

Deloitte | A Middle East Point of View - Fall 2024 | GenAl in real estate Deloitte | A Middle East Point of View - Fall 2024 | GenAl in real estate

s the world rapidly evolves, artificial intelligence (AI) has become a powerful force across all industries. Over the past few years, Generative Al (GenAl), a subset of Al, has surged in popularity due to its ability to produce original content such as text, images, audio, and other forms of media. The development of user-friendly tools and improved machine learning models has made GenAl more accessible to both businesses and individuals. Consequently, it is increasingly utilized for creative endeavors, automated content creation, and problem-solving, sparking widespread conversations about its potential impact. Companies are harnessing their capabilities to boost productivity and streamline processes, resulting in increased efficiency and improved customer experiences. As such, adopting this technology is no longer optional; it is essential for remaining relevant in the market.

The GenAl global market is set to surge to US\$1.3 trillion over the next decade, growing from US\$40 billion in 2022. This growth is expected to generate around US\$318 billion in new software revenue, driven by specialized assistants and innovative infrastructure products. Major players like Amazon Web Services, Microsoft, Google, and Nvidia are positioned to benefit as enterprises transition workloads to the cloud.1 While GenAl is transforming industries such as retail, education, manufacturing, and healthcare, its potential in real estate has yet to be fully explored.

The data-driven nature of real estate presents significant opportunities for value creation through Al. By integrating Al throughout the real estate lifecycle, all the stakeholders can achieve more efficient and sustainable operations, boosting asset values and enhancing customer experiences. According to Deloitte's 2024 Commercial Real Estate Outlook Survey, over 72% of global real estate owners and investors plan to invest in Al-enabled solutions within their organizations.²

Many real estate players in the region are accelerating their efforts to capitalize on the substantial value that these new technologies are offering. For example, ROSHN Group, a leading Saudi real estate developer backed up by Public Investment Fund (PIF), has partnered with Google Cloud to leverage AI to transform how it uses and benefits from data analysis.³ Meanwhile, Dar Al Arkan is launching a venture focused on developing technological solutions to address the major challenges faced by real estate companies.4

However, companies need to align several foundational factors such as securing management approval for the investment budget, effectively managing proprietary databases, and sourcing reliable third-party vendors to fully realize its potential. Once GenAl is fully understood and trusted, it will likely be integrated across the sector.

This article highlights a range of strategies that real estate companies can pursue to effectively leverage the advantages of a GenAl-driven vision and position themselves as industry leaders.



(O) Visualization insights

When a property is vacant or sold off-plan, the decision-making process for end users or tenants often takes longer. However, GenAl can facilitate a personalized virtual tour experience, enabling investors to make swift and informed decisions. Additionally, there is an opportunity to collaborate with home furnishing companies and interior designers, allowing users to select furniture and design elements in their preferred style, thereby enhancing the overall customization of the experience.



Property valuation

Traditional property valuation methods often depend on multiple manual processes, which can be time-consuming and prone to human error. In contrast, Alpowered valuation algorithms consider all aspects of a property in real time, including location analytics, market trends, and the

property's specific features. By expediting the valuation process, AI not only enhances accuracy but also facilitates quicker property turnover for real estate agents, owners, and buyers.

Bayut, the leading property website in the UAE that connects buyers, sellers, landlords, tenants, and agents, has collaborated with the Dubai Land Department (DLD) by launching TruEstimate, an Al-powered property valuation tool. This tool aims to enhance transparency and provide data-driven insights by leveraging the extensive data from the DLD.5



Businesses can leverage GenAl-powered chatbots to boost customer engagement. These chatbots can handle property inquiries, arrange viewings, and offer personalized recommendations tailored to user preferences. Additionally, virtual brokers and consultants can be developed to help avoid the challenges and delays that customers typically experience with human brokers. For example, a global real estate brokerage firm headquartered in the UAE has developed a fully qualified virtual broker capable of replacing a human agent. This virtual broker successfully advised multiple clients and closed property deals worth US\$30 million within just a week of its launch. The creation of this virtual broker stems from a goal to address the inefficiencies and unpredictability inherent in traditional real estate transactions.6



Investor decision making

Typically, an investor conducts a returnon-investment assessment by gathering data from various sources. For instance, when considering the purchase of residential property for appreciation, an investor analyzes factors such as location, proximity to shopping malls and metro stations, availability of children's play areas and schools, and property size. GenAl tools can leverage both internal and external datasets, enabling investors to filter options based on these criteria and

present relevant choices. This technology also allows for the evaluation of potential risks and returns, such as understanding how interest rate changes or rental rate fluctuations might affect profitability. Integrating GenAl enhances operational efficiency, improves customer experiences, and facilitates strategic decision-making, ultimately leading to increased profitability and a stronger competitive position in the market.



Property architect plans and designs

GenAl aids architects and developers by creating diverse architectural designs based on criteria such as budget, site dimensions, and aesthetic preferences. This technology allows for rapid prototyping, enabling quick visualization of different configurations. For example, tools can generate adjustable 3D models, providing clients with immersive previews of proposed buildings before construction begins. Developers in the UAE, such as Emaar Properties, have announced the detailed design of the Dubai Square project, positioning it as one of the most advanced projects globally utilizing GenAl.7



Project risk assessment

GenAl enhances risk assessment for real estate developers by analyzing large datasets to identify patterns and trends that indicate potential risks. It models various scenarios, allowing developers to visualize the impacts of decisions or external factors. Predictive analytics forecast issues like budget overruns and construction delays, enabling proactive mitigation strategies.

GenAl continuously monitors regulatory changes, alerting developers to new compliance requirements. It also assesses environmental impacts to help design sustainable solutions. By optimizing resource allocation and identifying inefficiencies, GenAl provides actionable insights that reduce uncertainties and improve decision-making throughout the project lifecycle.



Smart urban living

GenAl can analyze data from IoT sensors in buildings - such as temperature, humidity, and equipment performance - to anticipate when maintenance is needed. This proactive approach helps minimize downtime and repair costs by addressing potential issues before they escalate. For instance, Al can alert property managers to an impending failure in a heating system, allowing them to schedule maintenance proactively. This predictive maintenance not only reduces operational expenses but also boosts tenant satisfaction. For example, Aldar Properties (Aldar) has announced a partnership with Siemens to develop one of its integrated mixed-use projects in Abu Dhabi into a leading global example of smart urban living.8



♦ Urban planning

GenAl can analyze data on population growth, traffic patterns, and land use to create efficient and sustainable urban designs. For example, the Government of Dubai has announced its plan to implement GenAl for urban planning, positioning the city as one of the first globally to leverage this technology in developing its urban strategy. This initiative aims to create a comprehensive vision for neighborhoods and residential areas in collaboration with the community.9

In adopting GenAl, stakeholders and management within real estate companies must identify the most effective tools and strategies to enhance operational efficiency. This involves pinpointing applications that streamline processes, automate routine tasks, and ultimately save time for customers and tenants. By implementing Al-driven solutions such as virtual property tours, smart property management, and intelligent chatbots, companies can significantly improve the customer experience.

In an increasingly competitive landscape,

remain relevant and capitalize on new opportunities. Thus, investing in this technology is crucial for the future.

By Samina Rangoonwala, Director, External Audit, Deloitte Middle East

Endnotes

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adopting generative Al-driven tools and methods isn't just beneficial—it's essential for real estate companies looking to