



By the end of the decade there will be two kinds of companies:

- 1. Those who fully utilize AI; and
- 2. Those who are out of business

## Understanding Artificial Intelligence (AI)





Who Is This Man?

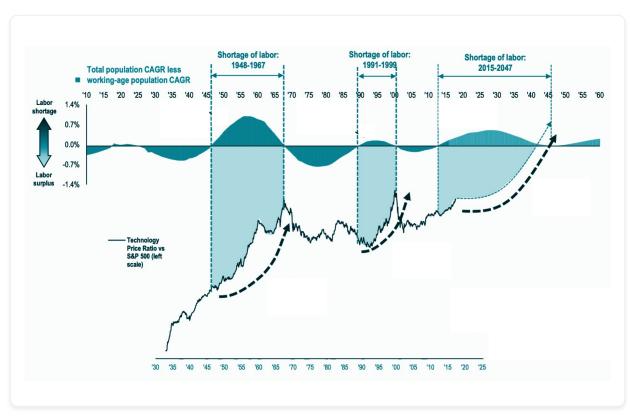
**How Did Your Brain Do That?** 



## We are facing a Global Labor Shortage

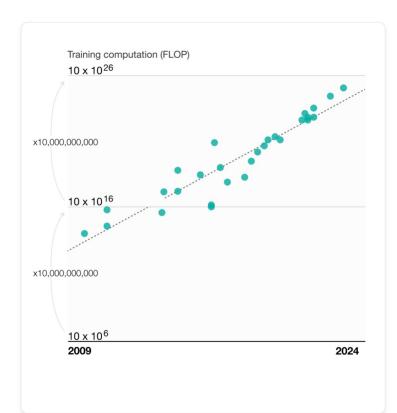
Comparative relative performance of US Technology stocks during periods of US labor shortage: 1930now

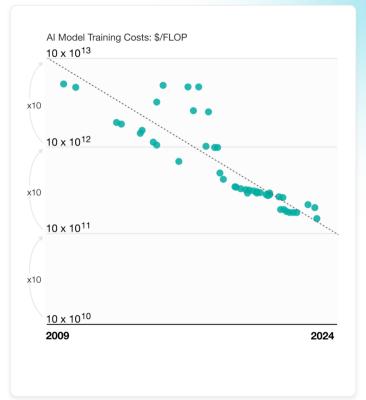
Source: Fundstrat, Bloomberg, US Census Bureau, UN DESA





### Democratization of Computing Power





Sources: Epoch AI, Nvidia, CPP Investments Analysis, Google DeepMind, OpenAI

\$72.1B

Funding for AI startups spiked to

\$72B

in 2021 post-pandemic.

Source: Statista

\$23.7B

2018

\$31.1B

2019

\$32.5B

)20

2022

202

\$46.2B

\$40.0B

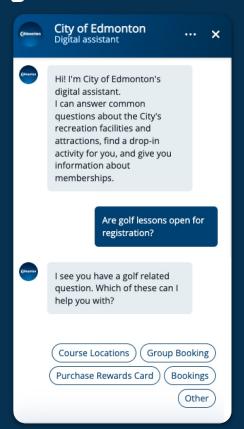
### **Then and Now**

# The AI Space is Rapidly Evolving

	2021	2024
Research & Development	<b>7</b> Foundational models released	149 Foundational models released
Technical Performance	<b>60%</b> Accuracy of multi-modal models	<b>90%</b> Accuracy of multi-modal models
Policy & Governance	<b>1</b> Regulatory Framework	<b>5+</b> Regulatory Frameworks
Adoption	56%	72%



### Building a Chatbot: Then and Now







# Operationalizing AI is Hard.

According to a recent Mckinsey Global Survey, only 36% of AI use cases are operationalized.

# Key Learnings in the Adoption of Al





#### Government of Alberta (GoA)

### Wildfire Resource Scheduling



### **Opportunity**

- Optimizing expenses
- Scheduling efficiency



#### **AI/ML Solution**

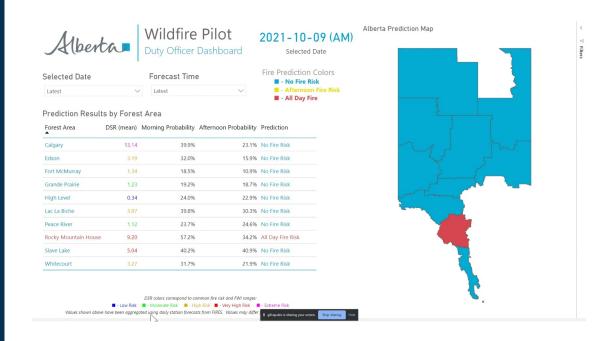
Machine learning



### **Impact**

- \$2-\$5M in equipment operation costs and crew overtime expenses
- Improved fire safety

# Forecasting Tool to Enable Schedule Efficiency and Optimize Expenses





### **Drilling Technology Vendor**

# Smart Power Notification



### **Opportunity**

- Operational Efficiency
- ESG Targets



#### **AI/ML Solution**

• Time Series Forecasting



### **Impact**

- \$3.0M to 6.0M USD in Fuel Cost Savings
- Reduction of 15-20M Kg of Co2 emissions

# Optimizing Energy Consumption to Reduce Costs and GHG Emissions





### By the Numbers

### A Few Statistics

Poll of companies in the Society for Corporate Governance in the U.S.

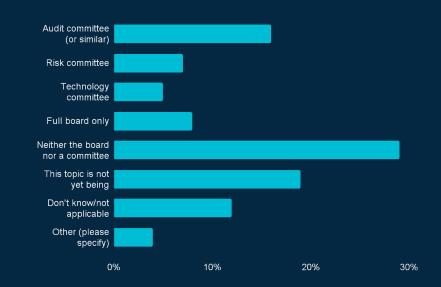
66%

of Boards have had Al on the agenda

49%

of companies already have or are working on AI frameworks, policies or codes of conduct

Where does primary oversight for AI reside at the Board level:





## Important Board Questions



**RAI Principles** 



**Risk Tolerance** 



**AI Regulations** 



**Adoption Mitigations** 



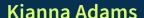
**Ongoing Maintenance** 



**Projected ROI** 



# Thank You



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