

Automation, People and Resilience

What two UK logistics firms did when automation arrived — and why the outcome was decided by strategy, not by technology

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PROVISIONAL SUPERVISOR FEEDBACK *ahead of the examination board — Dr Tim Ramjaun described the work as of “excellent quality” and as demonstrating “well-designed and executed research”.*

01 The result

In two UK logistics firms, automation changed what people did without reducing how many were employed — an outcome set by the workforce strategy built around the technology rather than by the technology itself.



02 What the study asked

How are UK logistics and facilities management firms adapting their workforce strategies in response to automation and AI, and what shapes the divergence in response across sub-sectors?

Most influential research on automation and employment is macro-economic: it estimates which occupations are exposed to computerisation, or models how tasks are reallocated across a labour market. That work describes what technology *can* do to the demand for work; it says much less about what firms actually *choose* to do with it. This study went to the firms.

03 The evidence base

Informant	Role and organisation	Contribution to the analysis
Informant A	Director of logistics integration, integrated services provider (now executive director)	The operational account of a capability-led model; where released capacity goes; workforce data
Informant B	Co-founder and chairman, integrated services provider	The board-level and historical account; the origin of the capability model; its commercial limits
Informant C	Head of solutions, independent road haulier	Automation at the level of the task; capability mechanisms; the contrasting sub-sector
Informant D	Head of skills and multimodal policy, national trade body	Sector-level triangulation; the skills system and the constraints on it

Four interviews across three organisations, July–August 2026, at three levels: executive leadership, operational delivery and national policy. Analysed thematically following Braun and Clarke’s six phases and tested against each organisation’s published materials and the Logistics UK Employment and Skills Report 2026. Every informant verified a written summary before use. Ethical approval granted under Royal Holloway’s simplified procedure, June 2026. **Organisations and informants are anonymised here; they are named in the full dissertation.**

04 What was expected, and what was found four expectations, four contradictions

Four expectations drawn from the literature and from the sector’s own public debate. The firm-level evidence contradicted all four.

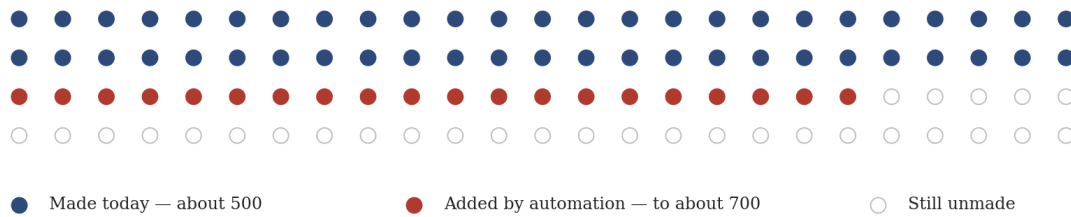
The expectation	What the study found
Automation removes jobs. Technology takes the work, and the headcount follows.	Tasks changed; posts stayed. Released capacity went to work that had previously been crowded out — decisions left unmade, and a standing improvement process.
Firms respond by shrinking the permanent core and leaning harder on flexible labour.	Both firms did the reverse, deliberately. The permanent core was enlarged and agency use cut. One uses no agency drivers at all, by internal decision.
What resists automation is what cannot be written down — the tacit knowledge of experienced people.	There is a second limit: someone must be answerable. A task can be fully automatable and stay human. In regulated work, legislation sets the pace, not capability.
Road haulage and integrated services, facing different technologies, would respond in different ways.	Both reached a capability-led strategy. What separated them was whether the firm controls its assets and its employment relationship — not its sub-sector.

05 Automation acted on tasks, not on posts

At the haulier, fuel management — roughly a third of the cost base — was reconciled by combining electronic draw records with a hand-read weekly tank dip and invoice volumes in a spreadsheet that never quite balanced. The intervention pulled the data through interfaces, replaced the dip with fitted sensors giving a continuous level, and consolidated the whole calculation into an overnight routine. The procedure disappeared. The post did not.

Asked directly whether automation had shrunk the traffic office, the answer was that it had not, and the reasoning was quantitative rather than reassuring.

