

AI & AUTOMATION: SHAPING THE FUTURE OF WORK

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01 Impacts of Technology

02 Fourth Industrial Revolution

03 AI and AI Centric Workforce

04 Keys to Implementing AI



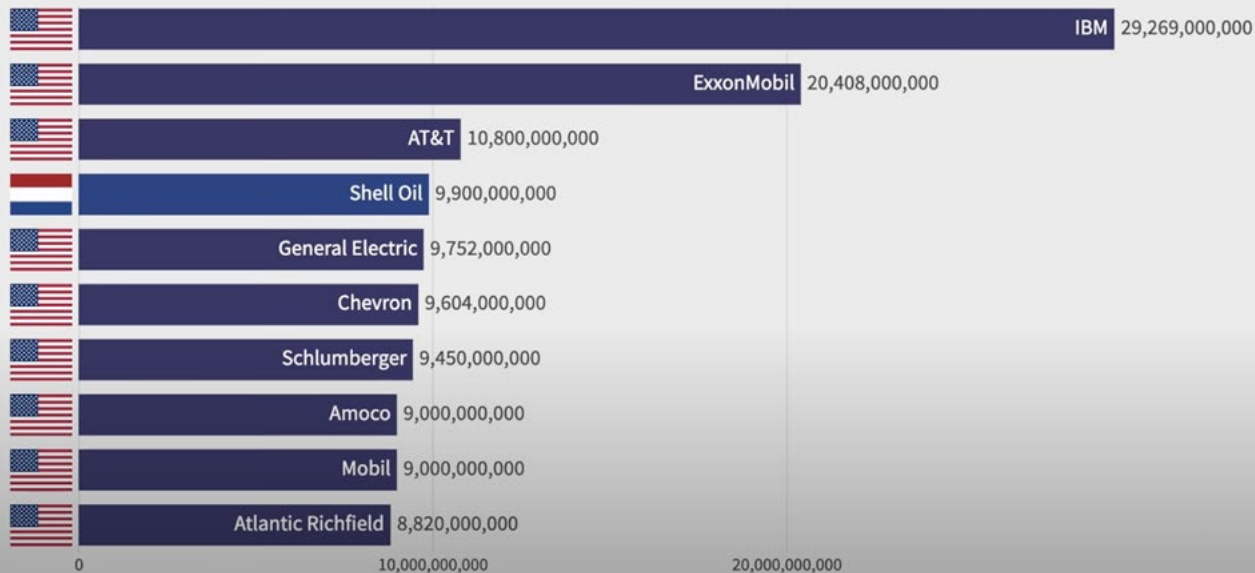
01

