



Launching Technology that Makes Digital Banking a Habit

Overview

With the number of mobile internet users in India estimated to have reached around 420 million by June 2017 [1], financial institutions are undertaking the mammoth job of becoming omnichannel and paperless in a digital economy.

HDFC Bank[2] is an Indian banking and financial institution with a global presence. It has over 84,325 employees and as of December 31, 2016, had a distribution network spanning 4,715 branches and 12,260 ATMs across 2,597 cities and towns. As the second largest bank in India, HDFC also faces the challenge of nudging thousands of customers towards making digital channels their primary means of engagement with the bank.

Business Problem

HDFC's Net Banking team wanted to start tackling this problem on two fronts:

1. Reduce high churn rates: The team wanted to identify customers who had already begun using HDFC's digital services, but had no activity in the past 3 months. They also wanted to understand the context of why these customers had churned in the first place.

2. Provide contextual marketing: Once they identified the above, the team wanted to connect with each customer through useful, personalized marketing to arrest churn.

Challenge: HDFC wanted to promote the regular use of net banking amongst its customers who were inactive on digital channels.

Why HDFC Chose an AI-Based Solution

Financial marketing spend is increasing worldwide. According to EMI Strategic Marketing's analysis of data from the Federal Financial Institutions Examination Council (FFIEC), U.S. banks spent \$17.1 billion on advertising and marketing in 2016. This expenditure represented 2.4% of bank revenues.

However, the US Consumer Financial Protection Bureau (CFPB) Director Richard Cordray reinforces the fact that when consumers receive the vast majority of their financial information from companies that are trying to promote an image or sell products, consumers have very little unbiased information to find and use banking features that are actually useful for them.[3]

Traditional segmentation-based awareness and direct marketing approaches, and incentive-based loyalty programmes are proving to be irrelevant, poorly targeted and expensive for banks, while eroding trust with customers as they are perceived as spam.

So the HDFC Net Banking team chose 3LOQ, one of their key innovation partners, to develop an Artificial Intelligence-based solution that could handle the complex, data-driven personalisation required to tackle the problem of churn in more personally relevant and meaningful ways. [4]

“For us to grow, we will have to grow the market because that's the only way as [a] market leader. Using analytics and artificial intelligence helps in building [a] better profile of individuals...”

- Parag Rao, Country Head Payments Business & Marketing, HDFC Bank



How 3LOQ Helped HDFC Reduce Churn with Habitual AI

Instead of focusing on the external factors that may have caused the churn, 3LOQ analyzed 24 months of in-house transaction, digital banking usage and customer profile data from the bank to implement a holistic approach that would create individual 'habit formation paths' for each customer.

3LOQ's Habitual AI solution treats customer actions like a game of chess. Instead of pushing a customer towards the 'next best action', it nudges them to gradually increase their usage of key features, one recommendation at a time. With

Habitual AI, the 'next best action' is not the end goal, it's only a step towards reaching an objective - making a churning customer use digital banking in whatever way serves him best.

The technology uses proprietary machine learning algorithms to analyse billions of data points and map out dynamic feature recommendations that put a customer on a habit formation path. Following this path ultimately leads to the customer adopting a desired action, in this case using digital banking on a regular basis, but through a journey that strengthens the value of this regular action. The system automatically adapts to any new customer behaviour as well.

Results

The bank found that, on average, customers who followed the Habitual AI recommendations increased their transactions through the net banking channel. Also, there was a significant increase in the average account holding by these customers.

With customers who followed Habitual AI's feature recommendations, there was a:

- 145% increase in digital banking transactions
- 33% increase in retention rates over a 6 month period
- 5% increase in net revenue

Habitual AI is a system that learns about a customer and introduces opportunities for him or her to form habits of usage. For financial institutions that are constantly exploring new channels and promotional methods to reach their demographic in ways that will stick, these advanced customer insights can prevent loss of ROI on marketing and ad spend.

“3LOQ's self-learning, AI-based system that takes customer behavior and transforms it into actionable insights is a powerful way to build engagement. Armed with Habitual AI, we are creating and sustaining new customer habits. And we've been seeing consistently good results.”

**- Kaushik Ghate, Senior Vice President,
Head - Marketing Analytics, HDFC Bank**

About 3LOQ Labs

3LOQ is a Bitkemy Ventures company that builds habitual usage for financial products. It has been recognized by NASSCOM as a leader in the Machine Learning space. It focuses on accelerating customer engagement through AI-based habit formation.

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