Who Will Become the Experts? · Part 1

The Disappearing First Rung: Is AI Breaking the Career Ladder?

By Dr Peter Fields · First posted: 6 November 2026

THE 2-MINUTE SUMMARY

AI is changing the economics of entry-level professional work. Tasks once given to trainees, including research, drafting and routine analysis, can now be completed or accelerated by generative AI. That raises a difficult question: if employers need fewer beginners to produce the same work, how will tomorrow's experienced professionals acquire the judgement they need?

The evidence does not justify a simple prediction that graduate recruitment will disappear. Automation can reduce demand for certain tasks while creating others, and its effects differ across occupations and employers. It is also important to distinguish productivity improvements from actual job losses and to separate generative AI from earlier forms of automation.

The central concern is the potential disruption of the route into expertise. Trainee work serves two purposes: producing value now and developing capability for later. Employers should examine which activities genuinely teach useful skills rather than preserve every historical task or remove junior positions without considering who will undertake senior work in future.

Imagine joining a law firm twenty years ago. As a trainee, you might have spent hours researching cases, reviewing contracts, preparing draft documents and checking the detail of a transaction. Much of it was repetitive. Some of it was positively tedious.

Today, AI can complete or substantially accelerate many of those tasks. A senior lawyer may be able to accomplish in an afternoon what once required several days of junior assistance.

For the firm, this looks like an opportunity. For the trainee, it raises an uncomfortable question: if AI can do the work traditionally given to beginners, why employ so many beginners?

And there is a second question, potentially more consequential.

If businesses no longer need people to undertake the work through which they traditionally acquired experience, where will the next generation of experts come from?

This is not just a problem for lawyers. Accountants, consultants, software developers, analysts and other knowledge workers face versions of the same dilemma.

But before accepting predictions of a disappearing graduate workforce, we need to examine what has actually changed and what the evidence tells us.

Automation is not new. This time, something is different.

Businesses have been replacing human tasks with technology for generations.

Manufacturing robots replaced particular physical operations. Spreadsheets transformed accounting. Software automated routine financial calculations, payroll, document processing and administrative workflows.

Artificial intelligence subsequently extended automation into activities that could not be reduced to a straightforward set of instructions. Machine-learning systems learnt to classify documents, predict outcomes, detect anomalies and recognise patterns.

Some of these systems make decisions by following explicit rules. Others produce statistical predictions.

The important distinction is that these technologies usually automate relatively defined activities within a larger process.

Generative AI changes the range of work that can be automated or assisted. Large language models can produce written explanations, analyse documents, draft contracts, write computer code and propose solutions to unfamiliar problems. Increasingly, AI agents can combine several such activities into a sequence, using external software and tools to progress towards an objective.

They are not necessarily reliable, nor can they exercise professional responsibility merely because their output looks convincing. Nevertheless, their capabilities extend into activities historically associated with skilled intellectual work.

This matters because businesses do not employ people simply to carry out individual tasks. They employ people to perform roles containing collections of tasks.

Automating a task does not necessarily eliminate the job. The remaining work may still require people. It may also become more valuable, allowing employees to concentrate on activities that previously received too little attention.

The International Labour Organization's 2025 study of generative AI exposure makes precisely this distinction. It estimated that approximately one-quarter of global employment was in occupations with some exposure to generative AI, but only 3.3% was in its highest exposure category. The researchers considered transformation of jobs more likely than their wholesale disappearance. [1]

These are estimates of technological exposure, not forecasts of redundancies. They tell us where AI might affect work, not how many people employers will actually dismiss or stop recruiting.

That distinction is easily lost in the headlines.

Are junior jobs actually disappearing?

There is growing evidence of pressure on entry-level employment. But the picture is far from uniform.

In August 2026, researchers at Stanford published revised findings from a study using US payroll data covering millions of employees.

They found that employment among workers aged 22–25 in highly AI-exposed occupations was approximately 19% below the level it would have reached had it kept pace with employment among similarly aged workers in less-exposed occupations.

The difference had widened from 15% in their earlier analysis. Crucially, the deterioration appeared primarily through reduced hiring rather than increased dismissals.