Impacts of Technology

Largest Companies by Market Cap

In US Dollars

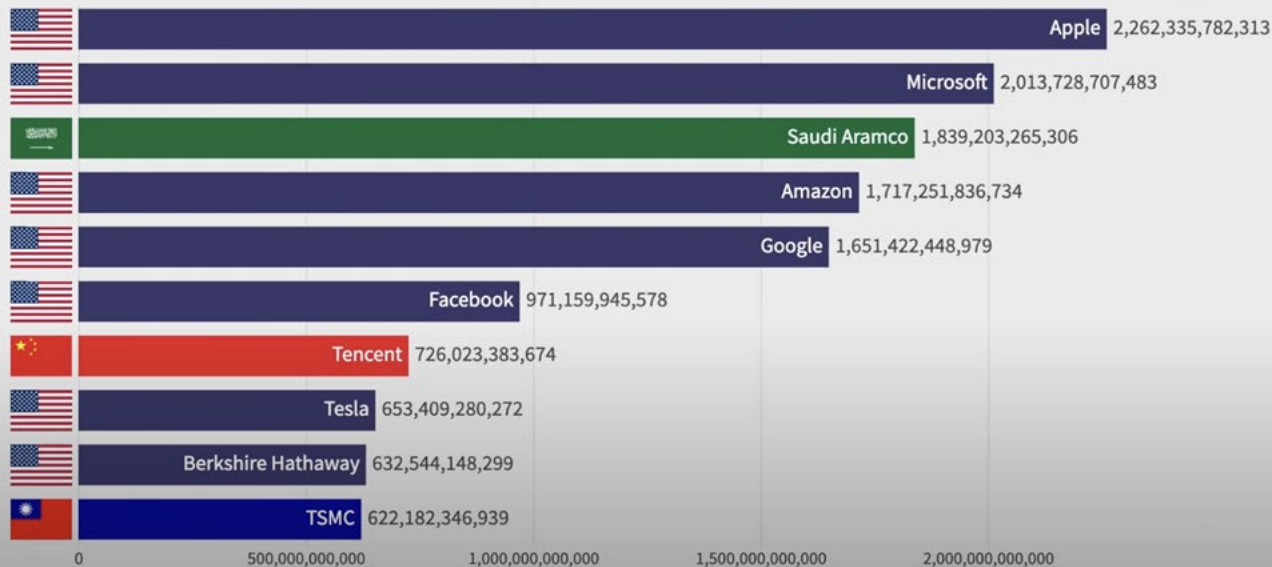
1979



Largest Companies by Market Cap

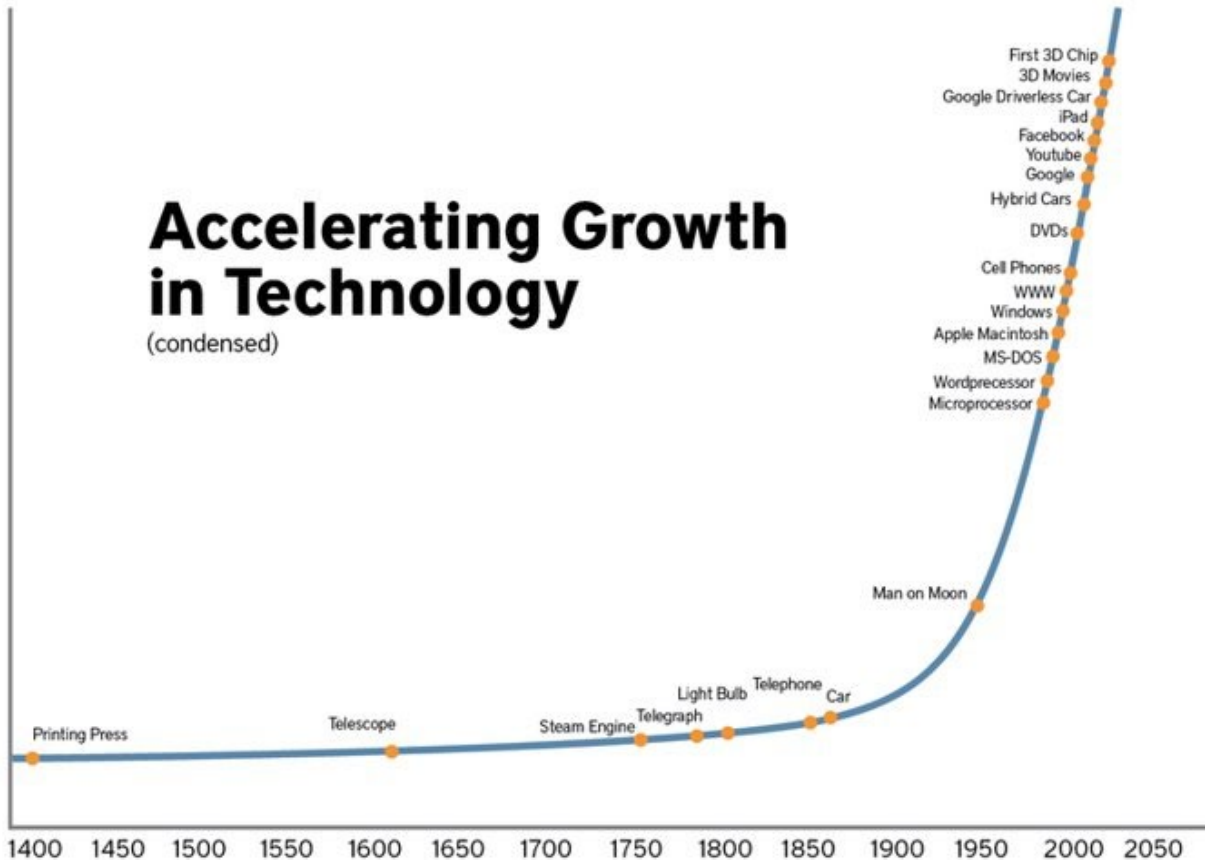
In US Dollars

2021



Accelerating Growth in Technology

(condensed)



