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The AI Alpha: Why Private Equity Is Entering an Automation Arms Race

By Professor Andy Pardoe | March 2026

Artificial intelligence is beginning to reshape the competitive foundations of private equity. What initially appeared as incremental experimentation with automation tools is evolving into a structural transition - one in which investment firms are seeking to build machine-augmented platforms capable of generating persistent informational advantage.

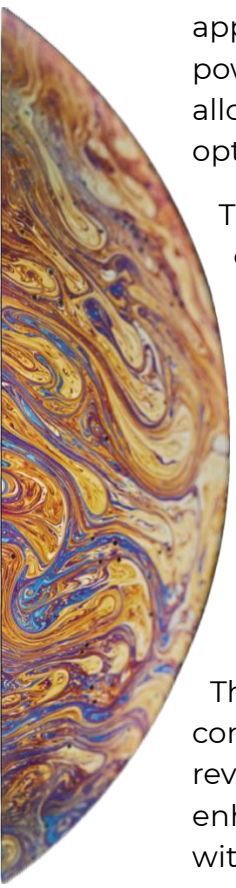
Private equity has historically relied on asymmetry. For decades, this asymmetry was driven by leverage optimisation, differentiated access to transactions, and disciplined operational execution. Yet the macroeconomic and technological environment that supported these advantages has shifted. Higher interest rates have materially reduced the contribution of financial engineering to returns, while increased competition for assets has constrained the scope for multiple expansion. At the same time, technological disruption is accelerating across sectors, shortening value-creation timelines and increasing execution risk.

Against this backdrop, artificial intelligence is emerging as a new source of alpha. Industry surveys indicate that approximately 50% of private-equity professionals expect generative or agentic AI to be the most transformative technologies affecting the industry within the next three years**,** while over half identify AI investment as a top strategic priority [1]. This reflects a growing recognition that competitive advantage in private markets is increasingly tied to the ability to scale insight and compress decision latency.

The shift toward automation is also evident in how firms structure investment workflows. Research suggests that around 80% of private-equity processes now rely heavily on digital technologies**,** with firms planning further increases in technology expenditure to improve deal sourcing, diligence, and portfolio monitoring capabilities [2]. As investment teams seek to track broader opportunity sets and respond more quickly in competitive auction environments, technology-enabled analytical scale is becoming a key determinant of performance.

Automation is beginning to reshape due diligence economics. Traditionally constrained by time pressure and human attention, diligence has required selective review of large datasets and extensive reliance on external advisers. Intelligent automation tools are enabling more systematic extraction and structuring of insights from virtual data rooms, helping investors improve consistency and coverage across transactions [3]. In highly competitive deal processes, incremental improvements in diligence speed and analytical depth can influence both pricing discipline and execution certainty.

Diligize is leading the way in this area, with its bespoke built AI tools and applications, including, Kepler ™, Galileo ™ and Copernicus™, it provides a range of AI powered automation and data analytics into parts of the due diligence process – allowing us to deliver faster and more accurately position insights into the deal optics.



The most durable impact of artificial intelligence may emerge during the ownership phase. Private equity has long sought to drive operational improvements across portfolio companies, yet scaling hands-on interventions across multiple assets has remained challenging. AI offers a mechanism for standardising performance optimisation. Predictive analytics systems can benchmark operating metrics across portfolios in near real time, while conversational automation tools are increasingly deployed in labour-intensive service industries to improve responsiveness and reduce cost structures. Strategy research indicates that investors are treating digital and AI transformation initiatives as central components of value-creation planning rather than discretionary technology projects [4].

These developments reflect a broader redefinition of productivity within portfolio companies. Traditional operational improvement programmes often depended on revenue expansion or physical capacity growth. Automation enables margin enhancement through endogenous efficiency - improving operating performance without proportional increases in capital expenditure. In volatile macroeconomic environments, such structural productivity gains can help stabilise earnings and support exit valuations.

Private equity's engagement with artificial intelligence also extends to capital allocation toward enabling infrastructure. Market data indicates that AI-related companies captured a substantial share of global private-market funding activity in recent years, approaching half of total investment volumes in certain periods**,** underscoring the strength of investor conviction in automation as a long-term thematic allocation [5]. In this sense, private equity is not only adopting AI internally but financing the development of the broader machine economy.

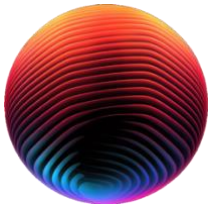
Family offices are playing an increasingly visible role in this transition. Their longer investment horizons allow them to pursue early-stage exposure to automation technologies and platforms. Wealth-management research suggests that allocations to AI-focused private investments are rising among ultra-high-net-worth investors seeking long-duration growth opportunities and asymmetric return potential [6]. This influx of patient capital is intensifying competition for high-quality assets while accelerating innovation cycles across private markets.

Yet automation introduces strategic risk alongside opportunity. Certain business models historically favoured by buyout investors, particularly information services and analytics providers, face valuation pressure as generative AI systems replicate elements of their core value propositions. Recent transaction discussions have reflected concerns that technological disruption could compress valuation multiples and weaken long-term growth assumptions in affected sectors [7]. Private-equity firms must therefore balance aggressive adoption of AI with careful reassessment of legacy investment theses exposed to structural technological change.

Looking ahead, these dynamics suggest the gradual emergence of machine-augmented investment platforms. Predictive systems may increasingly prioritise deal pipelines, automation tools may conduct elements of diligence and performance monitoring, and operational analytics may guide intervention timing across portfolio companies. Human investors will remain essential, particularly in governance, negotiation, and strategic synthesis. However, the comparative advantage of investment teams is likely to shift from executing analytical tasks toward interpreting insights generated by automated systems.

From a historical perspective, this evolution mirrors earlier industrial transformations. Mechanisation multiplied physical productivity in manufacturing; artificial intelligence may now multiply cognitive productivity in capital allocation. Firms that successfully integrate automation across sourcing, diligence, ownership, and exit processes may achieve greater performance consistency in an industry where return persistence has traditionally proved difficult to sustain. Those that fail to adapt risk informational disadvantage in markets increasingly defined by data velocity and decision speed.

Private equity's automation arms race therefore represents more than the adoption of a new technology. It signals a deeper reconfiguration of how value is created in private markets. In the coming decades, leadership may depend less on access to capital alone and more on the ability to build proprietary intelligence systems capable of transforming information into repeatable investment advantage.



In addition to our use of AI applications during the due diligence phase, we partner with firms to help them implement our recommendations of AI adoption for value creation, having extensive experience across a range of application areas and AI use-cases, not only with the technology but with the people and processes too – shaping culture, innovation, organisational structure, training and education and much more.

References

1. PwC
   https://www.pwc.com/us/en/industries/financial-services/library/private-equity-ai-transformation.html
2. World Economic Forum
   https://www.weforum.org/stories/2025/07/how-tech-innovations-are-transforming-private-equity/
3. Panamoure
   https://panamoure.com/wp-content/uploads/2025/09/Transforming-Private-Equity-Through-Intelligent-Automation-1.pdf
4. Kearney
   https://www.kearney.com/service/digital-analytics/article/the-impact-of-artificial-intelligence-on-private-equity-firms
5. Barron's
   https://www.barrons.com/articles/private-ai-investments-soar-66049e49
6. PWMNet
   https://www.pwmnet.com/content/f4ab7f98-fe9e-599c-8ef7-c0ba081f7e00
7. Reuters
   https://www.reuters.com/legal/transactional/ai-fears-temper-interest-private-equity-firms-weigh-data-company-deals-2026-03-05/