Yet the researchers also found no evidence of widespread displacement across the economy. Employment among more experienced workers did not exhibit the same pattern. The declines were concentrated in occupations where AI usage tended to substitute for human tasks, rather than complement employees. [2]

This sounds like strong evidence that AI is beginning to close off traditional entry routes.

It may be. But the researchers themselves emphasise that the results are descriptive, not proof of causation. Differences in education, pre-existing employment trends, the composition of the payroll sample and broader economic conditions complicate the analysis.

Nor should the 19% figure be described as 19% of jobs being lost to AI. It measures a relative employment shortfall against a comparison group, not the number of jobs demonstrably destroyed by the technology.

The UK evidence provides an instructive contrast.

A June 2026 analysis published by the Department for Science, Innovation and Technology, using LinkedIn employment data, found that entry-level recruitment was weak but falling broadly in line with the wider labour market.

The headline concealed considerable variation. Among 38 entry-level occupations examined, 30 had declining hiring rates. Accountants were down 29%, graphic designers 28%, software engineers 27% and legal assistants 14%.

But there was no consistent pattern of junior employees suffering more than senior colleagues. In engineering, entry-level hiring fell by 19%, compared with 10% for senior roles. In legal occupations, the relationship reversed: senior hiring fell by 20%, compared with 12% for entry-level roles. The report also identified growing demand in certain customer-facing and sales roles. [3]

The authors were explicit about the limitations. The occupations experiencing some of the sharpest declines were those where AI capabilities had advanced substantially. But these were also sectors affected by weak demand, increased competition and mismatches between the skills employers wanted and those applicants offered.

The evidence did not establish that AI caused the reductions.

Other UK evidence shows how severe the pressure has become. High Fliers Research reported that graduate recruitment at the country's leading employers fell by 24.5% between 2022 and 2025. Its figures record reductions of 6.4% in 2023, 14.6% in 2024 and 5.1% in 2025, with employers anticipating a further small decline in 2026. [4]

High Fliers measures recruitment among a selected group of major graduate employers, not every graduate vacancy in Britain. Its report attributed much of the contraction to economic uncertainty. The figures establish a serious squeeze on opportunities, but they do not establish how much, if any, was caused by AI.

A further study published in September 2026 examined 1.25 billion job advertisements and approximately 154 million employment records across 41 countries. Comparing foreign affiliates of companies adopting generative AI with comparable affiliates, the researchers found a decline in the proportion of junior employees. The reported change arose mainly from an estimated 6.7% increase in senior employment. Junior employment was estimated to be 2.5% lower, but that estimate was not statistically significant. [5]

That distinction matters. A business can have a smaller proportion of junior staff because it is recruiting more experienced people, without necessarily reducing junior headcount. Nor can the observed pattern automatically be generalised to every employer.

Taken together, the studies suggest that something is changing in the structure of professional employment. They do not yet justify a general claim that AI is destroying graduate careers.

What are employers actually doing?

Business behaviour offers another perspective, although corporate announcements must be distinguished from what companies ultimately do.

Consider the UK legal profession.

In September 2026, Legal Cheek examined advertised training-contract numbers at 109 leading law firms. The total had fallen from 2,593 to 2,549, a reduction of just 1.7%.

Some firms had made substantial cuts. Linklaters reduced its advertised training-contract numbers from 100 to 60, and Freshfields from 85 to 70.

Yet 25 firms increased their advertised places, 24 reduced them, and 60 reported no change.

There was also a significant complication: firms were expanding alternative routes into the profession, including solicitor apprenticeships. Linklaters, for example, operates a six-year programme enabling school leavers to qualify while working and studying.

But apprenticeships cannot simply be counted as replacements for lost training contracts. Legal Cheek reports that Linklaters recruits around six solicitor apprentices annually, against a reduction of 40 advertised training-contract places between the two annual lists. Across the 109 firms the fall was small; at some individual firms it was substantial. These figures do not, of themselves, establish why the changes occurred. [6]

The experience of accountancy and consulting firms is similarly revealing.

PwC UK reduced graduate recruitment during the economic slowdown. However, its chief executive, Marco Amitrano, publicly attributed the reduction primarily to weaker demand rather than AI, and in October 2026 expressed an expectation that junior recruitment would increase again.

