



# Banking Use Cases: What Do You Know?

Let's start with your experiences! What banking tasks could be improved with AI?

(Pause for audience input)



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# Common Banking ML Use Cases

## Fraud Detection

Identifies suspicious transactions to prevent losses.

## Customer Service

AI-powered chatbots and virtual assistants enhance support.

## Risk Assessment

Evaluates loan applications with data-driven precision.

## Compliance

Automates regulatory reporting for accuracy and efficiency.

## Marketing

Personalizes offers and recommendations to customers.

# ML Use Cases by NLP Problem Type

## Summarization

- Summarize customer feedback for quick insights
- Condense lengthy legal documents for compliance

## Topic Modeling

- Identify key themes in customer inquiries
- Analyze news articles for market sentiment

## Classification

- Categorize customer support tickets efficiently
- Classify loan applications by risk factors

## Sentiment Analysis

- Gauge customer satisfaction from reviews
- Monitor social media for brand perception

## Named Entity Recognition

- Extract key entities like names, dates, and amounts from documents
- Identify fraud-related terms in transaction descriptions

## Machine Translation

- Translate customer communications in multiple languages
- Localize banking documents for international clients

# Recent Use Case #1: Enhanced Fraud Detection

## Company: Mastercard

Uses AI with behavioral biometrics for real-time fraud detection.

## Impact

Reduces false positives by 20%, boosts accuracy by 15%.

## Result

Saved \$25 million in potential fraud losses in 2023.





# Recent Use Case #2: Personalized Customer Service



## **Bank: Bank of America (Erica)**

Virtual assistant offers personalized financial advice via text and voice.



## **Scale**

Handled 1.5 billion interactions, saved clients over \$2 billion.



## **Impact**

10% increase in customer satisfaction, 15% call volume reduction.





## Recent Use Case #3: Streamlined Loan Processing



### **Bank: JP Morgan Chase**

AI automates loan review, speeding processing and boosting accuracy.



### **Outcomes**

Processing time cut by 30%, small business approvals rise 15%.



### **Result**

Loan volume up 20%, operational savings of \$5M achieved.

# Key Takeaways

## ML Transforms Banking

Improves operations with automation and AI insights.

## NLP Solutions

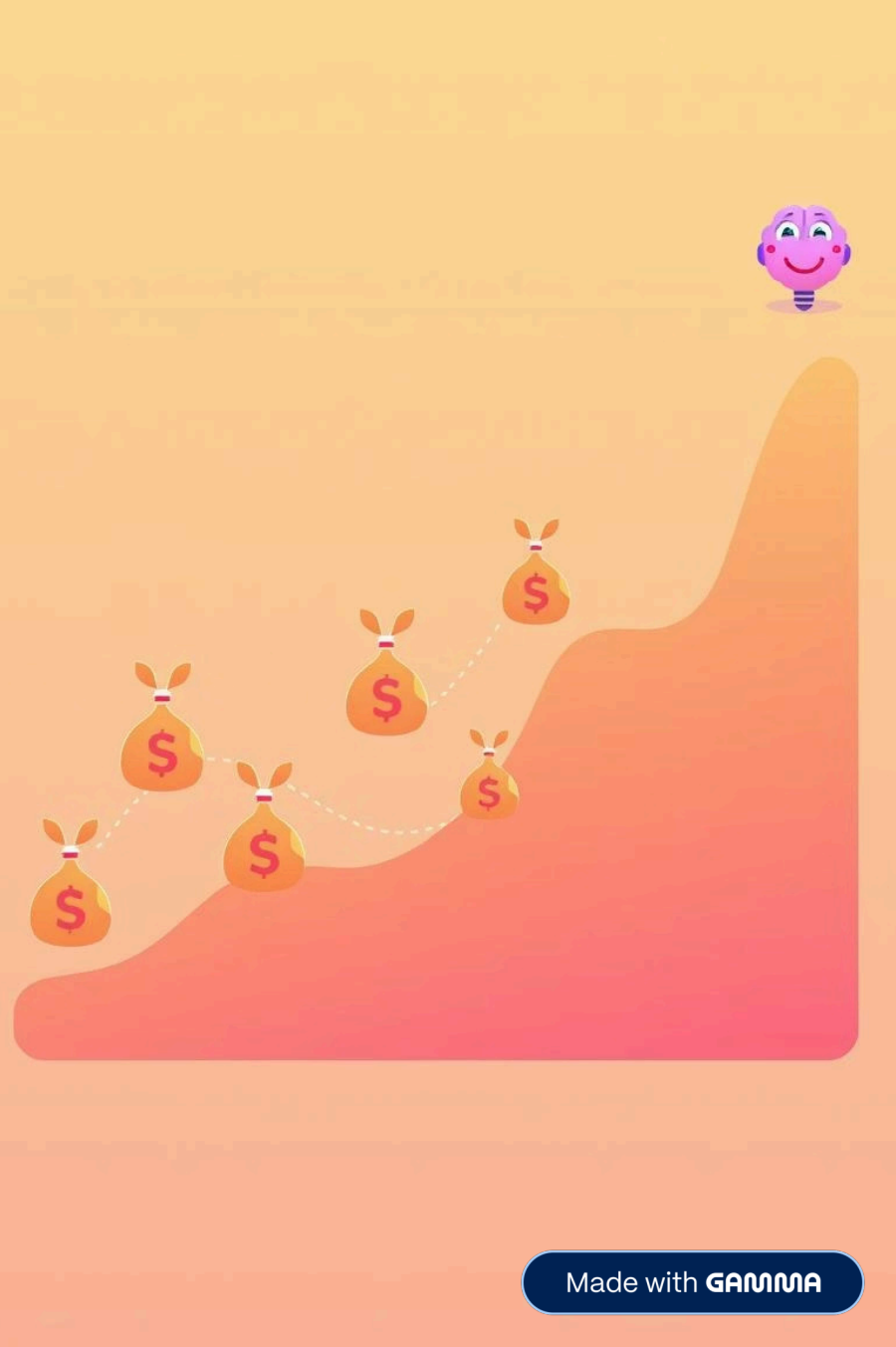
Enhance customer understanding and compliance capabilities.

## Proven Impact

Recent cases show fraud reduction and improved customer service.

## Future Focus

Adopt AI for efficiency, personalization, and risk management.





## Q&A and Discussion

Any questions? Let's explore how ML can transform your banking processes.