

EMERGING TRENDS in real estate valuation



BY **AYDA CHAMCHAM**,
MSC, FRICS, P. APP., AACI

INTRODUCTION

Between 2020 and 2022, the real estate industry found itself captivated by the meteoric rise of the metaverse. Virtual parcels of land in platforms like Decentraland and The Sandbox were selling for millions, sparking intense debate about the future of property ownership and value in digital environments. During that period, at the Edmonton virtual annual industry conference, my presentation explored the seismic/radical shift toward digital assets and the implications for valuation professionals. The central question was clear: how do we appraise assets that exist entirely in virtual environments, where traditional metrics – like location, physical condition, and comparable sales – no longer apply? It was a moment of both excitement and uncertainty, as

the profession began to reimagine its foundational principles in response to a rapidly evolving digital frontier.

By 2025, although the metaverse remains a marginal investment – almost relegated to the background, if not forgotten – the real estate sector has largely refocused its attention on tangible, physical assets. These are now more complex, data-driven, and shaped by technological transformation, climate uncertainty, and economic turbulence.

In this shifting landscape, real estate valuation is undergoing a profound transformation. The challenge is clear: balancing and maintaining precision and accuracy while remaining adaptable in a market that has become more volatile and unpredictable than ever. From AI-powered appraisal models to climate risk scoring analysis tools, the methods and philosophies



“As markets become more volatile and assets more complex, valuation professionals are embracing a dynamic, interdisciplinary approach that blends traditional expertise with advanced technology and global awareness.”

intelligence and the evolution of Automated Valuation Models (AVMs)/Systems (AVSs), which are redefining how property value is assessed, forecasted, and communicated.

Modern AVMs/AVSs are far more sophisticated than their early predecessors. Today, AVMs/AVSs leverage machine learning algorithms to process thousands of variables in real time – from transaction histories and demographic shifts to neighbourhood sentiment on ‘social media’ and mobility data. This shift enables faster, more consistent, and scalable valuations, reducing human bias and offering broader coverage across diverse markets. Predictive analytics further enhance these capabilities by forecasting future property values based on macroeconomic indicators, climate risk, and consumer behaviour. For investors, lenders, and policymakers, these tools offer a more nuanced and timely understanding of market dynamics, helping to inform decisions with greater confidence and precision.

However, the rise of AI-driven valuation systems brings new challenges. The complexity of these models often results in opaque outputs – commonly referred to as “black-box” algorithms – that can be difficult to interpret, explain, and justify. This lack of transparency raises legitimate concerns around accountability, especially in regulated environments where valuation must be defensible and auditable. Consequently, human oversight remains indispensable and essential. Local expertise and professional judgment are still critical, particularly in emerging or atypical markets where qualitative factors play a significant role. Consumer-facing platforms like Zillow’s Zestimate and Redfin’s Estimate illustrate both the promise and limitations of AVMs. Redfin’s integration with MLS data tends to yield more accurate valuations for listed properties, while Zillow’s broader coverage – based on public and user-submitted data – can vary in reliability. These examples underscore the importance of calibration, context, and critical evaluation when deploying automated tools.

guiding valuation are being fundamentally redefined. This article explores the emerging trends shaping the field, the forces driving market instability, and the best practices for navigating this new terrain.

EMERGING TRENDS OVERVIEW

Indeed, real estate valuation has now evolved far beyond the traditional criteria of location, square footage, and comparable sales. It is now a multidimensional discipline shaped by data science, sustainability/ESG imperatives, and shifting consumer behaviour. As markets become more volatile and assets more complex, valuation professionals are embracing a dynamic, interdisciplinary approach that blends traditional expertise with advanced technology and global awareness. At the heart of this transformation is the adoption of artificial

“Human oversight remains indispensable and essential. Local expertise and professional judgment are still critical, particularly in emerging or atypical markets where qualitative factors play a significant role.”

