

# MACHINE LEARNING IN THE SERVICE OF CUSTOMER JOURNEY

## ABOUT BANCO BNI EUROPA

Banco BNI Europa is known as a digital bank whose mission is to offer competitive and innovative products. Banco BNI Europa works every day to make financial services more accessible and intuitive for people.

## KEY FACTS

**<1 s.**

time needed to  
income  
verification

**>50**

different labels e.g.:  
salary, pension,  
compensation, etc.

**>50 000**

transactions used  
for the model tests

Banco BNI Europa is moving the loan application process to a new level with Kontomatik.

## INTRODUCTION

Providing paper documentation, manual verification of income, filling out forms – this is usually the tedious process for both clients and bank's employees. Unless... you involve a bit of technology.

A convenient way to apply for a loan, a fast and efficient way of income verification, data analysis based on machine learning, making credit decisions efficiently and objectively – this is the effect of the transformation process carried out by Kontomatik.

## THE RIGHT DATA IN REAL-TIME

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The path of bank customers applying for a loan has become fully digital. Kontomatik technology allows for a conveniently provision of bank transaction history.

Provided data is checked for authenticity – at this point, potential frauds are detected. The next step is the transaction analysis and labeling based on machine learning.



*“Labeling based on machine learning provided by Kontomatik allows us to operate more efficiently and better understand our clients' financial situation and thus, providing a better service”*

Gonçalo Santos,  
Director of Digital Platforms,  
Banco BNI Europa

## LABELING – A NEW QUALITY OF CATEGORISATION

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Metadata contained in the labels allows the measuring of trends and indicators in various dimensions, such as revenues, loans, lifestyle, healthcare expenses, recurring monetary obligations etc. The labels enrich the data and create a comprehensive view of the client's financial condition, which significantly speeds up the application verification process.

*“Labeling combines the advanced use of machine learning and other algorithms. Defined labels (e.g. salary, compensation, welfare etc.) describe the content of transactions used in assessing creditworthiness and disregard the insignificant - thus reducing the information noise associated with the processing of the natural language of banking transactions. The labeling model was built based on a huge set of real, fully anonymized transactions, as well as expert business rules.”* Michał Bukowski, Head of Data Science, Kontomatik

## TECHNOLOGIES AND TOOLS

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Open API



Python



Machine Learning



Labelling /Categorisation

## EFFECTS

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Income verification in less than one second, precise client financial information the whole loan application process becomes fully digital and effortless for users.