POSSIBILITIES #REIMAGINED - MORE THINGS TO BANK ON

Brick, click, tap and touch. Where do we go from here?

From branches and ATMs, to web properties and mobile assets, banking is consumed through a variety of touchpoints today. And these touchpoints are set to multiply with more and more connected devices in the future. In 2021, there will be 3.5 networked devices per person and the number of devices connected to IP networks will be three times as high as the global population[1]. Not only this, thanks to wearable technology that has already seen significant uptake in fitness trackers, there will be more variables added to the mix.

With connectivity and connected devices on an overdrive, banks are increasingly introducing solutions to blend banking in their customers' everyday lives. An example is Ally bank's mobile application 'Splurge' that sends the customer a warning to avoid making a purchase if monthly sundries exceed the budgeted.

But the hyper connected world of tomorrow will also have machines transacting on behalf of humans, and not just humans consuming services directly. In 2018, progressive banks will prepare for this future with services designed to talk to smart machines at the consumption end, i.e. at households, customer premises or customer assets. For example, a consumer may authorize a smart refrigerator to order grocery and charge the credit card, or configure a smart car to pay for fuel. Brett King, international futurist and founder of banking service Moven has gone on to predict an Uber model for driverless cars, where these cars will also collect payments.

The possibilities in the connected future are endless and the role of banks sizeable. The increase in channels and form factors that banking is consumed on, will also multiply the sources of data for banks to provide contextual experiences. In 2018 banks will harness these data sources in a variety of consumer and industrial scenarios. For example, in trade finance an exporter of perishable goods need not worry about the inventory getting damaged due to weather or temperature, and hence the commercial value of the shipment going down. With real-time data from sensors, the exporter is equipped with information and insights to base his decision on and to potentially take appropriate action.

Banking on Things combined with digital identity management also presents powerful use cases for banks. Banks will look at introducing account or finance management services for vehicles to facilitate a holistic view of the running cost. A pertinent use case for integration of digital identity with banking-on-things could be a bank foreclosing the usage of an autonomous car by simply locking it in case the owner defaults loan payments. This is a classic case of smart machines empowered by insights and configured to take action.

In 2018, banks will need to make the journey through the three stages of the IoT information value chain, namely access, insights and action. Banks will need to start with access to data from a bank's leased equipment or a customer's mobile phone or motors, and data from external sources such as hospitals. Banks need to aggregate and analyze relevant business insight out of the massive amounts of IoT-generated data streams. For instance, the forecast of leasing equipment error rates, and consumers' driving habits and health. Based on these insights, it may be necessary to initiate an action. For instance, a smart payment initiated through a car-embedded wallet at a gas station, a digital identity title transfer for collaterals. To realize the expected

impact and potential market for IoT, it is imperative that the provider ecosystem of infrastructure, hardware, and software work together to develop solutions. Adherence to integration and interoperability standards and use of open API architecture are crucial for meaningful integration with the ecosystem. Banks will need to move from getting access to IoT data generated by its internal devices, to customers' connected equipment and finally, the entire IoT ecosystem.

As data inputs multiply rapidly, progressive banks will find opportunities to make use of this data, to introduce new products, modify existing products or reimagine existing products for better efficiencies. Progressive banks are working to improve the integration between their systems and data sets to make these possibilities happen. Banks would do well to remember that this connected future comes with a caveat. In the connected future of 'banking on things', banks will be privy to unprecedented volumes of data and information about their customers. Banks must adhere to the highest security standards, and also include security principles and considerations in the very development of these services.

Banking touchpoints set to multiply

3.5 networked devices per person in 2021[10]

Number of devices connected to IP networks to be thrice the population[10]

Endless possibilities in the connected future

Trends	Implications for banks	Examples
More and more connected devices	More things to bank on	Banking services availed on Alexa
Multiple sources of data and insights	Create new offerings and modify existing ones	Quality & location of shipment tracked realtime for trade finance
Machines will transact on behalf of humans, and consume services directly	Design services that talk to smart machines	A smart car configured to pay for fuel