

Turning Disruption into Opportunity Guiding Teams Through AI-Powered Transformation

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*“By 2030, **30% of jobs** globally could be automated by AI, but **85% of jobs** that will exist in 2030 haven't been invented yet.”*

(Source: The Future of Jobs Report 2020 from World Economic Forum)

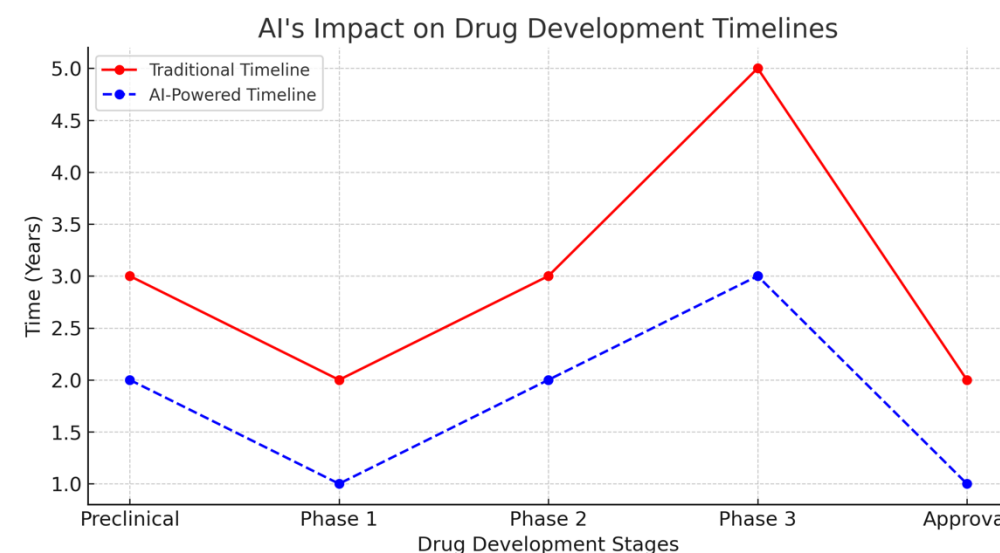
The question isn't if AI will transform work, but how leaders can shape its impact.



AI in Pharma & Biotech: The Big Picture

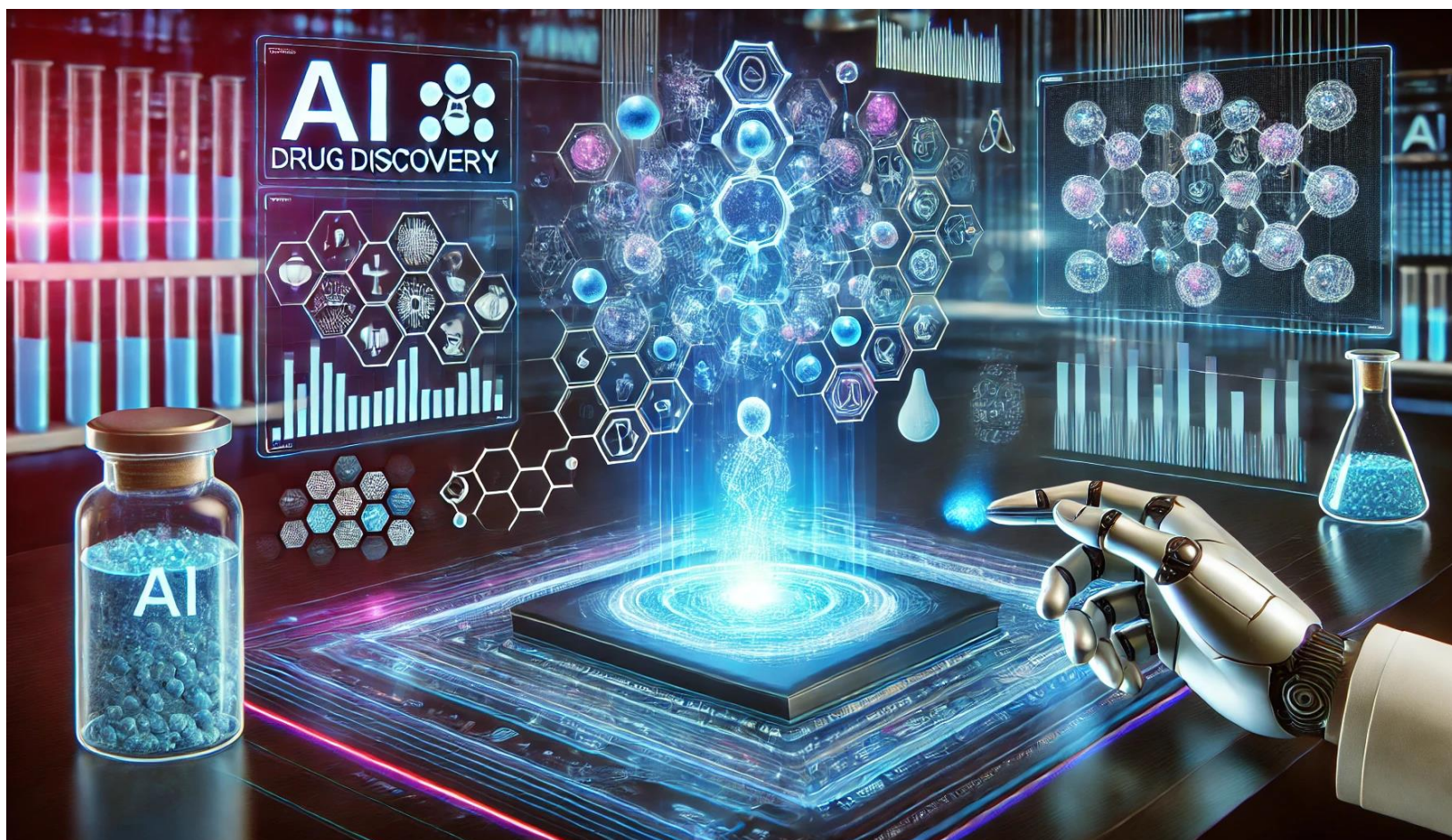
AI is revolutionizing drug development by accelerating research, optimizing trials, and streamlining regulatory processes.

