

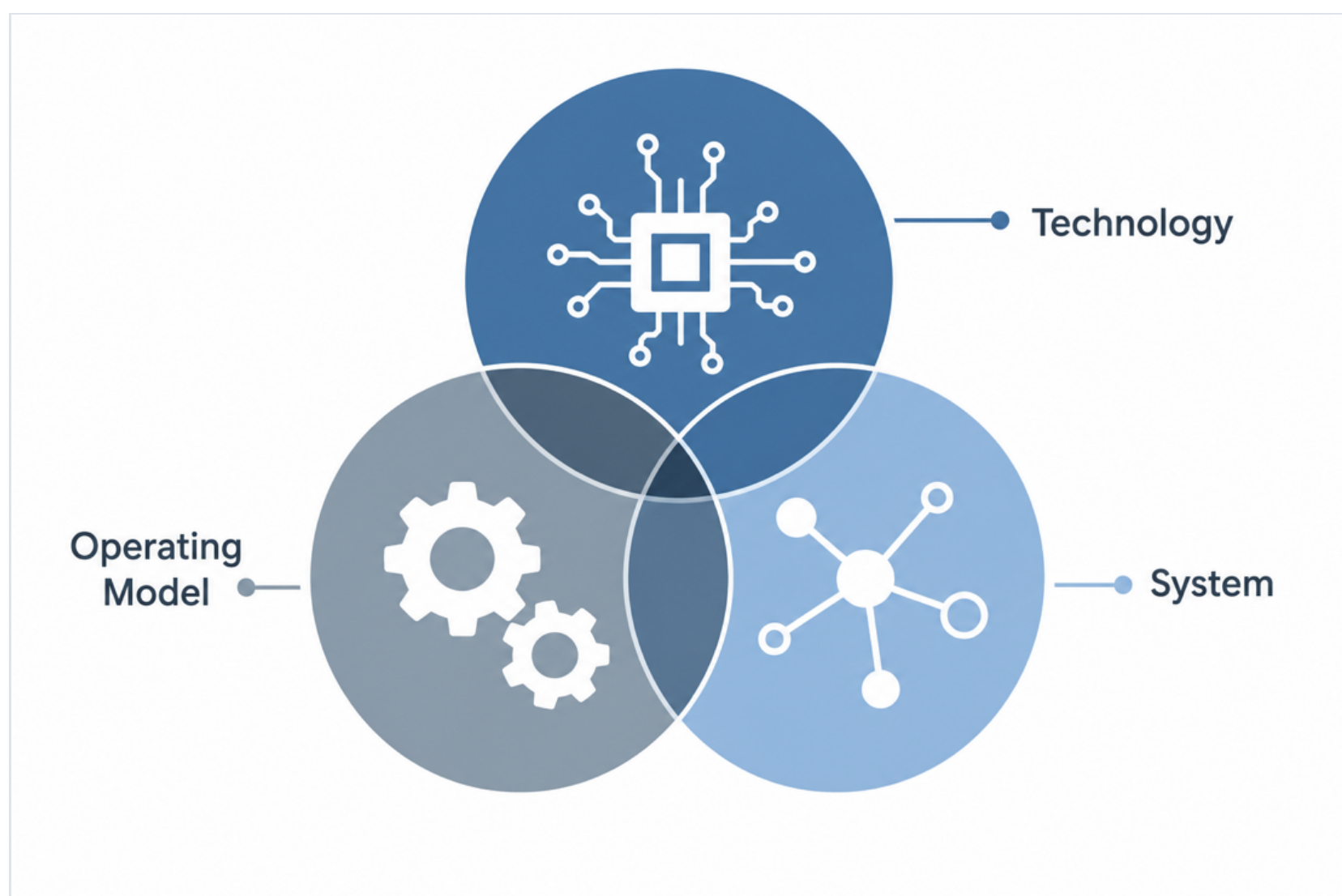
What “Digital Transformation” Actually Means Depends on Who's Saying It

Ask a CXO and an engineer to define digital transformation and you'll likely get two different answers — even when both are talking about the same programme. Three distinct framings circulate side by side, and none of them reference the others.

Graeme Wright · Founder & Principal Advisor, Graeme Wright Advisory Ltd

Ask a CXO and an engineer to define digital transformation and you'll likely get two different answers, even when both are talking about the same programme. That's not because one of them is wrong. The term has never settled into a single, agreed meaning, and three distinct framings circulate side by side in the consulting, vendor and policy material that shapes how transformation work actually gets scoped and sold. None of them reference the others.