Of roughly a thousand decisions needing attention each day, about five hundred are made; automation could raise that to seven hundred

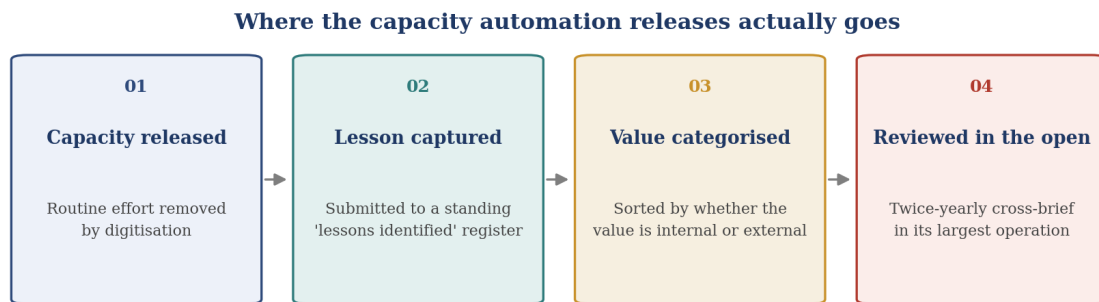


Each dot represents ten decisions. The volume of daily decisions rises; the workload does not fall.

Figure 1 Of roughly a thousand decisions needing attention each day, about five hundred are made; automation could raise that to seven hundred. Released capacity was directed at driver pre-briefing and debriefing — the work that goes first when the day gets difficult.

06 Where the released capacity goes the integrated services provider's evidence

If automation removes routine effort and no post is removed, the obvious question is what the freed capacity is spent on. At the integrated services provider it has a named destination, and this is the part of the evidence the study leaned on hardest.



The Kübler-Ross change curve is used with managers to explain why disruption precedes improvement.

Figure 2 The continuous-improvement process, first developed by the operational informant in a military planning context and carried into the business.

Two things about this matter for the argument. The first is that the firm rates the process **at least as important as the technology itself**, because it is what keeps the operation honest and open to challenge — the value is cultural as much as procedural. The second is that it answers the sceptical reading of a “refocus”. Without somewhere for released capacity to go, a refocus is a form of words; with a standing mechanism to absorb it, the capacity becomes work that had previously been crowded out.

At the haulier the same pattern appears by a different route, with capacity directed at time with drivers. In both firms the destination was deliberate rather than residual — which is why the study treats it as a finding rather than a coincidence.

Why this mattered to the analysis

“Refocus rather than reduction” is the claim most open to challenge in this whole study, because it is what a firm would say whether or not it were true. The provider’s own evidence is what makes it testable: there is a register, a categorisation, a cadence and a forum. A claim with a mechanism behind it can be examined; one without cannot.

07 The capability model, and where it came from

Both informants at the integrated services provider described a workforce organised as a flexible capability pool rather than as a set of fixed roles — capability-led rather than role-led, a transition the operational account dates over roughly four years, supported by digitised qualifications and competency records that make it possible to move qualified people to where demand is.

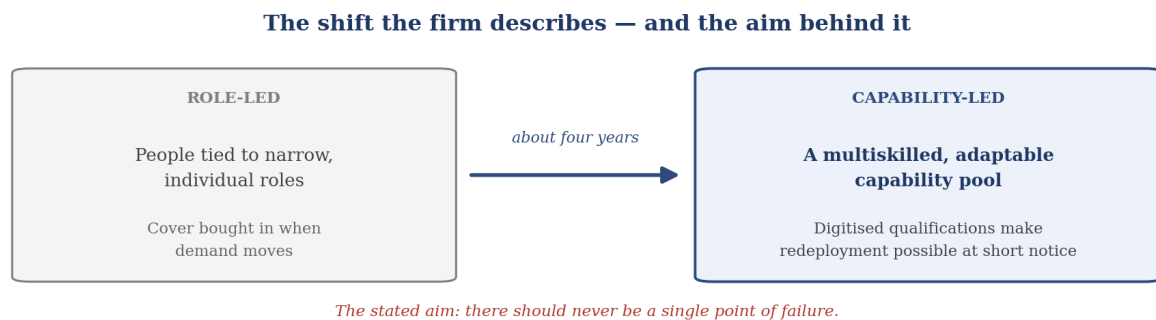


Figure 3 The shift described at the integrated services provider, and the aim stated behind it.

The more consequential observation came from the board, and it relocates the model’s origin. It was described through military doctrine — personnel trained first as soldiers and only afterwards in a specialism — with the stated aim that there should never be a single point of failure. The illustration given was one of its warehouses: when someone is absent, people move up and backfill one another. It was offered as an aim rather than as a claim about how every site runs on every day.

