

Geospatial and A.I. Technologies for Cadastral Mapping and Land Registration

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Key words: Cadastre; Digital cadastre; Engineering survey; Land management; Photogrammetry; Remote sensing; land registration

SUMMARY

Abstract: The Kingdom of Saudi Arabia is implementing its visionary Saudi Vision 2030, which is the strategic framework to reduce dependence on oil, diversify its economy, and develop public service sectors including land and development. The Kingdom has adopted a holistic approach using best practices and geospatial technologies and will draw upon the Land Administration Domain Model (LADM).

The presentation will share the approach to efficient land registration using High-definition (HD) mapping and Artificial Intelligence (AI) based automatic feature extraction (AFE) technologies. The presentation also covers lessons learned during this process and creative solutions to challenges.

In addition, the presentation covers the human-factor of the land registration process through the team's efforts to enhance the public trust in geospatial and AI technologies and methodologies to perform efficient and effective land registration.

Finally, the presentation will cover aspects of land registration regulations and impact on the process of land registration.

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