Artificial Intelligence and the Evolving Workforce

A presentation from the
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The Ohio State University Alumni Association
go.osu.edu/alumnicareermanagement
Your Career Management Team

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Career Management

- Programs/Resources
  - Web resources, job board, webinars, programs, career fairs, individual career advising (in-person and remotely). Visit: go.osu.edu/alumnicareermanagement for more info

- Career Changes
  - Launching
  - Transition
  - Underemployment
  - Unemployment
  - Encore Career

- A Lifelong Process
  - Assessment
  - Exploration/Research
  - Personal Branding
  - Networking/Job Search
  - Professional Development
AGENDA

• DEFINING AI
• CURRENT UTILIZATION OF AI
• PREDICTIONS OF FUTURE UTILIZATIONS
• SKILLS IN DEMAND FOR THE FUTURE
• PREPARING FOR THE FUTURE OR WORK
• SAMPLE JOBS OF 2030
• Q/A
What is Artificial Intelligence (AI)?

DEFINITION: “AN AREA OF COMPUTER SCIENCE THAT EMPHASIZES THE CREATION OF INTELLIGENT MACHINES THAT WORK AND REACT LIKE HUMANS” (SOURCE: TECHOPEDIA.COM)
How are we using AI now?
Can you think of any other examples?
Fourth Industrial Revolution

1st Industrial Revolution
Steam
1760-1820

2nd Industrial Revolution
Electricity
1820-1900

3rd Industrial Revolution
Computing
1900s

4th Industrial Revolution
Intelligence
Today
62% of hiring managers across industries believe that AI will change how we work within the next 5 years.

54% of today's employees will require significant upskilling by 2022.

According to a study by McKinsey & Company, the rise of automation could push 70 million+ U.S. workers to look for new work within the next 11 years.

Nearly 66% of companies expect workers to adapt and pick up skills as they pursue new positions.

Accenture is predicting that AI could boost U.S. labor productivity by 35% by 2035.
MORE FLUID GIGS
IMPORTANCE OF LIFELONG LEARNING
DECENTRALIZED WORKFORCE
MOTIVATION TO WORK
TECHNOLOGY WILL AUGMENT HUMANS’ JOBS
# Top 10 skills

<table>
<thead>
<tr>
<th>in 2020</th>
<th>in 2015</th>
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<tbody>
<tr>
<td>1. Complex Problem Solving</td>
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<tr>
<td>2. Critical Thinking</td>
<td>2. Coordinating with Others</td>
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<tr>
<td>3. Creativity</td>
<td>3. People Management</td>
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<td>4. People Management</td>
<td>4. Critical Thinking</td>
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<tr>
<td>5. Coordinating with Others</td>
<td>5. Negotiation</td>
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<tr>
<td>6. Emotional Intelligence</td>
<td>6. Quality Control</td>
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<td>7. Judgment and Decision Making</td>
<td>7. Service Orientation</td>
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Source: Future of Jobs Report, World Economic Forum
WHICH SKILLS WILL BE NEEDED?

Studies show that the strongest growth is expected in technological skills, including both basic digital skills and more advanced technological skills.

Demand for higher cognitive skills, social and emotional skills is also expected to rise.

These softer skills are becoming the new hard skills desired in our workforce.
Soft skill intensive occupations in 2000

Soft skill intensive occupations in 2015

Soft skill intensive occupations in 2030

Other occupations

Source: Deloitte Access Economics
Workers will spend...

- 30% more time learning on the job
- 100% more time at work solving problems
- 41% more time on critical thinking and judgment
- 77% more time using science and mathematics skills
- 17% more time per week using verbal communication and interpersonal skills

Workers will use...

Workers will need to develop an entrepreneurial mindset due to

- 26% less management
- 14% less organisational coordination
- 10% less teaching
How do we prepare for the future?
Organic Voltaics Engineer
Technology, Utilities and Infrastructure

Furniture Refurbishing Technician
Manufacturing and Construction

Recyclable Design Specialist
Manufacturing and Construction

Systems Tangilizer
Technology

Integrated Roofing Systems Designer
Agriculture, Manufacturing and Construction, Technology

Source: http://careers2030.cst.org/jobs/
Marketing eMediamaker Professional Services
Big Data Wrangler Technology
Agroecologist Agriculture
Multi-Marketer Technology
Purchase Prediction Analyst Culture and Recreation, Professional Services
Wearable Technology Therapist Healthcare
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