AI & Economic Development: An Introduction

INTERNATIONAL ECONOMIC DEVELOPMENT COUNCIL

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Introduction to IEDC

The Economic Development Council (EDC) is a professional association dedicated to supporting and advancing the field of economic development. It serves as a central hub for economic developers, providing them with valuable resources, training, and networking opportunities. The EDC focuses on promoting best practices, innovative strategies, and cutting-edge research to help its members foster economic growth, create jobs, and enhance the quality of life in their communities.

In late 2021, New CEO, Nathan Ohle took the helm of IEDC. Under Nathan's leadership, IEDC is growing significantly, prioritizing not just traditional development, but expanding in the areas of rural development, equitable development, entrepreneurship and other emergent economic development strategies.

Introduction to AI at IEDC

AI at Conferences

2024 Annual - 8 Sessions

2024 EFF – 3 Sessions

2024 Leadership –1 Tour, 1 Meetup

AI Research

2023 Fall EDRP Report

Upcoming Research

AI Engagement

Discovery Round Tables

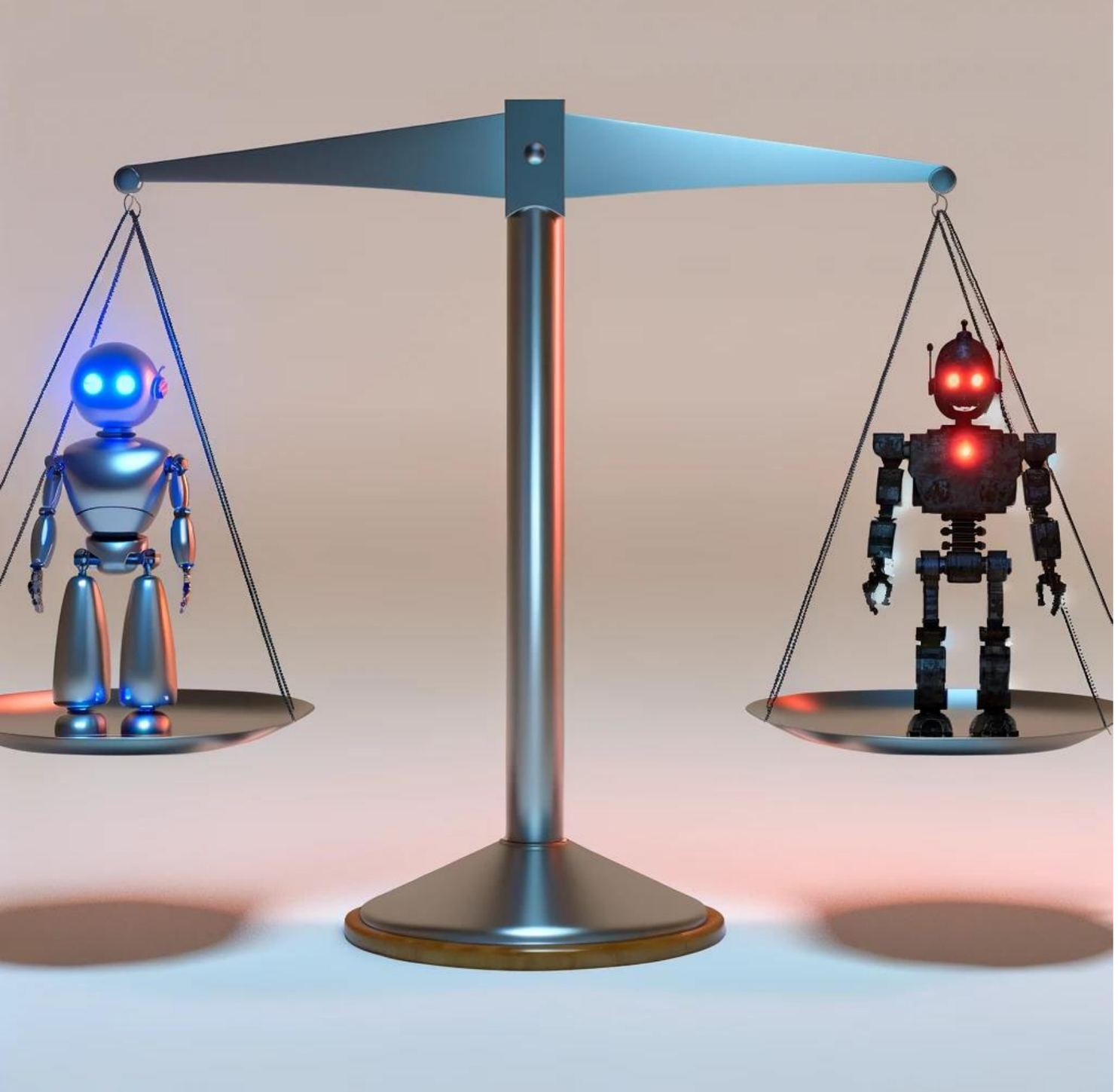
Presentations

AI Course (2025)

https://www.iedconline.org/

Me and my technology in 3rd grade!

Who remembers how awesome this game was?



The Economic Development Side of AI

Emily’s Small Business Use Case Example

Content Creation

- Use a generative AI writing tool to draft reports, proposals, and blog posts
- Saves time and resources on content creation while maintaining quality

