



Eduvos
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AI Ethics and Privacy

ITAIA1-33

Disclaimer

Please note that content made available on myLMS may deviate only slightly from what is covered in lecturer-led sessions, however, the content uploaded to myLMS represents all the material that you need to refer to in preparation for your assessments.

Week 2: Lesson 2

Introduction

Current State of AI

Learning Outcome	Assessment Criteria
2. Analyze the Present State of AI	<div>2.1 Evaluate the defining characteristics and capabilities of contemporary AI.</div> <div>2.2 Compare and contrast AI as a form of agency with traditional notions of human intelligence.</div> <div>2.3 Critically assess the implications of AI's current state on various industries and domains.</div>



What will be covered in Today's Lesson?

We will be learning about:

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1. Characteristics and Capabilities of AI
 1. Characteristics of AI
 2. Capabilities of AI
 2. Tangible Resources
 1. Data
 2. Technology
 3. Basic Resources
 3. Human Resources
 1. Overview
 2. Technical Skills
 3. Business Skills
 4. Intangible Resources
 1. Overview
 5. Activity

Characteristics and Capabilities of AI

Characteristics of AI

1. Data-Driven - Relies on large, diverse datasets for training and improvement
2. Deep Learning - Utilizes multi-layered neural networks inspired by the human brain
3. Domain-Specific - Designed for specific tasks in areas like healthcare, finance, education, and gaming
4. Human-Centered - Aims to augment human abilities and collaborate rather than compete
5. Facial Recognition - Identifies and verifies individuals using facial features
6. Automates Repetitive Tasks - Handles routine operations efficiently, freeing up human effort
7. Data Ingestion - Processes and integrates large volumes of data from various sources

Characteristics and Capabilities of AI

Characteristics of AI Continued

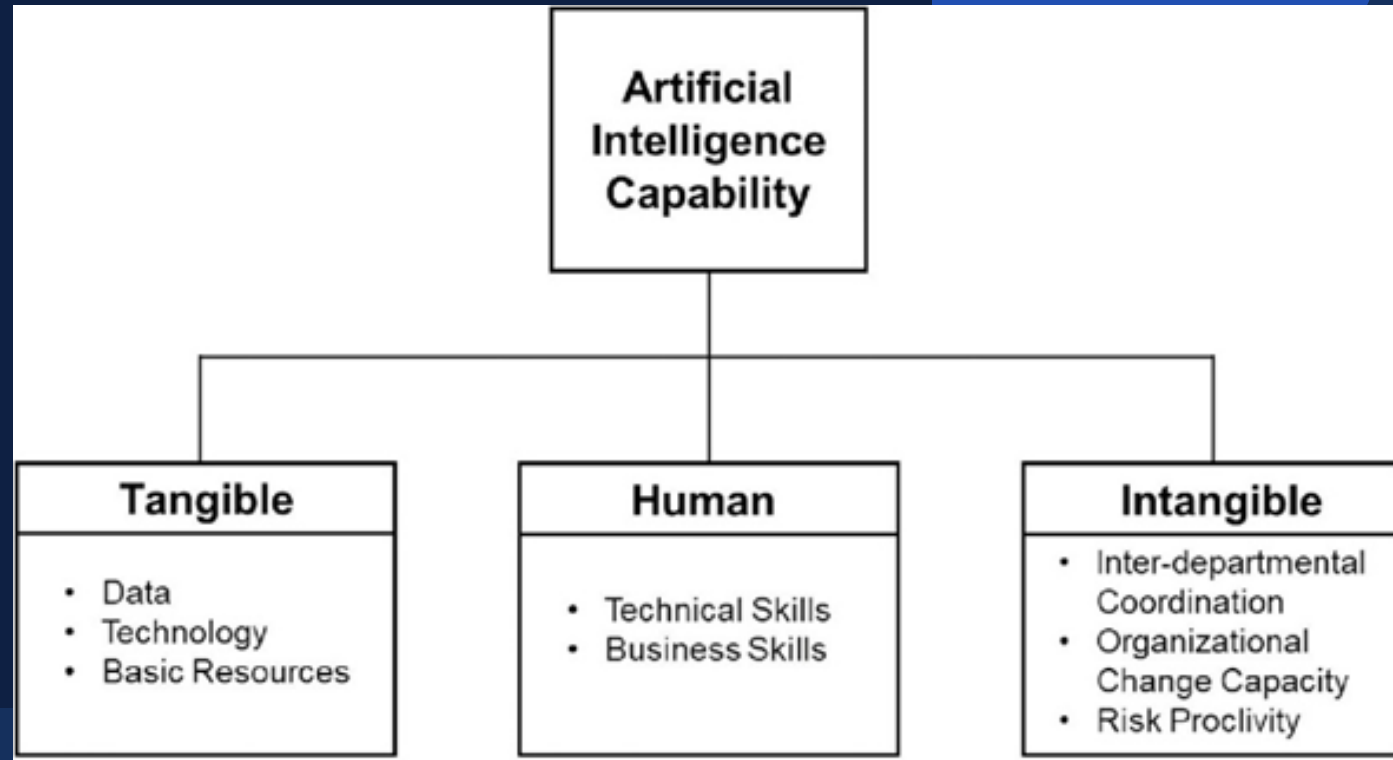
8. Chatbots - Provides interactive, conversational interfaces for user engagement
9. Quantum Computing - Explores advanced computation for solving complex problems
10. Cloud Computing - Leverages scalable infrastructure for AI deployment and data storage

