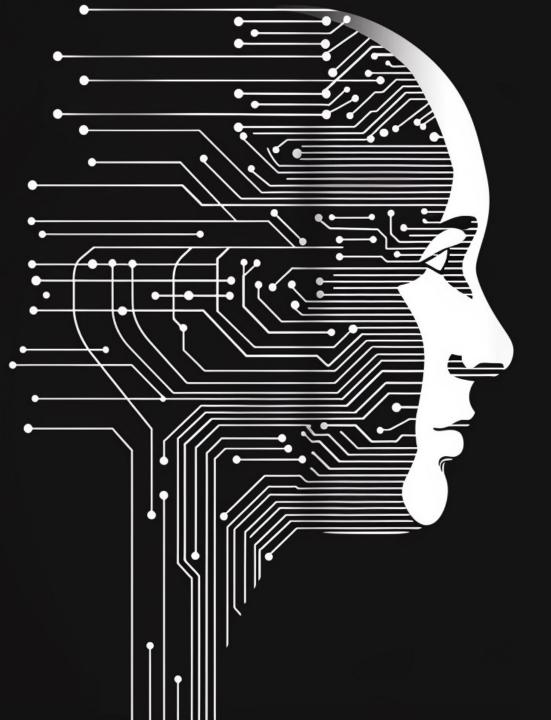


# Unleashing the Power of Data & AI to Drive Business Value and Innovation

By Fatih Nayebi, Ph.D. – World Al Summit Americas – April 25, 2024



# About Fatih Nayebi

Vice President, Data & Al at ALDO

Faculty Lecturer at

**McGill** 

# MOST BUSINESS ARE NOT PATIENT WITH AI

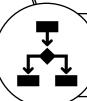
Buzz or Hype?

### Humans vs. Al



### **Learning & Recognition**

• Machine Learning / Deep Learning: Supervised, Unsupervised, Semi-Supervised, Self-Supervised, and Reinforcement



### **Decision Making**

• Causal Inference, Optimization, and Operations Research



#### **Content Generation**

• Generative AI, Foundation Models, and Large Multi Modal Models (LMMs)



### **Action & Execution**

• Robotic Process Automation (RPA), Al Agents, and Physical Robots

Quick Wins are Key to Achieve Tangible Business Benefits with Al





# FIND REAL **BUSINESS PROBLEMS**

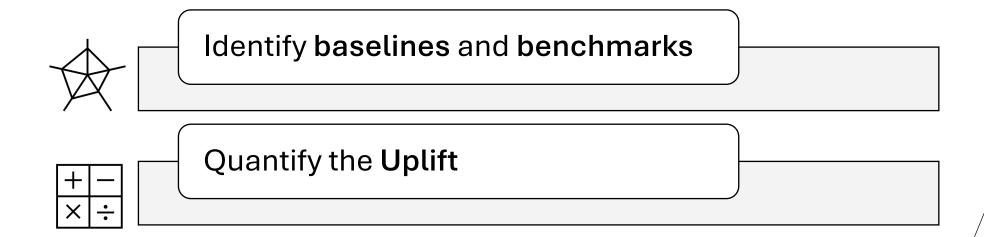
Bring your Research Mindset Select easy-to-implement use cases



## **EXPERIMENT FIRST**

Extract and sample production data
Leverage Pre-built AI models and Fully
Managed Machine Learning (ML) Services
Build preliminary models to test potential
and feasibility

## PROVE THE VALUE

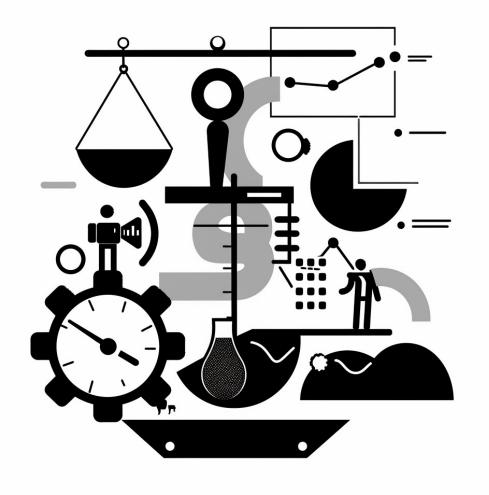


What is good enough?

# FOCUS ON VALUE-ADDED

To Align with Business Objectives





# AIM FOR IMPROVED **DECISION-MAKING**

Target Co Intelligence

Optimize impactful business objectives

**Prescribe treatments** 



# AN OPTIMAL PRODUCT TEAM

Who should be part of the Al Product team?