Worth surfacing with a client before any work starts, because a CXO using one lens and an engineer using another can use identical words to answer different questions.



The three competing framings of digital transformation — technology-enablement, operating-model and sector-systemic.

The technology-enablement framing

The first framing is technology-enablement: digital transformation as the adoption of specific technologies to hit defined operational outcomes. A December 2024 arXiv paper on CAUCCES, a digital twin platform for water distribution networks built at the University of Extremadura, frames its entire “digital transformation” claim around four benefits delivered by the platform itself: real-time monitoring, predictive maintenance, simulation, and data-driven decision-making. Transformation, on this view, is what happens when the technology goes live.

The operating-model framing

The second is operating-model: digital transformation as the trigger for redesigning the Target Operating Model (TOM), with the TOM itself becoming the object that gets defined and structured. KPMG's 2020 guide for CXOs argues the traditional process-people-technology model is insufficient and proposes six layers instead: process, people, service delivery, technology, performance insights and data, and governance. Technology sits as one enabling layer among several, not the lead element. OC&C's 2024 framework makes the same move from a different angle, with six dimensions of TOM design and “systems and technology” explicitly labelled an enabler rather than a driver.

The sector-systemic framing

The third is sector/systemic: digital transformation, or more precisely “digitalisation,” as change at the level of an entire system rather than a single organisation. The techUK/DESNZ/Ofgem Energy Digitalisation Framework, published March 2026, defines digitalisation as “the process of transforming how the energy system operates — for consumers, industry and networks — by using technologies and data to efficiently manage an increasingly complex, flexible and decentralised system.” That's a sector-systems definition, complete with its own governance bodies (a Digitalisation Delivery Group escalating to a Digitalisation Board), not an organisational one. NESO, working with RECCo and Elexon, must deliver the first draft of the sector's architectural reference framework by the end of August 2026 — the first point at which this governance model gets tested against an actual deliverable rather than a policy statement.



Digitalisation framed at the scale of an entire sector network, not a single organisation.

The word choice isn't incidental

Academic literature treats digitisation, digitalisation and digital transformation as a hierarchy rather than synonyms: digitisation is converting analogue to digital format, digitalisation is using digital technology to change a process, and digital transformation is organisation-wide strategic change enabled by digital technology. UK energy and water regulators have settled on “digitalisation,” not “digital transformation,” for a reason: their statutory remit covers how the sector operates technically, not whether any individual regulated company restructures itself. Conflating the two terms when scoping regulatory-driven work risks scoping the wrong piece of work entirely.

It would be reasonable to expect the named, analyst-firm definitions to cut through this. They don't. Gartner's IT glossary defines digital business transformation as “the process of exploiting digital technologies and supporting capabilities to create a robust new digital business model,” closer to the technology-enablement framing but anchored to “business model” rather than operational outcomes. McKinsey's explainer defines it as “the fundamental rewiring of how an organization operates,” which lands closer to the operating-model camp without using its language. Neither matches the techUK/Ofgem systemic framing. A 2025 academic review counted 26 competing definitions of digital transformation in the literature. That count suggests there isn't one correct definition hiding behind the noise; there's genuine, ongoing disagreement.

