Use of AI in Surveying Process of Land Measurement

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Abstract*: We have seen a shift from traditional surveying techniques to more automated techniques and processes, such as the introduction of drones for surveying. For drone surveys, unmanned aerial vehicles (UAVs), also known as drones, are equipped with high-resolution cameras that capture data. Whilst facing initial resistance, drone surveys have been widely adopted within the surveying industry due to them allowing surveyors to collect data more quickly and efficiently than ever before.*

In land surveying, another automation process that we have seen being used over the past few years is the use of machine learning algorithms to effectively analyse data. Machine learning algorithms are used to automatically detect and map changes in land use over time, allowing for land surveyors to easily recognise areas that may be of interest or concern, and to provide clients with accurate data that enables them to make more informed decisions.

One example of an automated process in land surveying is the use of drones. Drones equipped with cameras and sensors can be used to quickly and accurately survey large areas of land, capturing high-resolution images and data that can be used to create detailed maps. This can save time and money compared to traditional surveying methods, such as using a total station or GPS.

Keywords: Image analysing, Machine learning, Productive modelling, Data integration

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