

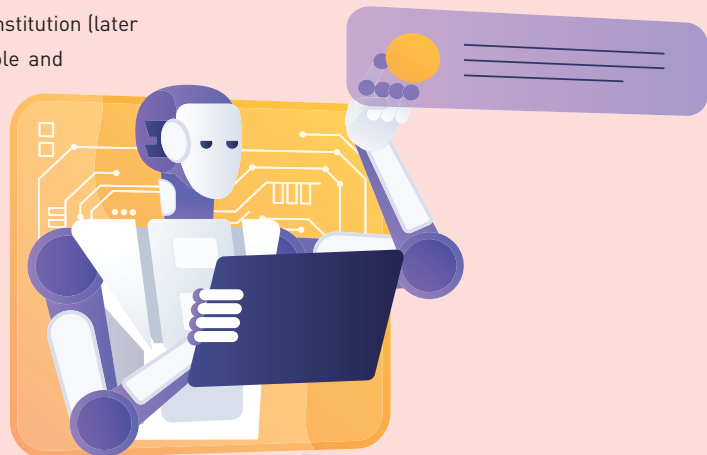
FROM EXPERTISE TO ALGORITHMS

WITH THE INCREASING USE OF AUTOMATED VALUATION MODELS, CHARTERED SURVEYORS MUST ENSURE THAT THE HUMAN ROLE IN PROPERTY VALUATION IS RETAINED.

Land and property valuation was practised in ancient Egypt, Greece and Rome, primarily for taxation and military tribute. Roman surveyors (*agrimensores*) performed basic valuations based on land productivity and area. In medieval Europe, there are recorded surveys, and feudal and land assessments, for rent setting, but without a formal valuation profession. The rise of capitalism in the early 18th century and urbanisation in Britain led to a growing need for independent appraisals. In 1868, the Surveyors' Institution (later the RICS) was established in the UK, formalising the role and profession of Chartered Surveyor. In the early 20th century, valuation emerged as a distinct branch within surveying, especially with the rise of compulsory purchase, mortgage lending, and taxation systems. Since then, not much has significantly changed, even when the first RICS Red Book was published in 1976.

Valuation in the modern era

As someone who has worked as an active valuer for the past 20 years, and is also engaged in the automated valuation model (AVM) area (having written many research papers and established an AVM for Cyprus data), I believe that in the last 10 years, the valuation profession has been facing significant challenges, driven by rapid technological



FEATURE

Dr Thomas Dimopoulos
MRICS

Director and founder, Axia
Chartered Surveyors
Assistant Professor and
Director of Real Estate
Programmes at Neapolis
University, Cyprus



change, shifting client expectations, regulatory scrutiny, and the increasing demand for faster, scalable, and data-driven solutions. At the centre of this transformation lies the growing use of AVMs. Initially seen as tools for bulk property assessments or preliminary checks, AVMs have evolved into sophisticated systems powered by machine learning, geospatial analytics, and real-time data streams. They now offer instant value estimates across large portfolios, support mortgage lending workflows, and provide consistent benchmarking for institutional investors and regulators.

However, their rise also raises fundamental questions, not only about accuracy and transparency, but also for the evolving role of the professional valuer. As the industry stands at the intersection of automation and expertise, surveyors must now navigate how best to integrate AVMs into professional practice – leveraging their strengths without compromising judgement, local insight, and ethical responsibility. The valuation profession today faces a complex set of challenges that extend beyond traditional technical concerns. One of the most pressing issues is the increasing commoditisation of valuation services, driven by digital platforms and client expectations for faster, lower-cost outputs. This shift risks reducing valuations to mere number generation, eroding the professional judgement and nuanced market insight that Chartered Surveyors provide. At the same time, data quality and availability remain uneven, particularly in secondary markets, rural areas, or jurisdictions lacking transparent property registries. Valuers must also navigate regulatory uncertainty, as international standards evolve to accommodate hybrid and automated models, often without clear guidelines on professional liability or methodological disclosure. Compounding these issues is the growing reliance on AVMs and artificial intelligence (AI) tools, which, while powerful, introduce new risks related to transparency, explainability, and ethical use. In this rapidly changing environment, the profession must reaffirm its value by adapting to technological progress without compromising its core principles of independence, reliability, and contextual expertise.

Data and expertise

While data has become the cornerstone of modern valuation – fuelling AVMs, geographic information systems (GIS), and predictive analytics – professional judgement remains irreplaceable. Undoubtedly, high-quality data enables greater consistency, speed, and scalability in valuation outputs, but does not capture all the nuances that affect property value. Factors such as planning uncertainty, market sentiment, construction quality, or recent off-market transactions typically escape data-driven models. Furthermore, even the most advanced AVMs require human oversight to interpret their outputs, assess confidence levels, and contextualise results within specific legal, physical, or economic frameworks. Professional judgement acts as the safeguard against blind reliance on automation, ensuring that assumptions are questioned, anomalies are investigated, and valuations remain both defensible and ethical. I believe that as the profession evolves, the future lies not in choosing between data and expertise, but in combining them, using robust data to inform, and experienced judgement to interpret.