More interestingly, PwC's chief people officer, Phillippa O'Connor, explained in February 2026 that the firm had deliberately chosen not to automate or offshore some routine junior work because it considered those activities important to developing professional judgement.

She identified the longer-term difficulty created by removing too much of the base of the traditional professional-services pyramid: how would the business develop the managers it would need several years later?

At the same time, she acknowledged that AI was already allowing graduates to undertake work previously performed by more senior staff. [7]

That is a striking combination. PwC is recognising productivity gains while deliberately preserving some work because of its training value.

Other employers are making different choices.

A KPMG survey of 150 UK financial-services leaders, conducted in November and December 2025 and published in April 2026, found that 55% expected to increase recruitment. Yet the emphasis was increasingly on technology and AI expertise. Managing director-level recruitment was the greatest priority, while only 4% identified apprenticeships as a hiring priority, compared with 20% in December 2024. [8]

These are intentions rather than observed employment outcomes. Nevertheless, they illustrate a potential imbalance: organisations may be enthusiastic about recruiting experienced people with AI-related skills while paying less attention to developing the people who will become experienced.

There is no single corporate response to AI. Some organisations are reducing junior recruitment, some are maintaining it, others are changing the routes into employment, and some are consciously preserving training opportunities.

The differences may prove as important as the overall trend.

The economic calculation is changing

For businesses, the immediate calculation is understandable.

Suppose a consultancy previously needed five junior analysts to collect data, prepare reports and undertake preliminary analysis. If AI substantially reduces the time required, the consultancy may be able to deliver the same work with fewer junior employees.

It might retain all five and undertake more assignments. It might reduce recruitment. It might employ people with different skills. Or it might use the productivity improvement to offer new services at lower prices, increasing demand.

The outcome depends on economics, competition, customer demand and management decisions, not simply on what the technology can do.

There is also an important distinction between automating tasks and replacing entire workflows.

A lawyer might use AI to produce an initial contract draft but still need someone to establish the client's objectives, identify commercial risks, negotiate provisions and take responsibility for the advice.

A software developer might generate code rapidly but still need to understand the system, test its behaviour, resolve defects and make architectural decisions.

Sometimes removing routine work will free junior employees to develop more valuable abilities sooner. It would be perverse to insist that trainees spend hours on unnecessary administrative work simply because previous generations did.

The difficulty arises when the business counts the productivity gain but overlooks another function traditionally performed by junior work.

It has also been part of the training system.

The hidden cost of a smaller intake

Professional firms often recruit inexperienced employees with the expectation that some will become their future managers, partners and technical specialists.

The familiar pyramid structure of professional services reflects both economics and career progression. Junior employees undertake work under supervision, gradually develop competence and assume greater responsibility.

Not everyone progresses to the top, nor does every hour of junior work contribute meaningfully to learning. Nevertheless, the system provides a continuing supply of more experienced professionals.

Now consider the consequences of substantially reducing recruitment.

For an individual business, employing fewer trainees may make immediate commercial sense. It might expect to recruit experienced professionals from elsewhere when it needs them.

But what happens if every competing business makes the same calculation?

Five or ten years later, the industry may discover that its supply of experienced professionals has diminished.

There is an economic problem here which cannot necessarily be solved by the decisions of individual employers. Training involves costs, and employees can leave after acquiring valuable skills. An organisation that invests heavily in developing juniors may eventually lose some of them to competitors that have invested less.

If AI allows a firm to obtain the same output with fewer trainees, that investment decision becomes harder to justify.

It is tempting to conclude that companies should simply preserve their existing graduate intakes. But that would be premature.

The demand for experienced professionals may itself change. AI may allow some employees to assume greater responsibility earlier. New occupations may develop. Businesses may find better methods of developing expertise than relying on years of relatively repetitive junior work.

The point is not that yesterday's employment structures must be preserved.

It is that the commercial value of junior work and its contribution to developing future expertise are different things.

Historically, businesses could often obtain both benefits from the same activity.

AI may separate them.

A second problem, even if recruitment survives

There is another risk that employment statistics cannot capture.