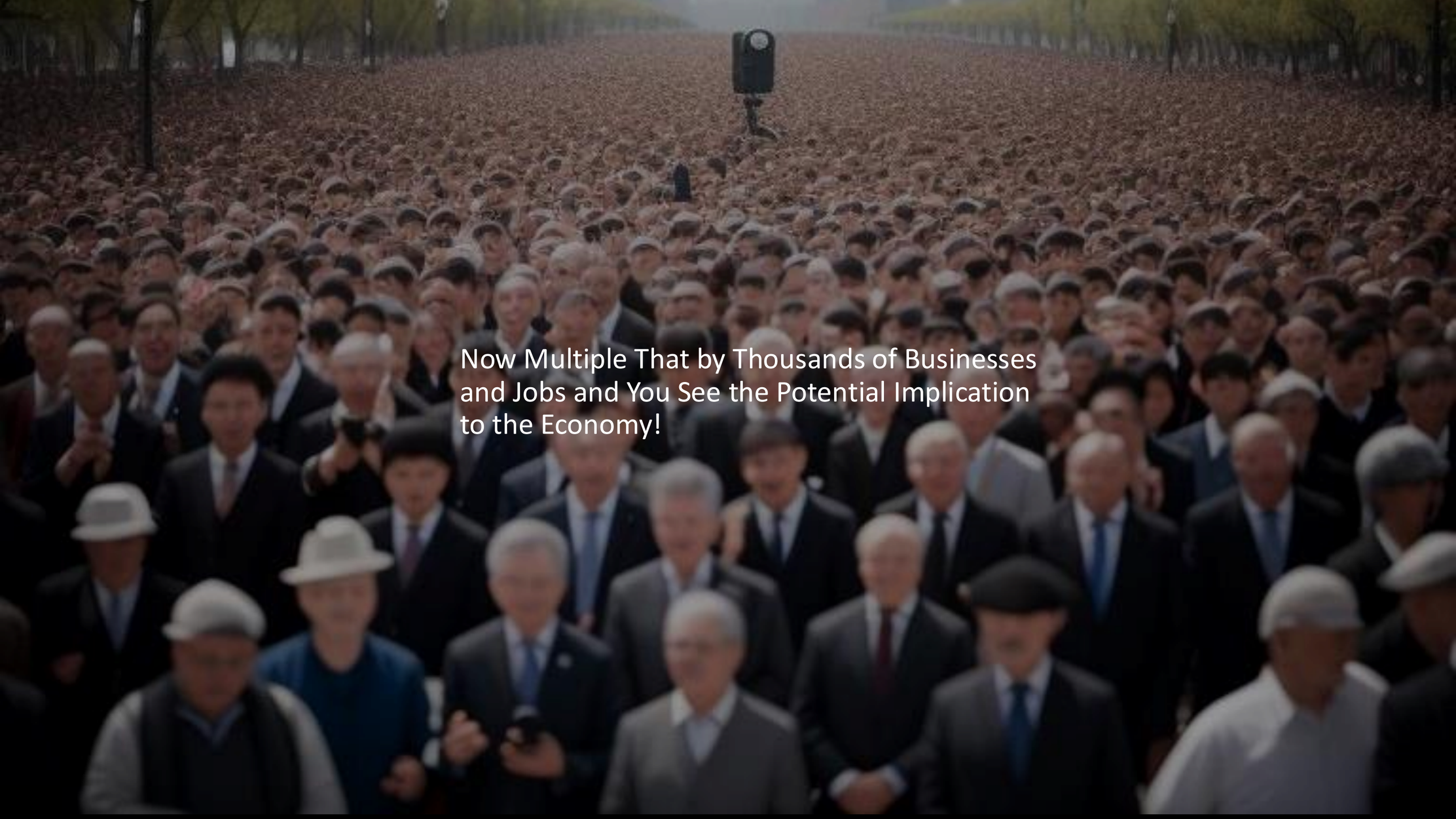
Presentation Design

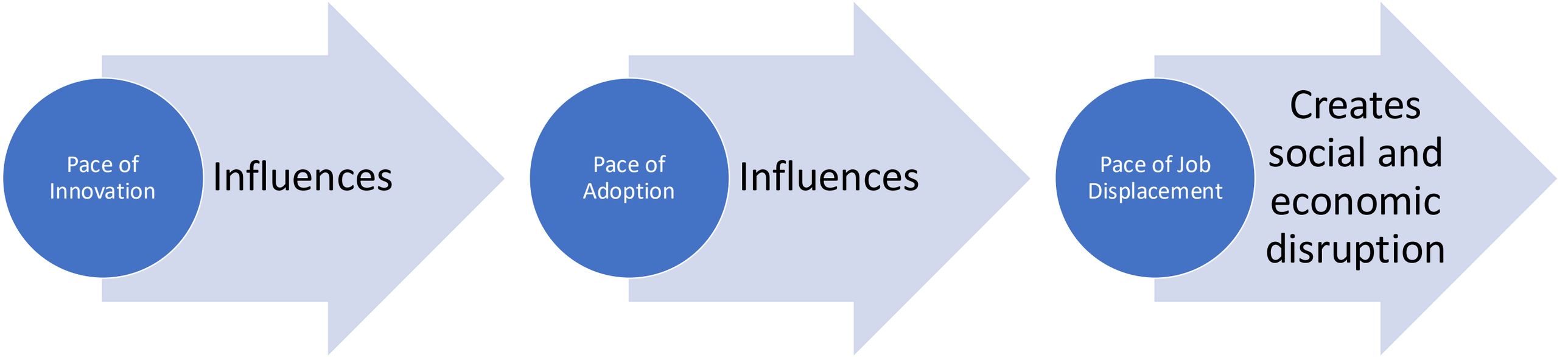
- Utilize a generative AI design tool to create professional-looking presentations
- Reduces the need for outsourcing design work or hiring a full-time designer

Branding and Marketing Materials

- Leverage generative AI to create logos, business cards, and marketing collateral
- Eliminates the cost of hiring a branding agency or graphic designer

But What About The Business Owners Who Lost Business Because Emily Used AI?


Now Multiple That by Thousands of Businesses
and Jobs and You See the Potential Implication
to the Economy!



Economies tend to do pretty well when technological disruption is at a slower pace, and the economy can absorb the change and retrain workers and provide new entrepreneurial opportunities.

The Economic Development Side

The challenge is that the pace of AI is extremely fast and has the potential to destabilize small businesses and workforces more quickly than workforce upskilling and the formation of new businesses can keep up.

While Creating Efficiencies it Will Reduced demand for traditional services

- As AI replaces human-provided services, businesses in affected industries may face declining revenue and layoffs
- This could lead to increased unemployment and economic distress in the short term
- Over the long run it could lead to an increased wealth divide and further challenge the urban / rural divide.

