captured human skills requirements, tech platform, affordability, reliability, cyber security and safety among others.
- On Njoroge: key issue of keeping the customer at the centre and the importance of people. Areas to focus on like SMEs being key to economic growth. Investing in advisory services above traditional products, and the key role of collaboration using the analogy of Marathon sport as well as bend it like Beckham.
- The 1st Panel: - a very rich session
- Dr, Twinemanzi emphasized that regulators will not regulate technology but focus on a service of mitigating risks created by technology; structural challenges in economy that bring about distortion of prices, cloud services etc.
- Juuko: Financial inclusion and issues of affordability, and collaboration (telcos & KYC data); One farm initiative overcoming structural limitations.
- Ali: Doing well by doing good (Mastercard); e-payment trends up by 70% and will remain even at the end of covid19. Cybercrime being a trillion-dollar reality, hence warns that even those in crime will invest highly.

- Peter: emphasized collaboration and mutual partnership to drive financial inclusion and uptake of digital financial services
- The very last session is still fresh in our memories and needs no summary, but was a very wonderful and rich session.
- Thanked everyone very much, and promised the Secretariat will share the document of the ABC proceedings at some time in the near future on their website. Go take shots, bend it like Beckham, and let us bounce back stronger.

ZOOM NUMBERS DAY TWO

- Total Attendees - 547
- Peak numbers – 520

OVERAL NUMBER OF GUESTS REGISTERED – 1,277