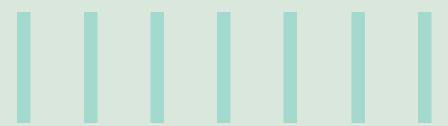
WHITE PAPER



BANKING ON HUMANS

How human psychology shapes the Banking Industry







Acknowledgements

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Introduction

The human mind is the most complex and unique gift that we possess to earn the superiority in natural biology. Animals and plants do not need business or banks, but we do. We conduct business to fulfill our ambitions, address the needs of life and achieve something collectively, which otherwise a single person will never be

capable of achieving. The banking industry does just that and more. Ambitions, needs, wants, decisions, achievements, greed, fear – all the emotions behind any business, are the direct realization of human psychology which bears a definition as the science of mind and behavior. So instead of "economics", the term "Behavioral

economics" makes more sense and banking is the most important instrument of it.

Without understanding the mind and rationale behind, an industry cannot be built. On the other hand, this might be a game changer for few who can utilize this to their benefits.

Impact of psychology in banking

To start with let us understand quickly how human psychology directly affects banking. The theory of behavioral economics tells us, how people make market decisions, what are the ways public choices are driven and what influence a business.

There are three major aspects of psychology that drive banking.

- Heuristics: 95% of humans make decisions using mental orientation and rules of thumb(habits).
- Framing: The collective set of anecdotes and stereotypes that builds the characteristic layers, creates understanding and response to any business decisions by us.
- Market inefficiencies: Miss-pricing of products and services, non-rational decision comes out of these.

Hence, it is evident why banking or any business runs on principles of psychology which drives our economic behavior. In the next section, we will dive deeper to few major theories of psychology, understand how they impact banking and see how to leverage them for best results.



Major Theories Behind Business Psychology that Shapes Banking

In this section, we explore some prominent theories of psychology, how they influence business, and how banks can use those to make a stronger foundation. Though the study of psychology is a wide area and consists of numerous prospects in various sections of human life, we limit ourselves to the business context of it.

1.Regan's Reciprocity Experiment



Theory: Dr. Dennis Regan explains reciprocity is a social behavior, where people act positively towards friendly actions and reacts negatively for hostile or harsh situations. This human trait drives continuous relationships and peoples to connect. This simple theory is very powerful considering how people mirror or reflect certain actions.

Business Importance of this study:

- It is a very powerful method of gaining customer loyalty and trust in the long term.
- II. When a business offers value to its customer, the customer returns the favor with increasing business.
- III. Customer retention is possible only when a business can generate good or rewarding feelings for its customer while doing business.

How to leverage in banking:

- Customer relationship: Focus on good deeds, behave well with the customer during face to face interactions or electronic communications. Collect and evaluate customer happiness parameters and plan to generate good feelings though interactions, campaigns, complaints handling.
- II. Products and Services: Design products and services keeping in mind a rewarding factor over similar

- offerings from other competitions. As per Regan's experiment, a little discount over competition often generates better business returns by increased volume.
- III. Ethical business: Ethics is important; customers don't want to do business with a bank if they have trust issues. Procedures, regulations, and measures should be followed in all situations.

Some examples/case studies:

- Across the globe, every bank spends a great amount of money and resource in CSR – Corporate Social Responsibility. This echoes the principle; good deeds bring good business.
- Banks who provide better service to the customer, often command higher fees for its products.
- Rewarding customers for payment using credit cards, to influence more spending.
- Reciprocity went wrong: UK financial regulator investigating a reciprocity practice between large investment banks, where banks cut a deal with the rival bank, in exchange for returning the favor to confirm future business.

2. Freedman and Fraser's Compliance Experiment



Theory: In 1966, Freedman and Fraser observed: if someone agrees to a small request, then it is more likely he will agree to second and even much larger requests.

This human trait of compliance comes from the fact, that we like to keep a synergy with our earlier response, to look more logical. Once granted, a person feels more involved with the future request. Also where if a large first request is denied, a smaller second request will have much larger chances of getting approved.

"Door in the Face", "Low Balling ", "foot in the

door" are the three great techniques, which were born out of this theory.

Business Importance of this study:

- This forms the basis for the art of negotiation, winning a deal, and making a counter proposal after an initial rejection.
- II. Increasing brand penetration on the customer, with a gradual increase of offerings with time.
- III. Cross-selling, marketing strategy, and revenue increase for business working on this principle

How to leverage in banking:

- i. Strategy: Strategy: Bank can build a growth strategy based on the effective utilization of the techniques. This can be very useful when a difficult deal needs to be persuaded. Also while entering a new market or to break an entry barrier created by a stronger competitor. "Door in the Face", "Low Balling ", "foot in the door, three very powerful negotiation techniques that a bank can adopt as per its strategy.
- ii. Marketing and Sales: Marketing and Sales: In marketing and sales, customer agreement can be increased with this concept. Areas where direct customer interaction is involved, the customer can be pursued to avail the bank's product and services.

