Business of AI

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A meetup hosted by our community
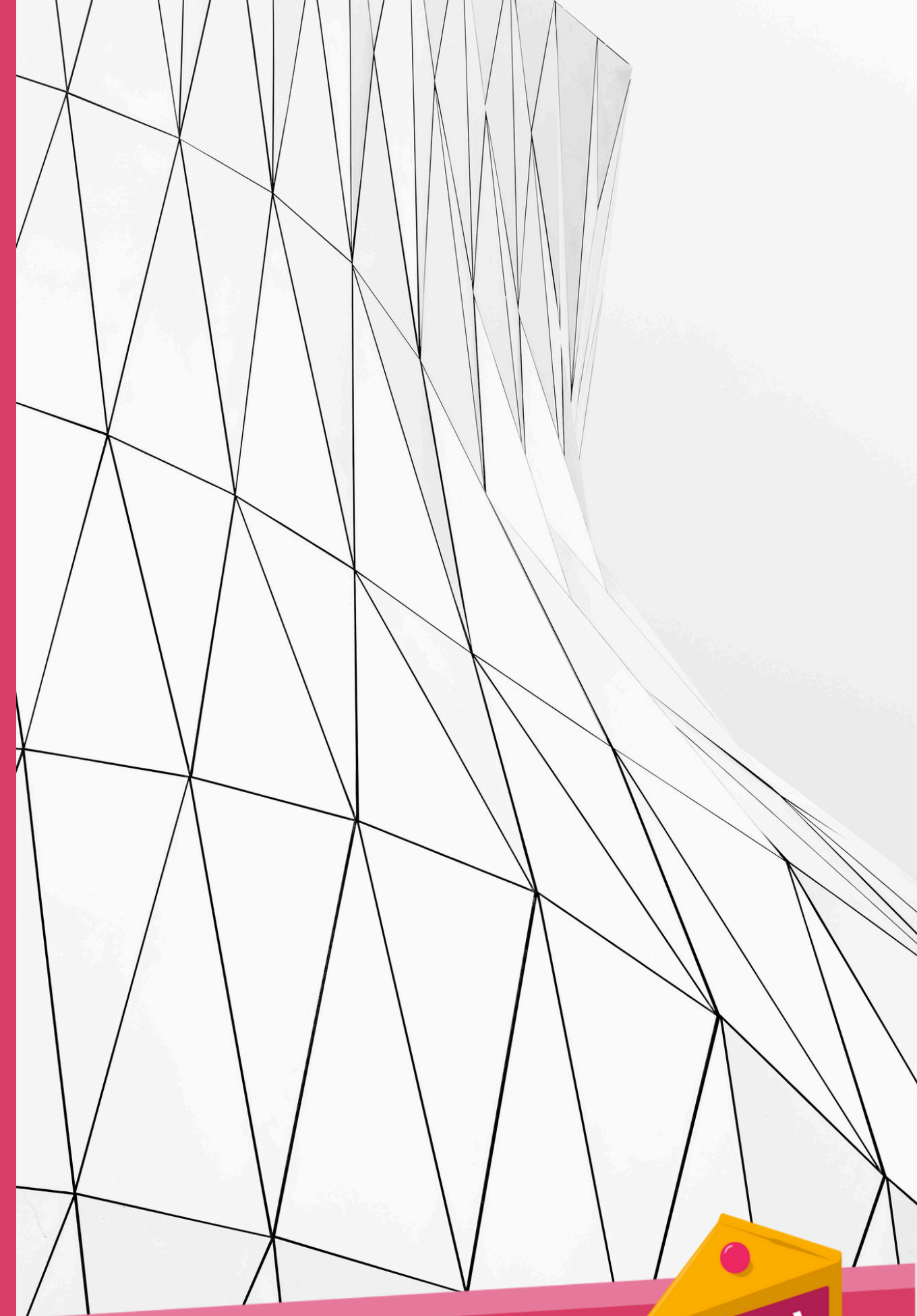
Talk Outline

