WHAT’S CONSUMER BEHAVIOR GOT TO DO WITH DIGITAL BANKING?
Introduction

Disruption in financial services led by startups & challenger entities has been taking new shape not only in terms of the solutions offered but also by the kind of talent that now forms a core part of these companies. Some leading startups expect critical roles to have sound understanding of the human mind followed by knowledge of technology skills, business domain etc. This view was an aberration a while back, however, the trend is slowly becoming mainstream and is considered critical to building impactful & sustainable offerings.

It has been clear for some time now that behavioral science's applicability to banking is significant. Traditionally banks have leveraged the concept of behavioral sciences in the areas of strategy, product design and marketing. Select banks have also been on the journey to adapt their technology offerings to make use of the existing user behavioral nuances and to even facilitate a change in consumer behavior. However much more could be done by taking learnings from this mature field of social sciences in order to mitigate some core issues that banks continue to face while acquiring and servicing customers.

Financial institutions have been spending significantly on acquiring digital technology encompassing design & architectural improvements, loyalty & insights driven personalization, channel & integration refresh as well as extensive use of automation & AI levers. However key business challenges still exist for banks globally. For example:

- Average application abandonment rates across bank's retail product offerings still stand at approximately 40-50%.
- As per a recent IMF Global Financial Stability Report dated Oct 18, while bank's non-performing loans percentage globally has come down to 3.4%, the emerging markets asset quality remain a big issue as their bank's non-performing loans percentage was close to 4.9%.
- As per World Bank's 2017 Global Findex database, while more than two-thirds of the adult population has access to banking and mobile money accounts, 1.7 billion adults remain unbanked.

Hence could the missing piece involve an application of behavioral economics, cognitive neuroscience, network theory and social psychology during each customer interaction?
Understanding the concepts

Behavioral science is the study of human behavior and decision making, one that analyses human relationships and encompasses areas such as psychology, economics, sociology and neuroscience. Both design and consumer behavior are called out as foundational elements for innovation and change. There has been significant research around the concept of rationality emanating from behavioral study and it is believed that humans are often not rational and that our decisions are impacted by what are called as cognitive biases. While there are a number of cognitive biases, a few that come up frequently are called out in the diagram below.

Cognitive biases are limitations in our thinking and are understood to be aberrations from expected norms. They typically arise while we try and process information by way of data that is often large, complex and dynamic in nature. Over time we have simplified data processing in our minds by relying on shortcuts called heuristics that often result in various forms of biases. These biases could unfortunately also lead us to make judgment errors. However by having understood the human biases better, solutions have now been created that include triggers to improve consumer’s decision making ability.
Adoption by Banks

Most technology change initiatives at banks can be categorized into the below seven stated themes considering revenue and cost parameters. Each theme has a certain potential to leverage behavioral science concepts (refer to the diagram below).

The view above also describes the leading cognitive biases mapped to the technology change themes, with initiatives under each of the themes (select examples below) driving both a change in consumer behavior as well as ensuring that the consumer biases are effectively catered to.
Banking technology has proven to be a strong facilitator both in influencing as well as in leveraging existing consumer behavior. Moreover there are now numerous examples of ever-changing consumer needs and consumption patterns for banking enabled services, signaling a consumer more open to innovation. Hence banks are now emphasizing more on adoption of behavioral science concepts as part of ideation, design, development and communication of digital content via applications and platforms. Significant focus on effectively utilizing customer segmentation, user profiling enhanced by way of rich psychographic information (such as customer beliefs, motivations, and priorities) and user persona detailing (including the goal directed behaviors, attitudes, emotions etc.) is currently underway. This enhanced knowledge of the customer is expected to be leveraged at each decision point of the user journey, helping explain and predict behavior at every step. While initial areas of focus at banks have been primarily around changing consumer behavior pertaining to investments/retirement discipline, insurance coverage uptake, savings improvement, credit discipline as well as risk mitigation - the potential is huge. Progressive banks have started their journey to build out the next generation behavioral banking technology (refer to the diagram below), one that would cater well to both financial and psychological needs of users. This rigor is hence expected to help banks re look at the approach that they have so far taken while solving certain challenges in areas of customer on-boarding retention, value management and in mitigating losses, where the results have not have been as per expectations.

Looking ahead

Goldman Sach's “Marcus”- is helping broaden the bank’s wealth management offerings

DBS launched Digibank that uses KAI Banking from Kasisto, their conversational AI platform

ANZ is planning to use voice biometrics for authentication based on behavioural & physical vocal traits

SunTrust's customers share personal stories, attend F2F instructions around saving money using the banks platform

Merrill Lynch by their “Face Retirement Experiment” had younger customers upload their photos, which were run through an ageing algorithm

Initiative leverages “Mental Accounting Bias” one that facilitates simultaneous management of different mental categories of accounts into savings, loans, & investments

AI led robo advisory & conversational banking helps overcome “Unconscious Bias”, which impacts our accepting recommendations easily

Overcomes “Outcome Bias” wherein we judge the quality of a decision based on outcomes, rarely examining the conditions at the time of decision

Initiative helps manage “Anchoring Bias”, one that makes us over-reliant on initial information that we hear and experience

Initiative helped customers overcome the “Current Moment Bias” which in turn helped improve their retirement savings behaviour
An example of success worth emulating is that of Discovery Bank in South Africa which claims to be the world's first behavioral bank. This digital bank has smartly leveraged loyalty, behavioral science and analytics to differentiate itself by offering a highly value driven and personalized end customer experience. On the same lines, Standard Chartered Bank after having gone through a loan impairment crisis in India has now started leveraging machine learning in order to analyze borrower behavior using structured as well as unstructured internal & external data. The end goal for the bank is to build out an ability to distinguish between borrowers who could be in default due to business challenges and the potential willful defaulters.
Conclusion

It is clear that the emergence of behavioral banking is helping put empathy into technology as well as separate out the banks that truly imbibe digital from the ones that only wish to portray themselves to be so. While some financial institutions are already leveraging behavioral science competencies as part of their technology and operations improvement teams, the need of the hour is for the human experience to be at the core of technology ideation and execution.

References:

- Global Financial Stability Report, Oct 18 referring to data from Bloomberg Finance L.P; Haver Analytics; IMF, Global Debt Database (2018) preliminary estimates; S&P Leveraged Commentary and Data; and IMF staff calculations
- Behavioral Game Theory- Experiments in Strategic Interaction by Colin F. Camerer
- Anatomy of the Credit Score by Shweta Arya and Catherine Eckel and Wichman Colin https://mpra.ub.uni-muenchen.de/59268/1/MPRA_paper_47783.pdf
- HEURISTICS AND BIASES - The Psychology of Intuitive Judgment by Thomas Gilovich, DaleGriffin & Daniel Kahneman
- SCARCITY- Why Having Too Little Means So Much by Sendhil Mullainathan and Eldar Shafir

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