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## Towards a Smart University in Morocco : A Systematic Literature Review on Artificial Intelligence for Governance Optimization

### Communication Info

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### Abstract

The digital transformation of higher education is reshaping governance and decision-making worldwide. Artificial Intelligence (AI) enables data-driven governance, improved efficiency, and strategic planning in universities [1]. Despite growing research, AI's role in university governance remains fragmented, especially in emerging systems such as Morocco.

This study presents a systematic literature review (SLR) that synthesizes research on AI applications in university governance, highlighting key trends, contributions, and challenges, and clarifying how AI supports Smart Universities [2].

Findings reveal AI techniques—machine learning, predictive analytics, and intelligent decision-support systems—enhancing strategic planning, resource allocation, and academic management [3][4]. Challenges persist regarding ethics, data governance, technological readiness, and organizational transformation.

This study provides a structured synthesis of AI-driven governance approaches and proposes a conceptual framework guiding Moroccan universities toward Smart University governance, offering insights for similar higher education contexts globally [5].

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### References

- [1] M. Zawacki-Richter et al., International Journal of Educational Technology in Higher Education, 16, 2019, 39.
- [2] P. Chen, L. Zhang, Computers & Education, 162, 2021, 104093.
- [3] S. Tlili et al., IEEE Access, 9, 2021, 150456–150478.
- [4] A. Coccoli et al., Journal of Visual Languages & Computing, 25, 2014, 1003–1011.
- [5] D. Ifenthaler, Educational Technology & Society, 18, 2015, 230–242.