



Intelligent Product Recommendation System

Drive high conversion rate and Increase Customer Satisfaction
with Hyper-Personalized AI Recommendation Engine

Introduction

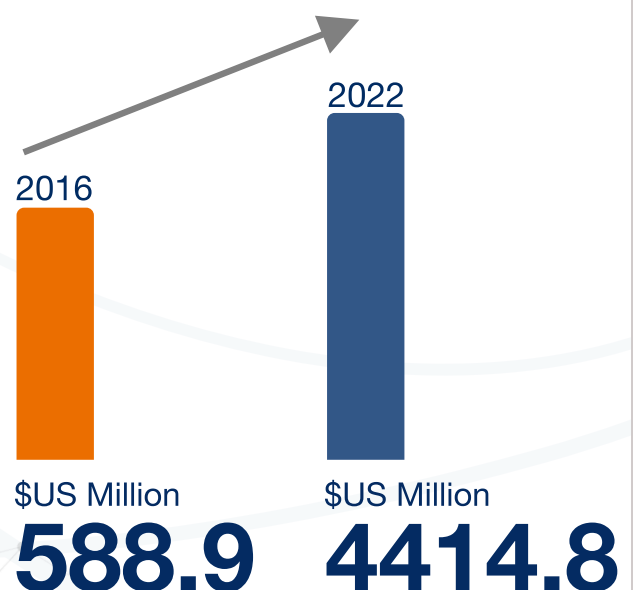
In this highly competitive business world, gaining customer's loyalty and offering them the best of services and products, based on their needs and preferences, is the need of the hour. A shift towards digital banking has enabled banks to offer a dozen services to its customers. However, this brings the challenge of information overload that might be difficult for many customers to deal with. For this reason, the need for personalization which can help customers find their product of interest at the right time is felt more than ever. Until recently, customer relationship managers were handling customer's venture choices but with increase in number of services and customers, their ability to offer relevant products befitting the customers' needs has decreased.

This brings the need for banks to deploy an appropriate recommender engine based on existing data and everyday customer touchpoints that could go beyond suggesting the “next-best offers” and proactively present the most relevant financial product to the customer.

At NEC, we understand these challenges faced by banking and financial institutions and present cutting-edge AI-powered proprietary platforms that enable focussed customer targeting by presenting a suite of products satisfying the client's risk profile and investment goals. We employ the Customer propensity module to identify a customer's likelihood to purchase and augment it with a robust product affinity module to recognize the most likely purchased products. This is build on advanced Machine Learning concepts which exploits some complex and efficient algorithms. This solution, when clubbed with our other modules such as channel optimization can solve multitude of problems.

Recommendation engine market to grow at a Compound Annual Growth Rate (CAGR) of

40.7%



NEC Recommendation System

Leverage the Power of AI to Enhance Your Customer Experience



Proactive Service

Identify, define and manage the financial journey with AI-based prediction.



Cross-Sell

Persona & context based recommendation.



Up-Sell

Recommend upsell products and services with seamless fulfillment.



Conversion

Understand customer behavior, manage leads and increase conversion.



ROI

Increasing marketing spend on the most relevant products rather than cross-selling generic products



Reduction in Churn

Increasing lifetime value of customers by providing satisfying experience

Our Approach

Our team is backed by well-experienced data scientists and machine learning experts. They follow a streamlined and systematic process to build the most intuitive and intelligent recommender system.



ANALYZE

In the first step, we try to understand the client's existing recommendation methodology with the type of products being sold, customer affinity, and the target market. A suitable roadmap is developed befitting your needs and expectations.

After carefully analyzing the requirements, we utilize AI and machine learning algorithms to build an intelligent recommender system.



Build



Integrate

Once we build the software, it is integrated into your system, which creates customer level recommendation reports to be utilized by your sales team to fine-tune their approach.

Our specialized team will test the software for different use cases specific to your organization. The issues detected are fixed to enable flawless and robust deployment.



Testing, Enhancement, Deployment



Optimize

As the financial product market is constantly changing, we analyze its performance regularly to ensure seamless performance.

Continuous support and monitoring.



Support

NEC Banking Product Recommendation System

Move from "Intuitive Insights" to Automated "Insight Based Action."