-  **80%** of drug discovery and clinical trial tasks could be augmented by AI **by 2030**.
-  AI accelerates drug discovery, clinical trial efficiency, and regulatory workflows.
-  AI doesn't just automate—it augments decision-making, enabling faster, smarter analysis.
-  The challenge: How do we balance AI-driven automation with human expertise?



The Transformative Power of AI in Pharma & Biotech

AI is revolutionizing drug discovery, clinical trials, and regulatory processes—accelerating research, reducing costs, and improving accuracy.



AI's Transformational Impact – A Closer Look

AI is not just an automation tool—it augments decision-making, drives efficiency, and opens new possibilities for innovation.

Drug Discovery

AI accelerates molecule identification & predictive modeling.

Clinical Trials

AI optimizes patient recruitment, trial monitoring, & anomaly detection.

Regulatory Workflows

AI streamlines documentation, compliance, & approval processes.

Top Challenges in AI-Powered Drug Development

AI adoption faces critical challenges, including regulatory barriers, data quality concerns, AI model interpretability, and workforce readiness.

Regulatory Complexity

Compliance, Validation and ethic hurdles slow AI adoption.

Data Quality Issues

AI models depend on clean, structured and high-quality data.

Interpretability of AI

Black-box models raise concerns in decision making.

Workforce Readiness

Upskilling is required to integrate AI into existing workflows.

From Disruptions into Opportunities

Transforming Challenges into AI-Driven Opportunities

AI challenges are not roadblocks but stepping stones—when addressed strategically, they unlock new efficiencies, insights, and innovation.

Challenges	➡	Opportunities
Data Challenges	➡	AI-Powered Data Harmonization & Privacy-Preserving AI
Regulatory Hurdles	➡	AI Explainability & AI Sandboxes for Testing
Workflow Integration Barriers	➡	AI-Optimized Workflows & Upskilling Programs
AI Model Limitations	➡	More Generalizable & Robust AI Models
Cost & ROI Concerns	➡	AI for Faster Drug Timelines & Efficiency Gains

How AI is Transforming Data Science and Statistical Programming

From manual coding to **AI-driven automation**, the role of data scientists and statistical programmers is evolving rapidly.



AI-Assisted Programming

Automating repetitive coding tasks

AI-assisted debugging & code suggestions

AI-driven statistical modeling



New Career Opportunities

Emerging AI-specialized roles in Pharma & Life Sciences

The need for AI fluency & upskilling

AI-driven decision support

How can we effectively implement these AI-driven opportunities?

