



# Valuation ft. AI

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Beyond the Black Box: Leveraging  
Technology to Enhance Valuation Quality,  
Speed, and Defensibility





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Huong, as Advisory Manager at TMS Consultancy, manages valuation and investment advisory projects across corporate, real estate, and industrial sectors. With over six years of experience, she has advised both domestic and international investors on M&A, enterprise valuation, and fundraising in Vietnam and Southeast Asia.

She holds a Master's in Finance from IÉSEG School of Management (France) and a Bachelor's in Economics & Finance from University of Colorado Denver (USA).

Currently pursuing a PhD in Development Economics at UEH, her research focuses on valuation, sustainable finance, and development in emerging markets. Her paper on ESG performance and firm value received the Best Paper Award at the 26th AVA International Conference (2024)

## The Big Question



### ***Historical Progression***

- Valuation underpins investment, lending, and corporate decisions
- Technology offers new opportunities — but risks opacity, bias, and commoditization.

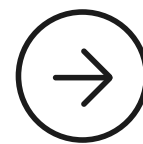
### ***Key Challenges***

- Accuracy
- Speed
- Defensibility

**How can technology enhance valuation without turning it into a black-box factory?**

# Traditional Valuation

Foundation of professional practice,  
but each trades transparency for  
practicality



## ***Discounted Cash Flow (DCF)***

- Strength: Intrinsic, theory-based; flexible for scenarios.
- Limits: Assumption-heavy; small input errors distort results.

## ***Market Method***

- Strengths: Reflects real prices; easy to explain.
- Limits: Requires reliable data; comparables seldom identical.

## ***Multiples Method***

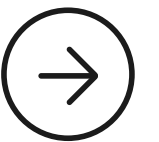
- Strengths: Quick benchmark across peers.
- Limits: Ignores fundamentals; mirrors market sentiment.

## ***Residual Income Method (RIM)***

- Strengths: Links accounting to valuation; useful when cash flows uncertain.
- Limits: Depends on accounting quality and cost-of-equity assumptions.



Technology	Strengths	Limits / Risks
<b>Automated Valuation Models (AVMs)</b>	Rapid, scalable valuations; consistency across assets.	Limited interpretability; depends on data quality.
<b>Machine Learning (ML)</b>	Detects complex, non-linear value drivers; improves accuracy.	“Black-box” opacity; potential data or bias issues.
<b>Blockchain</b>	Tamper-proof ownership and transaction records; enhances trust.	High setup cost; regulatory uncertainty.
<b>Big Data &amp; ESG Analytics</b>	Integrates non-traditional indicators (ESG, satellite, IoT).	Data inconsistency and weak disclosure in emerging markets.
<b>Explainable AI (XAI)</b>	Makes model logic transparent; strengthens auditability.	Still early in adoption; requires technical literacy.

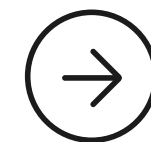


# Technology in Valuation

Technology accelerates valuation and broadens evidence—but must remain transparent, explainable, and professionally governed

# Opportunities

Technology can transform valuation—if guided by transparency and expertise.



## **Quality**

Broader datasets and deeper insights.  
ML captures ESG, sentiment, and spatial data to explain value drivers.

## **Speed**

Automation replaces manual processes.  
AVMs reduce report time from 3 hours → 0.05 seconds.

## **Defensibility**

Transparent audit trails and explainable outputs.  
Blockchain and XAI strengthen regulatory and client confidence.

*When used responsibly, technology enhances the quality, speed, and defensibility of valuation—without replacing professional judgment.*

Risk	Description	Impact
<b>Opacity</b>	Complex models become “black boxes.”	Clients and regulators lose trust in results.
<b>Bias</b>	Algorithms replicate flaws in historic data.	Distorted or unfair valuations.
<b>De-skilling</b>	Over-reliance on tools reduces professional skepticism.	Weakens judgment and accountability.
<b>Commoditization</b>	Automation makes outputs seem interchangeable.	Fees fall; expertise undervalued.
<b>Regulatory Lag</b>	Standards evolve slower than technology.	Compliance and liability risks.