# **NO ONE WANTS** TO BE LEFT-OUT



# **FOSTER AN** INNOVATION **CULTURE**

Curiosity

Research & Growth Mindset

Diversity

Interdisciplinarity

# ESTABLISH AI PRODUCT MANAGEMENT



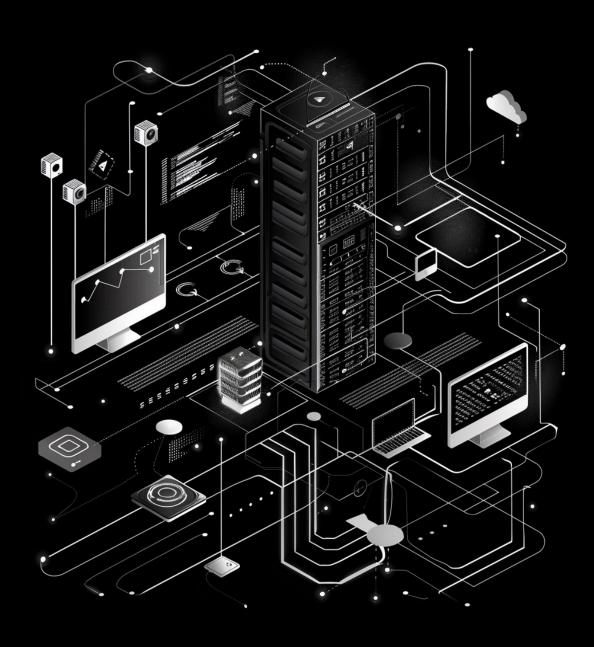
**Appoint a Product Leader** 



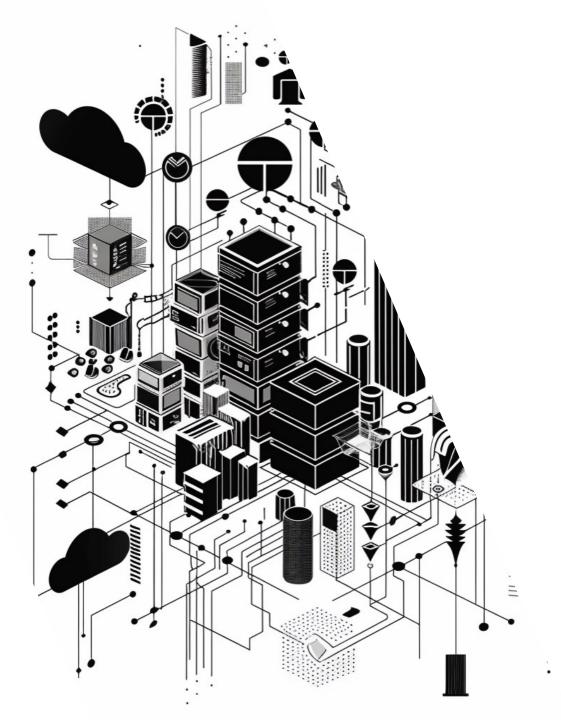
**Avoid Feature Teams** 



Do not fall into Rigid Agile Trap



# ESSENTIAL TOOLS & SERVICES



# LEVERAGE CLOUD AND MANAGED **SERVICES**

To Enhance Scalability and **Reduce Initial Cost** 

## **ESSENTIAL** TOOLS & FRAMEWORKS\*

### **Data Processing** and Analysis

 Pandas, Numpy, Scipy, PySpark, Data Pipelines, Seaborn

### **Machine Learning** and Deep Learning

 Scikit-Learn. PyTorch, HuggingFace

### **Model Deployment** and Monitoring

 AWS SageMaker, Azure ML, Databricks, and Monitoring tools

### DevOps

• Git, Docker, CI/CD Pipelines, Observability, and Infra as Code (laC)

