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What are implications of AI, either for core PE firm or for its varied portfolio businesses? • analect/technical-docs-hierarchy

Level 3 MLOps Processes Lifecycle

# **Topic Navigation**



# How Do We Weigh-up Business Opportunities and Threats?

Whatever about forming an AI strategy for a single business domain, having to do so across varied domains, a feature of private-equity investing, is exponentially challenging.

- Private Equity businesses need to anticipate opportunities and risks for their existing portfolio of investments as well as the pipeline of potential new investments.
- For their core competency of surfacing new investments and exiting existing investments, what has changed with the emergence of these new AI-driven technologies?
- The field has already transformed itself immeasurably over the past decade to become considerably more data-centric when investing. Layering an AI capability on top of this quantitative approach will inevitably raise the bar again.
- If the requisite skills are not available yet in-house, could an 'Operating Partner' model bridge that gap in the meantime, while new capabilities are built internally?

# Risks: Do these threaten existing business models?

Here are some of things to think about:

- **Deepfakes** prospect of reputational damage
- Disinformation disinformation campaigns that required hundreds of people prior can now be created and dispensed with two people and Al. according to James Landay of Stanford HAI.
- Discrimination systems known to discrimate across race, gender, age among other things, with good model explainability still some way off.
- Displacement of Jobs white-collar roles likely to be displaced?
- Trust / Privacy infringement A major failing of AI is that few tools and companies accept and act on feedback pertaining to model errors.

#### Sourced from:

https://hai.stanford.edu/news/davos-2024-six-takeaways-ai-conversation-wef

### **Priorities for PE Companies - Core Business**

AI has the potential to revolutionise the life-cycle for PE.

- Data-science Culture Al and data science can be used throughout the investment lifecycle for private-equity firms, from due diligence to monitoring. Businesses need to realise that data-scientists (or lack of them) doesn't need to be the bottleneck. These skills can be developed internally as user-friendly tooling in this space proliferates.
- Centre of Excellence / Operating Partner At the outset, a core team can begin to drive best-practice and coordinate internal efforts around leveraging AI in a methodical way, prioritising pilots that have greatest scope for creating value.
- Strengthen data-curation Models underpinning generative AI need large amounts of curated data to learn. As foundational models converge, proprietary data will be become a differentiating factor in specialist model fine-tuning.
- **Regulatory / Trust** Pre-empting evovling regulatory requirements and putting in place governance structures that underpin building trust in AI initiatives will be key. Responsible AI should be the mantra.
- ESG Reporting automating the gathering of information and disemminating of reporting, with a human-in-the-loop, could reduce some of the regulatory burden.
- Accelerated Targeting / Due-diligence For a well-tooled organisation, once mammoth tasks around screening candidate companies and keeping abreast of important industry shifts are much more easily automated and monitored. The task of performing due-diligence in virtual data rooms can be greatly simplified and made efficient.

# **Priorities for PE Companies - Portfolio Businesses**

Building on the points above, which are equally applicable to holdings:

- Map risk / opportunities for existing companies, methodically determine what are the risks and opportunities in their domains eminating from Al. How has it affected competition?
- Implications of AI for new investments GenAI can help transform processes at portfolio companies, improve operational efficiency and potentially identify new revenue streams.
- Georgian model implement cross-portfolio collaboration and cross-pollination initiatives. What other insights from a PE firm's ecosystem can be tapped and made actionable? Look at the casestudy we present on the next page.
- Reg/Trust anticipate how a changing regulatory regime, arising from Al diffusion in a given sector, will play-out and act accordingly.

### **Operating Partner Model**

Consider an MLOps platform that would potentially harvest data-sets from portfolio companies and act as an 'ML lab' of sorts, to propogate ideas around leveraging ML. Such an approach has the potential for cross-pollinating best-of-breed ideas (and templates) for working with AI to portfolio companies within a PE firm. At the same time, this would begin to bring better observability for the private-equity firm over its disparate businesses.

Seeding portfolio companies with a framework(s) and a platform(s), a team within {a Typical PE/VC} could act as an **Operating Partner**, bringing specialty knowledge on how to appropriately architect and operate technology platforms for the purpose of introducing a data-science culture that can implement machine-learning strategies across disparate businesses.

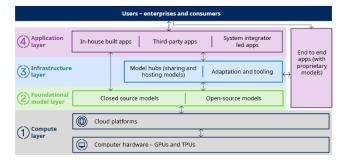
#### Layers of AI Ecosystem

Schroders (in Fig. 1) helpfully reproduce what is generally accepted as the Al tech stack. From layers 1 through 4, it's likely within layer 4 where most PE firms will operate.

- compute layer hardware and cloud providers, capital intensive.
- foundational model layer big tech companies. cost of training LLMs is huge, but gap with open-source is narrowing. OpenAl api-based services, but concerns around privacy issues may drive corporate users to ultimately self-host.
- infrastructure layer developer tooling around building corporate AI capabilities - this is an intensely competitive space.
- application layer perhaps where most PE activity will. What applications are ripe for an AI overlay, bringing new innovations.

#### The generative AI technology stack

#### **Schroders**



Source: Schroders Capital, 2023. 609063

Figure 1. GenAl Technology Stack - from insights/ai-revolution-who-sprofiting-now-from-generative-ai-/