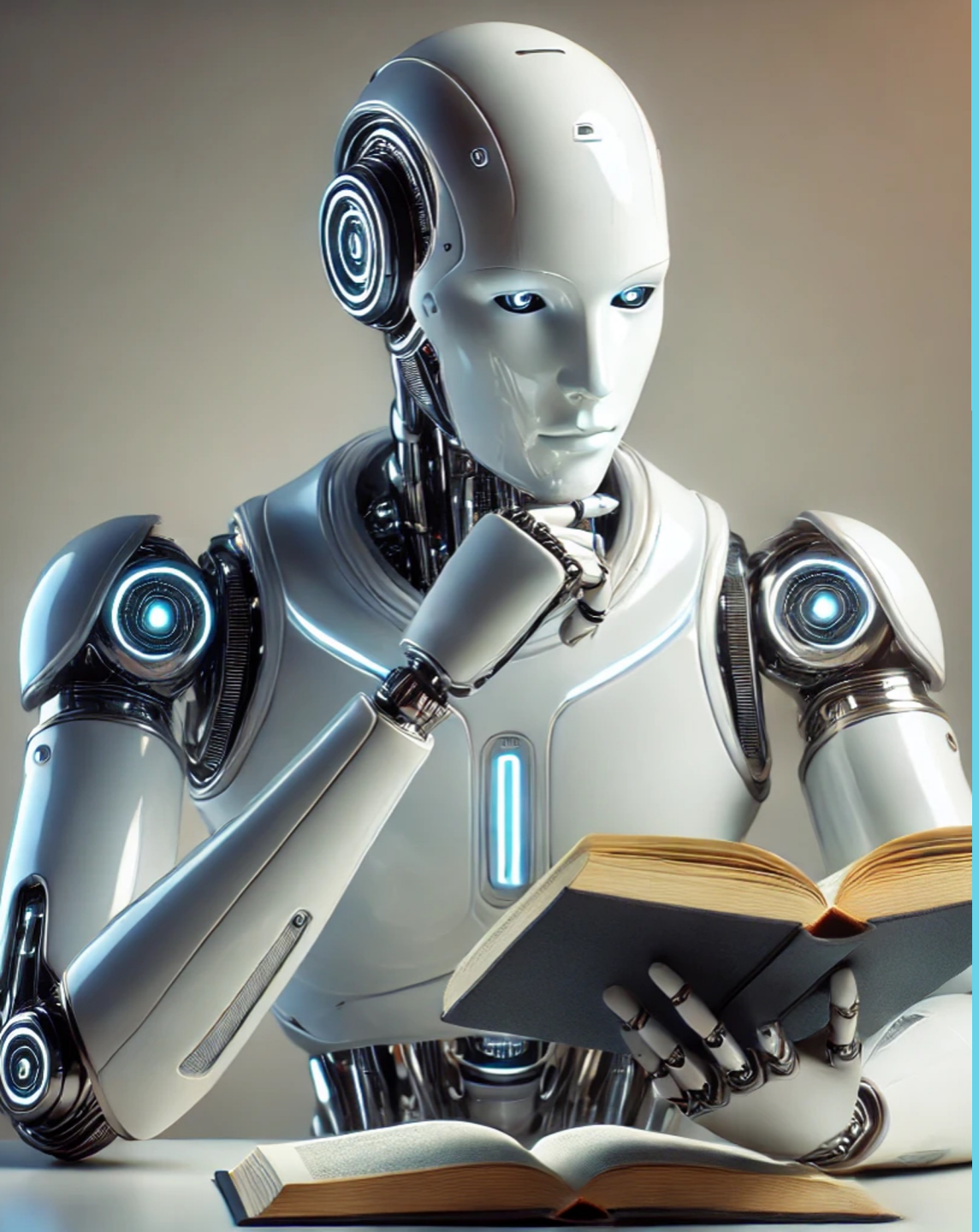
AI for Developing Countries CSSDs: Threat or Opportunity?