AI Literacy in Demand for Statistical Programmers & Data Scientists

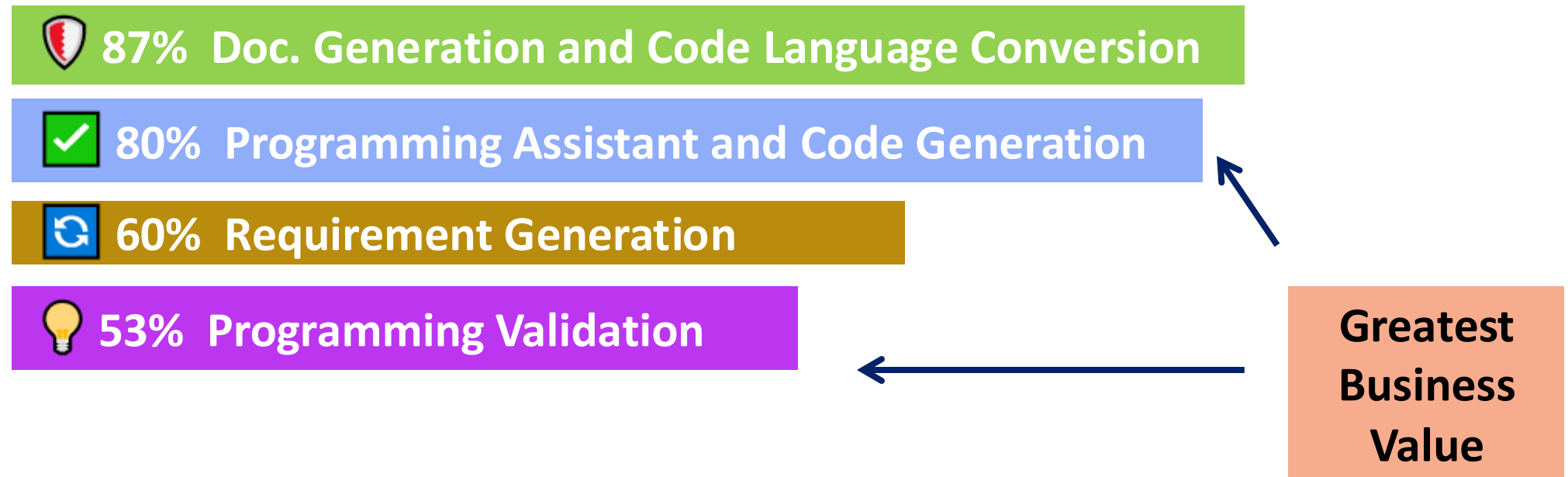
AI literacy is no longer optional—it's a critical skill for modern data scientists and statistical programmers. Understanding **how AI impacts analytics, automation, and decision-making** is essential for staying competitive.

1 Understanding AI Fundamentals  Basic ML concepts, AI terminology, and how AI models work.	2 AI-Driven Analytics  Using AI tools for predictive modeling, automation, and data analysis.
3 Programming & Automation  Exposure to Python, AI-enhanced statistical computing, and automation tools.	4 AI Ethics & Governance  Awareness of bias, fairness, and responsible AI decision-making.

How the Industry is Embracing Generative AI

Generative AI is transforming statistical programming and data science, with industry leaders prioritizing AI-driven **validation**, **compliance**, and **language conversion** to **streamline workflows** and **enhance efficiency**.