Characteristics and Capabilities of AI

Capabilities of AI

What AI Can Do:

1. Recognize patterns
2. Make predictions
3. Understand natural language
4. Learn from data
5. Interact with users
6. Solve domain-specific problems



Tangible Resources in AI Data

Types:

- Internal Data: Generated within the organization
- External Data: Sourced from outside entities

Key Requirement:

- Integration of internal and external data
- Data must be cleansed, processed, and distributed in compliance with laws and regulations

Note: Data alone does not provide competitive advantage—it's the quality and integration that matter

Tangible Resources in AI Technology

Infrastructure Needs:

- Robust systems for data storage and processing
- Increasing shift to cloud-based infrastructure to reduce costs.

Barrier to Adoption:

- Lack of technological infrastructure is a major obstacle to implementing AI

Tangible Resources in AI

Basic Resources

Time and Financial Investment:

- Essential for AI projects to deliver expected outcomes
- Competes with other organizational priorities for funding

Human Resources in AI

Overview

Definition:

- Human capital includes the:
 - Knowledge
 - Skills
 - Experience
 - Leadership
 - problem-solving
 - Communication
 - collaboration abilities
- of an organization's workforce

Human Resources in AI Technical Skills

AI Implementation:

- Skills to develop and deploy AI algorithms and infrastructure

Training AI:

- Expertise in preparing and refining AI models

Business Understanding:

- Ability to explain AI functionality to non-technical stakeholders

Human Resources in AI Business Skills

Strategic Deployment:

- Knowing where and how to apply AI technologies

Impact Awareness:

- Understanding the implications of AI use, including:
 - Privacy
 - Safety
 - Ethical considerations

Intangible Resources in AI

Overview

Definition:

- Unique, hard-to-replicate resources
- Crucial in uncertain and volatile environments
- Vary across organizations and contribute to competitive advantage

Inter-departmental Coordination:

- Enables innovation and creativity
- Essential for success in multi-disciplinary projects
- Improves agility and adaptability in AI deployment

Intangible Resources in AI

Overview Continued

Organisational Change Capacity:

- Ability to initiate and execute transformation plans
- Involves:
 - Breaking the status quo
 - Introducing new practices, values, and structures
 - Overcoming resistance to change

Risk Proclivity:

- Proactive, risk-taking mindset leads to early adoption benefits
- Associated with:
 - Higher levels of innovation
 - Market leadership
 - Competitive edge in AI integration

Activity

Let's have some fun!

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Activity



1. Watch the following YouTube Video to help yourself consolidate your knowledge for this lesson, and to prepare for the next:

<https://www.youtube.com/watch?v=MjNHllZiHP8>

2. Complete the Week 2 - 4.2. Practice Quiz on MyLMS