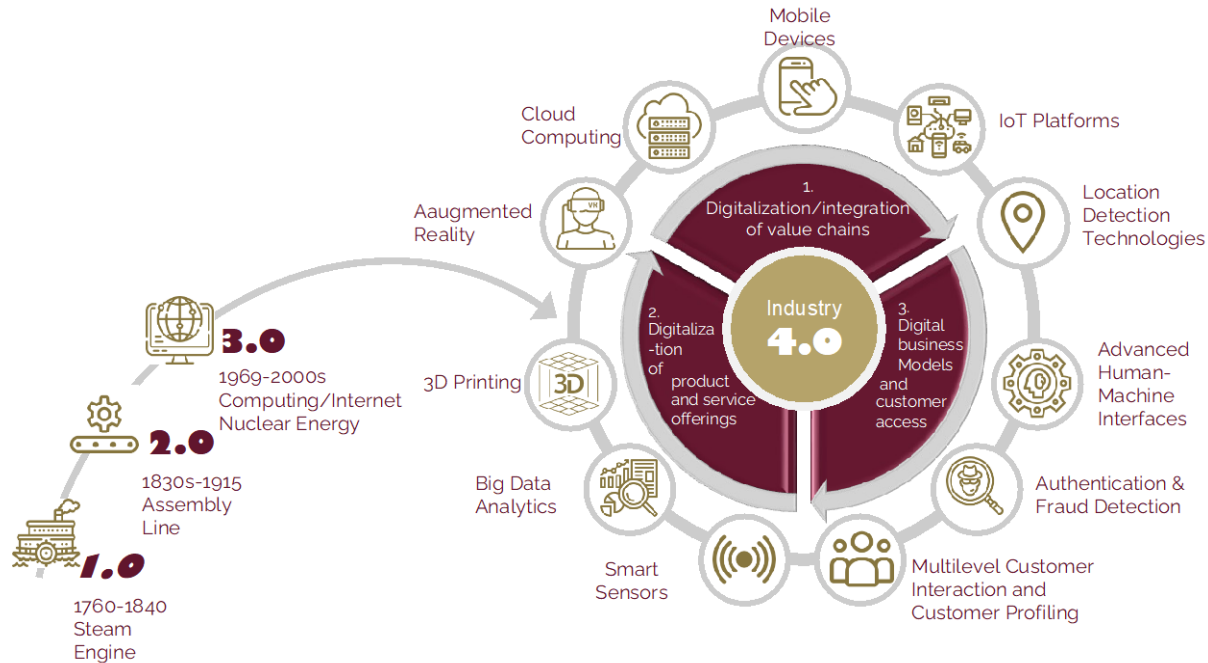
Source: Asgard
Human Venture
Capital for Artificial
Intelligence

The background features a dark red overlay on a blurred image of a person's hands holding a smartphone. Scattered across the background are several red icons: a hand holding a cube, a person wearing a headset, a gear with a checkmark inside, a cube with a dollar sign, a factory with smoke, a circuit board, and a hand holding a cube.

