# Common AI Use Case by Industry: Financial Services

In the table below we list the most common AI uses cases by industry. The ‘Business Value Score’ column rates expected business impact on a scale from 1 (least impact) to 10 (highest impact). The ‘Difficulty to Implement Score’ column rates the difficulty to implement (time, cost, effort, etc.) on a scale from 1 (easiest to implement) to 10 (hardest to implement). Note these are estimates and will vary from customer to customer.

| **Business Metric** | **AI Use Case** | **Description** | **Microsoft AI Services** | **Microsoft AI Solution Description** | **Business Value Score** | **Difficulty to Implement Score** |
| --- | --- | --- | --- | --- | --- | --- |
| Fraud Reduction | Fraud Detection and Prevention | AI models analyze transaction patterns to identify potential fraudulent activities. | Azure Machine Learning, Azure OpenAI | Use GPT models for deeper pattern recognition and natural language processing to identify sophisticated fraud schemes. | 9 | 7 |
| Risk Management Efficiency | Risk Assessment and Management | AI evaluates financial data to assess credit and market risks. | Azure Machine Learning, Azure AI, Azure OpenAI | Employ GPT models to enhance risk analysis by synthesizing large volumes of unstructured data for more accurate assessments. | 8 | 8 |
| Trading Profitability | Algorithmic Trading | AI uses algorithms to automate trading, optimizing for speed and profit. | Azure Machine Learning, Azure OpenAI | Leverage GPT models to analyze market sentiment from multiple sources, enhancing trading algorithms. | 7 | 9 |
| Customer Service Efficiency | Customer Service Chatbots | AI-driven chatbots handle routine customer queries, improving response times. | Azure Bot Service, Azure AI Language Service, Azure OpenAI | Integrate GPT models to provide more context-aware and personalized customer service responses. | 6 | 4 |
| Customer Experience | Personalized Banking Services | AI analyzes customer data to tailor financial advice and product recommendations. | Azure Machine Learning, Azure OpenAI | Use GPT models to generate highly personalized financial advice based on nuanced customer data analysis. | 7 | 6 |
| Process Efficiency | Loan and Insurance Underwriting | AI automates the evaluation of loan and insurance applications for quicker decisions. | Azure Machine Learning, Azure OpenAI | Apply GPT models to improve decision-making accuracy by analyzing complex application data. | 7 | 7 |
| Compliance Assurance | Regulatory Compliance Monitoring | AI monitors transactions and activities to ensure compliance with regulations. | Azure AI, Azure Machine Learning, Azure OpenAI | Enhance compliance monitoring with GPT models to interpret regulatory texts and track compliance in real-time. | 8 | 8 |
| Revenue Protection | Anti-Money Laundering (AML) | AI detects suspicious financial activities to prevent money laundering. | Azure OpenAI | Utilize GPT models to enhance pattern detection and integrate diverse data sources for comprehensive AML analysis. | 9 | 8 |
| Customer Retention | Customer Churn Prediction | AI predicts which customers are likely to leave and helps develop retention strategies. | Azure Machine Learning, Azure OpenAI | Employ GPT models to analyze customer feedback and interaction more deeply for targeted retention efforts. | 6 | 6 |
| Investment Management | Wealth Management and Robo-advisors | AI provides automated investment advice based on market data and individual profiles. | Azure Machine Learning, Azure OpenAI | Use GPT models to enhance investment strategies by analyzing global market trends and individual preferences. | 7 | 7 |
| Operational Efficiency | Digital Receipt Management | Automates the capture and organization of digital receipts for financial reporting. | Azure AI, Azure AI Document Intelligence, Azure OpenAI | Implement GPT models to automatically categorize and summarize financial transactions from digital receipts. | 6 | 4 |
| Customer Convenience | Enhanced Mobile Banking Features | Enhances mobile banking interfaces with voice recognition and simple chat functions. | Azure AI Speech Service, Azure AI Language Service, Azure OpenAI | Use GPT models to provide more natural and intuitive voice interactions for mobile banking users. | 7 | 3 |
| Financial Security | Automated Account Alerts | Sets up automatic notifications for significant account activities. | Azure AI, Azure Logic Apps, Azure OpenAI | Enhance alert systems with GPT models to provide more detailed and contextual information about account activities. | 6 | 2 |
| Customer Experience | Simplified Loan Application Processes | Streamlines loan applications with automated form filling and instant document verification. | Azure AI, Azure Machine Learning, Azure OpenAI | Use GPT models to interactively guide customers through the loan application process with personalized advice. | 7 | 3 |
| Financial Health | Credit Score Analysis | Provides automated insights and recommendations for improving credit scores. | Azure AI, Azure Machine Learning, Azure OpenAI | Enhance credit analysis with GPT models to offer more tailored financial improvement strategies. | 7 | 3 |
| Financial Literacy | Basic Financial Planning Services | Offers automated, basic financial advice on savings, investments, and budgeting. | Azure AI services, Azure OpenAI | Use GPT models to provide interactive and adaptive advice to enhance users' financial understanding and planning. | 6 | 3 |
| Process Efficiency | Automated Document Handling | Manages and retrieves customer documents efficiently using AI. | Azure AI Document Intelligence, Azure OpenAI | Deploy GPT models to automate the extraction and interpretation of text from various document types for faster processing. | 6 | 4 |
| Customer Onboarding | Customer Onboarding Automation | Simplifies customer onboarding with AI-driven data entry and validation. | Azure AI Document Intelligence, Azure OpenAI | Implement GPT models to streamline data validation and enhance the onboarding experience with dynamic forms and instant feedback. | 7 | 3 |
| Financial Education | Interactive Financial Education Tools | Develops personalized, AI-powered financial education tools that adapt to users. | Azure AI, Azure Machine Learning, Azure OpenAI | Leverage GPT models to create customized educational content that adjusts in real-time to the learner's progress and questions. | 6 | 4 |
| Claims Processing Efficiency | Simplified Insurance Claims Processing | Automates initial steps in insurance claims to improve speed and reduce manual workload. | Azure AI Document Intelligence, Azure OpenAI | Use GPT models to enhance the accuracy and efficiency of automated claims processing by interpreting claim details more effectively. | 7 | 3 |