Lessons learned from AI in enterprise

Rajen Sheth, Vice President of Product, Cloud AI & ML
Welcome to NCSA Mosaic, an Internet information browser and World Wide Web client. NCSA Mosaic was developed at the National Center for Supercomputing Applications at the University of Illinois in Urbana-Champaign. NCSA Mosaic software is copyrighted by The Board of Trustees of the University of Illinois (UI), and ownership remains with the UI.
Over the next decade every business will be transformed through AI
AI has transformed nearly every Google product

Used across products:

- Google
- Android
- Play Store
- Chrome
- Maps
- Drive
- YouTube
- Gmail
- Photos
- Assistant
- Waymo
- Cloud
- AlphaGo
Domains with the most practical advancement

- Vision
- Conversation
- Language
- Structured Data
Personalized customer interactions

Efficiency & agility

Spotting patterns and trends

Adding structure to your data
Major benefit to many industries

- Retail
- Government
- Energy
- Media & Entertainment
- Gaming
- Financial Services
- Manufacturing
- Healthcare & Life Sciences
- Technology
- Marketing
Businesses are still nascent in their AI journey

I know I should use AI, but why?

I know why I need AI, but how?

I know why and how, but what tools?
Who can actually use AI today?

Very few people can create custom ML models today.
Some other major challenges with AI

- **Use Case**: Is it mission critical, or is it just cool?
- **Trust**: Can I trust AI, and what are the implications?
- **Deployment and integration**: 60% of models intended for production never see the light of day.
- **Data**: Data is scarce or hard to use.
Solving the talent and data gap: AutoML

Controller: proposes ML models

Train & evaluate models

Iterate to find the most accurate model

20K times
Solving the talent gap: Teach the world
Changing workforce

Bias in the data

Impact of the use of AI
Google AI Principles

**AI should:**

1. be socially beneficial
2. avoid creating or reinforcing unfair bias
3. be built and tested for safety
4. be accountable to people
5. incorporate privacy design principles
6. uphold high standards of scientific excellence
7. be made available for uses that accord with these principles

**Applications we will not pursue:**

1. likely to cause overall harm
2. principal purpose to direct injury
3. surveillance violating internationally accepted norms
4. purpose contravenes international law and human rights
Lessons learned in building AI for businesses
Start with your key business objectives
Sometimes the simplest uses are most powerful
Focus on the user experience, not the technology
AI open up new user interaction models

Google Assistant

UBISOFT

Dialogflow Enterprise
AI is a team sport
Think big, and get there a piece at a time