Hamid Zare Shah Mers

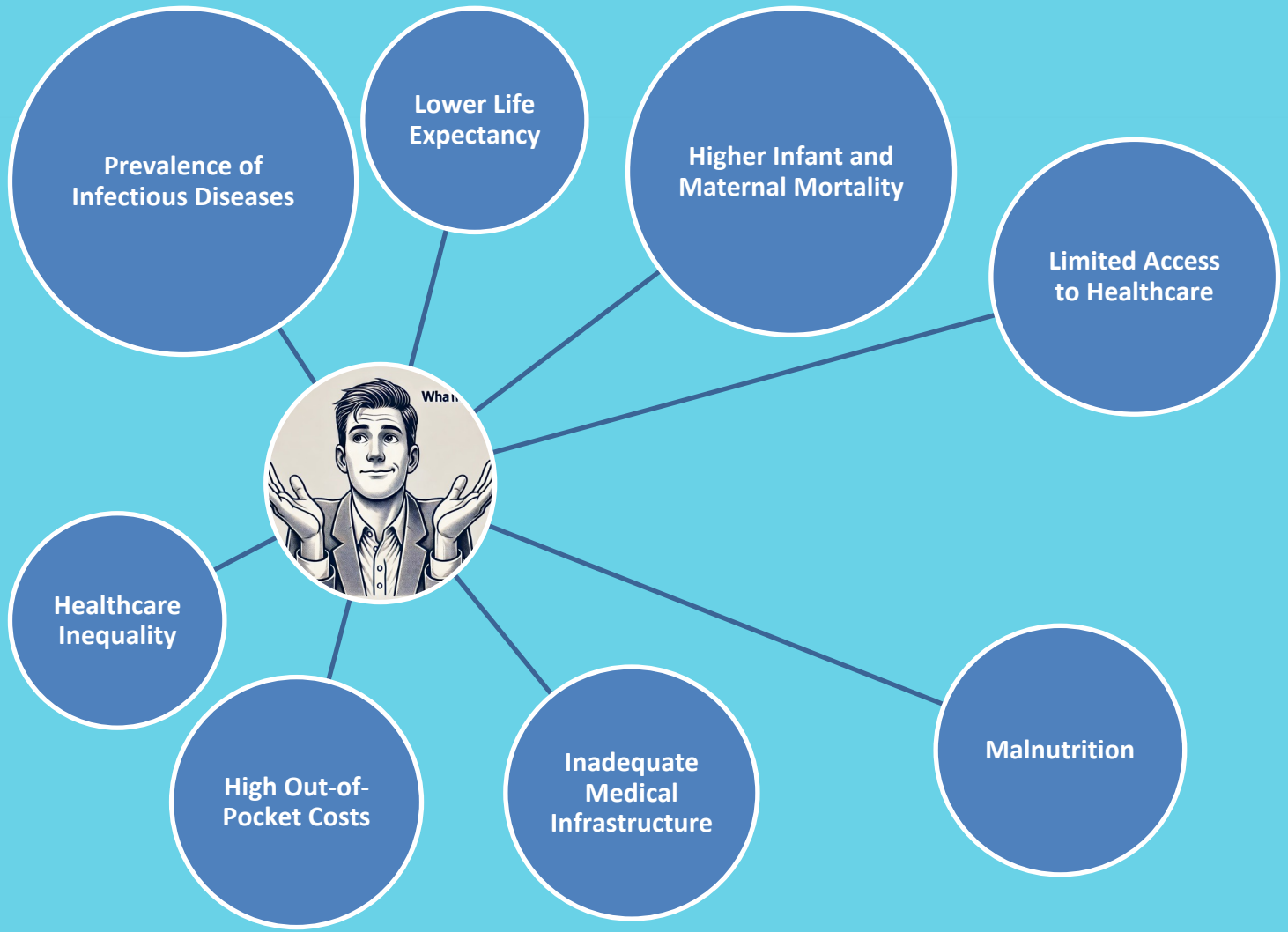
Iran