02

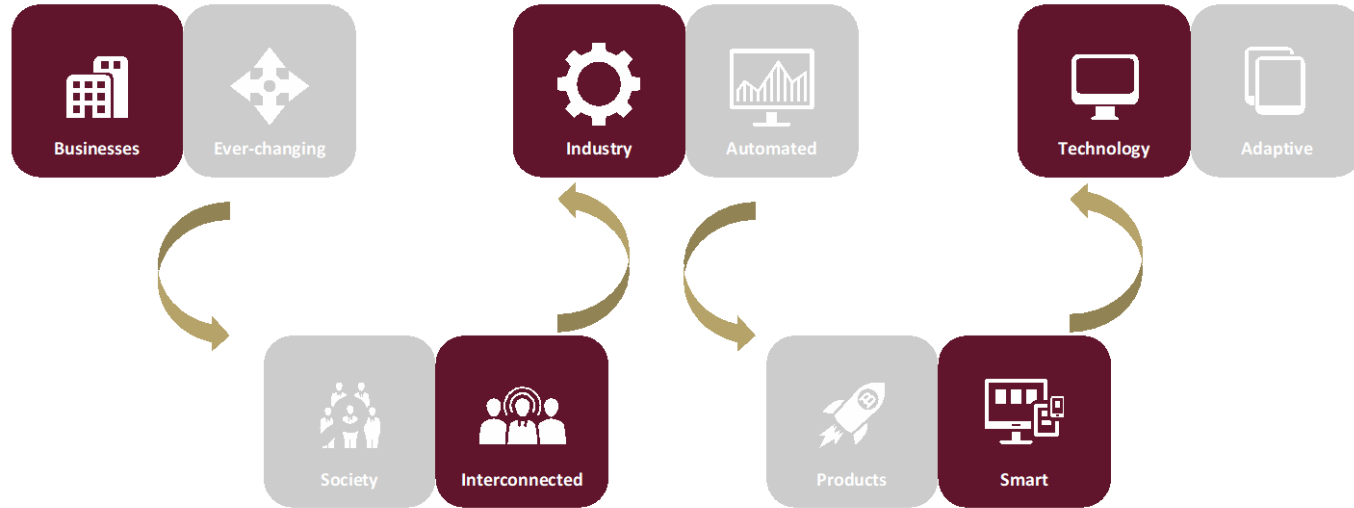
Fourth Industrial Revolution

FOURTH INDUSTRIAL REVOLUTION



Source: ICT Works

INDUSTRY 4.0 – CHANGE OF MODEL



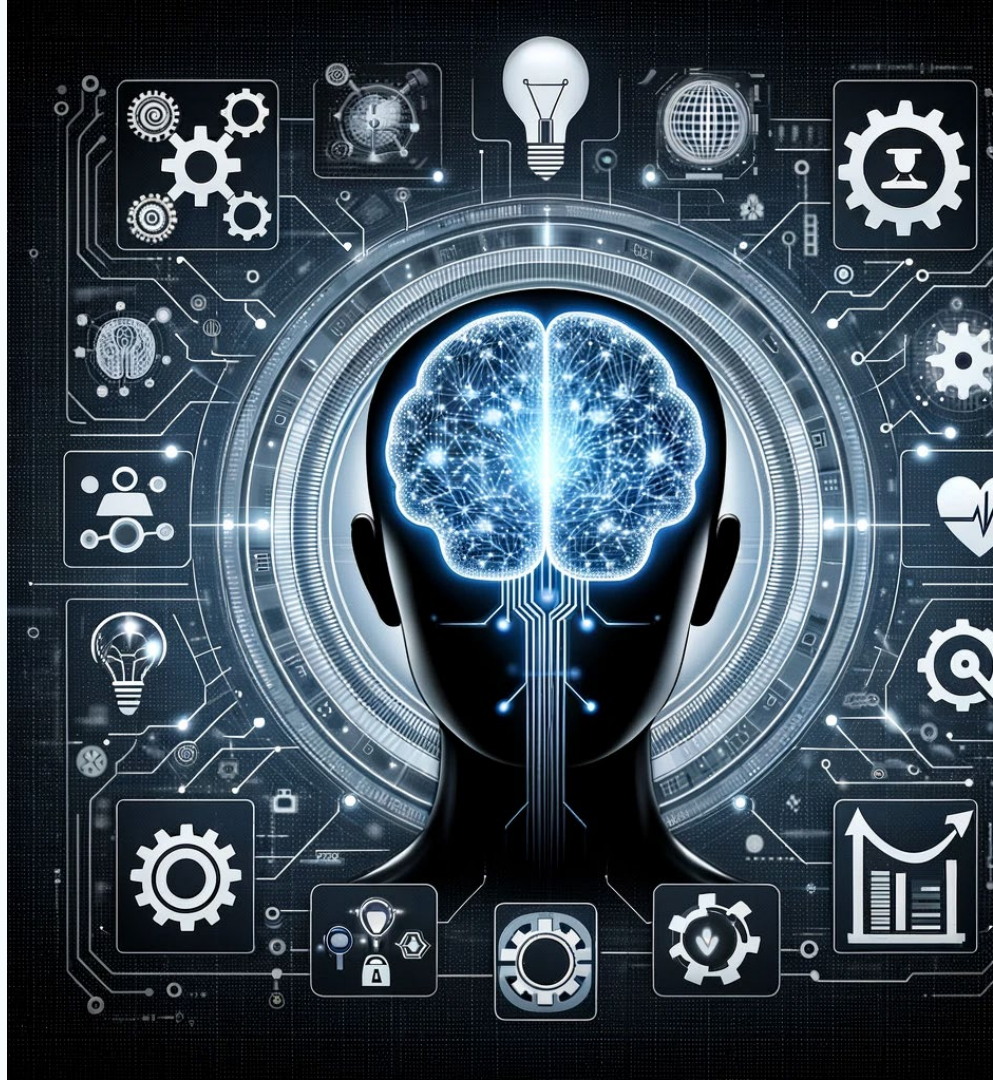


03

AI and AI Centric Workforce

Understanding AI: The New Frontier

- **Definition of AI:** AI refers to the simulation of human intelligence in machines that are programmed to think and learn.
- **AI's Core Aspects:** It encompasses learning, reasoning, and self-correction.
- **Applications of AI:** From voice assistants to complex decision-making systems, AI is everywhere.