- Demystifying Terms
- Business Value of AI : What
- Business Value of AI: How
- Process of Developing AI
- Applications Practical Limitations
- Business Challenges
- There is a Hope
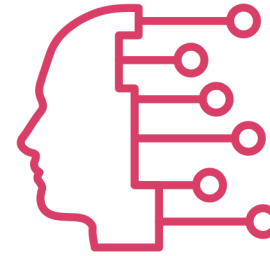- Framework for Successful AI Business

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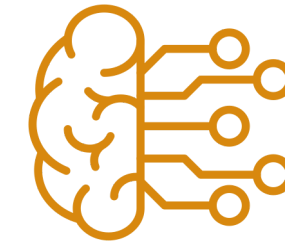A meetup hosted by our community

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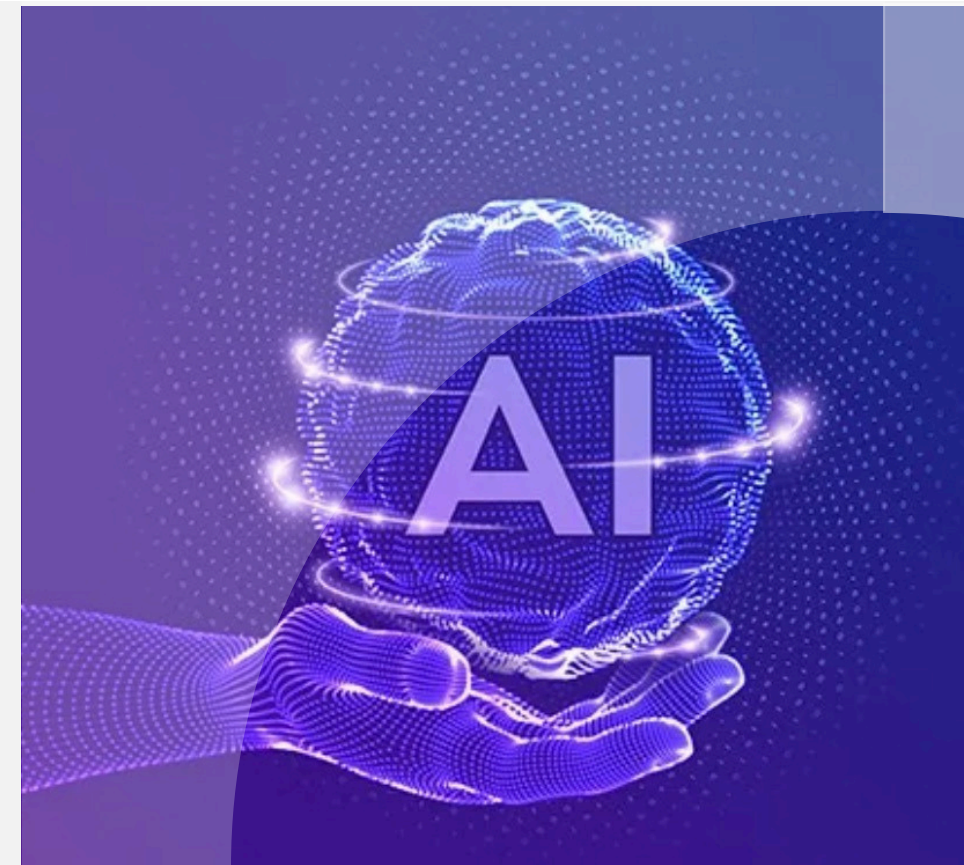
Demystify Terms

Data Science

Itis a broad field of study pertaining to data systems and processes, aimed at maintaining data sets and deriving meaning out of them.

Artificial Intelligence

Machines or computers that mimic cognitive functions that humans associates with human mind such as learning and problem solving

Machine Learning

Machine Learning is the study of computer algorithms that improve automatically through the experience without the need for explicit programming.

