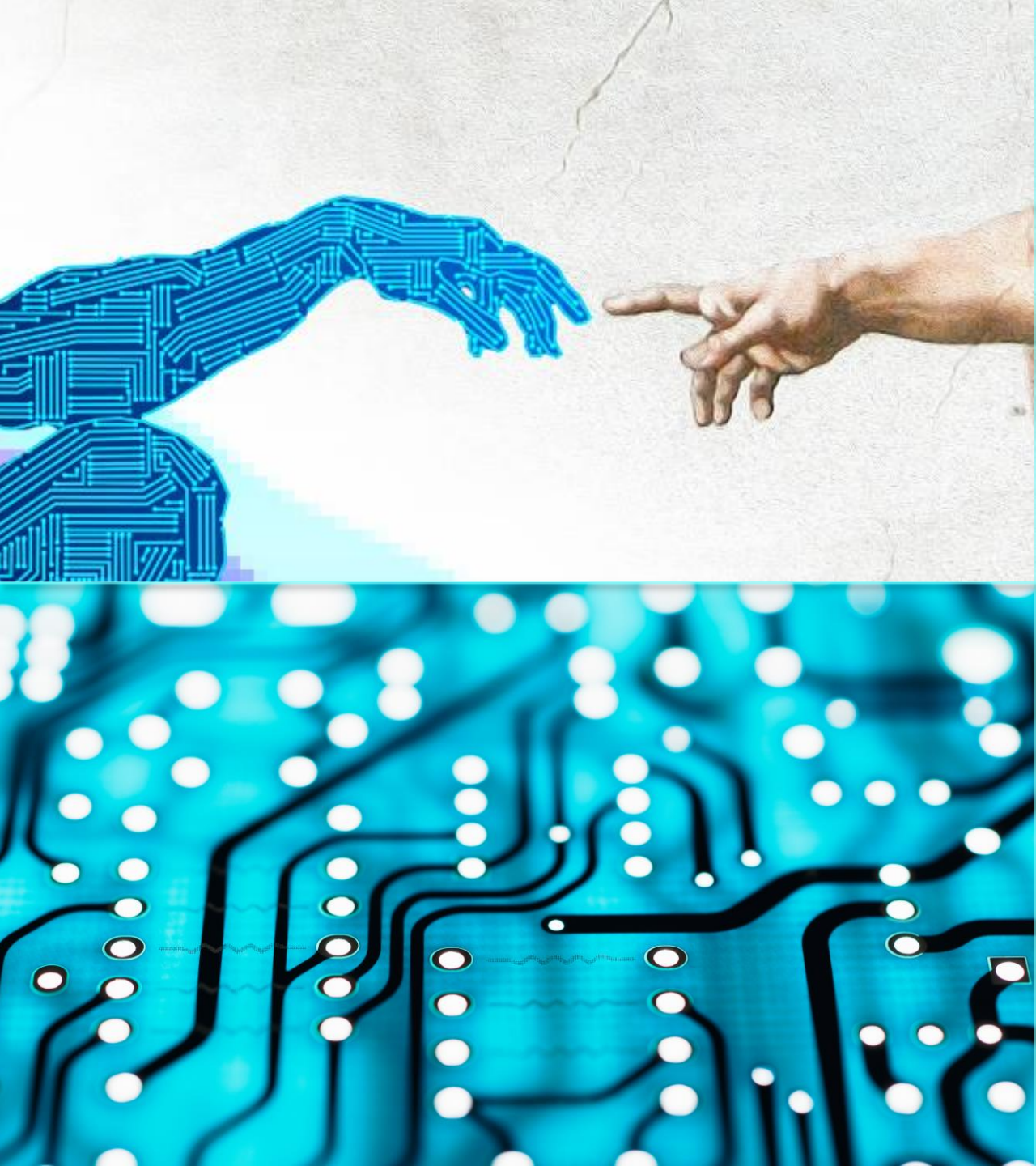




OPERATIONALISING AI AND ML FOR MANAGING RESOURCES IN THE CLOUD

NEHA BOORA | CLASS LTD



CHALLENGES IN CLOUD RESOURCE MANAGEMENT

- Cost management
- Security and Compliance
- Performance Optimization
- Complexity in Multi-Cloud and Hybrid Environments
- Skill Gaps and Expertise
- Data Management and Migration
- Vendor Lock-In

The background of the slide is a complex digital-themed graphic. It features a dark blue gradient with glowing white circuit lines on the left side. In the center, there's a semi-transparent bar chart with red and orange bars, overlaid with a white line graph showing an upward trend. Binary code (0s and 1s) is scattered throughout the background in various colors (blue, green, red) and sizes, some appearing to float or glow.

ROLE OF AI AND ML

How AI and ML can address challenges?

- **Cost Management:** Predictive Analytics-AI, Automated Cost Optimization:ML.
- **Security and Compliance:** Anomaly Detection: AI, Dynamic Resource Allocation: ML, Predictive Maintenance: AI
- **Performance Optimization:** Dynamic Resource Allocation: ML, Predictive Maintenance: AI
- **Complexity in Multi-Cloud and Hybrid Environments:** Unified Management Platforms: AI, Cross-Cloud Optimization: ML
- **Skill Gaps and Expertise:** AI-Driven Support and Training, Automated Management: ML
- **Data Management and Migration:** Smart Data Migration: AI, Data Lifecycle Management: ML
- **Vendor Lock-In:** Interoperability Solutions: AI



USE CASES

How AI and ML are being used for cloud resource management? Here are some real-world examples:

1. Amazon Web Services (AWS) Auto Scaling
2. Recommender System GCP
3. Personalized Cloud Guidance Azure
4. Multi-Cloud Governance
5. Automated Monitoring and Troubleshooting

IMPLEMENTATION STRATEGIES

Define Objectives and Use Cases

Data Collection and Preparation

Choose the Right Tools and Platforms

Develop and Train ML Models

Integrate and Deploy Models

Automate Decision-Making

Governance and Compliance

Training and Change Management



BEST PRACTICES

Recommended
best practices
for successful
implementation

Start small and scale gradually

Model Development and
Deployment

Continuous Improvement

Ethical and Responsible AI

THANK YOU !!



Reach out to me:

Linkedin: <https://www.linkedin.com/in/nehaboora-626a6138/>

Email: Neha.Boora@class.com.au