InsightOut
ANALYTICS

Case Study

imobiliare.ro

How our Multichannel
Online Recommendation Engine
increased conversion rates & leads

About Our Client

imobiliare.ro

Our **Online Recommendation Engine** increased conversion rates and number of leads for the main real estate portal in Romania

Imobiliare.ro is **the leading real estate (property) portal on the Romanian market**, with more than 100.000 property listings and over 1.6 million monthly unique visitors. [1]

Imobiliare.ro is also **the main real estate data provider in Romania** and the most quoted real estate brand in business media. [2]

Since 2016, Imobiliare.ro is part of the Ringier group, **the largest internationally operating Swiss media company**, with operations in 19 countries. [3]

| **The Challenge**

Connect users of Imobiliare.ro with announcements uniquely relevant to them

In today's digital world, presenting users with a vast collection of property listings is a core strength of Imobiliare since it increases the chances of each user finding their ideal home.

However, the feat of listing more than 100.000 announcements poses its own challenges, the prime one being that of **users sifting through pages.**

To this end, Imobiliare provided a set of tools such as filtering properties based on features, a powerful search engine and a widget containing similar announcements.

Though users made full use of these, they still had to **invest time and effort in order to pinpoint those announcements relevant to them.** When also factoring in today's declining attention spans, this equated to visitors generating fewer conversions than expected.

‖ The Goal

Increase the conversion rate by providing each user with the most relevant property listings for their profile

In order to increase conversions, we proposed a multichannel online recommendation engine that ensures that **only the most relevant listings are shown to each user,** taking into account three main topics:

- Degree of similarity between **announcements**
- Degree of similarity between **users**
- **Users' implicit preferences,** based on which announcements they interact with (views, add to wishlist and lead)

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The Multichannel Online Recommendation Engine led to an *increase in user leads* due to the improvements in our conversion rates. We were *very satisfied with the project implementation* and the overall collaboration with InsightOut Analytics.

The team quickly understood our business goals and translated them into technical challenges that were solved with *data science solutions.*

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Managing Partner & Product Manager
Imobiliare.ro
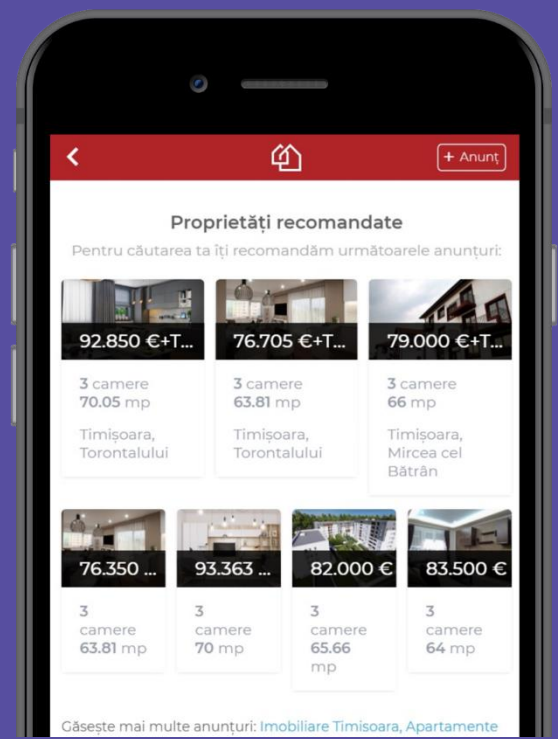
III The Approach

Built a multichannel online recommendation engine to increase conversion rates and number of leads

1. Applied **similarity algorithms and advanced methods of statistical analysis** across a number of features in order to rank announcements based on their relevance for the user

2. Employed **Machine Learning techniques** to analyze the type and frequency of user interactions with property listings (such as views, add to wishlist, contact via phone/email), whereby the accuracy of recommendations was fine-tuned for each individual user

3. Analyzed the **historical performance of each listing** (views, actions) and compared its features against users' manifest & non manifest interests to identify the pool of users for whom it would qualify as a relevant recommendation

We employed **state of the art technologies**:
- Python
- R
- Google Cloud Platform
- Apache Spark
- PostgreSQL

IV **The Results**

Outstanding performance in key metrics

1. **59%** increase in **user clicks**
2. **81%** increase in **number of user leads**

In order to accurately measure the impact of our solution, we employed A/B testing methods using Google Optimize. Traffic on Imobiliare.ro was divided in two segments:

- 50% of users received recommendations identified by Imobiliare's previous algorithm (the baseline), while
- the other 50% received recommendations determined using our improved model (the tested variant).

A/B testing was performed in **production environment (live website)** and recorded **outstanding increases in key metrics**. Deployment of our Recommendation Engine provides Imobiliare.ro users with an enhanced property search experience and allows them to focus more on contacting the property owners.

WHAT WE DO

InsightOut Analytics is a consulting firm for Data Science, Machine Learning & AI.

We develop complete business solutions which enable our clients to stay competitive in their industries by taking data-driven decisions.

HOW WE DO IT

We work closely to understand your needs and identify deliverables. Using your data, we rely on our expert data scientists to crunch the numbers and provide you with the best insights.

This implies Machine Learning & AI algorithms, fast validation of models and valuable maintenance for the solutions we deliver. We achieve all this and more thanks to our seasoned team who is always eager to apply its expertise to a new challenge.

LET'S GET STARTED

Let's explore together how your data can be enriched with our insights to drive better decisions for your business.

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