

Module 4 European Studies through Digital Management

Practical workshop No. 4

**Topic 4: AI and Automation in European Public Sector Management**

**Part 1: The Role of AI and Automation in Public Administration**

1. **Defining AI and Automation in Public Sector Management**
    - Understanding **artificial intelligence (AI)**, **machine learning (ML)**, and **robotic process automation (RPA)** in governance.
    - The EU's **strategic vision for AI-driven public services** under the **Digital Decade 2030**.
  2. **Key Applications of AI in European Public Sector Management**
    - **AI-powered chatbots and virtual assistants** for citizen services (e.g., Estonia's Bürokratt).
    - **Predictive analytics** for policy formulation and crisis management.
    - **Automated document processing and workflow management** to reduce bureaucratic inefficiencies.
  3. **AI and Data-Driven Decision-Making in the EU**
    - The role of **big data analytics** in policymaking and forecasting.
    - AI in **public finance, tax administration, and fraud detection**.
    - The impact of **AI-assisted legislative drafting and regulatory analysis**.
  4. **Challenges in AI Implementation in the Public Sector**
    - **Data privacy and security concerns** under GDPR and the AI Act.
    - **Bias in AI algorithms** and the risk of discrimination in public service delivery.
    - **Ethical considerations** in AI-based decision-making and automation.
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**Part 2: Case Studies and Future Trends in AI-Driven Public Sector Management**

1. **Successful AI Implementations in EU Public Administration**
  - **Estonia's AI-driven e-Government services** (e.g., AI-powered tax filings).
  - **France's AI-based fraud detection system** in social welfare programs.
  - **Germany's automated legal document analysis** for policy evaluation.
2. **The AI Act and the Regulation of AI in Public Administration**
  - The EU's **AI Act (2024)**: Guidelines for AI usage in governance.
  - **Risk classification of AI systems**: High-risk AI applications in law enforcement, social security, and border control.
  - The role of **ethics boards and regulatory oversight** in public sector AI deployment.
3. **The Future of AI in European Public Sector Governance**
  - Expanding **AI-driven digital identity verification** and secure public authentication.
  - The rise of **AI-assisted urban planning and smart city governance**.
  - **AI and blockchain integration** for secure, transparent digital record-keeping.
4. **Ensuring AI for Public Good: Ethical AI in Governance**
  - Promoting **transparent and explainable AI** in government decision-making.



**Full-Time Studies**

**Semester 1, 2**

- Balancing **automation with human oversight** in critical public services.
- Strengthening **EU-wide AI governance frameworks** to prevent misuse and ensure accountability.