Skill obsolescence and job displacement

- The automation of certain tasks may render some skills less valuable in the job market
- Workers in affected industries may need to reskill or upskill to remain competitive
- This could exacerbate existing inequalities and create challenges for those less able to adapt

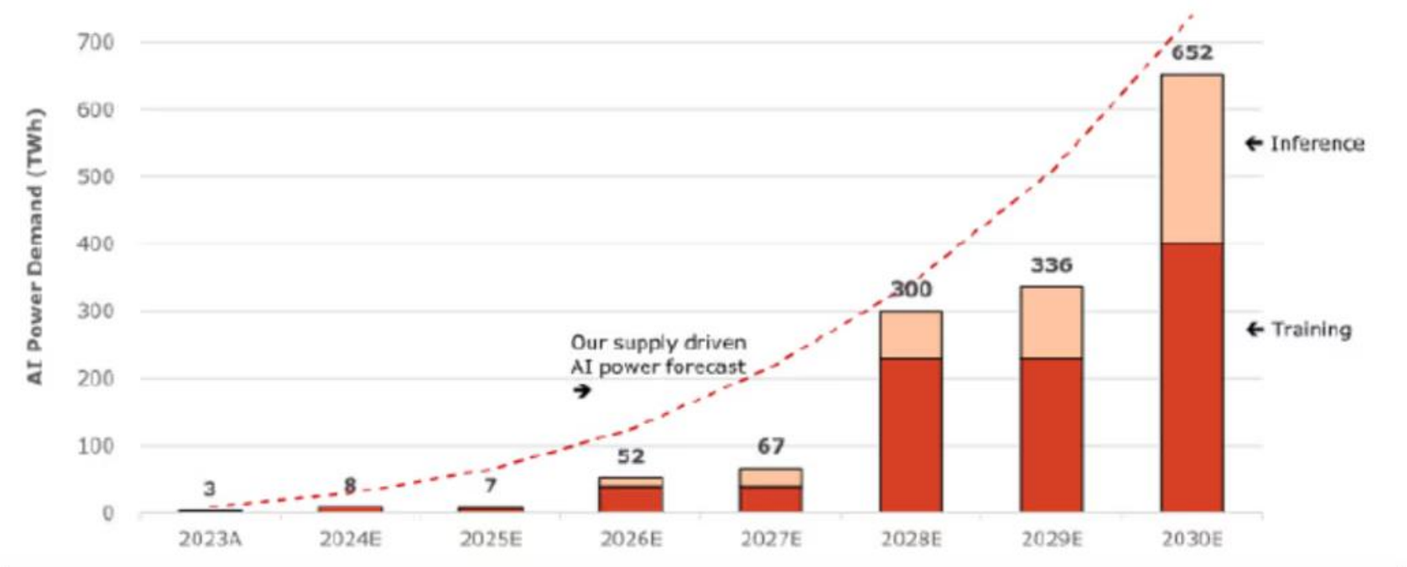
> Picture this: By 2030, it is estimated that AI could affect about 40% of global jobs, with advanced economies having higher exposure (about 60%) due to their focus on more cognitive jobs.

Source: Forbes, *Hype Or Reality: Will AI Really Take Over Your Job?* 2024

AI Will Create Significantly More Power Demands

"In the UK, AI is expected to suck up 500% more energy over the next decade. And in the US, data centers are projected to use 8% of total power by 2030, up from 3% in 2022, according to Goldman Sachs, which described it as "the kind of electricity growth that hasn't been seen in a generation." – **Bloomberg, 2024**

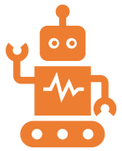
Wells Fargo Projected Power Demand Increase Through 2030



	2023A	2024E	2025E	2026E	2027E	2028E	2029E	2030E
(+) Training power demand (TWh)	3	8	7	40	40	229	229	402
(+) Inference power demand (TWh)	0	0	0	12	27	70	107	250
Demand driven AI power forecast (TWh)	**3**	**8**	**7**	**52**	**67**	**300**	**336**	**652**
Supply driven AI power forecast (TWh)	*9*	*29*	*65*	*125*	*217*	*341*	*506*	*739*

Source: Wells Fargo Securities, LLC estimates

How Economic Developers Can Position Themselves in the AI Wave



Business Attraction

Position the region as an AI-ready destination with robust infrastructure, supportive policies, and a skilled workforce to attract innovative, AI-focused companies.
DO YOU HAVE POWER?