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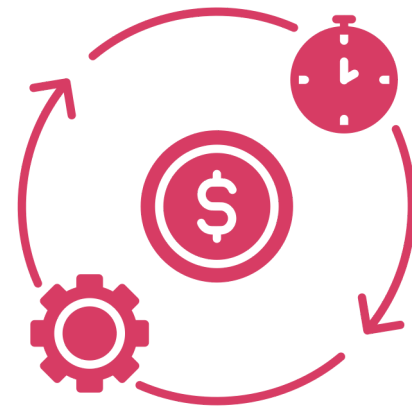# Business value of AI: What

Reduce Cost

Increase Revenue

Create New Value

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Business value of AI: How

Efficiency

- Cheaper
- Faster

Create New Value

- New Business Model
- New Customer Segment

Process of Developing AI Applications

Start → Business Understanding

Data Acquisition & Understanding
· Data Source
· Pipeline
· Environment
· Wrangling, Exporation & Cleaning

Modeling
· Feature Engineering
· Model Traning
· Model Evaluation

Deployment
· Scoring
· Performance
· Monitoring, etc

Model Store
Web Service
Intelligent Applications

Customer Acceptance → End
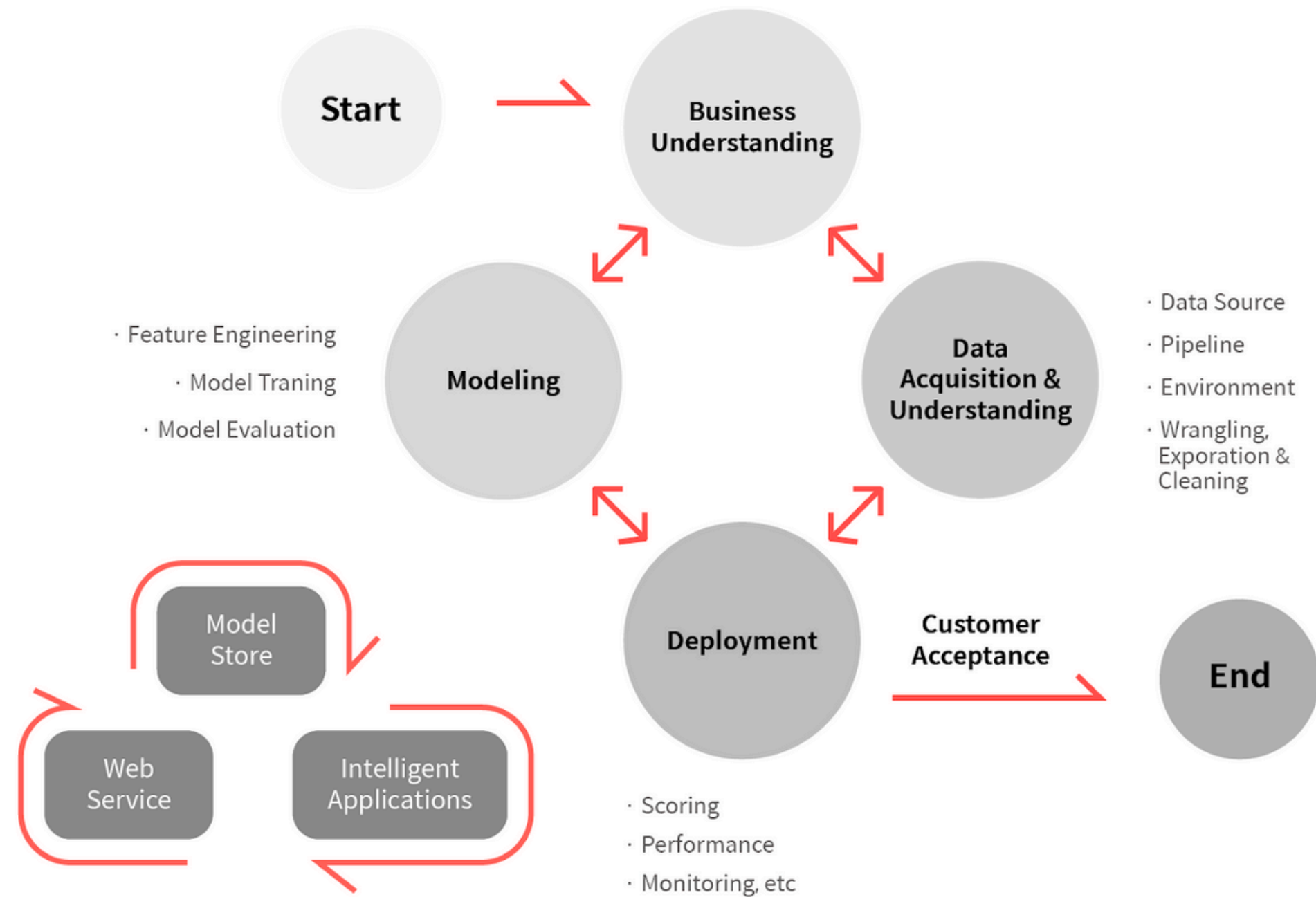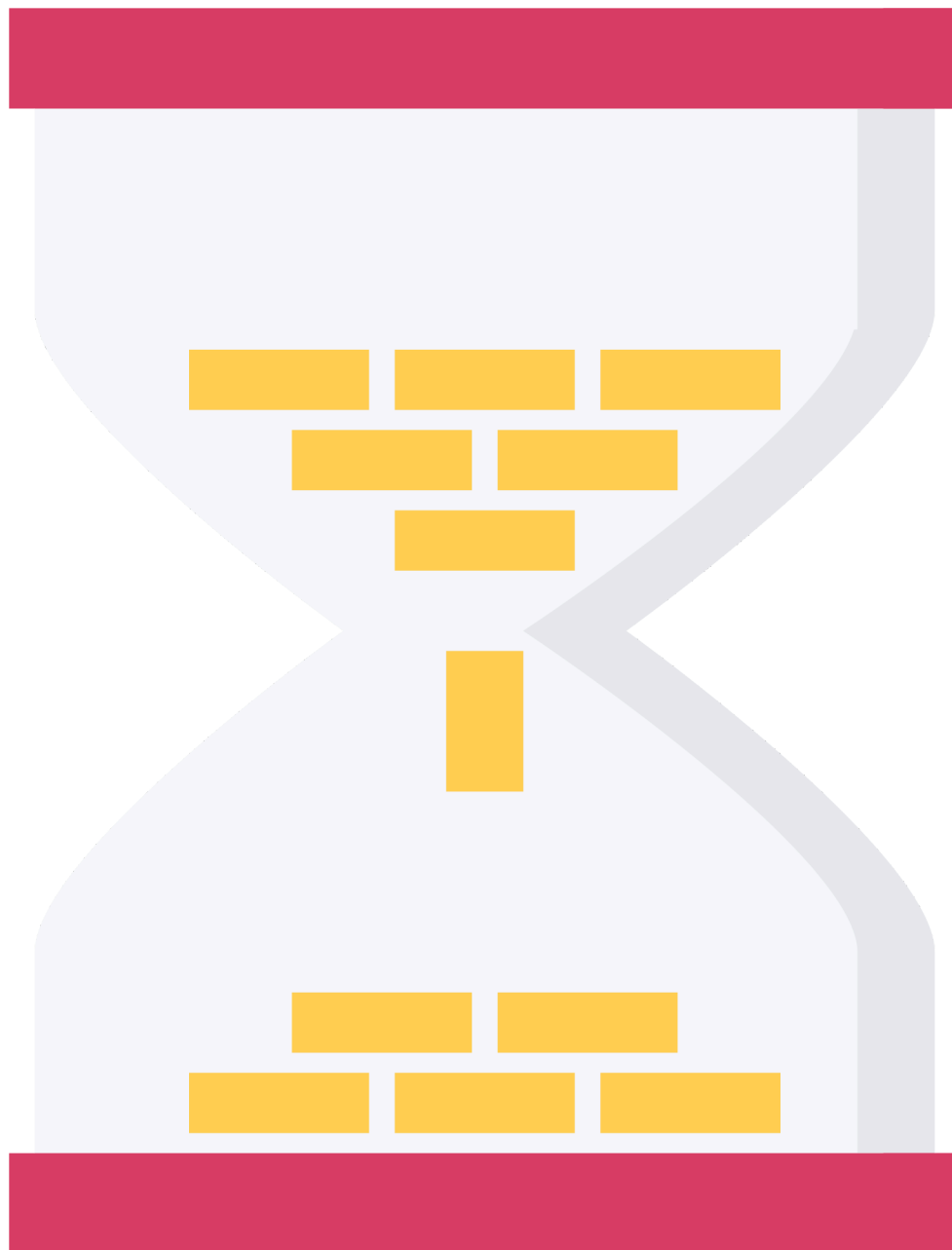
Image Credit: http://programmersought.com/article/250152726/