The study reads this as predating the technology. **Automation did not create the capability model; it raised its value.** That matters analytically, because it suggests firms already built around reconfigurable capability adapt more readily than firms acquiring that capability under pressure — they were not adapting, they were already built that way. The operational informant pressed a further point in writing: it is the capability itself that transfers between sectors, not only the people. On that reading the capability pool is an asset whose value extends beyond the contract on which it was built.

08 The core grew; the periphery shrank

This runs most directly against expectation. Automation is commonly assumed to push firms toward a smaller permanent staff and a larger flexible fringe. Both firms moved the other way, deliberately. Because the provider’s workforce holds multiple qualifications, work that previously required agency staff is absorbed in-house, and a temp-to-perm route converts agency workers into permanent ones. The haulier uses no agency drivers at all — an internal decision taken on financial grounds, not a market constraint.

“I can’t invest in them because they’re not mine.”

Informant B — co-founder and chairman, integrated services provider — on agency labour

The permanent core is held together by investment in it. The operational account described strong workforce retention, with cross-training and reskilling at the centre of the strategy on the reasoning that investment raises employability and employability generates commitment. The board was candid about the boundary: what a firm can invest is bounded by what it earns under competitive tendering, and fiduciary duty limits how far a displaced worker can be redeployed. **The people-first account is more persuasive for being stated under that constraint rather than in spite of it.**

Neither firm abolished contingent labour, and both were precise about where the model stops: sudden peaks, highly specialised short-term requirements, and geographically dispersed work that cannot be economically covered from a permanent base. What the evidence shows is not the end of the flexible periphery but its conscious minimisation around a deliberately enlarged core.

09 Job security as a condition of adoption

Where automation at the haulier reduces someone's workload to the point of spare capacity, that person may reduce their hours on unchanged salary. The stated reasoning is not welfare. It is that employees who believe their work is being automated away will not engage with the work of automating it.

Why this reverses the usual argument

Most of the displacement literature treats job security as something automation puts at risk. Here it is the precondition that makes automation possible at all — and because it is stated to staff in advance, it functions as an enabling condition rather than as compensation. It became the study's first recommendation for practice, and it is the only one that arrived fully formed from an interview rather than being assembled from evidence.

10 Accountability limits substitution — and legislation will move it

The standard explanation for why some work resists automation is tacit knowledge: what an experienced person knows cannot be written down, so it cannot be coded. That holds here. But two informants, in different sub-sectors and considering different technologies, independently identified a second and separate limit.

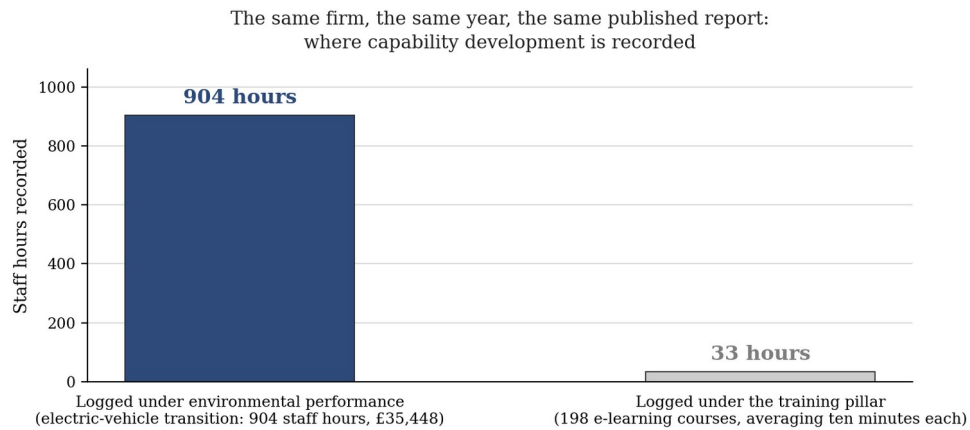
At the integrated services provider the argument was put in terms of consequence rather than capability: however capable the technology, no account of a serious failure in which responsibility rested with an automated system would be accepted, so a person must remain answerable and the assurance and governance structure must be built around them. At the trade body the same conclusion was reached from the other direction — driver substitution placed beyond the informant's working lifetime, with the obstacle located in unresolved questions of who discharges the walk-round check when a vehicle is driven remotely, whether remote operators fall within drivers' hours rules, and whether an unaccompanied vehicle is more exposed to theft absent a freight-crime classification.

What this means for a regulated operator

In regulated work the pace of substitution is set by **legislative** development rather than technical development. The barrier is real but contingent: it binds because of the current regulatory settlement, and measures such as the Automated Vehicles Act may move it. For a firm operating in aviation and nuclear, that is a more actionable forecast than any estimate of technical automatability — it says watch the statute book, not the technology press.