- **The Goal of AI:** To create systems that can perform tasks requiring human intelligence, such as visual perception, speech recognition, and language translation.



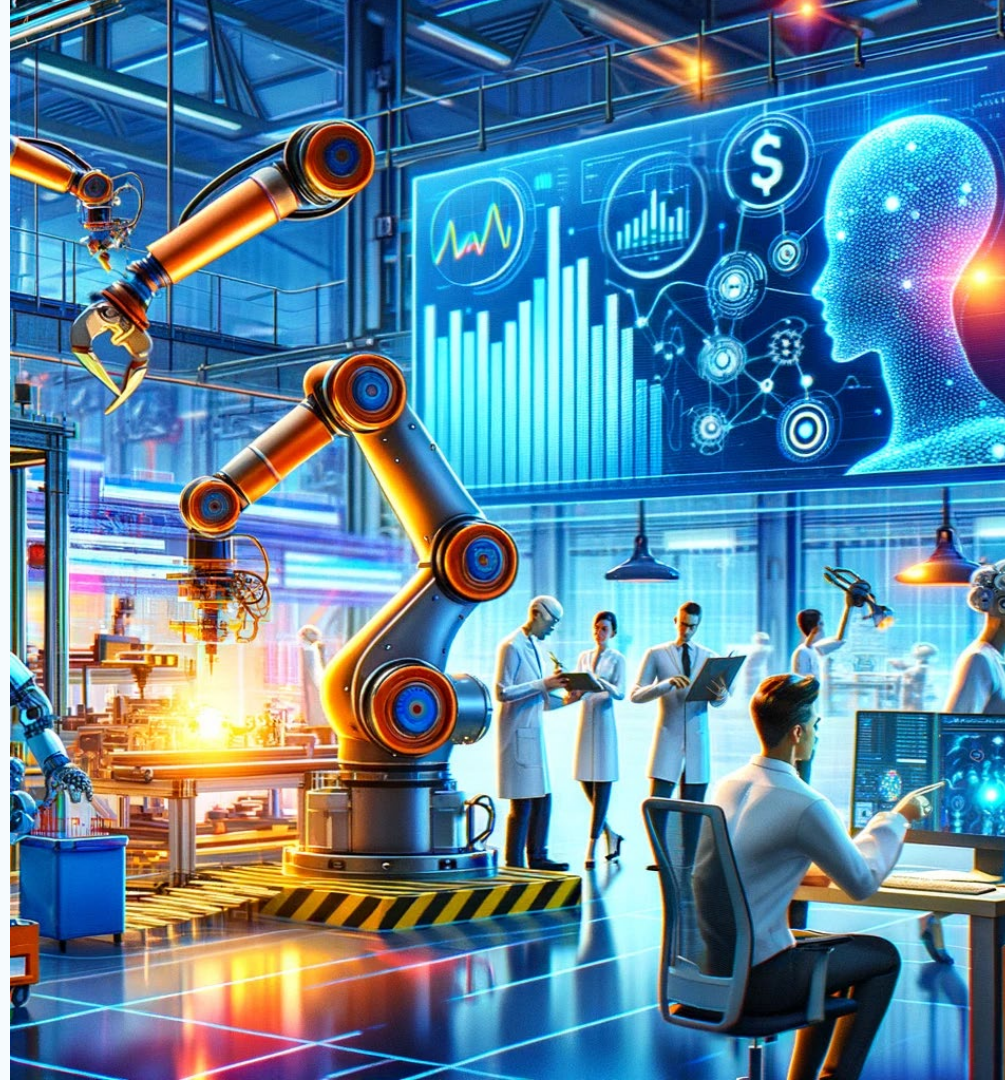
Navigating the Now: AI, Automation, and Robotics Today

- **Widespread Adoption:** IBM's Global AI Adoption Index 2022 and McKinsey's report on "Generative AI and the future of work in America" estimate that **35%** of companies use AI now, **42%** explore it, and automation covers **21.5%** of work hours, potentially reaching **30%** by 2030.