Practical Limitations of AI Applications

01 ## Data Hungry

AI Algorithms are too data-hungry. They require a large amount of data to learn and operate effectively .

02 ## Data Bias

It presumes that data is unbiased.

03 ## Environment

It assumes that the environment in which it operates is stable

04 ## Causal Model

It is great at learning and identifying correlation, but does not determine causality
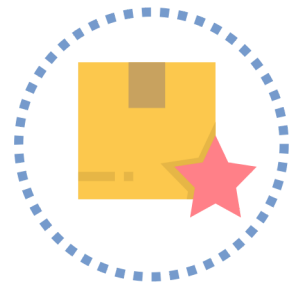
05 ## Domain

It does not build on any prior knowledge of the domain

06 ## Knowledge Sharing

Limited transfer learning capabilities and is unable to generalize from one situation to another

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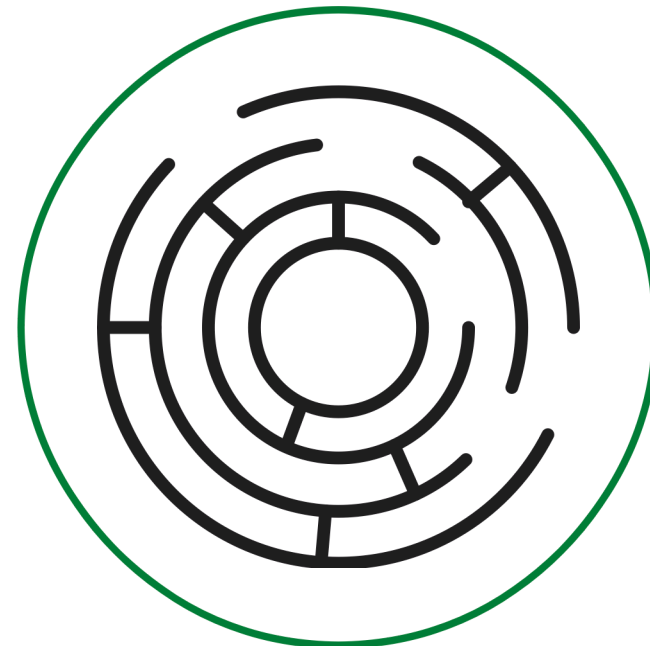# Business Challenges of AI