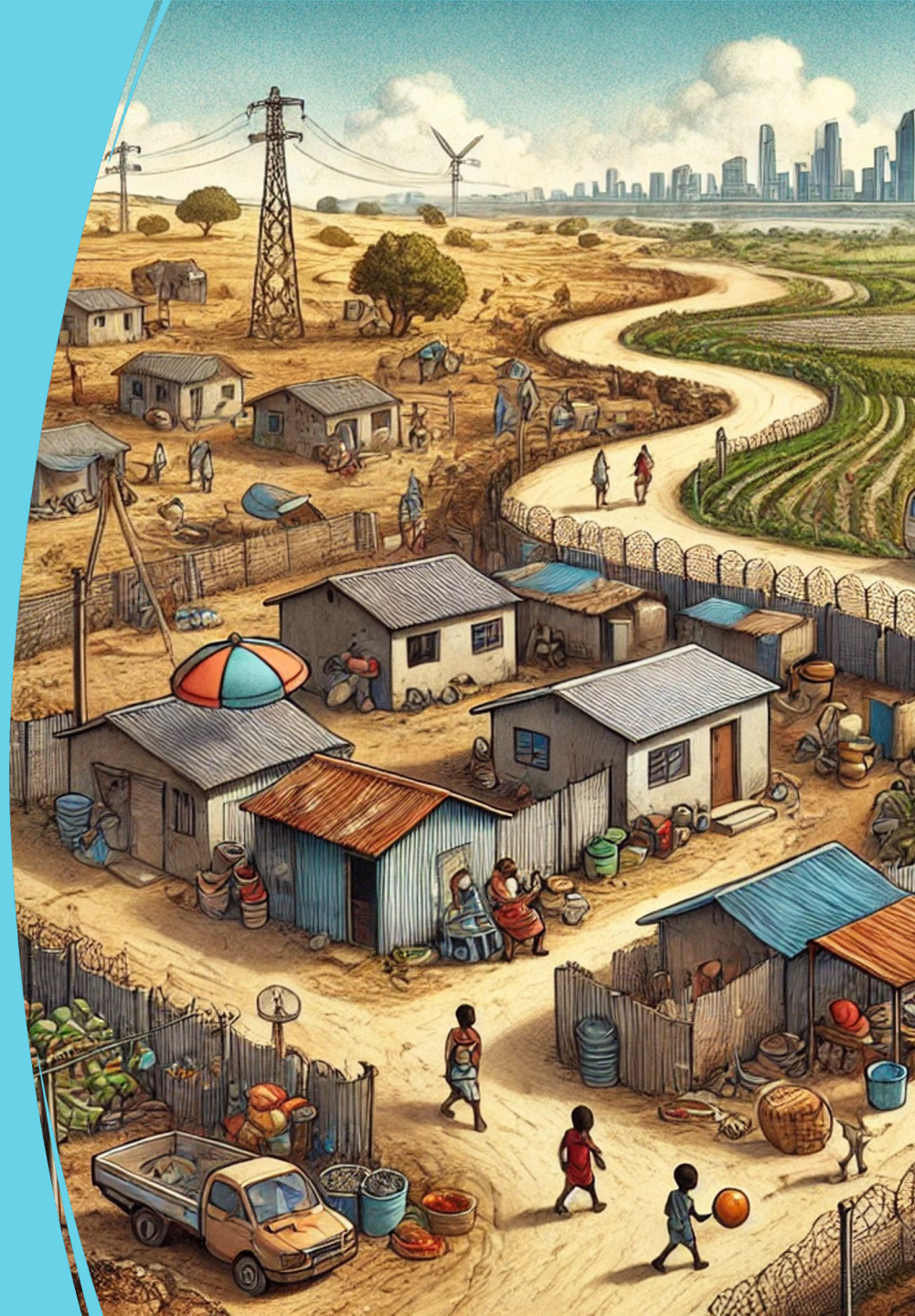


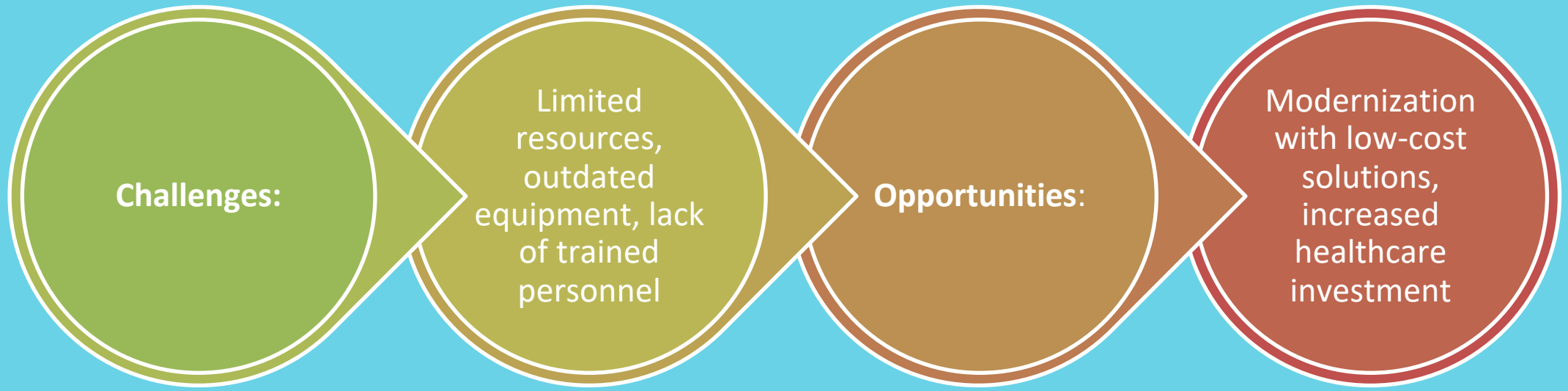
What is AI?

