

Adapting to AI

Fintech and Artificial Intelligence

Presented by:

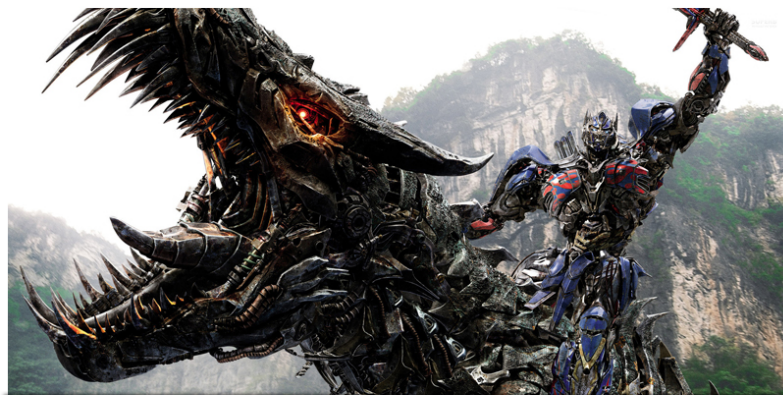
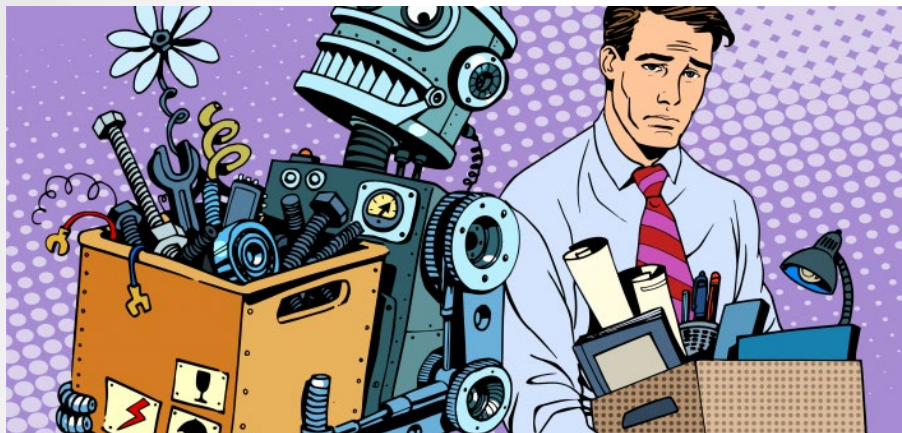
Neil Desai



This presentation and my comments represent my personal views and do not necessarily reflect the views of the Federal Reserve Bank of Atlanta or the Federal Reserve System.

- What is AI?
- How are people using AI in banking?
- How can Community Banks adapt?

What is AI?



**Machines may
take over the world**

What is AI...today?

Characteristics (Note: No universally accepted definitions exist)

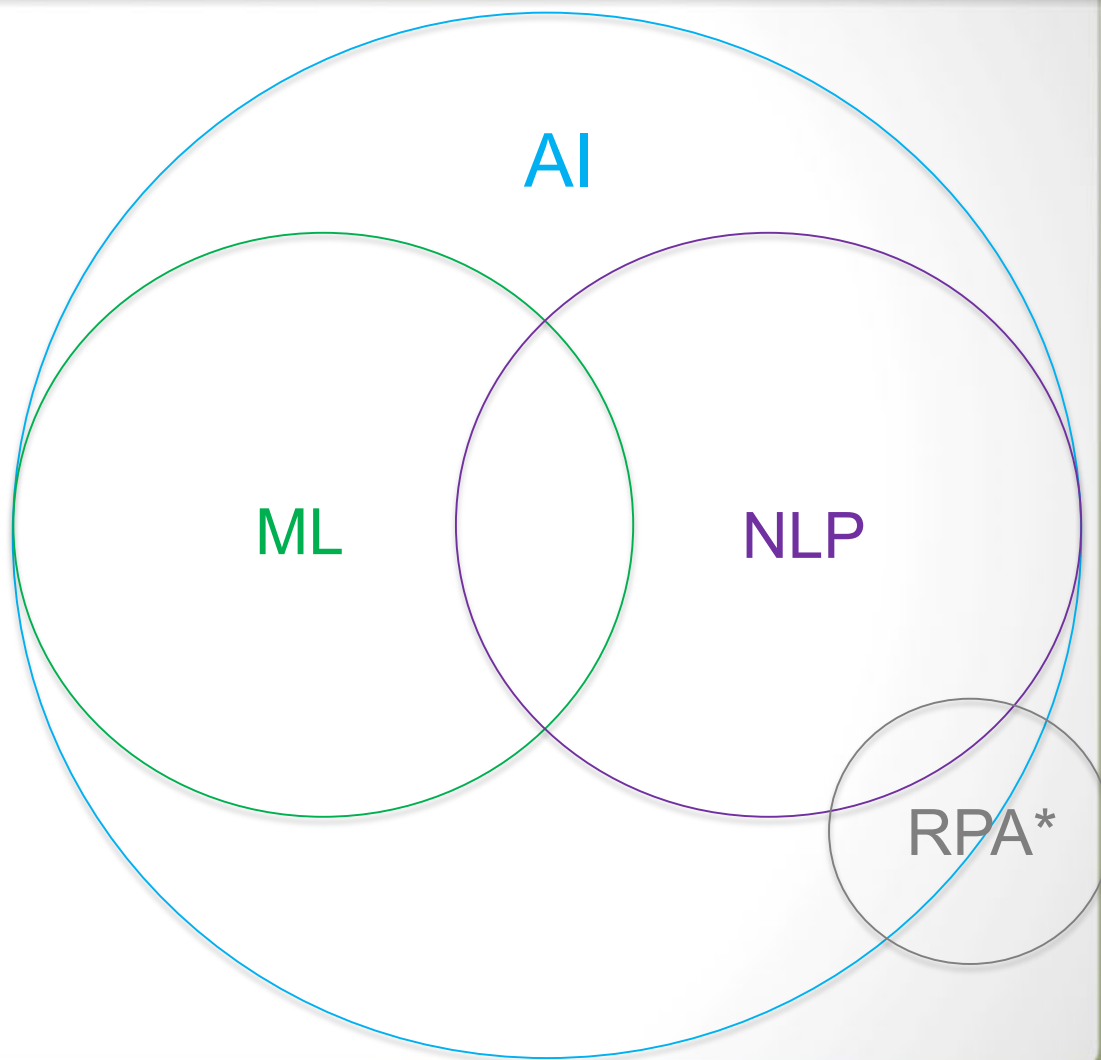
Artificial Intelligence (AI): The ability of a machine to imitate intelligent human behavior