Novelty
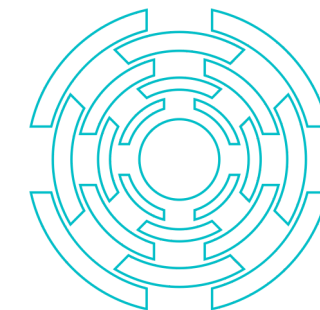
High Expectations

Unclear Regulations

Right Team and Talent
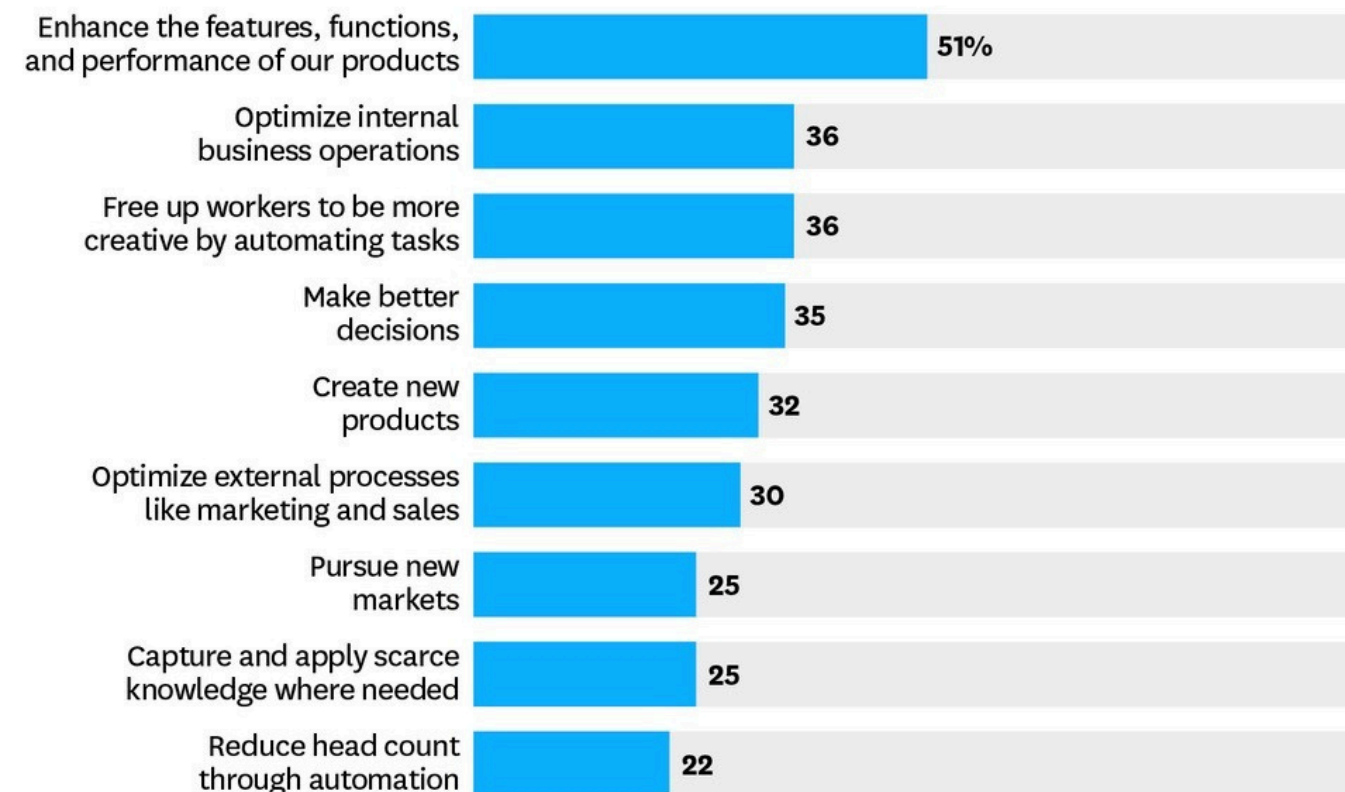
Data

Bias and Opacity

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There is a Hope: A survey report with Top executives

The Business Benefits of AI

We surveyed 250 executives who were familiar with their companies' use of cognitive technologies to learn about their goals for AI initiatives. More than half said their primary goal was to make existing products better. Reducing head count was mentioned by only 22%.