Ethical considerations

My view is that AVMs will inevitably become more common in valuation practice, but their use must continue to be centred on ethical responsibility. Transparency is a major issue: clients, regulators, and end users need to be aware of the model's constraints, confidence intervals, and data sources in order to comprehend the valuation's foundation. In the absence of this clarity, an excessive dependence on opaque, algorithmic outputs that could mask bias or uncertainty exists. Equity and fairness constitute another ethical dilemma. Studies have indicated that AVMs may inadvertently reinforce market prejudices, especially in historically underprivileged or underrepresented communities, as a result of imbalances in training samples or inconsistent data quality. It is the responsibility of surveyors to assess whether the use of AVMs is in the best interests of their clients and complies with fairness standards, particularly in high-stakes situations like financing, taxation, or compulsory purchase. Most importantly, professional valuers remain accountable for their conclusions, even when AVM tools are used. This underscores the need for informed consent, careful model selection, and the clear communication of when human judgement has adjusted or overridden automated estimates. Ethical AVM use is not just about compliance – it is about preserving trust in the valuation profession.

A random example of AVM's bad application in mortgage lending

Scenario: A national retail bank in a fast-growing urban area begins using an AVM to speed up residential mortgage approvals for properties under €300,000. The AVM, trained primarily on historical sales data from established neighbourhoods, systematically undervalues properties in newly developed areas on the city's periphery, where there are fewer recorded transactions and less historical data. As a result, several loan applicants receive lower-than-expected mortgage offers – or are denied altogether – despite local market evidence (e.g., new infrastructure, school catchments) suggesting higher market values.

Ethical dilemma: The bank's loan officers rely solely on the AVM estimate without a professional valuer's review. Borrowers are not informed that the valuation was automated, nor are they offered the chance to challenge it or request a traditional appraisal. This raises several ethical issues:

- transparency: borrowers are unaware of the valuation method used or its limitations;
- equity: applicants in data-poor areas are disadvantaged despite similar or better property fundamentals;
- accountability: no qualified professional assumes responsibility for the estimate; and,
- duty of care: the institution fails to inform or protect the client's financial interests adequately.

The dual role of the modern Chartered Surveyor is the resolution in AVM use

The role of the modern surveyor has evolved into a dual responsibility:

both as a data custodian and as a critical evaluator of model outputs (Figure 1). On one hand, surveyors must ensure that the underlying data feeding into AVMs – property characteristics, zoning information, comparable sales, and locational factors – is accurate, up to date, and contextually relevant. Errors or omissions at this stage can significantly distort the model's conclusions. On the other hand, surveyors are also responsible for reviewing and interpreting AVM results, assessing whether the output aligns with local market realities, legal frameworks, and the unique characteristics of the property in question. This involves questioning anomalies, validating confidence intervals, and applying professional judgement where the model lacks nuance. In this sense, the valuer becomes both auditor and analyst, bridging the gap between automated efficiency and human expertise, and safeguarding the integrity of the valuation process.

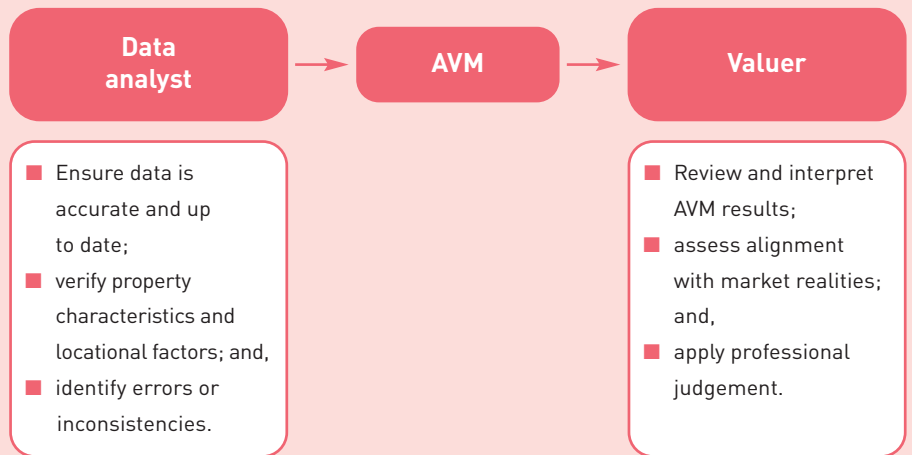


FIGURE 1: the dual role of the surveyor in valuations.

THE ROLE OF THE MODERN SURVEYOR HAS EVOLVED INTO A DUAL RESPONSIBILITY: BOTH AS A DATA CUSTODIAN AND AS A CRITICAL EVALUATOR OF MODEL OUTPUTS.

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