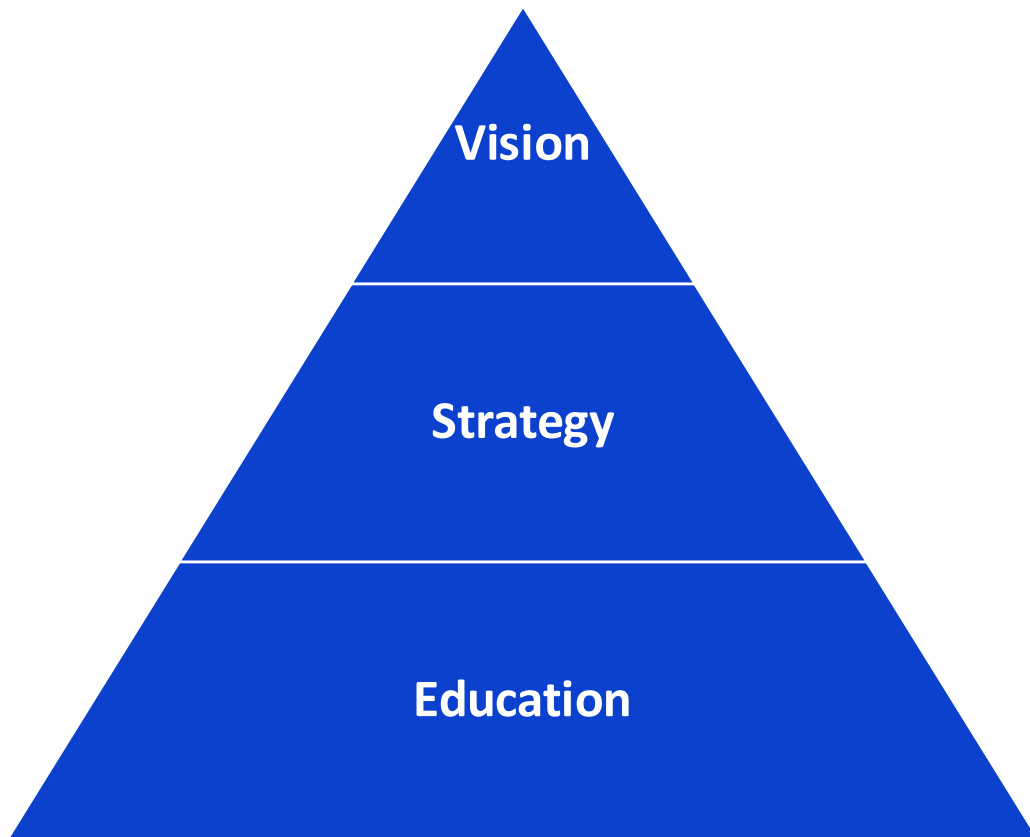
GenAI Survey Results - Pharma Global Programming Head Council (June 2024)



AI Leadership – Guiding Teams Through Transformation

The AI Leadership Imperative: Guiding Teams Through Transformation

Leadership is the driving force in AI adoption. While AI transforms workflows, **leaders shape its impact** by guiding teams through change.



Understanding AI's role in your organization



Creating AI-readiness through structured plans



Empowering teams to implement AI effectively

Leading AI Adoption: Building an AI-Ready Culture

Successful AI adoption depends on leadership that fosters **trust, transparency, and adaptability**.

Leadership Actions

Promote AI Confidence

Communicate the value of AI and address workforce concerns

Foster a Learning Culture

Encourage AI training, hands-on projects, and peer learning

Lead by Example

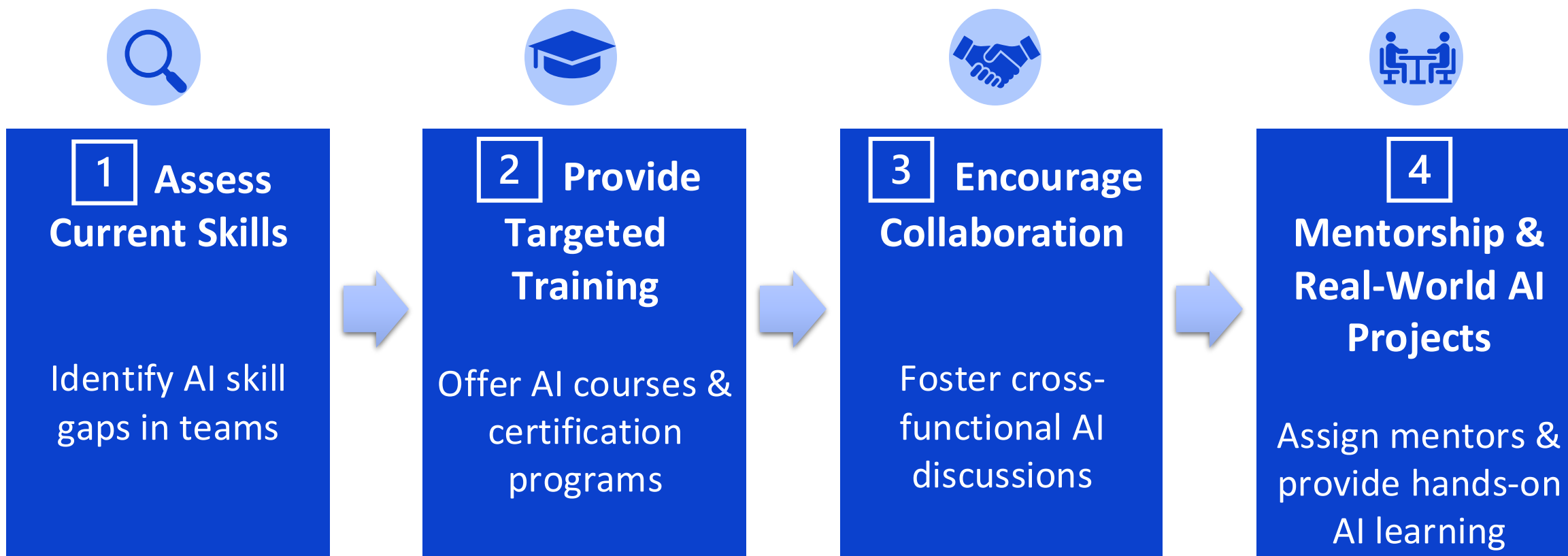
Use AI-driven tools to demonstrate adoption