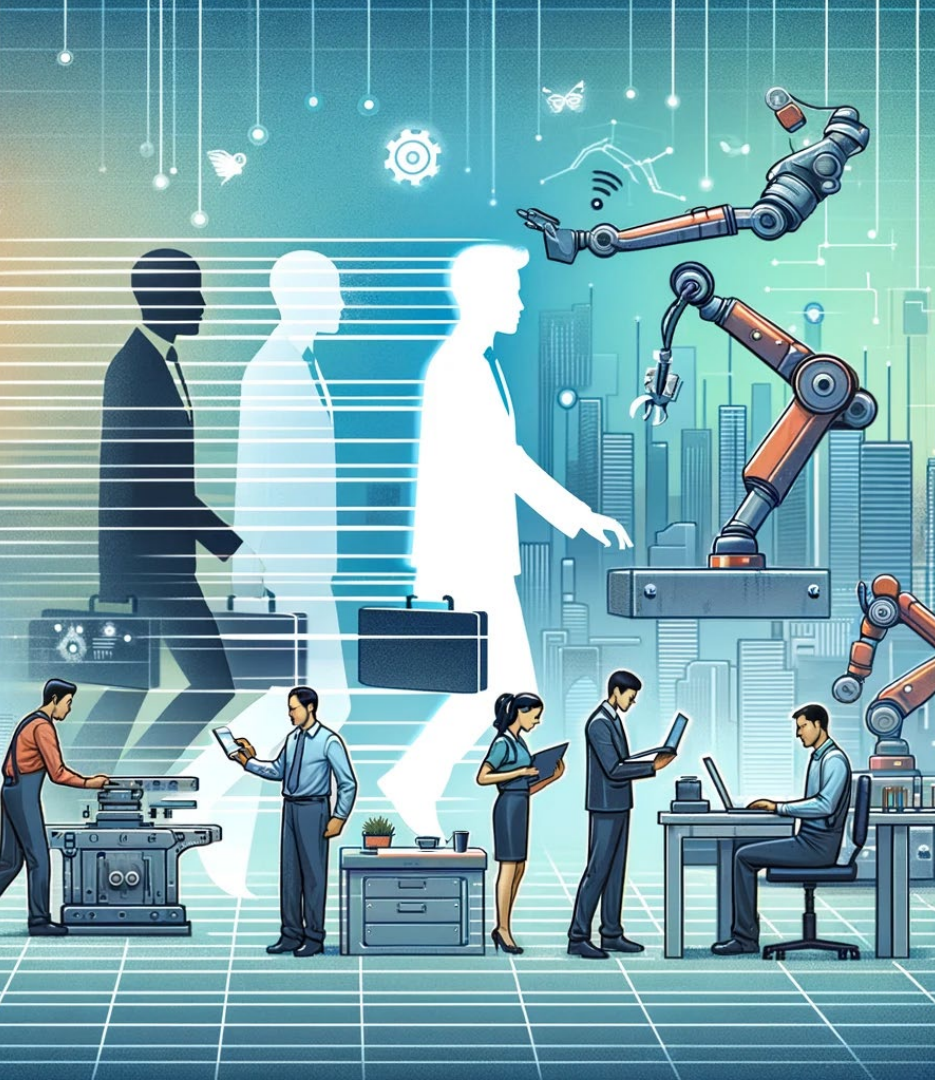
- **Leading Sectors:** Manufacturing, healthcare, and finance lead in automation adoption, leveraging robotics, AI diagnostics, and algorithmic trading, respectively.

- **AI in Daily Operations:** From customer service chatbots to AI-driven supply chain optimization, AI's presence is becoming ubiquitous across various business functions.

- **Robotics on the Rise:** In 2023, industrial robot installations increased by **14%**, with significant growth in non-traditional sectors like agriculture and construction.



Transforming the Workforce: The AI and Automation Effect



• **Job Displacement:** McKinsey estimates **20-30% of jobs** in advanced economies could be automated, particularly in manufacturing, transportation, and administrative sectors

• **Net Job Impact:** While automation displaces some jobs (up to 800 million estimated), new opportunities arise (up to 890 million estimated), with a potential net gain of **90 million jobs**

• **Job Transformation:** McKinsey and the **World Economic Forum** estimate that up to **85% of jobs** could have **20% of tasks automated by 2030**, altering job composition & requiring adaptation.