11 Most capability formation is invisible to the records

This is the study's most consequential finding, and it emerged independently at firm and at sector level. At the haulier, capability for the electric transition was built through four simultaneous mechanisms differentiated by occupational group — formal manufacturer training, train-the-trainer, participation in the decisions, and, for one group, no learning at all, because charge and energy management were automated before the operation ever met them.



Source: the haulier's published ESG report, 2025. The training-pillar figure converts the report's own count of 198 courses at ten minutes each into hours.

Figure 4 The haulier's own ESG reporting: 904 staff hours of transition training, worth £35,448, sit under environmental performance rather than skills, while the training pillar for the same year records 198 e-learning courses averaging ten minutes each.

Nationally the blindness is confirmed: levy data records expenditure and completions only, with no measure of progression or of retention within the employing firm. The implication reaches beyond one firm. Research on technology and skills routinely uses training participation, qualification attainment or levy data as proxies for capability development. If the capability formed in response to automation is routed outside those channels, such work understates the workforce response — and does so most severely in exactly the firms and occupations where the response is most active. **The capability gap the sector reports is, in part, a gap in observation.**

12 Why the two firms differ *the comparative finding*

The study was designed around an expected contrast: road haulage facing a directly substitutive frontier in autonomous driving, integrated services facing a more transformative one. The contrast mattered less than anticipated, and for an interesting reason — both firms arrived at a capability-led workforce strategy, but by opposite routes.

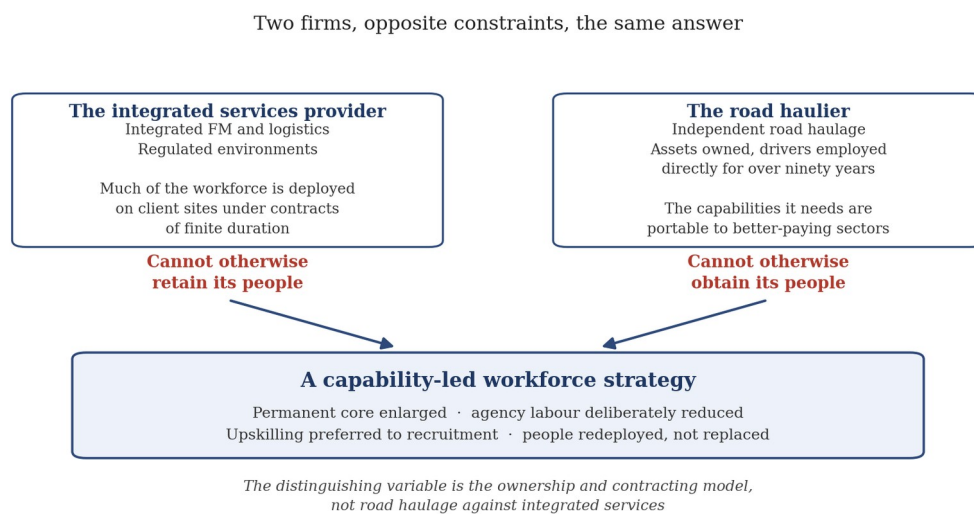


Figure 5 The integrated services provider builds capability because it cannot otherwise keep its people. The haulier builds it because it cannot otherwise obtain them.

The variable distinguishing the two cases is therefore not road haulage against integrated services; it is the **ownership and contracting model** — whether a firm controls its assets and its employment relationship, or delivers through people and premises belonging to a client whose investment decisions it does not make. The sector evidence corroborates this directly: a single large contract logistics provider was described running a highly automated site alongside a substantially manual one, because the customer at the second does not fund equivalent investment. The same firm, two capability regimes, one sub-sector.

	Integrated services provider	Road haulier
Origin of the model	Military ‘soldier first’ doctrine; predates automation by decades	Response to labour-market competition for portable skills
Why capability is built in-house	Cannot otherwise retain workers deployed on client sites	Cannot otherwise obtain skills portable to better-paying sectors
Employment effect observed	A refocus, operationally; fewer but more skilled jobs, from the board	The traffic office did not contract; capacity redirected
Agency labour	Reduced; retained for surges; temp-to-perm route into the core	None used for drivers, by internal decision
Principal constraint	Fiduciary duty; low-margin competitive tendering	Margins; data quality; systems interoperability
Apprentice intake governed by	Client contract and vetting requirements	Turnover, not skill change

One divergence is worth naming. The two informants at the integrated services provider did not agree about aggregate employment: the operational account described a refocus without reduction, the board-level account was unequivocal that automation would mean fewer jobs — more skilled, but fewer. The study reads these as observations from different vantage points and time horizons rather than as competing claims, and keeps both. Nothing here should be read as a forecast that no jobs will be lost.