Some examples/case studies:

- Banks often offer first time customer with a low priced/discounted product to get him on-boarded. Once the customer is on-boarded then banks push for costlier products slowly as customer compliance increases.
- Often products are sold/advertised with basic pricing, only to disclose indirect charges/taxes later during the final agreement, when a customer already agreed to conduct business.
- Offering top-up credits to already existing loan customers.

Word of caution: These techniques are extremely powerful, but banks should always use those techniques in ethical ways.

3. Kahneman's Framing Experiment



Theory: During 1979- 1980 Kanheman proposed the framing theory, which speaks about cognitive bias, in which people reacts differently to the same choice, depending on how the choice is presented(framing).

As per the experiment, a loss is more significant than equivalent gain from human mindset. This is also understood as loss aversion theory, where someone is more biased to avoid loss than taking chances for equal gain. From a business point of view, different wordings, settings, situations can completely change the effect of consumers on the same service a product. For example, below framing of questions can completely change the bias of selection, readers can try to make a

choice from below to understand framing.

- Meat which is 95 % lean Vs Meat which 5 % fat?
- Risking 10 % lives Vs opportunity to save 90% lives?
- And the famous one, the glass is half full Vs the glass is half empty?

Business Importance of this study:

- I. This influences consumer behavior, by creating a bias to select a product.
- II. How a brand is perceived amongst consumers, i.e. brand image.
- III. Determine response to a particular business decision

How to leverage in banking:

- Product design: Banks should design products which will frame no loss bias.
 Example, for debt related products, where the return is low, guaranteed profit should be highlighted over percentage return. With high-risk high gain products, chances of profit should be highlighted instead of risk.
- II. Marketing and Sales: Right framing can create a huge impact on banking products, so while advertising or marketing, banks should never go against the cognitive bias, but use the correct frame for push the sales.
- III. Strategy: In different economic situations

- banks need to make certain decisions, like interest rate change, change in fees and pricing etc. Based on the theory of loss aversion and cognitive bias, banks can predict the impact of the decisions on consumers and act accordingly.
- IV. Risk aversion and control: Like customers, even bankers are often guided by cognitive bias, thus failing to recognize risks and their criticality when analyzing banks internal process. Banks need to analyze the areas where cognitive bias effects business decision making and put effective control on process flow

Some examples/case studies:

- I. During market volatility, or during a period of loss, banks push FD and bonds through marketing. Those advertising messages often frames as - FDs and Bonds are guaranteed not to make a loss during market volatility, often hiding the fact that those generates usually lower returns.
- The same kind of strategy is applied, to push tax saving products to customers, particularly just before the tax filing window is closing.
- While cognitive bias has been proven as a big influencer for high NPA'S, as banks often fail to recognize the problems in their own systems for loan decisions. To eliminate this risk, predictive analytics, data decisions, and external counseling systems are implemented.

4. Zajonc's Mere Exposure Study



Theory: In the 1960s, Robert Zajonc conducted a research, which is famously known as mere exposure effect or familiarity principle.

According to the principle, people develop a preference for certain things without any actual knowledge, just because they have been familiarized with the item. Simply, if somethings appear frequently in our eyes and ears, we tend to like them more over others.

Business Importance of this study:

- This simple theory is the basis of why advertising matters.
- II. Rightly used, this can create an attachment for a product in a customer's mind

How to leverage in banking:

- Advertising and Sales: More presence a bank makes for its product in customer's attention, more likely it is going to be sold. This becomes very important when a bank is not very well known to the consumer or a new product is launched.
- II. Investment products: In a common market, a particular investment product offering is almost the same for many banks. So since product differentiation is not possible, banks have to make the investment product well heard, so brokers and advisers are more likely to recommend them to investors, and investors are more likely to choose a brand, they are well aware of.
- III. Lead Generation: Like any other business in the digital age, banks must increase their online presence. So banks need to deploy effective lead generation and management strategy, also targeted online marketing advertisements.

Some examples/case studies

- Banks provide sponsorship to
 various global programs like sports,
 entertainment, seminars etc., which is not
 directly linked with any banking activity.
 But this is to create a presence to the
 mind of the participants. For example,
 sports fans, so whenever they will recall
 their favorite game, the image of the
 sponsor may also appear unconsciously
 to their mind.
- Other than commercials, it is quite common, we can see bank logos, banners etc. on traffic signals, roadside markings, wall art etc.