Business Retention

Assist existing businesses in adopting Generative AI technologies and navigating workforce transitions to enhance competitiveness and ensure long-term viability.

Entrepreneurship

Foster an AI-friendly startup ecosystem with access to resources, mentorship, and funding to encourage the creation and growth of AI-driven ventures.

Workforce

Collaborate with educational institutions and training providers to develop AI-focused reskilling and upskilling programs that prepare workers for the evolving job market.

Economic Development & Workforce

Skills and Workforce Development in AI Related Tech Fields

- **Identifying Key Skills**: Economic developers need to understand the key skills required for AI-related roles, such as data analysis, programming, machine learning, and critical thinking.
- **Training Programs**: Collaborate with educational institutions to develop training programs and workshops focused on AI and related technologies.
- **Upskilling and Reskilling**: Encourage continuous learning and professional development for current employees to adapt to new AI-driven processes and technologies.

Economic Development & Workforce

- **Upskilling Your General Workforce in AI**
- **Educational Partnerships:** Collaborate with universities, community colleges, and online platforms to offer specialized courses, certification programs, and workshops. Foster internships and apprenticeships to provide hands-on experience.
- **Community Learning Centers:** Establish local learning hubs equipped with AI tools and resources. Partner with businesses for sponsorship and expertise. Conduct outreach campaigns to raise awareness and promote participation.
- **Targeted Workforce Initiatives:** Develop industry-specific training programs and supportive policies. Advocate for government incentives and funding. Encourage continuous professional development and create networks for knowledge sharing.

Considerations for EDOs Using AI

Considerations of AI Use for your Organization

Privacy and Security

Ethics

Operational Cost of Adopting AI Tools

Considerations of AI Use for your Organization

Privacy and Security

Economic development organizations must prioritize privacy and security to protect sensitive data when adopting generative AI tools. Failure to do so can lead to data breaches, loss of stakeholder trust, and potential legal liabilities. Organizations should look for AI solutions that offer robust encryption, compliance with data protection regulations, and features that ensure secure data storage and transmission. Also, they should at how companies like ChatGPT are using the data that is uploaded through chats. Many now have “opt outs” so that your chats cannot be used for training.

A good rule of thumb -> If you would not want it to be placed on social media, you might not want to put it into generative AI.

Considerations of AI Use for your Organization

Ethical Considerations

Generative AI can raise ethical concerns regarding copyright, as the content it generates may inadvertently infringe on existing intellectual property rights, leading to potential legal disputes and ethical dilemmas. Organizations should ensure that their AI tools are designed to respect copyright laws by using legally sourced training data and implementing safeguards to avoid generating content that violates intellectual property rights.

