

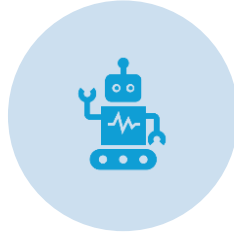
Edge AI Technology for AI Applications & AI Ethical Challenges

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IBM Middle East & Africa

Agenda



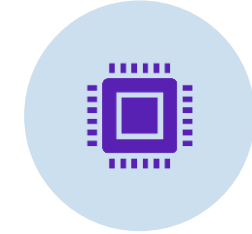
Introduction:
The Transformative
Potential of AI in
Arab Societies



IBM AI Solutions:
Addressing Key
Challenges And
Opportunities.



AI Focus Areas &
Case Studies



IBM's Competitive
Edge: Watsonx.Ai &
LLMs Library.



AI Risks & Ethics:
IBM's Commitment
To Responsible AI.



Conclusion:
Partnering for
A Brighter Future

Unleashing the Power of AI for a Thriving Arab World

- AI is rapidly transforming **industries** and **societies** globally.
- **Arab societies** can leverage AI for economic growth, life quality advancement, and social and political progress.
- Cutting-edge **AI technologies** can address critical challenges and unlock immense potential in the region.
- **Responsible AI** technologies are critical for all AI applications.



AI-Powered Solutions for Arab Societies

Education

- Personalized learning platforms powered by Watson Assistant, fostering critical thinking and skills development.

Economy

- AI-driven insights for business growth, optimizing supply chains, and creating new job opportunities.

Healthcare

- AI-powered solutions for healthcare diagnostics, medical demand forecasting, medical risk

Policies & Laws

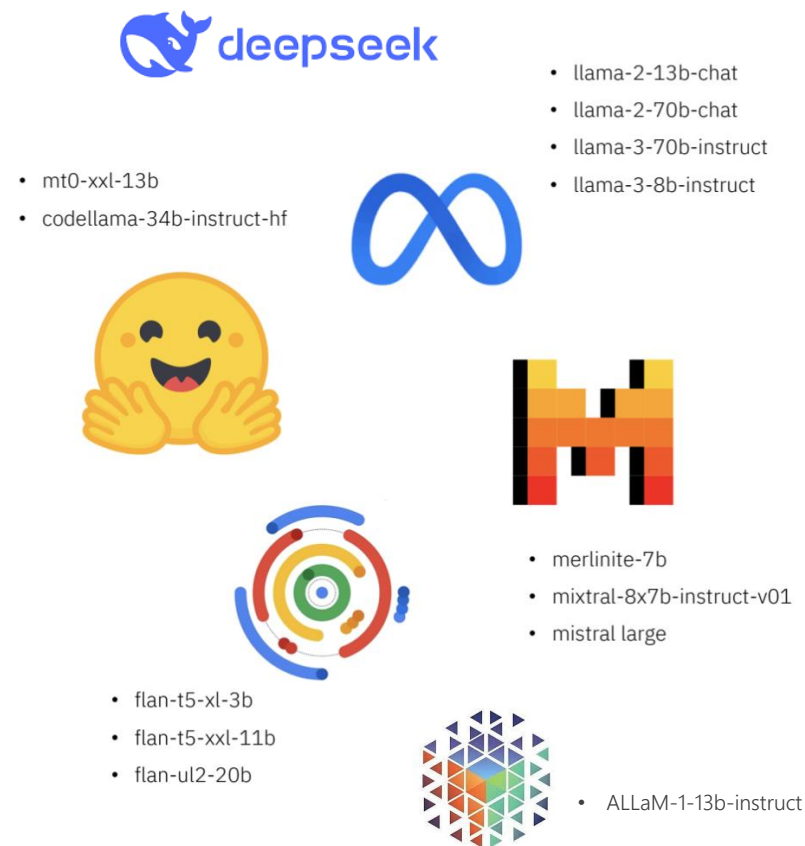
- AI-driven analysis of legal documents to improve efficiency and access to justice.

Diplomacy & Conflict Resolution

- AI-powered simulations and predictive analytics to support peaceful conflict resolution and crisis management.

watsonx.ai – The Next Generation of AI Platforms

- Watsonx.ai is IBM's powerful AI platform, designed to build and deploy AI models across any environment.
- **LLM Model Library:** Access to a broad range of leading LLMs, including Meta's **Llama**, **Mixtral**, Google's **Flan**, and **DeepSeek R1**.
- **Enterprise-Grade Platform:** Scalable, secure, and reliable platform for building and deploying AI applications.
- **Open and Flexible:** Integrates with existing tools and workflows, allowing for seamless deployment.