• **New Job Creation:** Emerging fields such as AI ethics, robot repair, and data annotation are expected to grow, with millions of new roles anticipated.

• **Skill Shifts:** Demand for advanced digital skills, critical thinking, and complex problem-solving skills are on the rise, while physical and routine cognitive tasks decline.

• **Cross-Sector Impact:** No industry is untouched, with impacts ranging from high-tech sectors to traditional fields like agriculture and retail.

Voices from the Floor: Labor's View on AI & Automation

- **Job Security Concerns:** Fear of widespread job losses and reduced job stability as automation and AI technologies become more prevalent.
- **Wage Dynamics:** Anxiety over the potential for automation to drive down wages or widen wage disparities, particularly for low-skilled jobs.
- **Working Conditions:** Issues related to increased monitoring, algorithmic management, and the potential erosion of worker autonomy and satisfaction.





Steering Through Innovation: Management's Strategy on AI & Automation

- **Enhancing Efficiency:** Management should view AI & automation as a key tool to boost productivity, reduce errors, and streamline operations, leading to cost savings and improved output quality.
- **Competitive Edge:** AI & automation should be seen as a strategic lever to enhance competitiveness in the global market, with faster turnaround times and the ability to offer innovative products and services.
- **Workforce Transformation:** Acknowledgment of the need to manage workforce transitions, with investments in retraining programs and the creation of new roles to oversee and maintain automated systems.
- **Employee Engagement:** Efforts to involve employees in the automation process, seeking their input and addressing concerns to ensure a smooth transition and maintain morale.

Navigating the New Norms: Legal and Ethical Aspects of Automation



•**Regulatory Landscape:** Overview of existing and emerging regulations governing the use of AI and automation in the workplace, including data privacy, safety standards, and labor laws.

•**Ethical Deployment:** Principles of ethical AI use in the workplace, such as transparency, accountability, and fairness, particularly in decision-making processes like hiring, promotions, and terminations.

•**Worker Data Rights:** The importance of protecting workers' data rights in an era of increased workplace monitoring and data collection by automated systems.

•**Bias and Discrimination:** Addressing the risks of algorithmic bias and discrimination, ensuring that AI systems are designed and implemented in a way that promotes diversity and inclusion.

•**GDPR and Worker Privacy:** How the EU's General Data Protection Regulation (GDPR) has impacted the deployment of AI in monitoring workplace productivity and behavior.

Horizon Scan: The Future of Work and Technology

- **Rise of AI and Machine Learning:** Advanced AI capabilities will lead to more sophisticated automation, affecting both cognitive and physical tasks in the workplace.
- **Internet of Things (IoT) Integration:** Increased IoT integration will enhance workplace efficiency and safety, enabling real-time monitoring and data-driven decision-making.
- **Augmented and Virtual Reality (AR/VR):** AR and VR technologies will transform training and development, offering immersive learning experiences and remote collaboration opportunities.
- **Green Technologies:** The integration of sustainable and green technologies in the workplace will rise, driven by environmental concerns and regulatory pressures.





Charting the Course: A Collaborative Future

- **Embrace Open Dialogue:** Encourage continuous and open communication between labor and management to address concerns, share insights, and collaboratively develop strategies for integrating new technologies.
- **Invest in Lifelong Learning:** Commit to ongoing education and training programs that empower workers with the skills needed for current and future job demands, fostering a culture of lifelong learning.
- **Foster an Adaptive Culture:** Cultivate a workplace culture that values adaptability, innovation, and resilience, preparing both employees and organizations for the inevitable changes brought by technological advancement.
- **Promote Inclusivity and Equity:** Ensure that the benefits of automation and technological innovations are equitably distributed, and that all workers have access to opportunities for growth and advancement.
- **Leverage Technology Ethically:** Prioritize ethical considerations in the deployment of technology, ensuring transparency, fairness, and respect for worker rights and dignity.