PERCENTAGE OF EXECUTIVES WHO CITE THE FOLLOWING AS BENEFITS OF AI

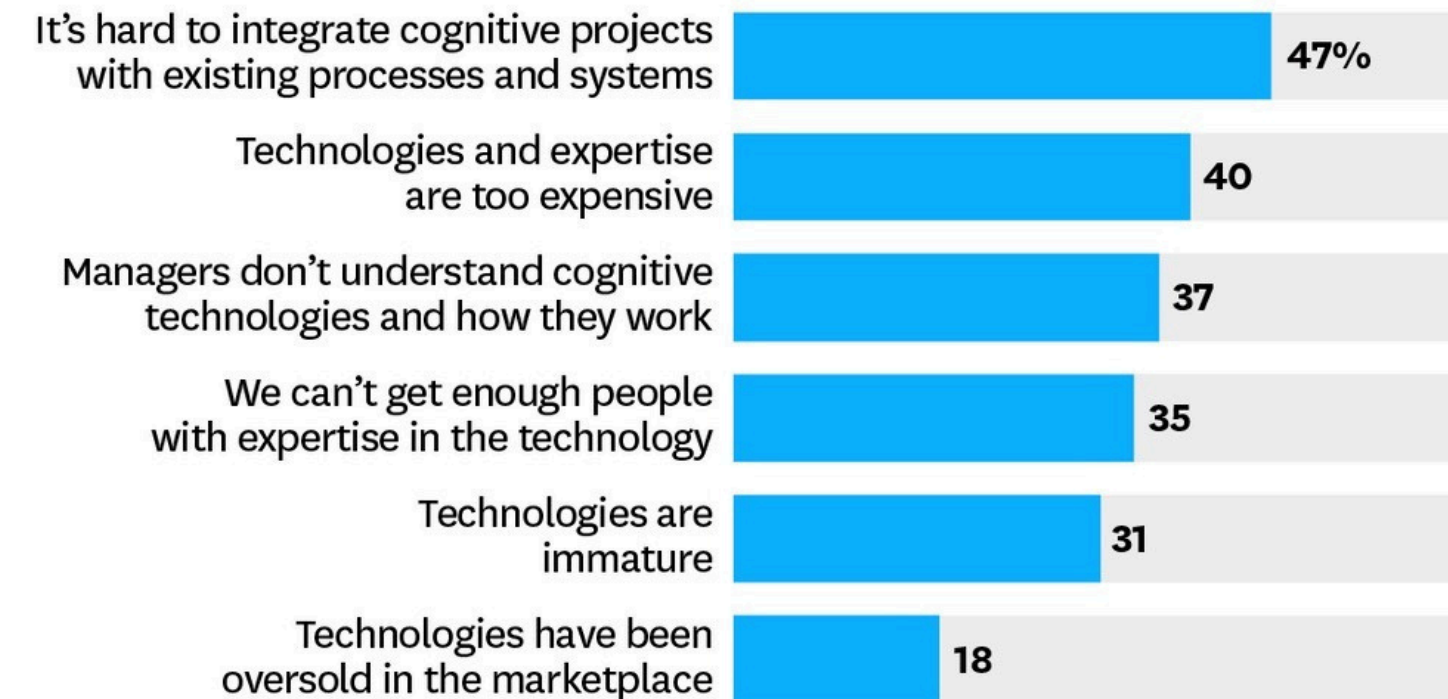| Benefit	%
Enhance the features, functions, and performance of our products	51%
Optimize internal business operations	36
Free up workers to be more creative by automating tasks	36
Make better decisions	35
Create new products	32
Optimize external processes like marketing and sales	30
Pursue new markets	25
Capture and apply scarce knowledge where needed	25
Reduce head count through automation	22

SOURCE DELOITTE 2017
FROM "ARTIFICIAL INTELLIGENCE FOR THE REAL WORLD,"
BY THOMAS H. DAVENPORT AND RAJEEV RONANKI, JANUARY–FEBRUARY 2018

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The Challenges of AI

Executives in our survey identified several factors that can stall or derail AI initiatives, ranging from integration issues to scarcity of talent.

PERCENTAGE WHO CITE THE FOLLOWING AS OBSTACLES

Obstacle	%
It's hard to integrate cognitive projects with existing processes and systems	47%
Technologies and expertise are too expensive	40
Managers don't understand cognitive technologies and how they work	37
We can't get enough people with expertise in the technology	35
Technologies are immature	31
Technologies have been oversold in the marketplace	18