Machine Learning (ML): Algorithms used for pattern detection, classification, and prediction

Natural Language Processing (NLP): Algorithms used to interpret, transform, and generate human language

Robotic Process Automation (RPA): Code used to automate repetitive tasks and reduce manual touchpoints

Source: Presenter's amalgamation of various sources (Merriam-Webster's dictionary, Russell & Norvig, New Scientist, Sievo, and others)

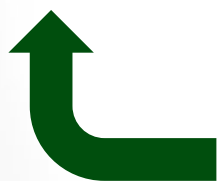
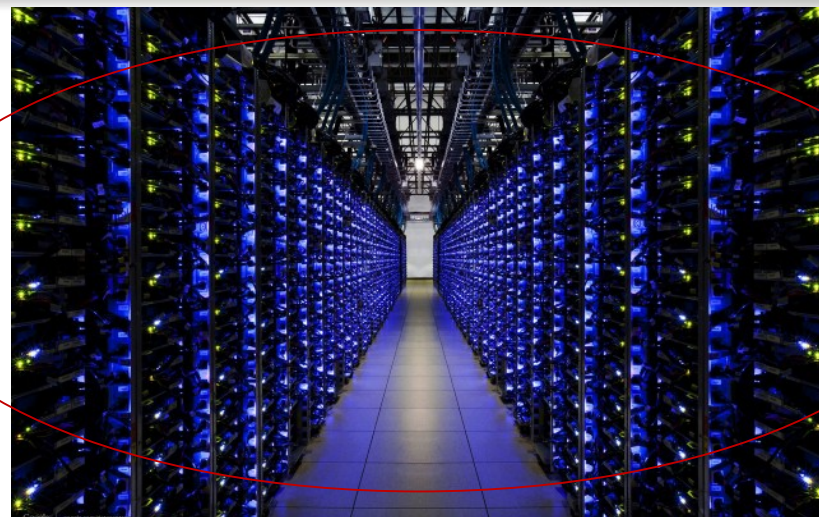


What is AI...today?

Logistics



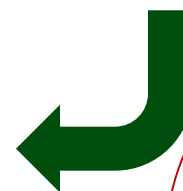
Data and
User Input



Input for user
to make
decisions (?)



Numbers! Text! Pictures! Voice!



Machine
Learning
+
Natural
Language
Processing

AI in Banking

Uses seen at Large Banks



LEANER...in the back-office

- **Fraud**: Fraud Risk Scoring; Predictive Analytics; Fraud Detection on Calls
- **BSA/AML/OFAC**: Classifying Transactions; Due Diligence using NLP; Behavior Pattern Identification
- **Personalization of Services**: Chatbots (Text and Voice)
- **Underwriting(?)**: Duplicating an underwriter's decision

FOCUSED...in the front-office

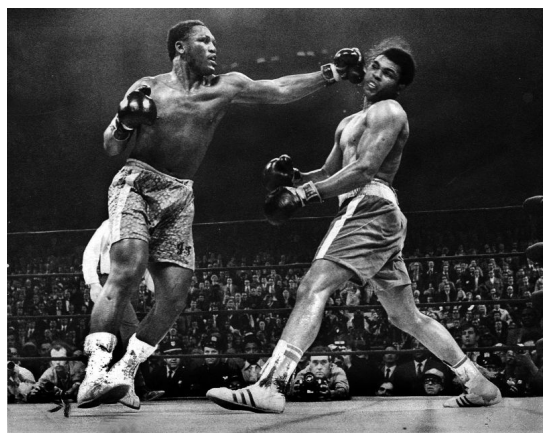
- **Profitability**: Who should we go after?
- **Tailoring**: How should we go after them?
- **Financial Planning**: Helping Customers with their Portfolios
- **Trading**: Real-time Pattern Identification and Automated Execution

Cost-Cutting

- Impact on Efficiency Ratio, Ease of Transactions
- E.g. Reducing Overhead, Account Opening

Identifying Customer Needs

- Impact on Profitability and Customer Relations
- E.g. Cross-Selling, Retention



Convenience

Loyalty

How can Community Banks adapt?



“I believe that if a bank has not started thinking about how innovation may impact its business, it is very late to the game.”

- [Gov. Michelle Bowman, April 2019](#)

- Better late than never!
- Emphasis on partnering with FinTech firms
 - Not just in credit origination and payments
- RPA can be very beneficial (and affordable*) for Community Banks
 - Online platforms for loan applications and deposit taking
 - Automated data collection processes
- Key Risk Management Function: Third-Party Risk Management
 - Variety of other risks to be managed as well, depending on use case
 - Regulators cognizant about taking a measured approach to not hinder innovation
- Inaction is not a viable strategy