5. Asch's Conformity Experiment



Theory: In 1951, Solomon Asch proposed the theory of conformity, which basically states the effect of peer pressure on a person while making decisions.

According to the principle, it is possible to make a person change his obvious choice just

by clouding his judgment with peer pressure tactics. If peers make a non-obvious choice deliberately, often we make the same choice as theirs because we like to match or group ourselves with popular opinion.

This theory also explains the effect of association, for example, if a product is popular in certain community or cult, anyone who wants to be part of the community, will most like choose the same product.

Business Importance of this study:

- This principle can push product sells to new customers, and increase market share.
- II. This can be used to shift customer loyalty from the competition.
- III. Can create a popular opinion, by creating a word of mouth for the brand.

How to leverage in banking:

- Marketing and Sales: To push products and services deeper in a potential customer base, word of mouth is very important. For that banks need to first make a product popular, then advertise the same popularity amongst noncustomers.
- II. Targeted product development: Banks often develop a product for a target segment. To create a high acceptance,

- it is important for banks to understand the mindset of that segment, as people for the same community or segment are more likely to make similar choices for a product.
- III. Creating a niche or monopoly: If a bank decides to create a niche for itself, it must ascertain that its strategy uses peer pressure towards its advantage, as once the niche is created it's very hard for someone else to generate peer pressure against that brand.

Some examples/case studies

- Often banks advertisement highlights a certain customer as a representative of a certain targeted consumer class, who gets benefited by using the bank's service.
 Example a certain home loan product for government employees or, a special loan product for working women
- Success stories or use cases are often publicized in media, to create a customer affinity towards this success who might have a similar need from banks
- Banks often partner with popular brands, to push its services amongst an already well-formed group, as peer pressure helps high penetration. Example credit cards offer an extra discount when shopping is done from a certain popular retail/club/ brand by partnering with them.



Long term Benefits by Strategizing Psychological Theories

As seen above, many banking functions can improve, by taking powerful psychological theories into consideration and by implementing them rightly. Below are the few overall long term benefits if a bank strategizes its business on those principles.

Customer behavior and satisfaction – Increased customer satisfaction by aligning banks business to the customer mindset. To build a great brand recognition, its required, that the brand to reflect the values its customer holds.

Marketing and building next generation bank – When the competition is extreme, and products for different competitors are often more or less same, building next generation banks will require more than technology. Banks must need to predict future behaviors of customers in order to take the lead.

Risk Aversion- By understanding and eliminating own cognitive bias, banks can make better business decisions, establish

control based on facts and data

and build a most successful risk

aversion strategy.

Winning over The Generation Gap – If millennial generations are to be on boarded in banking customer base, they must be understood from physiological point of view. If banks can know how millennials do behave, their products and services will reflect the same value.

Investment decision making-Phycology theories are a powerful predictor and influencer how investment decisions will be made for or against certain investment.

Crafting Messages, Slogans and Product Names – Advertising strategies are directly linked to the success of a bank amongst customers. Hence messages, slogans , product placing, etc. everything must leverage phycology to its advantage, else its will be destructive to the marketing objective.



Role of Technology to Adopt Psychology in Banking

The existing technical capabilities that banks have built can be utilized for strategic integration to adopt and apply psychological theories. Advanced features that are being implemented in banks viz: decision engines, predictive analysis, Chabot's and social network integration can benefit from the learnings from

psychology theories.

Psychology and Banking has one common accelerator: Computing. Psychological studies often require to analyze a huge set of data and to run a set of complex algorithms on the data Recent advancement of computing capabilities has increased the progress on psychology front. This is also a big reason why banking across the globe has changed to digital;

with the enormous size of data and intelligent analytics to convert that data into insights.

So in this way banks can do better business, increase market shares, avoid risks and build a next-generation enterprise based on technical progress; leading to a solid foundation of psychology embedded into smart business strategies.



Case Studies

 Allianz- Direct Insurance division of Allianz was losing 60% of its customer from auto insurance. Also, only 2 percent of the customers were actually making a purchase.

They adopted Psychological Analytics, to evaluate customer mindset, improve user experiences, and adopt proper customer segmentation.

As a result, their sales conversion improved to 4% and retention by 15 %. The full case study is available for further read - https://www.clicktale.com/media/3239/allianz-case-study.pdf

• Bank of Newzealand Emotion Scan: BNZ

has launched emotion scan app, that actually reads customer faces though camera, to analyze the actual feelings they are going through.

Every time a customer makes a financial decision, the emotion scan reads their expression and gather data to accurately measure customer experiences.

BNZ is using this tool, to make personal finance more personal to customers and using the data insights, it can change the services and products to customer's need. Already many customers have participated in this, and BNZ is now equipped with deep customer insights already.

