

Case Study:

# Implementing AI-driven personalization and analytics for a PropTech platform



**Client:** A mid-sized American PropTech company that connects property owners, buyers, and agents through a web and mobile platform.

## 1. Challenge

The client's platform already had a strong user base and a large property database, but engagement and conversion were stagnating. The main challenges included:

### Missed conversion opportunities

Without predictive analytics, it was difficult to identify high-intent leads or optimize campaigns.

### Fragmented data

Property and user data were stored in separate systems, making it hard to track the customer journey.

### Limited personalization

Users received the same generic property recommendations regardless of their behavior or preferences.

### Low data visibility

Marketing and product teams relied on manual segmentation and outdated reports.

## 2. Solution

ZONE3000 introduced an AI-powered personalization and analytics layer integrated into the client's existing infrastructure:

### Optimized infrastructure

to ensure scalability and stable performance during traffic peaks.

### Implemented Machine Learning

models to recommend listings and content tailored to user behavior.

### Built BI dashboards

to track engagement, conversion rates, and property trends in real time.

### Automated ETL workflows

for real-time data updates and feedback loops.

### Unified behavioral and property data

across web and mobile into a single analytics pipeline.

## 3. Technology used



### AI/ML framework

Python, Scikit-learn, TensorFlow to build and train personalization and user-behavior prediction models.



### Data & cloud

AWS (Lambda, S3), PostgreSQL, .NET, SQL for scalable data collection, processing, and storage.



### Integration & frontend

React.js, REST APIs for seamless integration of personalized recommendations into the existing web platform.



### ETL & automation

Python-based pipelines with .NET and SQL automation, which ensured data cleansing, unification, and regular updates across sources.



### Visualization & analytics

Power BI, Tableau to create interactive dashboards and real-time performance analytics for product and marketing teams.

## 4. Result

The integration of AI and analytics features improved both user experience and internal decision-making:

**Seamless alignment with the recruitment team processes:** Engagement grew by around 38%, with users spending more time exploring listings and returning to the platform more often.

**Improved conversion:** Conversion from viewed to saved listings increased, reflecting more relevant recommendations and a smoother user experience.

**Data-based decisions:** Product and marketing teams gained real-time visibility into user behavior, enabling faster, evidence-based updates to campaigns and features.

**Stable performance:** Optimized data pipelines and cloud setup ensured reliability during traffic peaks and minimized downtime.

This case study demonstrates how ZONE3000 combined AI, data engineering, and business analytics to help a PropTech company deliver more relevant user experiences, improve decision-making, and achieve sustainable growth.