Creating an AI-ready culture is just the first step—leaders must also upskill their teams.

AI Upskilling: Preparing Teams for the Future

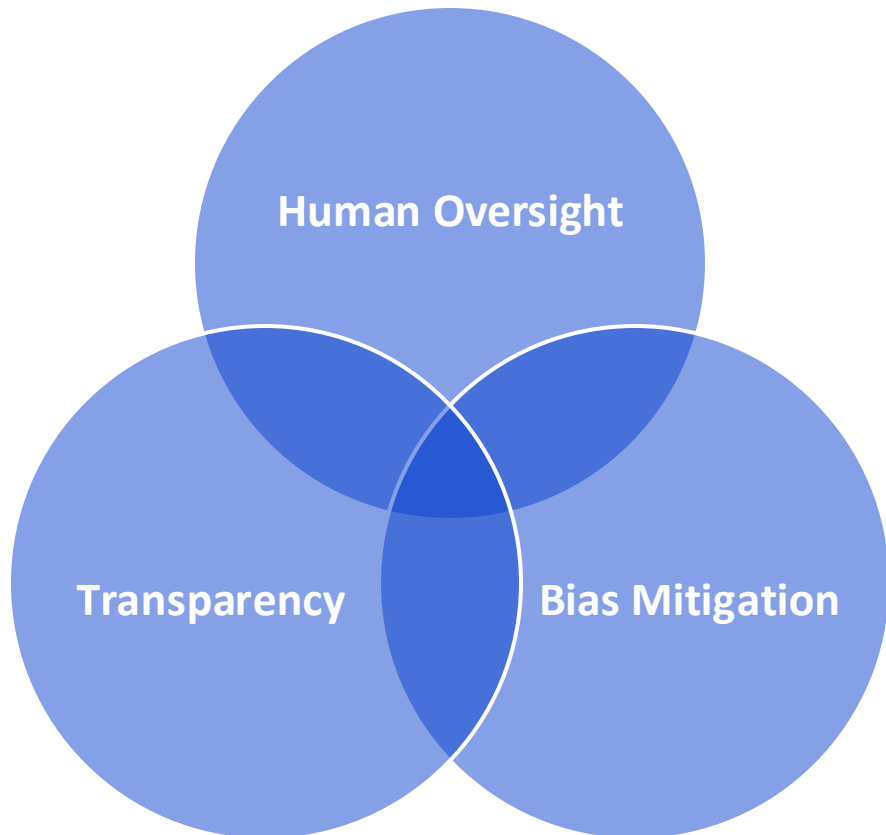
Leaders must ensure their teams have the **skills and mindset** to work alongside AI.

Steps for AI Upskilling:



Ethical AI & Decision-Making: Balancing Automation & Human Expertise

AI is a powerful tool, but leaders must ensure its **ethical and responsible use**.



Leadership Priorities for Ethical AI



AI should assist, not replace critical decision-making.

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Make AI decisions explainable and understandable.



Ensure AI is fair and inclusive.