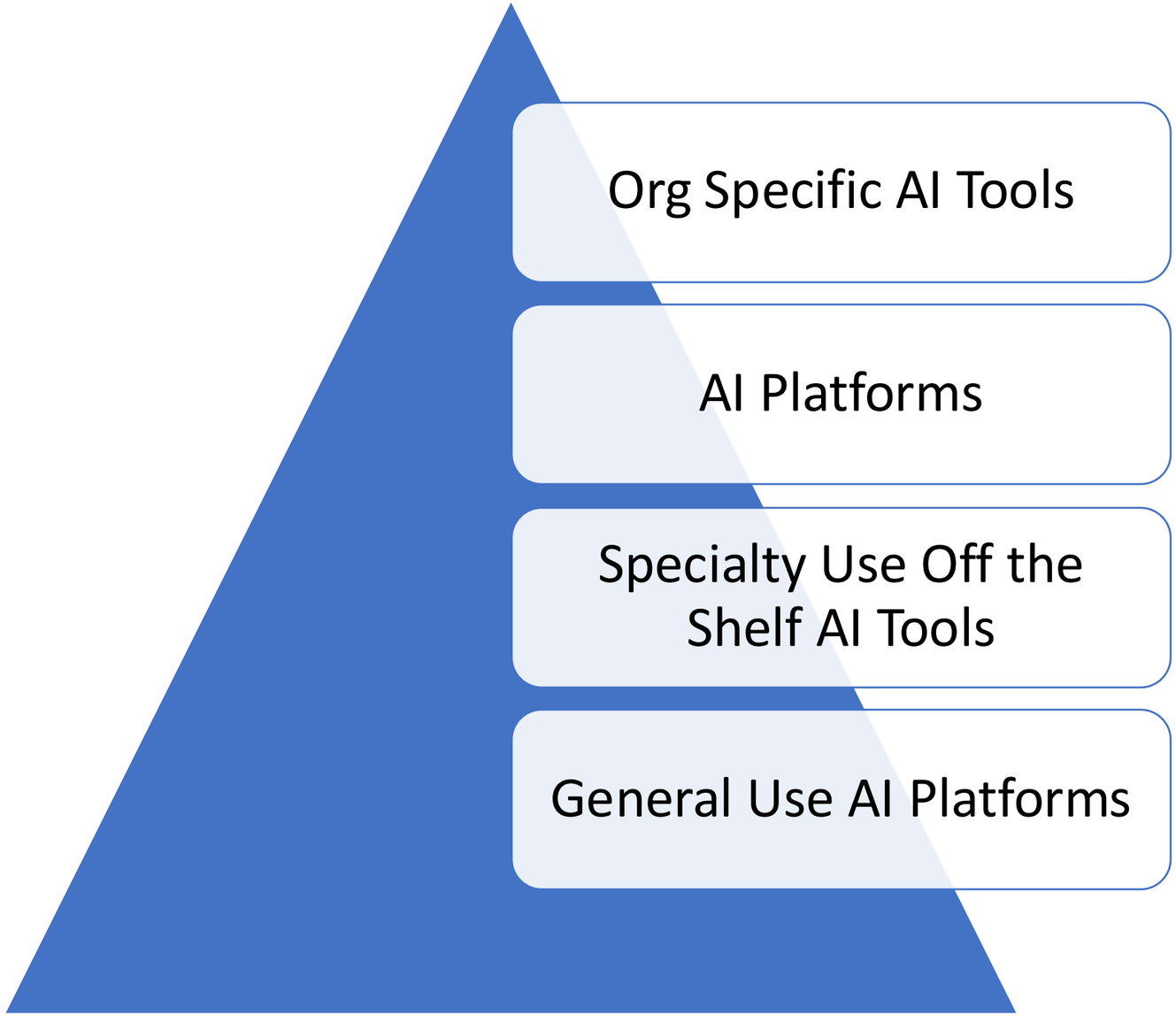
Considerations of AI Use for your Organization

Operational Cost

Organizations should carefully evaluate the operational costs of adopting generative AI to ensure it is financially sustainable and provides a clear return on investment. This involves assessing both the initial implementation expenses and the ongoing costs of maintenance and training. Organizations should seek cost-effective AI solutions that offer scalability, reliable support services, and integration with existing systems to maximize value and efficiency.

General Use Tools

Types of AI Adoption for your Organization



ChatGPT: Versatile AI Assistant

Multi-modal Capabilities

Handles text, images, and custom models.

Wide-ranging Applications

Excels in diverse tasks and exports.

Comprehensive Solution

Ideal for complex, multi-faceted projects.

Claude: Business Writing Powerhouse

1 **Professional Document Creation**

Excels in formal business writing formats.

2 **Project Management**

Organizes documents and chats within projects.

3 **Advanced Analytics**

Strong in qualitative and quantitative analysis.

Google Gemini: Workspace Integration

1

Google Services Access

Seamlessly connects with Drive, Docs, and email.

2

Document Analysis

Notebook LM for large-scale document processing.

3

Streamlined Workflow

Enhances productivity across Google Workspace ecosystem.

Perplexity: AI-Powered Search

Web Searches

Conducts AI-driven, high-validity online searches.

Source Validation

Ensures accuracy with robust source verification.

Result Storage

Saves search findings for future reference.

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