More details can be found by searching the internet.

 Bank Mellat – Bank Mellat is using psychological factors, to understand different market segments in Iran for its Islamic retail banking, and to create products and services related to their needs.

The research paper is published and available for reading here -

https://www.researchgate.net/
publication/282001258_Retail_Banking_
Customer's_Market_Segmentation_
Based_on_Psychological_Factors_Case_
Study_in_Islamic_Republic_of_Iran_
Bank_Mellat



How Banks Can Strategize Psychology

By adopting the learnings of consumer psychology, neuroscience, and behavioral economics, mediocre marketing efforts and generic campaigns that are so far successful will become even more precise and effective. By understanding how we process any information, how we decide to spend money onto something (or not) and how much, has a huge impact on the bank's marketing ROI.

Also, today's technologies, with deep analytical capabilities and with everchanging media environment, offer unlimited opportunities for banks to create a very personalized experience that consumers demand; resulting in increased business volumes for banks.

Neuroscientists have a saying: "You can take people out of the Stone Age, but you can't take the Stone Age out of people."

Consumers today may seem remarkably equipped with their latest mobile phones, tablets, fitness trackers, smart watches, and

virtual reality headsets but the truth is, the fabric of our thinking deep inside our brain is still same, we share much in common with our ancestors. As a consumer, we are living in the Digital Age but still, we have quite the same psychological triggers which driven mass decisions back in the Stone Age. All the above-mentioned customer's psychological theories and experiences would help the modern day digital banks strategize hitting the bull's eye, maximizing their sales and marketing investment returns.

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Karunesh Mohan is a Principal Consultant with FSDCG banking group within Infosys. Karunesh has gained his deep expertise in banking from his 20 years of robust experience while working in banks and IT organizations as a consumer banking domain expert and consulting top global banking clients in US, UK, Australia, Singapore and Japanese Geographies He holds a PGDBM in Finance from Birla Institute of Management and Executive education program in Strategic Management from IIM, Kozhikode. Karunesh is also a certified trainer on banking domain and has trained 2000+ IT resources across the globe.



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References

Webpage references

- 1. https://www.worldfinance.com/wealth-management/how-using-psychology-in-the-finance-sector-is-reducing-behavioural-biases
- 2. https://www.cell.com/trends/cognitive-sciences/fulltext/S1364-6613(16)30099-7
- 3. https://www.mckinsey.com/business-functions/marketing-and-sales/our-insights/putting-behavioral-psychology-to-work-to-improvethe-customer-experience
- 4. https://www.thebalancecareers.com/applying-psychology-to-finance-1287199
- 5. https://dspace.mit.edu/bitstream/handle/1721.1/46841/appliedpsycholog00farr.pdf;sequence=1
- 6. https://www.poweredbysearch.com/blog/psychology-of-marketing/
- 7. https://en.wikipedia.org/wiki/Behavioral_economics

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- 1.1 http://www.tonybates.ca/wp-content/uploads/social-inclusion.jpg
- 1.2 https://www.libela.org/px/article/_s/stock-photo-advertising-word-concept-in-tag-cloud-on-white-background-81667444.jpg
- 1.3 https://www.eoi.es/blogs/embacon/files/2013/05/abogadoseingenieros.jpg
- http://www.verafinanza.com/wp-content/uploads/2015/09/francia-trading-banca-300x271.jpg 1.4
- 1.5 http://pediaa.com/wp-content/uploads/2016/08/Difference-Between-Adherence-and-Compliance-1.jpg
- http://1.bp.blogspot.com/-ExXn5TRN9Dk/TXpWm68t9kl/AAAAAAAACcE/RhJosMCt4kg/s1600/zzbetter.gif 1.6
- 1.7 https://upload.wikimedia.org/wikipedia/commons/e/e5/Point_of_view_bias.jpg
- 1.8 https://selfgrasp.com/wp-content/uploads/2018/02/What-is-Business-Finance.jpg
- 1.9 http://www.techeconomy.it/wp-content/uploads/2014/11/IOT.png
- http://researchleap.com/wp-content/uploads/2015/09/How-does-marketing-strategy-influence-firm-performance-Implementation-1.10 of-marketing-strategy-for-firm-success.jpg

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- http://3.bp.blogspot.com/-OBD2DPDI1Wc/T0d7Ypnbxwl/AAAAAAAAAA0/0/qD_4PmZOd0/s1600/CTC.jpq 1.11
- 1.12 https://www.solvibrations.org/wp-content/uploads/2017/04/the-power-of-the-subconscious-mind.jpg
- http://www.pngall.com/wp-content/uploads/2016/04/Brain-PNG-Picture.png 1.13

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