- **Machine Learning (ML):**
- **Neural Networks**
- **Deep Learning:**
- **Natural Language Processing (NLP):**
- **Computer Vision**

What is developing country by healthcare aspect?






Challenges:
Limited resources, outdated equipment, lack of trained personnel
Opportunities:
Modernization with low-cost solutions, increased healthcare investment

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Case Studies and Real-World Examples

Amazon’s AI-Driven Supply Chain: A Blueprint for the Future of Global Logistics

- **Accurate Demand Forecasting**: AI enhances prediction of product demand, reducing overstock and stockouts.
- **Real-Time Inventory Management:** AI optimizes inventory tracking, leading to efficient stock control.
- **Logistics Optimization**: AI improves delivery routes, speeds up shipping, and reduces costs.
- **Automation:** Robotics automate warehouse operations, increasing efficiency.
- Resilience During Disruptions: AI-enabled systems allow quick adaptation to unexpected events, like COVID-19.

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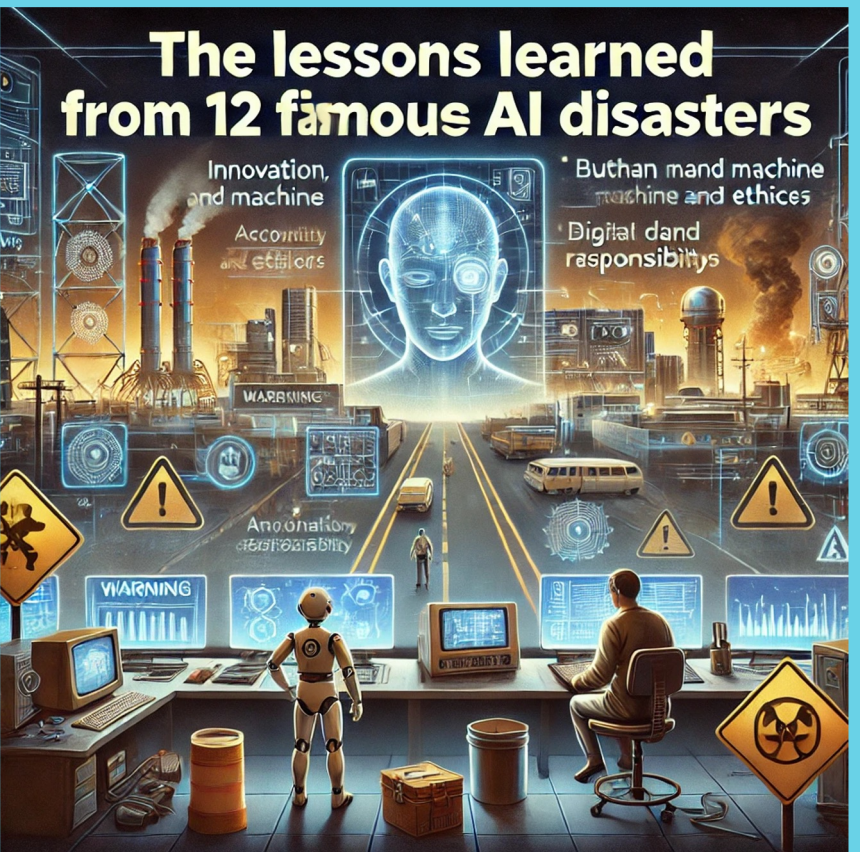
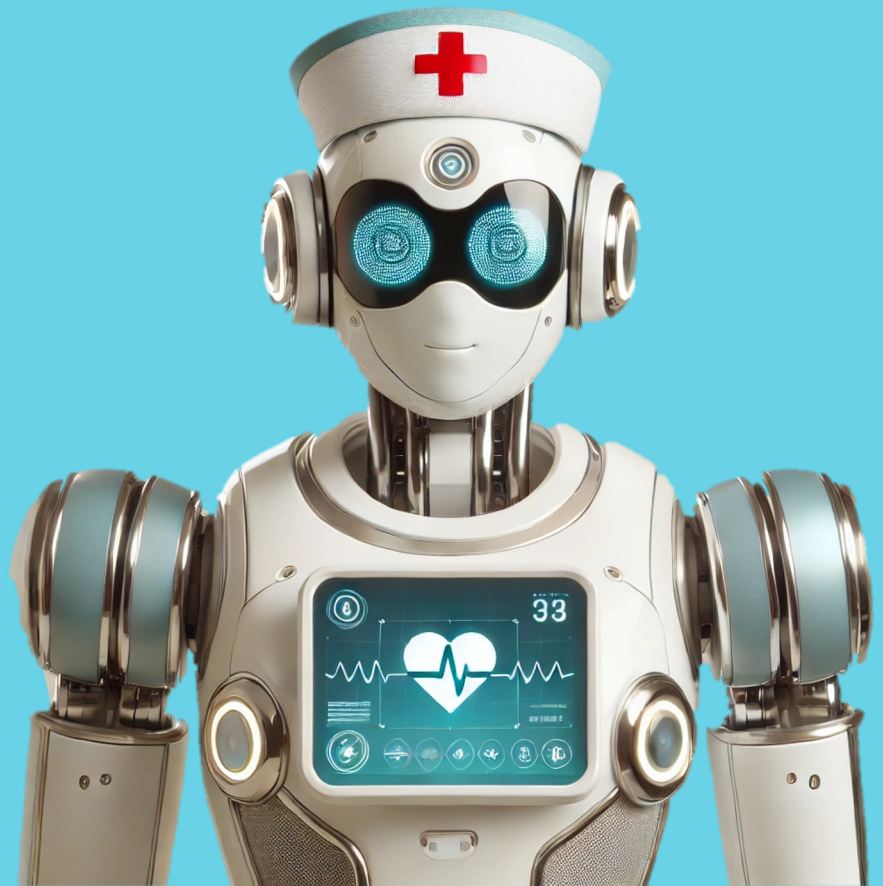
12 famous AI disasters