“The convergence of AI, big data, and blockchain is reshaping the very foundation of property valuation. Professionals must now assess not only the physical attributes of real estate, but also the digital mechanisms that govern its ownership, exchange, and market behaviour.”

BLOCKCHAIN AND VALUATION INNOVATION

Alongside AI, blockchain technology is emerging as a powerful force in reshaping real estate valuation. Blockchain is a decentralized, secure, and transparent ledger system that records transactions without the need for intermediaries, ensuring trust and efficiency. As the real estate industry undergoes a digital transformation, blockchain is also reshaping how property data is recorded, assessed, and transacted.

By securing records in tamper-proof digital ledgers, blockchain reduces the risk of errors, unauthorized changes, and ownership disputes. It enables instant access to transaction histories, enhancing transparency and reducing fraud. Smart contracts (self-executing digital agreements triggered by predefined conditions) automate key processes such as lease execution, title transfers, and valuations. These tools streamline operations, minimize reliance on paper documentation, and improve speed and reliability.

Once associated primarily with cryptocurrencies, blockchain has matured into a foundational technology capable of revolutionizing industries, and real estate is among the most promising.

Canada is positioning itself as a significant player in this evolution. Indeed, market projections estimate that the Canadian blockchain sector will grow from USD 557.2 million in 2022 to USD 81.6 billion by 2030, reflecting an extraordinary

compound annual growth rate of 88.2%. This momentum is driven by rising demand for secure, efficient, and tamper-resistant systems across industries – including real estate, where blockchain is being leveraged to create immutable property records and automate valuation processes.

Canada's commitment to blockchain innovation is reflected not only in market forecasts but also in policy direction. A landmark 2023 report from the House of Commons recommended a national blockchain strategy and the creation of regulatory sandboxes – controlled environments for testing blockchain applications in valuation and property transactions. This institutional support signals a clear intent to foster innovation while maintaining regulatory oversight and public trust. The Canadian Mortgage and Housing Corporation (CMHC) is also exploring blockchain for its housing finance ecosystem, while provincial and federal regulators address cryptocurrency-related aspects of the technology.

Industry momentum is also accelerating, with the Toronto and Region Real Estate Board (TRREB) launching the REALM platform – now widely used across Ontario. Companies like PropTx are integrating blockchain into REALM to enhance property valuation, while Mavennet is advancing decentralized identity standards. These efforts are supported by advocacy groups such as the Canadian Blockchain Consortium, which highlights blockchain's potential in smart contracts, land-title

transfers, and secure identity verification, signaling a broader shift toward digital innovation in the industry.

So how does this apply to the valuation profession? For valuation professionals, the implications are profound. Blockchain offers a secure infrastructure for managing property data, ensuring that historical valuation records remain tamper-proof and accessible. Smart contracts can automate key aspects of the valuation process by pulling data from verified sources – such as market trends, comparable sales, and property characteristics – and executing predefined rules to generate real-time valuations. This reduces reliance on intermediaries, minimizes human error, and accelerates transaction timelines. Several platforms are already integrating blockchain-based valuation models, marking a shift toward more transparent, efficient, and accountable ecosystems.

TOKENISATION

Another emerging trend is **tokenisation**, which involves converting ownership of real estate assets into digital tokens on a blockchain, allowing investors to buy and sell small shares – similar to trading stocks. This makes real estate more accessible, increases liquidity, and enables peer-to-peer transactions without traditional intermediaries.

For appraisers, tokenisation introduces new layers of complexity. Valuation must now consider how easily those shares can be traded, how ownership is structured, and how market sentiment affects value. While the underlying asset remains physical, its tradable nature and digital infrastructure shift the valuation framework toward a hybrid model.

Without going into further details, a recent example illustrates the trend and shows how this is already happening. In March 2025, Polymesh and Ocree Capital tokenised a \$51.9 million commercial property in Winnipeg, giving



accredited investors fractional ownership through a regulated blockchain platform. This marks a significant milestone in the integration of digital finance and real estate investment.