Suppose a law firm maintains its intake of 50 trainees. Its recruitment figures look reassuring.

But the trainees now use AI to carry out much of the research, drafting and preliminary analysis that previously occupied their time.

Their productivity improves. Their output looks professional. Clients may receive better service more quickly.

Have those trainees become more capable?

Perhaps. AI might help trainees learn faster, exposing them to more demanding work and useful feedback. Equally, it might allow them to complete assignments without developing the independent judgement that those assignments once helped to build.

Neither the recruitment figures nor the quality of the finished work tells us which outcome is occurring.

A firm might therefore maintain its intake, improve productivity and still discover years later that its future managers lack important experience. The opposite is also possible: carefully used AI might accelerate their development. Which outcome should we expect?

That is a different question from whether junior jobs are disappearing, and it leads directly to Part 2: how does someone actually become an expert?

The disappearing first rung, or a different ladder?

The evidence does not establish that generative AI is about to eliminate entry-level professional employment.

There are genuine warning signs, particularly in certain knowledge-intensive occupations and among younger workers. There is also credible evidence that wider economic conditions explain a substantial part of the recent recruitment slowdown.

What is clearer is that businesses are reconsidering the relationship between junior work, productivity and professional development.

Some may conclude that they need fewer junior employees. Others may discover that AI allows their trainees to become more capable, more quickly. Still others may retain traditional recruitment structures but fundamentally change what their new employees do.

The important question is not whether the old career ladder can be preserved indefinitely.

It is whether the new arrangements will continue to produce the expertise on which businesses, professions and society depend.

If the answer is yes, AI could improve professional development considerably.

If the answer is no, short-term productivity gains could conceal a serious long-term problem.

The danger is not necessarily that tomorrow's experts will have no jobs to enter. It is that we may change the work of today's beginners without understanding how tomorrow's experts are made.

That is the question we will examine in Part 2.

Alex Asks

If I can help a trainee produce the work of an experienced professional, have I helped create a future expert, or simply made the trainee look like one?

And how would we know the difference?

References

[1] Gmyrek, P. and others (2025). Generative AI and Jobs: A Refined Global Index of Occupational Exposure. International Labour Organization, Working Paper 140. Particularly the introduction, exposure gradients and conclusions.

[2] Brynjolfsson, E., Chandar, B. and Chen, R. (2026). Canaries in the Coal Mine? Six Facts about the Recent Employment Effects of Artificial Intelligence. Stanford Digital Economy Lab, revised 12 August 2026. See also the authors' explanation of the revised findings.

[3] Department for Science, Innovation and Technology and LinkedIn (2026). A snapshot of entry-level hiring in the UK, 8 June 2026. Particularly the occupational and seniority comparisons and data limitations.

[4] High Fliers Research (2026). The Graduate Market in 2026. Research among 100 leading UK graduate employers. See "An Unprecedented Drop in Graduate Jobs" for the annual and cumulative recruitment figures.

[5] Chandar, B. and Klein Teeselink, B. (2026). How Does AI Change Labor Demand? Evidence from 41 Countries. Stanford Digital Economy Lab, 21 September 2026. The study concerns foreign affiliates of AIadopting firms. The junior employment estimate was not statistically significant.

[6] Legal Cheek (2026). Exclusive data: Trainee numbers fall by 2% across 100 Legal Cheek Most List firms, 10 September 2026. Advertised places, rather than independently verified appointments. See also Linklaters' solicitor apprenticeship programme.

[7] Financial Times, republished by The Irish Times (2026). PwC UK applications jump 35% in graduate jobs drought, 13 February 2026. See also City AM, PwC expects junior hiring to push back up across professional services despite AI fears, 7 October 2026.

[8] KPMG UK (2026). UK Financial Services to Boost Hiring in 2026 in AI and Tech-Focused Recruitment Drive, 16 April 2026. Survey of 150 financial-services leaders, fielded 21 November – 2 December 2025; responses concern intentions rather than observed hiring.

Additional background: Skills England (2026), Annual Skills Report 2026, particularly Chapter 3, provides a useful comparison of the competing UK employment evidence and cautions against attributing the graduate recruitment slowdown entirely to AI.