# Risks of Over-Automation

***Signaling Theory***

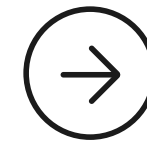
Valuations signal credibility and trust to markets.  
Opaque models weaken the signal of professional reliability.

***Institutional Theory***

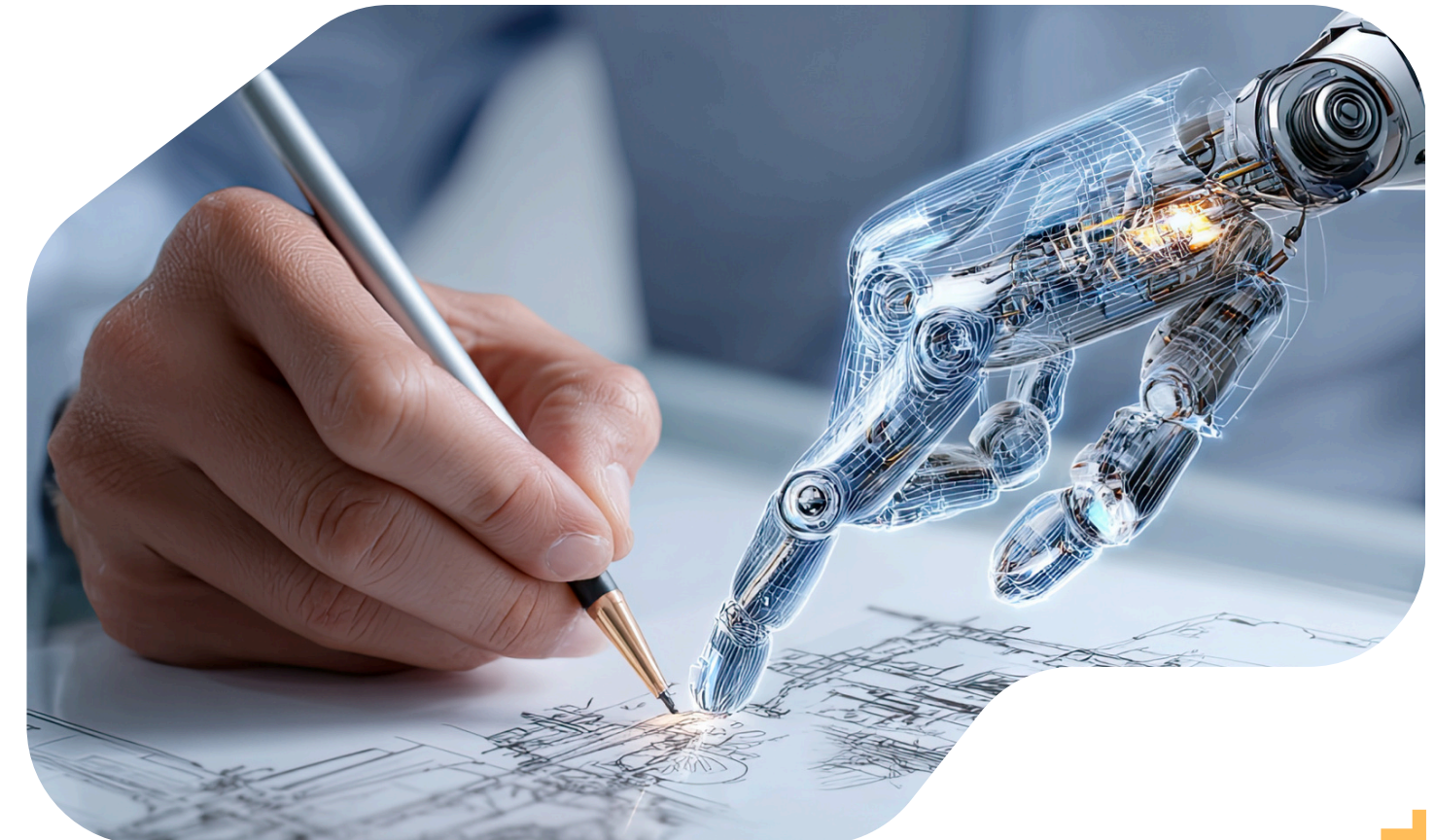
Legitimacy stems from following accepted norms and standards (IVS, RICS)  
Compliance and transparency preserve professional authority.