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There is a Hope: A survey report with Top executives
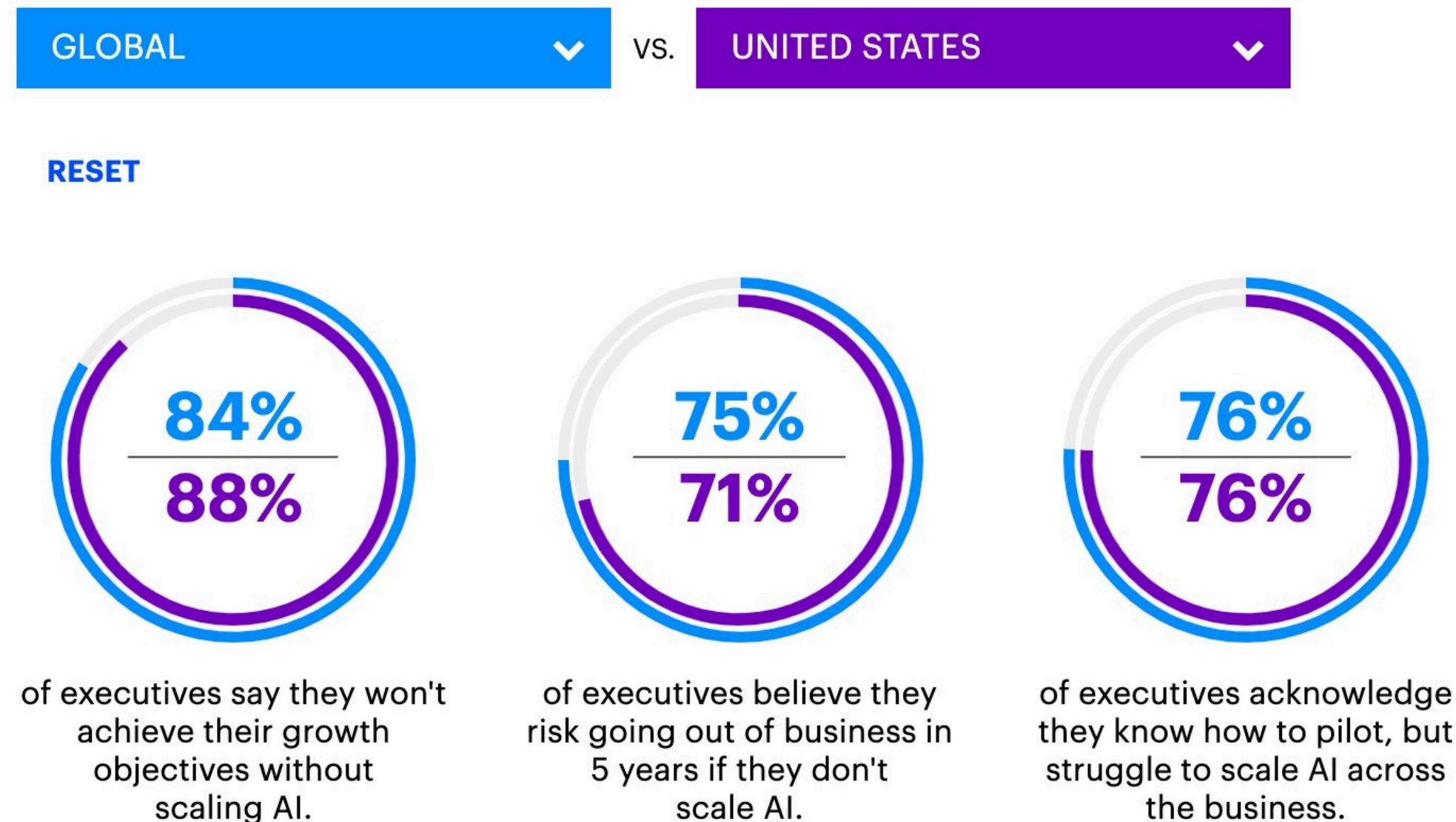
Image source: AI Built to scale, Accenture Research Report, Nov 2019

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Framework for Successful AI Business
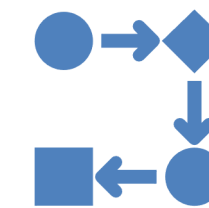
Technology
Understand the Technology

Portfolio
Create a Portfolio

Experiment
Don't hesitate in Experimentation

Scale
Generate Business value

Stay Connected!!

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