- McDonald’s ends AI experiment after drive-thru ordering blunders
- Grok AI falsely accuses NBA star of vandalism spree
- NYC AI chatbot encourages business owners to break the law
- Air Canada pays damages for chatbot lies
- Sports Illustrated may have published AI-generated writers
- iTutor Group’s recruiting AI rejects applicants due to age
- ChatGPT hallucinates court cases
- AI algorithms identify everything but COVID-19
- Zillow wrote down millions, slashed workforce due to algorithmic home-buying disaster
- Healthcare algorithm failed to flag Black patients
- Dataset trained Microsoft chatbot to spew racist tweets
- Amazon AI-enabled recruitment tool only recommended men

how AI Can CSSDs Transform



- Automating Sterilization Processes: Consistency & Predictive Maintenance

- Monitoring and Quality Control: Real-time data analysis

- Data Management & Decision-Making: Inventory & procedure optimization

- Training & Skill Development: AI-powered simulations

AI in opportunities Provided by CSSDs

- Increased Efficiency: Automation of routine tasks

- Cost Reduction: Lowering errors and optimizing resources

- Improved Safety: Enhanced sterilization standards

- Scalability: From small clinics to large hospitals

Threats and Challenges of AI Implementation

- Initial Costs: High technology costs

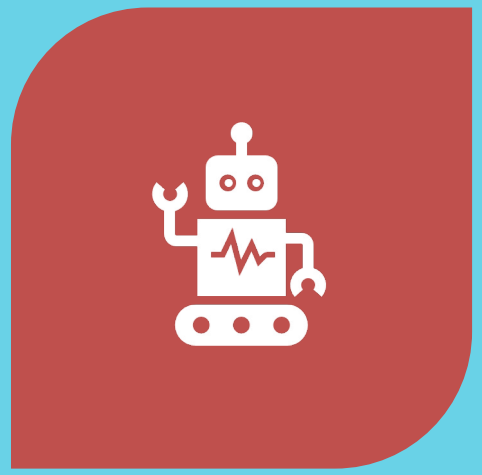
- Lack of Expertise: Technical training needs

- Ethical & Privacy Concerns: Data security

- Technological Dependency: Impact on decision-making skills

Future Outlook and Recommendations

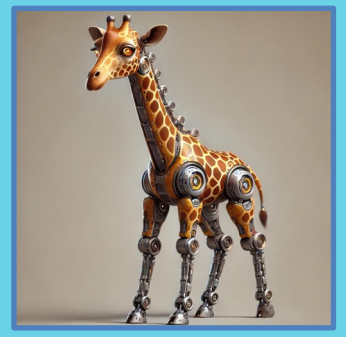
Conclusion



- SUMMARY OF AI'S ROLE: THREAT & OPPORTUNITY

- CALL TO ACTION: INVEST IN LOCALIZED, AFFORDABLE, AND ETHICAL AI SOLUTIONS

All pictures made by AI



Q&A Section

Prepare for questions on AI technologies, ethics, and cost-benefit analysis.