***Socio-Technical Systems Theory***

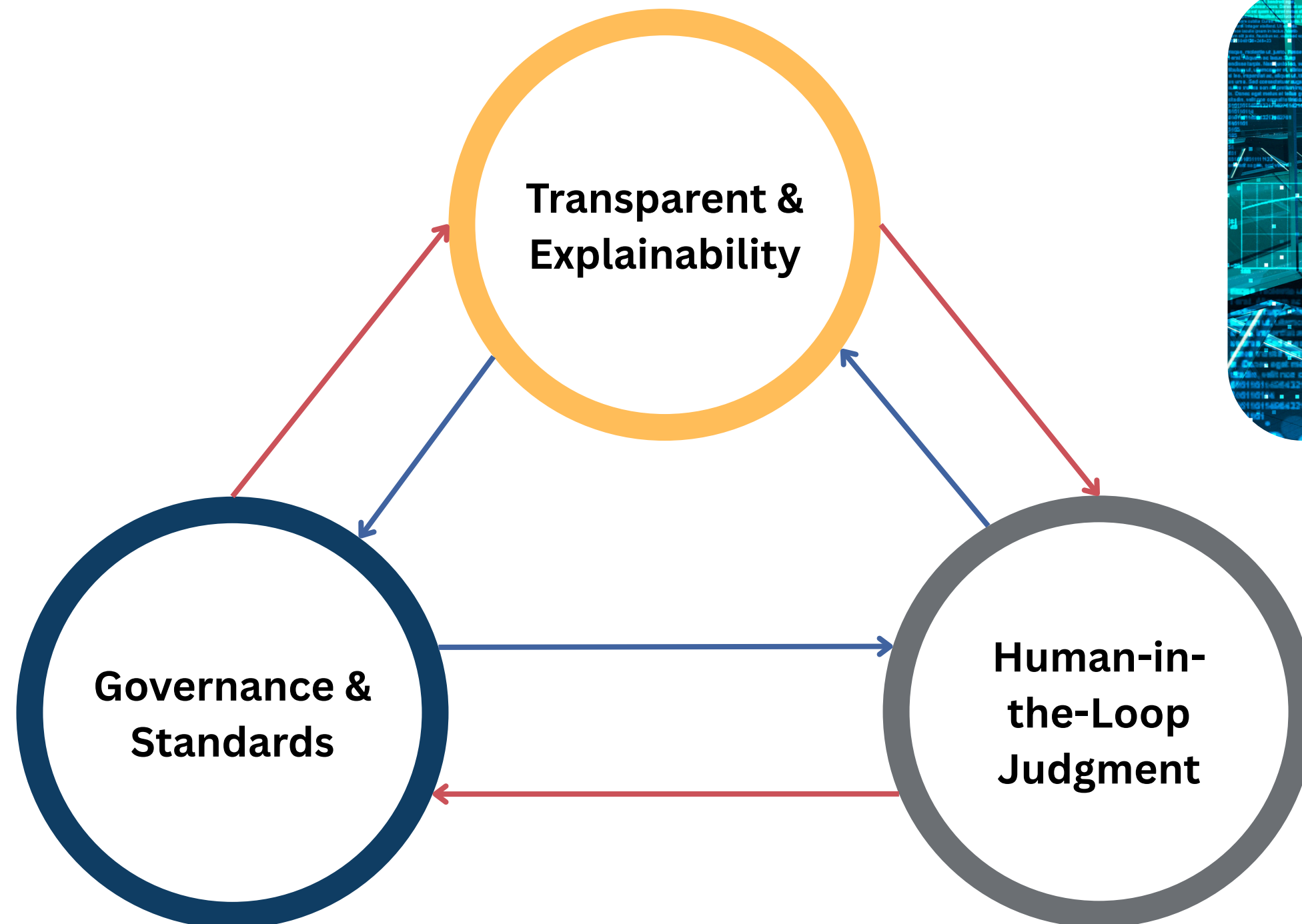
Effective systems combine human judgment with technology.  
Valuers and algorithms must co-evolve for accuracy and accountability.



# Theoretical Anchors



# Transparent Augmentation



Automation enhances efficiency;  
professional judgment sustains credibility.

