### **Adding Real-Time Behavioral Data for Better Accuracy**

* What I Did:
  + Integrated real-time customer interactions (e.g., login frequency, support tickets).
  + Streamed customer behavior data from Apache Kafka to the model pipeline.
  + Updated feature engineering to capture user engagement signals.
* How I Did It:
  + Connected Kafka topics to a feature store (Feast) for dynamic updates.
  + Used AWS Lambda functions to process and feed new data into the model.
  + Implemented online learning with River to continuously refine predictions.

### **Using Deep Learning Models (LSTMs, Transformers)**

* What I Did:
  + Experimented with LSTMs for time-series churn prediction.
  + Used Hugging Face Transformers to analyze customer reviews & support tickets.
* How I Did It:
  + Trained an LSTM model using TensorFlow on historical customer data.
  + Fine-tuned a BERT-based sentiment analysis model for churn-related support tickets.
  + Combined deep learning outputs with traditional features to enhance predictions.