13 What follows for practice six recommendations, each anchored to case evidence

01 Treat job security as a condition of adoption, not a consequence Say explicitly that automation will not cost jobs, and honour it. Staff who expect displacement will not help automate their own work. OPERATIONS AND HR LEADERSHIP	02 Plan around capability pools, not headcount Plan around competences held across the workforce rather than posts filled, and keep the competency data that makes redeployment possible. WORKFORCE PLANNING
03 Put operational staff in the room where the change is decided Include those affected, and adjacent functions, in the decision itself rather than training them afterwards. PROGRAMME AND CHANGE LEADS	04 Consider designing the requirement out, not only training up Where a technology adds complexity, integrate it before the operation meets it, holding the role’s skill profile constant. TECHNOLOGY AND ENGINEERING LEADS
05 Calibrate development to skill change as well as turnover Intake governed solely by attrition or by contract requirement starves the occupations changing fastest. EARLY CAREERS AND L&D	06 Review contingent labour as a strategic choice Assess whether agency use suppresses problem-solving the constraint would force. A firm-level judgement, not a sector prescription. COMMERCIAL AND RESOURCING

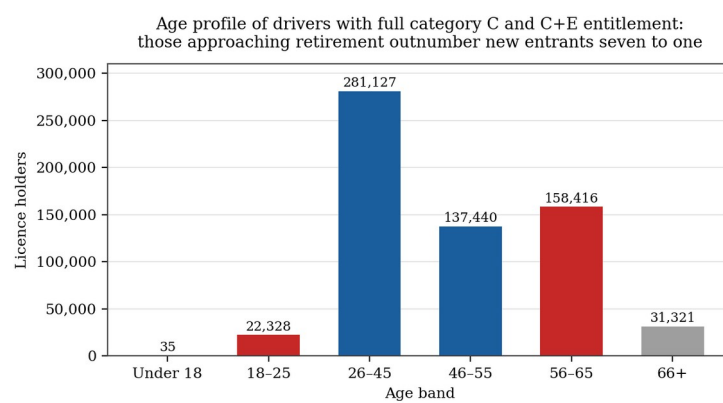
These are recommendations to the reader drawn from observed practice. No organisation in this study has given a guarantee of any kind.

14 What follows for policy

Supported. The trade body’s four skills objectives are consistent with this evidence. The second — strengthened progression and leadership capability — is directly evidenced by the finding that supervisory capability is simultaneously more critical and less funded.

Added by this study. Measure capability formation, not only training expenditure. Levy data records spend and completions only. A skills system that cannot see how capability is actually formed cannot know whether its interventions work, and public money is allocated partly blind. Extending measurement to progression and retention would be a modest change with disproportionate effect.

Qualified. Both firms reduced agency use deliberately; the trade body lobbies to protect employer access to temporary labour. These are not contradictory — they optimise different things, and what is rational at firm level does not generalise to sector policy.



Source: adapted from Logistics UK (2026, fig. 2.6).

Figure 6 The demographic pressure behind the sector’s skills case: among drivers holding full category C and C+E entitlement, 158,416 are aged 56–65 against 22,328 aged 18–25. Adapted from Logistics UK (2026, fig. 2.6).

15 What this study does not show

It rests on two self-selected firms, both willing to be named in the full study — a probable bias towards organisations confident in their workforce practices. The sector-level evidence comes from a single trade-body informant who declared a pro-technology standpoint. No worker-level perspective was obtained: every account is managerial, and the design is cross-sectional. Evidence pointing the other way is reported: a Gartner survey finds 55 per cent of supply chain leaders expecting agentic AI to reduce entry-level hiring.

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Run end to end by one person: access negotiated with four senior informants across three organisations; a consent and member-checking process designed and maintained, with two passages withdrawn at a participant’s request; evidence triangulated against company reporting and national data; delivered to a fixed deadline.

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“Automation does not reduce the importance of people. It changes the capabilities that people need, shifting workforce strategy from managing labour towards developing organisational capability.”

Informant A — written response to the study’s summary of his interview

The full dissertation — literature review, complete methodology, coding framework and interview material — is available on request.

With thanks to the four senior informants who gave their time, candour and corrections, and to the professional contact whose introduction opened the door to this research.