AI CENTRIC WORKFORCE



AI Producers



**AI
Practitioners**



AI-Aware

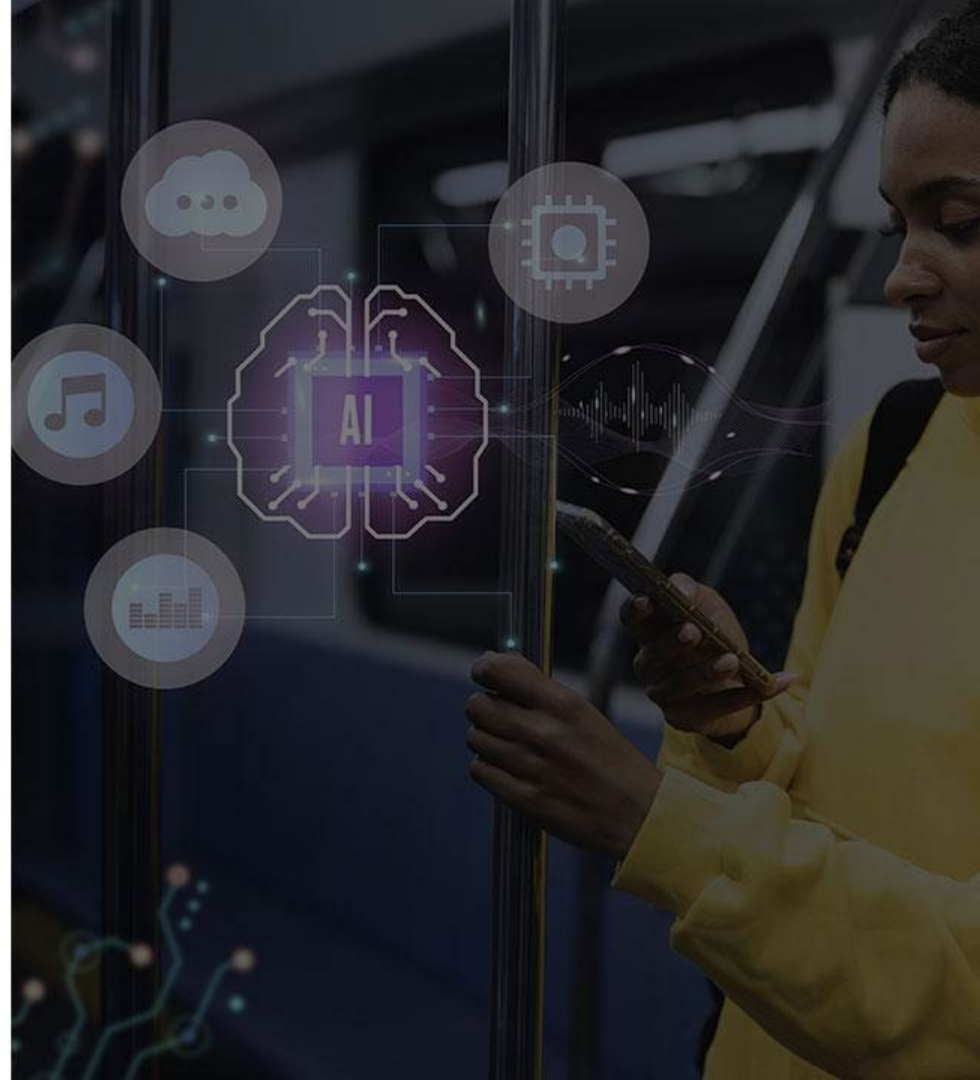


The A.I. Producers: Building Blocks of an A.I.- Driven Future

A.I. Producers will be primarily responsible for conceptualizing, designing, building, and seamlessly integrating A.I. applications into existing workflows and operations.

The A.I. Practitioners: Leveraging A.I. to Drive Efficiency

These professionals will be at the forefront of implementing A.I. into practical workflows. They will be the ones translating the theoretical potentials of A.I. into tangible efficiencies and strategic advantages.





The A.I.- Aware Individuals: The Informed Spectators

A.I.-Aware Individuals are informed people who understand the importance and relevance of A.I. While not directly involved in the development or utilization of A.I., they need to be mindful of the existence and application of A.I. in the real world.



04

Keys to Implementing AI

5

KEYS TO IMPLEMENT AI

- ① **Begin small**
- ② **Choose the proper partners**
- ③ **Invest in data**
- ④ **Identify the specific business issues**
- ⑤ **Prioritize data security and privacy**

**“ When the rate of change
within the company is
exceeded by the rate of
change outside, the end is
near. The only question is
when it will occur. ”**

• -Jack Welch



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