GEOJUNXION

REAL ESTATE

A STEEP TECHNOLOGICAL CURVE

Emerging technologies will bring improved productivity and operational efficiency to the property development sector

GEOJUNXION

> WHITE PAPER

There is no doubt that property development and the real estate sector in general are undergoing a technological transformation. Since those early back-office admin tools and online property sales and rental sites, things have moved on a pace to cloud based property management; virtual reality viewings; data aggregation and analysis; and blockchain secure transactions and databases.

Although video games are probably the best known application of augmented reality, engineers, builders and developers can make very effective use of computer generated images to visualise 3D models and understand the outcome of potential changes. Drones can deliver aerial surveillance of buildings, plots and areas for developers and also act as very effective security monitors over large sites.*

Back on the ground, big data is being leveraged together with AI and machine learning to sift through information, identify trends and optimise building performance. Today, there is unprecedented access to a plethora of historical and real-time data which supports timely and informed decision-making and hence improves efficiency.**

A GROWING APPETITE FOR DATA

Leveraging data and turning it into actionable insights is an invaluable asset. For example, essential hyper-local information can uncover both opportunities and pitfalls, helping to optimise site selection – it provides great clarity.

Data on issues which affect quality of life, sustainability and economic development are becoming increasingly important with the growth of Smart Cities and the obligation to reduce environmental impact. There are many commercial and governmental sources of local information on amenities, housing prices, family friendliness, crime, sustainability, education, employment, noise pollution, time-distance (shortest, fastest, safest, most efficient routes), high alert zones (such as schools) and even dangerous road junctions.

It is a vast array of very useful information but often from different suppliers and therefore fragmented. However, there are now solutions coming on to the market which can combine many different types of data on one platform. This certainly means faster, easier and more flexible visualisation but, whichever route you choose, the key factors are currency, relevance and precision.

DATA DRIVEN DECISIONS

Data insights empower people to make informed (and fast) decisions. So what can a single platform really deliver?

Taking a shopping centre development as an example, location-aware data can provide demographic and social background on a given area, confirming the profile of potential shoppers, levels of crime, and available transport links. A clear picture of the existing transport infrastructure and time/distance statistics are also critical to an efficient stock delivery process. School zones with speed and perhaps road restrictions need to be considered in relation to available routes.

Neighbourhood evaluation insights based on the key parameters buyers and renters use when choosing somewhere to live are fundamental to any residential development. Similarly, noise levels can be very detrimental to daily life and potentially impact the type of sound proofing materials appropriate for a specific build.

This is just a snapshot of how this type of data can support developers with relevant insights. When they are all available on one platform, it gets even more interesting as any combination of this information can be simultaneously displayed as layers over a map of the area. The size of the area varies from a single postcode to an entire country. Reports can even be generated from the data analysis as required.

MOVING FORWARD....

The indications are that evolving technology will carry on shaping the future of this industry. New solutions will continue to digitise workflows and bring transparency to all the stakeholders – developers, engineers, designers, architects, contractors, project managers and investors.*** The boundaries are constantly moving so it is important to keep a finger on the digital pulse and make good use of any innovations which can improve efficiency and deliver the right insights.

*https://www.pwc.com/us/en/asset-management/real-estate/assets/pwc-emerging-trends-in-real-estate-2020.pdf
**https://www.propmodo.com/7-property-management-technology-trends-to-look-out-for-this-year/
***https://www.forbes.com/sites/valleyvoices/2019/02/22/the-proptech-opportunity/#1291b7e75826