

# AI Real Estate Deal Analyzer – Detailed Business & Technical Plan

## 1) Concept

A web/mobile platform that collects real estate transaction data in Riyadh, applies an Automated Valuation Model (AVM) and predictive analytics to provide instant property pricing, investment potential scores, and neighborhood trends. The platform helps investors, brokers, and developers identify the best deals and avoid overpriced listings.

## 2) Data Sources

- Real Estate General Authority (REGA) – official market indicators and transaction datasets.
- Saudi Open Data Portal – property sales/rental statistics.
- Ministry of Justice – legal transaction records.
- Web scraping from listing portals (Aqr.sa, Haraj) for additional attributes.

## 3) Technical Architecture

- Data Lake: CSV/Parquet from REGA + Open Data, scheduled weekly updates.
- ETL: Python + Airflow/Prefect for cleaning & unifying units and geo-mapping.
- Features: Price per sqm, absorption rates, transaction volume, rent averages, proximity to services.
- Models: Gradient Boosting (XGBoost/LightGBM) for AVM; Prophet/ARIMA for time-series trends.
- Frontend: React/Next.js or Flask Admin for MVP.
- Mapping: PostGIS + Mapbox.
- Reporting: FastAPI + PDF generation.
- Monitoring: MLflow for model tracking.

## 4) Timeline

- MVP (Riyadh only): 1.5 – 3 months.
  - Commercial release: 4 – 6 months.
- Phases: Data acquisition → Model building → Web dashboard → Payment integration → Pilot clients.

## 5) Revenue Model

- B2B subscriptions:
  - Broker Pro: 499 SAR/month.
  - Office Plus: 1,250 SAR/month.
  - Enterprise: 3,500 SAR/month (API access).
- B2C one-off reports: 49 SAR/report.
- Custom valuation studies: 3k–10k SAR/project.
- Premium alerts (SMS/WhatsApp): 99 SAR/month.

## 6) Profit Projections

Conservative (6 months): ~27,830 SAR/month gross → ~15–20k SAR net. Moderate: ~62,660 SAR/month gross → ~44–50k SAR net. Aggressive (12 months): >180k SAR/month gross → ~140k SAR net.

## 7) Go-To-Market

- Paid pilot with 3–5 Riyadh brokerages.
- Partnerships with listing platforms.
- LinkedIn content marketing with neighborhood heatmaps.
- Webinars for brokers.
- Referral program.

## 8) Competitive Advantage

Few local platforms combine AVM + investment scoring + API access. Clear value to B2B clients with measurable ROI. Potential to expand to Jeddah/Eastern Province easily.

## **9) Risks & Mitigation**

- Model accuracy: Show confidence intervals; improve with feedback.
- Data dependency: Cache datasets; diversify sources.
- Regulatory changes: Monitor REGA/MOJ updates.

## **10) Team & Budget**

- Team: Data/ML lead, backend/devops, frontend, part-time bizdev.
- Budget (3 months MVP): Cloud/maps 4–9k SAR, tools/domains/payments 2–4k SAR.