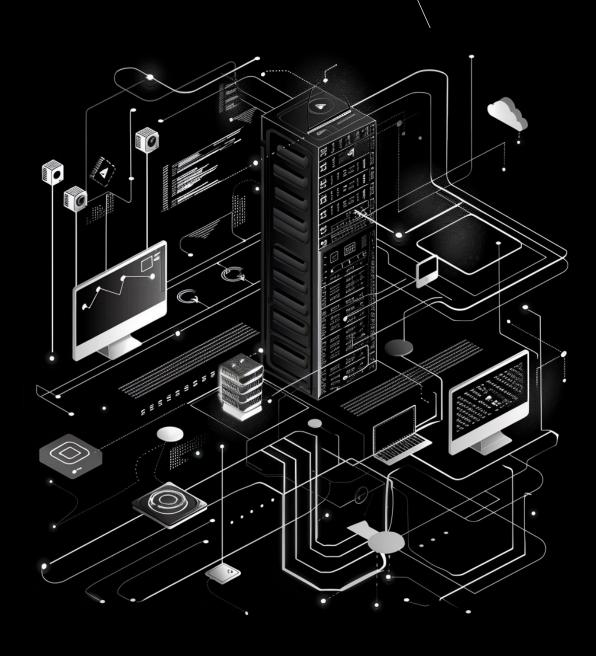
#### Gen Al

 OpenAl Assistants API. FastAPI, and Vector DB

<sup>\*</sup> This is an opinionated list based on Fatih's experience

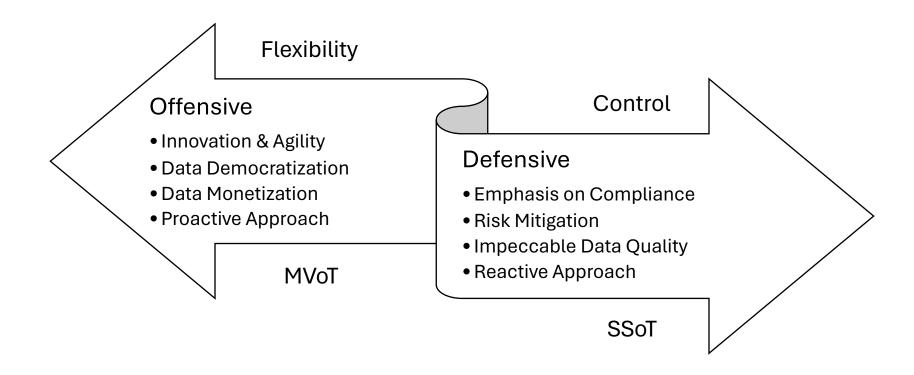
# **FOLLOW AN MLOPS MATURITY** MODEL

**MLOps Maturity** 



# GOVERNING DATA & MANAGING CHANGE

## ESTABLISH DATA GOVERNANCE STRAT

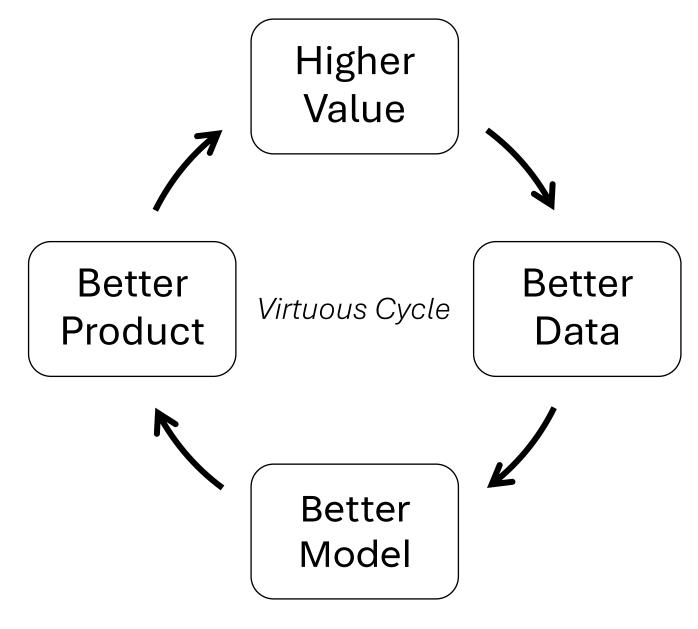


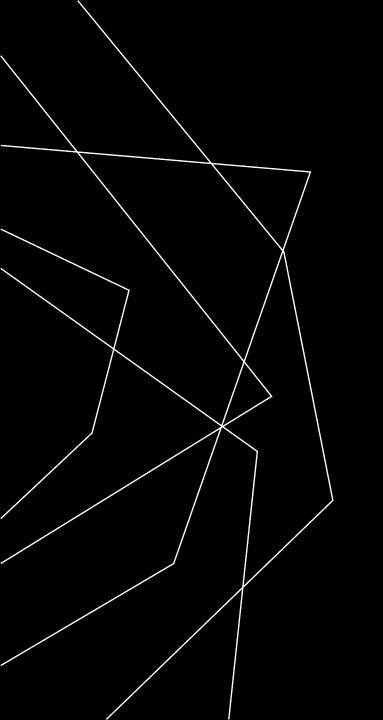
**SSoT**: Single Source of Truth **MVoT**: Multiple Version of Truth

### EMBRACE TRANSPARENT AI

Establish a Data & Al Literacy Program Practice AI responsibly, ethically, and transparently Examine Accuracy-Explainability Trade-off Address potential biases and privacy concerns

BEWARE OF **FLYWHEEL** EFFECT & **ESTABLISH A FEEDBACK** LOOP





# THANK YOU!

Let's keep the conversation going

"ChatGPT is not your AI strategy" - Brian Evergreen