Turning transparent augmentation into professional practice.



Stakeholder	Action Focus	Goal / Impact
<b>Regulators &amp; Standard Setters</b>	Update IVS, RICS, USPAP to include AI transparency and model disclosure.	Strengthen credibility and reduce compliance risk.
<b>Firms &amp; Institutions</b>	Adopt hybrid workflows combining automation with expert review.	Improve speed and auditability without losing oversight.
<b>Professional Valuers</b>	Build data literacy and critical interpretation skills.	Remain authoritative in a tech-enabled environment.

# Implementation Pathways

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Technology enhances valuation only when  
guided by transparency and expertise.

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***Technology as an Accelerator***

Automation improves speed and analytical capacity, freeing valuers for higher-level interpretation.

***Transparency as the Foundation of Trust***

Explainable AI and clear model disclosures will be essential for credibility and regulatory confidence.

***The Hybrid Future***

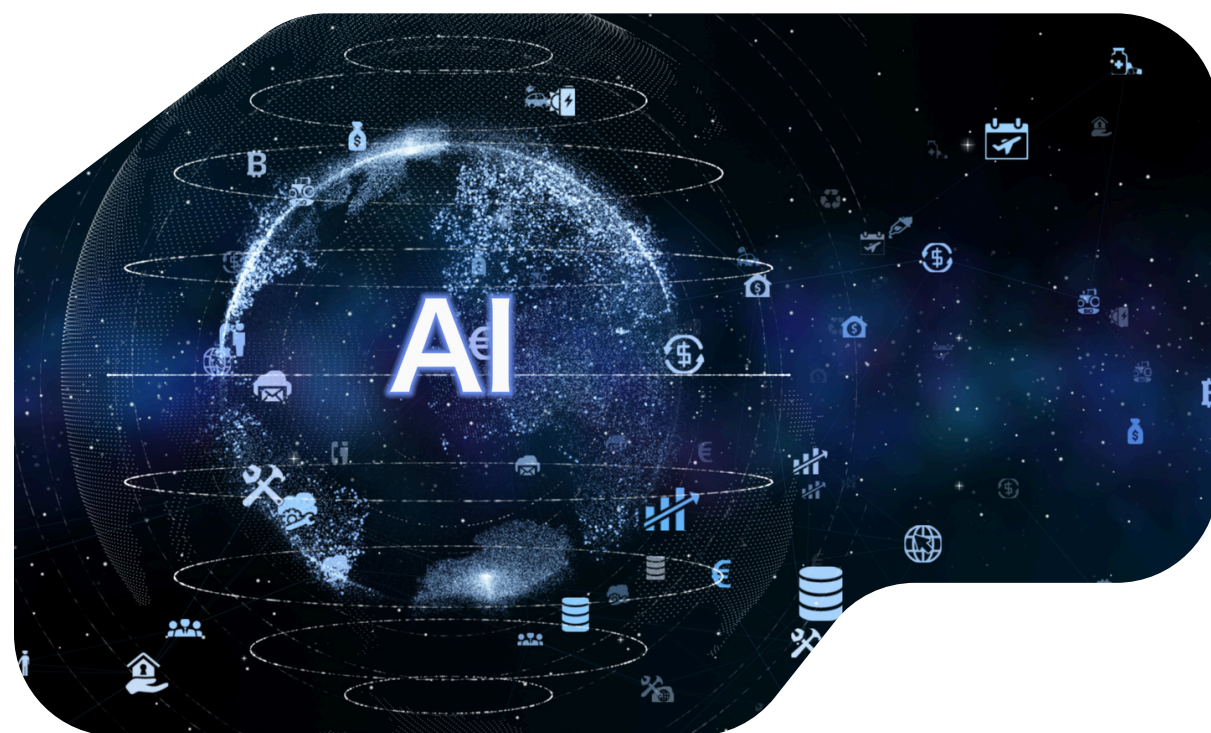
The most resilient practice blends automation, auditability, and human insight—“transparent augmentation.”

***Professional Judgment Remains Central***

Algorithms process data—but only valuers can reconcile context, uncertainty, and client needs.

# Key Insights & Future Outlook





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# Thank You

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