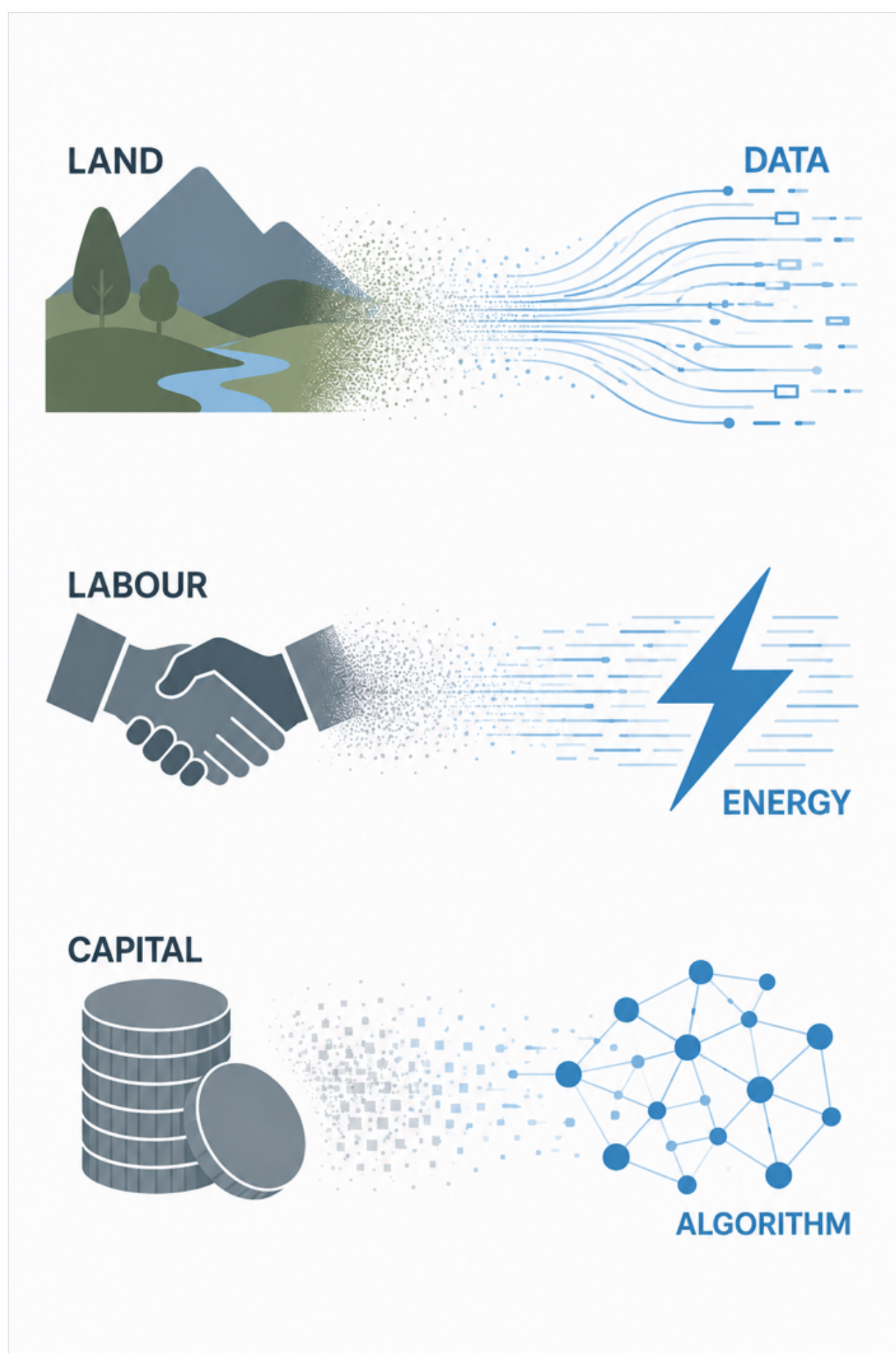
The mismatch isn't free

OC&C cites more than 60% of large transformation projects failing or underdelivering because of poor TOM principles. SAP LeanIX, looking at enterprise architecture in the utilities sector specifically, cites a 70% failure rate for digital transformations, attributing it to a narrow, technology-only approach rather than change across the wider business. Different sources, different framing of the figure, same underlying failure mode: treating digital transformation as a technology rollout rather than the operating-model change it actually requires.

Buying new technology doesn't make a business “digital.” Embedding the new factors structurally in how it operates does.

A factors-of-production view

The operating-model camp has the diagnosis right; a new TOM is genuinely required. What it doesn't explain is why. My own view, after 40 years in IT, is that the reason sits one level down: digital transformation is a change in the factors of production a business runs on. Adam Smith's three classical factors — land, labour and capital — are being augmented by three digital-era factors: data, energy and algorithms. Land and data are both resources. Energy is a measure of how much work can be done, and increasingly substitutes for labour as machines and processes take on more of the work. Algorithms are codified process and logic, a form of intellectual capital that directs and multiplies the use of the other factors. None of the three substitutions is complete; each digital factor augments its classical counterpart rather than replacing it outright.



The classical factors of production augmented by their digital-era counterparts: land→data, labour→energy, capital→algorithms.

A new TOM becomes necessary precisely because the old one was built around the classical factors. Change what a business runs on, and the model for how it operates — who does what, what gets reported, how it's governed — has to change with it. Buying new technology doesn't make a business “digital.” Embedding the new factors structurally in how it operates does. This isn't a binary switch. Every organisation sits somewhere on a spectrum between the classical factor and its digital counterpart, and that position is a more useful diagnostic than arguing over which definition of digital transformation is correct.

The five-minute conversation

Before scoping transformation work with a client, ask which of their factors of production are actually shifting. The answer determines what their new operating model needs to look like; the choice of definition doesn't. That's a five-minute conversation at the start of a scoping exercise, and it's cheaper than discovering the mismatch six months into delivery.