

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' need has decreased.

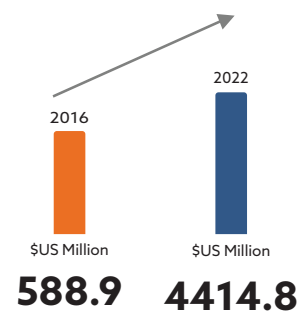
This brings the need for banks to deploy an appropriate recommender engine based on existing data and everyday customer touchpoints that could go beyond suggesting the "next-best offers" and proactively present the most relevant financial product to the customer.

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 built 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%



Source: Markets & Markets

INTELLIGENT **PRODUCT RECOMMENDATION** SYSTEM



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.



UP-SELL

Recommend upsell products and services with seamless fulfilment.



ROI

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



CROSS-SELL

Persona & context based recommendation.



CONVERSION

Understand customer behavior, manage leads and increase conversion.



REDUCTION IN CHURN

Increase lifetime value of customers by providing satisfying experience.



OUR APPROACH

Our team is backed by well-experience 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.



TESTING ENHANCEMENT DEPLOYMENT

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



BUILD

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



OPTIMIZE

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



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.



SUPPORT

Continuous support and monitoring.



NEC BANKING PRODUCT RECOMMENDATION SYSTEM

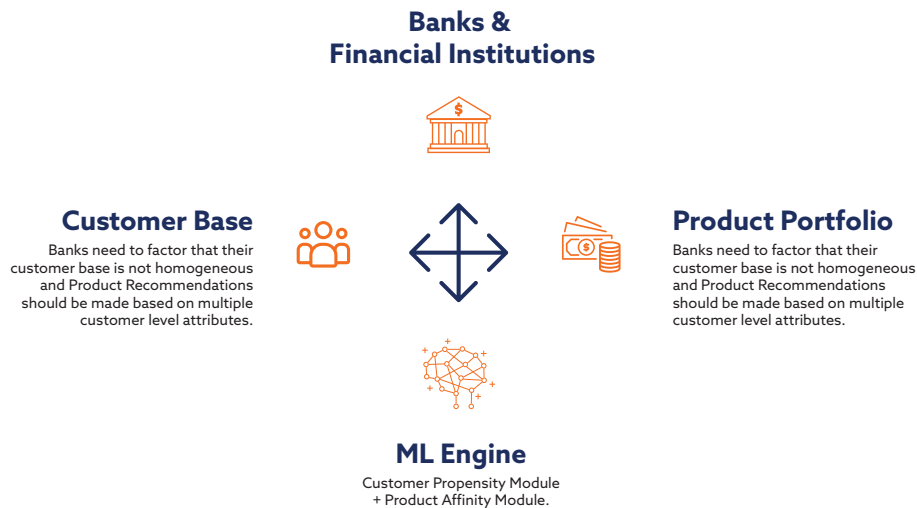
Move from "Intuitive Insights" to Automated "Insight-Based Action."

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

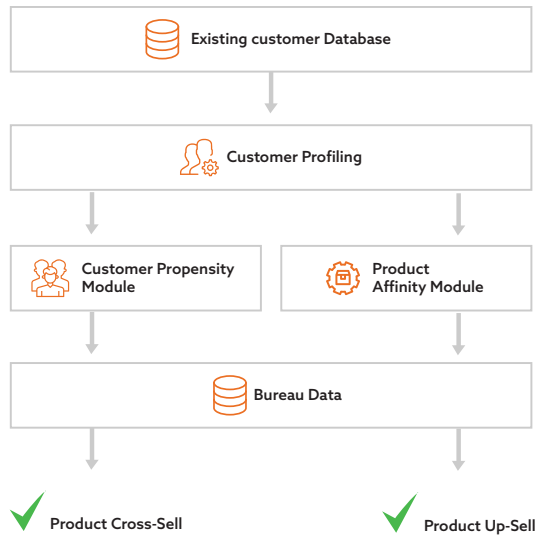


Output: Customer Level Product Recommendation Report will map existing customer and their likelihood to purchase with the product they are likely to buy.

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



HOW IT WORKS



- > **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

Headquartered in Irving, Texas, NEC Corporation of America is a leading technology integrator providing solutions that improve the way people work and communicate. NEC delivers integrated Solutions for Society that are aligned with our customers' priorities to create new value for people, businesses and society, with a special focus on safety, security and efficiency. We deliver one of the industry's strongest and most innovative portfolios of communications, analytics, security, biometrics and technology solutions that unleash customers' productivity potential. Through these solutions, NEC combines its best-in-class solutions and technology, and leverages a robust partner ecosystem to solve today's most complex business problems. NEC Corporation of America is a wholly-owned subsidiary of NEC Corporation, a global technology leader with a presence in 160 countries and \$25 billion in revenue. For more information, visit necam.com.

Skilled Workforce

In-house business & domain experts

	Data Stewards
	Big Data Engineers
	Data Scientist
	Architects
	Consultants & Data Analysts

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 and Alliances Across Data Platforms and Analytics Solutions

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