Why Recommendation Systems for BFSI

- Availability of multiple and diverse financial product portfolios
- Varied Customer Needs [Core Banking, Cards, Mutual Funds, Demat Services, Health Insurance, Auto Insurance, Home Insurance, Home Loans, Auto Loans, Personal Loans, etc.]
- Inability to Identify target customers
- Incompetence to identify target products for the targeted customers
- Cross-sell and up-sell opportunities
- Increase customer engagement and retention

Solution Overview

Banks & Financial Institutions

Customer Base:

Banks need to factor that their customer base is not homogeneous and Product Recommendations should be made based on multiple Customer level attributes



Product Portfolio:

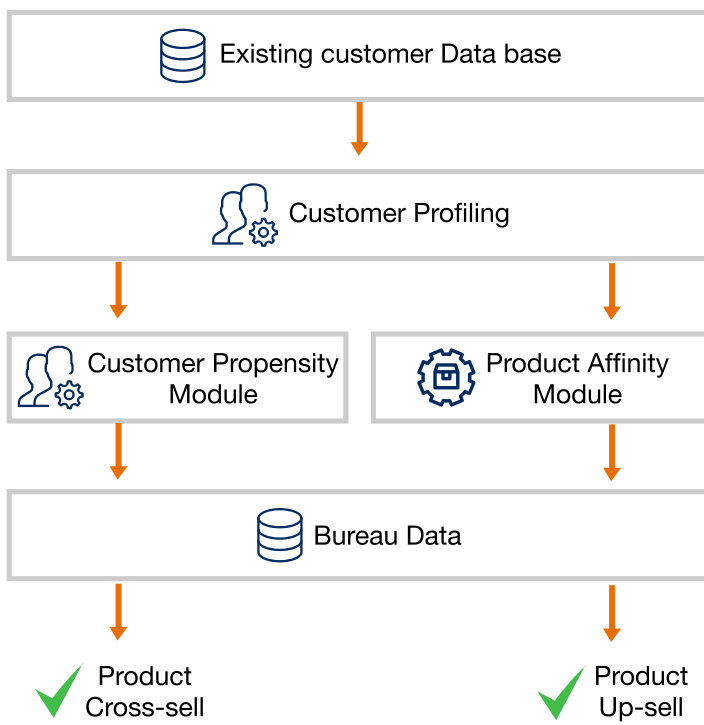
Banks need to be informed about the Affinity of different Products purchased together by a set of customers in order to be able to design an effective Item-based collaborative filtering module

ML Engine Customer Propensity Module Product Affinity Module

Output: Customer Level Product Recommendation Report will map existing customer and their likelihood to purchase with the product they are likely to buy

Customer Id	Propensity to Buy	Suggested Product
A101010	0.85	Product A
B121212	0.45	Product C

How It Works



- Additional information on credit products held by customer is used to identify possible product requirement

- Spend and Payment patterns of customer is analyzed to determine the need for a product with

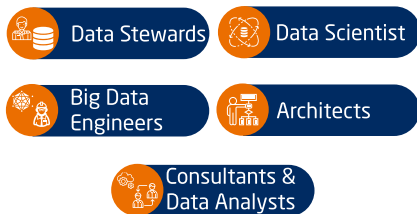
- **Analytical Dataset Creation:** Consolidate customer level data elements for key factors based on hypothesis testing
- **Customer Segmentation Module:** Create customer segments using RFM analysis or ML based algorithms (K-mean, K-modes etc) to identify different customer profiles and plan targeting accordingly
- **Customer Propensity Module:** Develop module to identify likelihood of a customer to buy a product using SVM, Random Forest, Decision Tree etc
- **Product Affinity Analysis:** Build model to identify purchase pattern of customers across products and recommend most suited products to customers to increase conversion
- **Output:** Customer level Product Recommendation Report which will help Sales Operations team design marketing campaigns accordingly

Why NEC

NEC is a leading technology company with more than 121 years of experience working with diverse clients worldwide. Our Recommendation system helps you truly "understand" your customer, "identify" their financial journey, and "predict" the best action. We possess deep expertise in the design and implementation of banking and financial product recommendation engines that leverage the most innovative deep learning techniques to map customer persona, financial journeys, and expected behavior to identify befitting products/services. We are an ISO-certified organization and have a multi-level quality checking and assurance team to ensure that only flawless and high-quality recommendation systems are delivered to our clients. Our mission is to amplify sales & customer engagement and increase profits by lowering the costs associated with disintegrated recommending techniques.

Skilled Workforce

In-house business & domain experts



Domain Expertise

Solving Complex Data Challenges

Myriad of Successful Analytics Projects

Dedicated Analytics Research Labs

Work for Solutions for Societies

Robust Partner Ecosystem



Strong Partnerships & Alliances Across Data Platforms and Analytics Solutions

Technology Partners



Contact us for more information:

marketing@india.nec.com

in.nec.com

Copyright © NEC Corporation India Private Limited 2021. All rights reserved.