The Future of Urban Planning: Blending Planning Expertise with AI Technology

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SUMMARY

In recent years, artificial intelligence (AI) and machine learning have emerged as transformative technologies promising to revolutionise how we approach complex challenges across various industries. Urban planning stands at the forefront of this technological revolution, with potential in assessing how cities and neighbourhoods might develop in the future.☐☐The most exciting possibility lies in using AI to help determine the development potential of properties—a critical task that has traditionally relied primarily on human judgment. By analysing vast amounts of data quickly and identifying patterns that might escape human perception, AI offers a promising new approach to understanding urban development.☐☐However, this technological promise comes with significant challenges that will be discussed in the presentation. Current AI systems are limited by the quality and quantity of data used to train them. Just like a student learning from an incomplete textbook, these systems can inadvertently inherit and propagate existing biases present in historical development assessment processes. This means that without careful implementation, AI could potentially reinforce outdated or unfair approaches to urban growth.☐☐A more balanced approach is required to overcome these limitations. Instead of replacing human expertise, the most promising strategy involves combining the strengths of AI with the nuanced understanding of experienced urban planners. This collaborative model leverages the computational power of AI while ensuring that human insight, local knowledge, and ethical considerations remain at the centre of decision-making.☐☐The proposed approach represents a fundamental shift in how we think about technological innovation. Rather than viewing AI as a replacement for human professionals, this strategy sees technology as a powerful tool that can enhance and support human decision-making. ☐☐The presentation will explain how this can be done and provide insights into the advantages of using this strategy. Demonstrating how urban planners can use AI to process complex data sets, identify trends, and generate initial insights, while still applying their professional judgment, local understanding, and strategic thinking to ensure appropriate urban development strategies are

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achieved. As cities continue to grow and become more complex, this integrated approach represents a promising path forward. By combining cutting-edge technology with human expertise, we can develop more thoughtful, efficient, and equitable approaches to urban planning that truly serve the needs of communities.