How Emerging Technology will Impact Jobs of Tomorrow
Introductions

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• Evaluating emerging AI and immersive technologies through prototyping to enable enterprise adoption

• Formerly Chief Technologist at Booz Allen Hamilton with a focus on defining impact of emerging technologies on client multi-year plans

• Pioneer for enterprise applications of immersive technology, including training, planning, and operations

• Structure deals connecting innovative startups with large enterprises and governments

• Edge technology startup mentor
Office Work in the 90s

The rise of information technology
Office Work in the 2000s

Globalization and Outsourcing
In the 2010s & 2020s there is a divergence.
Automation is impacting the current workforce, but presents a huge market potential.

Young Americans especially likely to have been impacted by workforce automation

% of U.S. adults in each group who say they have ever personally ____ because their employers replaced their positions (or some aspect of their jobs) with a machine, robot or computer program

- Lost a job
- Had pay or hours reduced


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AI FORECAST

84% Education
74% Accommodation & Food Services
71% Construction
59% Wholesale & Retail
55% Healthcare
53% Agriculture, Forestry & Fishing
46% Social Services
44% Transportation & Storage
39% Manufacturing
36% Other Services
31% Financial Services
27% Public Services
26% Arts, Entertainment & Recreation
24% Professional Services
17% Information & Communication
9% Utilities

Share-of-profit increase per industry between baseline in 2035 and AI steady state in 2035 in %, Source: Accenture and Frontier Economics.
Office Work in the 2020s and after

Immersive, pervasive, and natural 3D computing
What is AI?

Artificial intelligence (AI) is the research area of how to make machines think and behave in ways that mirror or exceed human behavior.
Booz Allen uses computer vision to identify drone threats and Mixed Reality to help security professionals secure high value targets.
Immersive Edge Computing Examples

Neurable uses BCI for a brainwave-controlled VR gaming.

Valorem’s HoloBeam uses computer vision to detect a body frame and project a holographic representation of a user across location.
Capabilities “As-A-Service”

Leverage the gig-economy for labor when you need it
Skills for the Future Workforce

Activity

- Synthesizing Barriers and Enablers
- Crowdsourcing of Solutions
- Hypothesis testing and root cause and data analysis
- Analysis of alternatives and socialization or plan of action
- Technical evaluation and prototyping

Skills

- Research skills
- Creativity
- Project management
- Data science
- Communication skills
- Technical foundational skills and basic coding
KEY TAKE-AWAYS

- Technologies are emerging that will fundamentally change how we interface with computing tools.
- Robotic Process Automation and Industry 4.0 are automating the trades.
- AI is enabling tool to assist decision support and creativity.
- “As-a-service” offerings should inform “Build v. Buy” decisions.
- Future workforce will value solutions architect and project managers more than technicians.