Leading AI-Powered Change

True leadership isn't about using AI to replace people—it's about **empowering them to achieve more.**



Empower Your Team

Build AI skills and tools



Promote Ethical AI

Ensure responsible adoption



Lead with Vision

Drive long-term strategies

Key Takeaways & Next Steps

As AI reshapes the industry, leaders play a pivotal role in guiding teams through change.
What role will you take?

"In the age of AI, knowing how to ask the right questions will be the most valuable skill."
– Sam Altman, CEO of OpenAI

Take Actions Today!

*What leadership
actions will you take
today?*

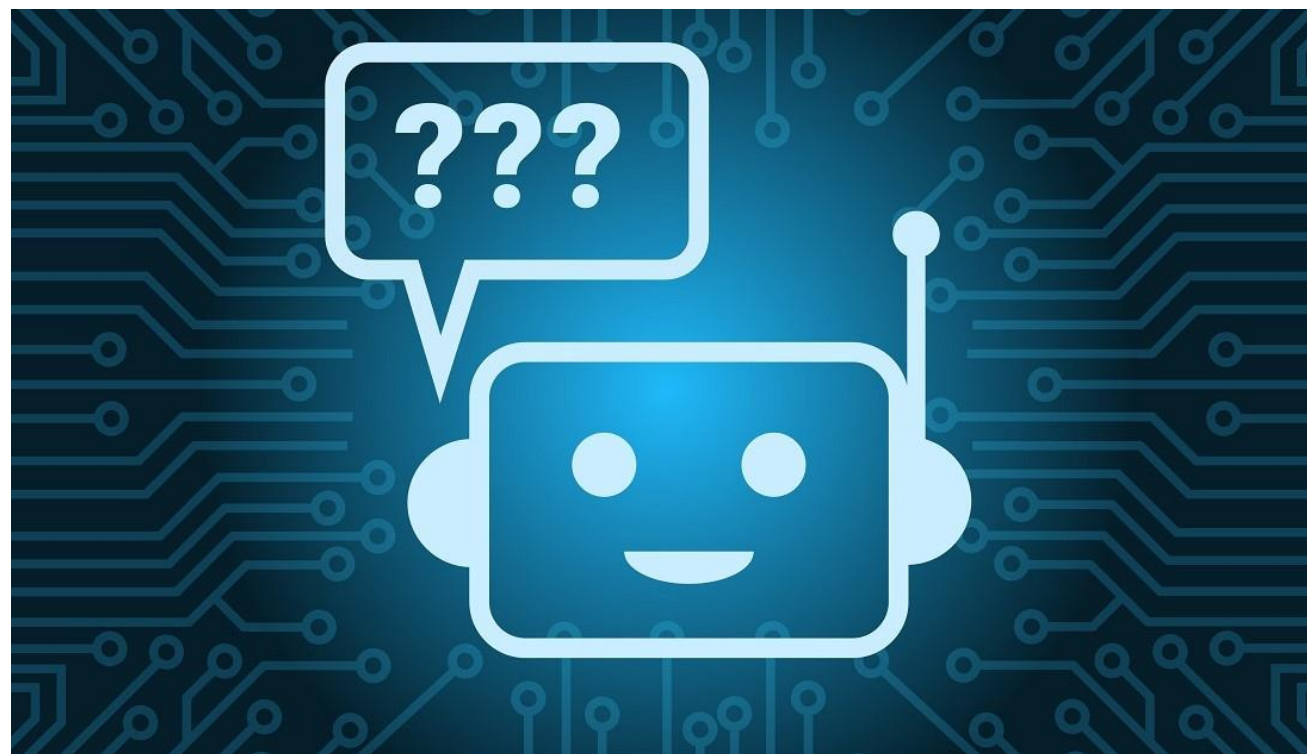
*How are you preparing
your team for AI
adoption?*

- ✓ **Develop an AI Vision and Strategy**
- ✓ **Build an AI-ready culture**
- ✓ **Invest in AI Literacy & Training**
- ✓ **Pilot & Scale AI Projects**
- ✓ **Ensure responsible & ethical AI use**

Questions & Discussion

“ AI + human oversight = faster, cheaper, and just as accurate”

What's your next step in AI leadership?



How can we drive AI transformation together?

Your leadership will shape the future of AI transformation. What will you do next?

Thank you!



Let's Drive AI Transformation Together!



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