As Canada continues to advance its digital strategy, the valuation profession stands at the threshold of a new era – one that demands a fundamental shift in methodology. The convergence of AI, big data, and blockchain is reshaping the very foundation of property valuation.

Professionals must now assess not only the physical attributes of real estate, but also the digital mechanisms that govern its ownership, exchange, and market behaviour. This calls for a hybrid skill set that blends traditional appraisal expertise with fluency in blockchain economics, digital asset valuation, and data-driven analytics. The future lies in models that leverage the speed and objectivity of technology while preserving the insight and discernment of seasoned professionals – especially as these elements must be transparently disclosed and responsibly interpreted in valuation reports. In an environment marked by economic uncertainty, climate disruption, and rapid technological acceleration, the ability to balance innovation with sound judgment is no longer optional.

ESG INTEGRATION

As artificial intelligence, blockchain, and tokenisation continue to reshape the mechanics of real estate valuation – bringing speed, transparency, and liquidity – another force is redefining its purpose: ESG. Environmental, Social, and Governance criteria are no longer peripheral considerations. They are now central to how properties are assessed, financed, and regulated. Valuation is no longer just about determining what a property is worth today; it is about anticipating what it could be worth tomorrow, and understanding the forces – technological, environmental, and societal –

that will shape that trajectory to meet the evolving demands of investors, lenders, and policymakers.

As governments and regulatory bodies push for greater transparency, sustainability, and long-term resilience in the built environment, valuation practices must evolve to reflect these priorities. ESG integration means accounting for climate risk exposure, energy efficiency, social impact, and governance structures – aligning financial value with broader societal goals. The International Valuation Standards Council (IVSC) has begun formalizing ESG within its global standards, encouraging valuers to consider both qualitative and quantitative ESG impacts where relevant. This shift is not just technical. It redefines value as a function of responsibility, resilience, and relevance.

While both Canada and Europe recognize the strategic importance of ESG, their approaches reflect distinct regulatory environments and market maturity. In Canada, ESG adoption is largely market-driven and not mandated, with increasing use of green certifications like LEED and BOMA, and growing attention to climate resilience and social equity. However, standardized ESG reporting and valuation methodologies remain limited, leaving room for interpretation and inconsistency. Europe, by contrast, is regulation-led. The EU Taxonomy and Corporate Sustainability Reporting Directive (CSRD) mandate ESG disclosures, while energy performance standards restrict leasing of inefficient buildings. Appraisers in Europe use structured frameworks to embed sustainability into financial models, making ESG a core part of asset value rather than an optional enhancement.

This evolving emphasis on ESG marks a natural progression in the broader transformation of valuation – where technology meets responsibility, and data-driven precision is paired with ethical foresight.

CONCLUSION: NAVIGATING THE NEW NORMAL

Overall, in today's rapidly evolving landscape, real estate valuation is no longer a static snapshot – it is a dynamic, multidimensional discipline shaped by technology, ethics, and global forces. The convergence of AI, blockchain, and tokenisation is transforming how value is measured, exchanged, and understood, while ESG integration ensures that valuation reflects not only financial performance, but also long-term resilience and societal impact. As we stand in 2025, the metaverse may have sparked the conversation, but it is the real-world challenges – climate change, economic instability, and digital acceleration – that are defining the future of valuation.

In this new paradigm, valuation professionals are no longer just market analysts – they are strategic advisors navigating complexity with clarity. Balancing accuracy with volatility requires more than better tools; it demands a mindset shift: from rigid formulas to flexible frameworks, from isolated expertise to collaborative intelligence. The profession now calls for hybrid skill sets that blend data science with human insight, capable of anticipating tomorrow's worth through the lens of transparency, ethics, and adaptability. Whether you are an investor, developer, or valuer, the message is clear: embrace the tools, respect the risks, and never stop learning. ■

“Whether you are an investor, developer, or valuer, the message is clear: embrace the tools, respect the risks, and never stop learning.”