AI Ethics and Governance

Responsible AI Strategy and Contributions

U.S. National AI Advisory Committee (NAIAC)

Chief Privacy Officer Christina Montgomery named to NAIAC and U.S. Chamber of Commerce Commission on Competition, Inclusion and Innovation

European Commission Expert Group on AI

Defined the ethics guidelines for trustworthy AI

Partnership on AI

Brings together diverse global voices to define best practices for beneficial AI

IBM is a founding member

IEEE Global Initiative on AI Ethics

Supports development of AI that prioritizes ethical considerations

World Economic Forum's Global AI Action Alliance

Guides the responsible development of AI

Co-chaired by Arvind Krishna, IBM Chairman and CEO

ITU AI for Good Global Summit

Global and inclusive United Nations platform on using AI to achieve the UN Sustainable Development Goals

MIT-IBM Watson AI Lab

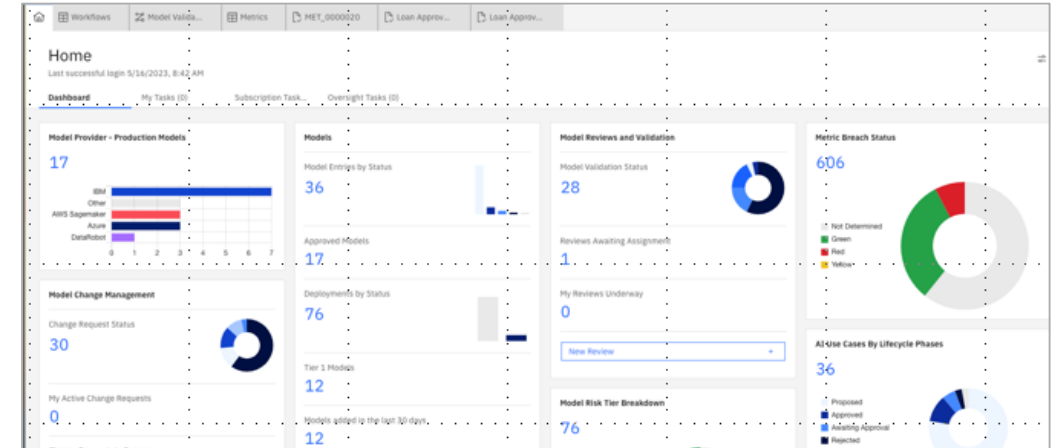
Research focused on healthcare, security and finance using the IBM Cloud, AI platform, blockchain and quantum computing

Data & Trust Alliance

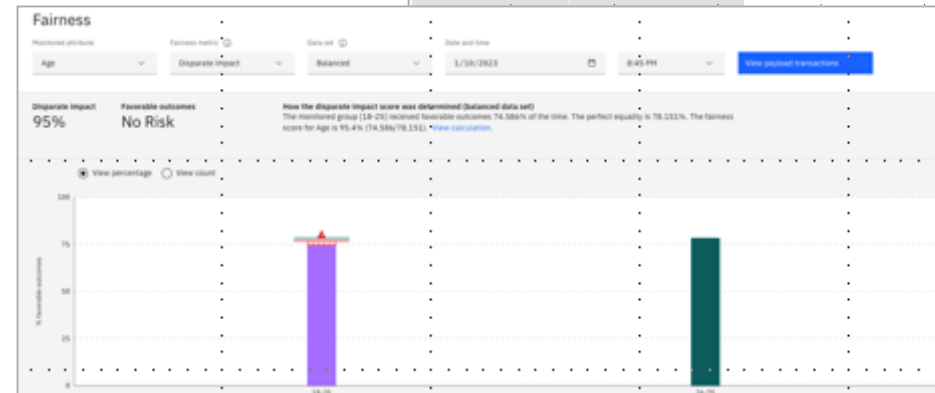
Develops new practices and tools to advance the responsible use of data and AI across industries and disciplines

AI Governance Technology

- Drive model quality
- Detect and mitigate bias and drift
- Drive transparent model results
- Implement model risk management



Quality									
Area under ROC	Area under PR	Accuracy	True positive rate (TPR)	False positive rate (FPR)	Recall	Precision	F1-Measure	Logarithmic loss	
0.76 0.19 lower threshold violation	0.76	0.82	0.57	0.05	0.57	0.87	0.69	0.43	
			Prediction						
			No Risk		Risk		Total		
Actual			No Risk	62	3		65		
			Risk	15	20		35		
					23		100		



Building a Better Future with AI



Partnering with Arab governments, businesses, and researchers to unlock the transformative potential of AI



By leveraging **watsonx.ai** and adhering to ethical principles, we can build a brighter future for Arab societies



Thank you!