Smart buildings

SMPE

What is a Smart Building?

Smart Technologies:

- Sensors
- IoT

Optimizing →

Operations:

- Energy
- Comfort
- Security

Problems addressed:

- Reducing energy consumption.
- Improving operational efficiency and occupant comfort.
- Enhancing security and reducing management costs.

Analysis of the Articles and Identified Problems

➔ **Can a Building Have Empathy?**

- Collection + Analysis of behavioral data ✅
- empathic design ✅

- Complexity of prediction ❌
- Empathy in shared spaces ❌

Evaluation of Impacts

Advantages

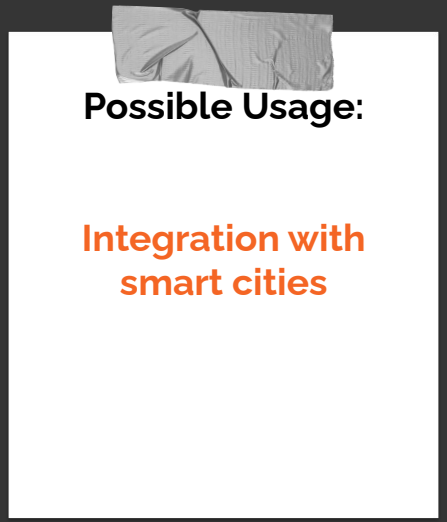
- Reduction of CO2 emissions through energy efficiency.
- Enhanced quality of life (comfort, personalization).
- Optimized resource management (water, energy).

Evaluation of Impacts

Disadvantages

- Increased technological dependency.
- Risks to privacy and data security.
- High initial installation and maintenance costs.

Unlocking New Usages with Smart Buildings ?



Unlocking New Problems with Smart Buildings ?

Newly Emerged Problems:

Increased need for training building managers.

Growing dependency on technology providers

ADEME Scenarios and Smart Buildings

- ➔ **Sufficiency**
- ➔ **Green Technologies**

Thank you for your attention