Data Analytics and Artificial Intelligence Applications in Banking

PURPOSE

❑ Customer Data Structure in Banking ▶ Demographic/Firmographic Data …

WHO CAN PARTICIPATE?

This course is suitable for data scientists, marketing, sales, and operations teams who wish to learn more about digital transformation and artificial intelligence, or who work with CRM, credit risk, credit monitoring, fraud, or human resources analytics in banks.

CONTENT

❑ Customer Data Structure in Banking

- ▶ Demographic/Firmographic Data

- ▶ Transaction Data

- ▶ Communication Data

- ▶ External Data Sources

- ▶ The Development of Artificial Intelligence Over the Last 3 Years and Its Impact on the Banking Sector

❑ Data Analytics – Current Banking Problems

- ▶ Credit Risk Analytics: Innovative Approaches in Application, Delinquency, and Income

Models; Variable Derivation Using Peer Comparison Alongside Self-Comparison and

Population Comparison

- ▶ Marketing Analytics: Next-Best-Action Modelling with Ensemble Methods (Random

Forest, Xgboost) and Self-Updating Models; Calculating Customer Lifetime Value

- ▶ Fraud Analytics: Fraud Prediction with Multi-Genre Analytics (Path, Network,

Association Models); Real-Time Streaming Data Analytics for ATM and Credit Card

Transaction Fraud Models

- ▶ Generative Artificial Intelligence Applications: Implications of Natural Language Models for Banking

Training Date	Saturday, 29 November 2025
Virtual Classroom Application	MS Teams
Virtual Classroom	
Start-End Time	10:00 - 16:00

INSTRUCTOR

CURRICULUM VITAE

With over 15 years of academic and professional experience, he has worked in the finance and service sectors.

Since 2010, he has taught courses in **Marketing Analytics, Data Mining, and Statistical Analysis** in undergraduate and postgraduate programmes at universities.

· He was born in Ankara in 1983.

· He graduated from Middle East Technical University with a degree in Industrial Engineering.

· He holds a PhD in **Operations Research** from Middle East Technical University. His thesis and publications in international peer-reviewed journals focus on revenue management and pricing.

· He has managed Marketing, Risk, and Fraud Analytics projects at various banks, participated in the establishment of analytical development teams, and trained numerous personnel in data science departments. Some of these colleagues currently hold managerial positions in the banking sector and the real sector.

· He currently works as the Data Science Team Leader at Analythinx, where he is a founding partner. He continues to provide consultancy services in ongoing projects across the banking, insurance, transportation, and telecommunications sectors.

WORK EXPERIENCE:

2019 – **ANALYTHINX INFORMATION TECHNOLOGY SERVICES TAŞ:**

Founding Partner, Chief Data Scientist 2018 – 2019 **AKBANK**

Customer Retention Analytics Manager (Vice President)

Responsible for developing the models required for the bank's customer retention programmes, designing and operating operational CRM processes in conjunction with the developed models.

2017 – 2018 **YAPI KREDİ BANKASI**

Lead Data Scientist

Reporting directly to the CDO (Chief Data Officer), he was responsible for coordinating teams developing credit risk and marketing analytics models, monitoring modelling processes, and developing advanced analytics models within the bank.

2015 – 2017 **Hürriyet Journalism**

Lead Data Scientist

Reporting directly to the Chief Sales Officer (CSO), he led the big data analytics initiative and was responsible for developments aimed at increasing digital publishing revenues at the holding company level.

2012 – 2015 **AKBANK**

Pricing Analytics Manager

2011 – 2012   **UNITEAM CONSULTING**

          SAP ABAP Developer

2005 – 2011   **Middle East Technical University**

2009 – 2011   **Instructor**

2005 – 2009   **Teaching and Research Assistant**