

# Key learnings from VocTech market activity

Quarterly report, October – December 2024

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Ufi Ventures and Tyton Partners are collaborating on an ongoing exploration of the opportunities for investors in the Future of Workforce Development. We are working together to both refine Ufi Ventures' focus over time and to catalyse the broader field of vocational technology (VocTech) investing across the UK, drawing lessons and insights from continental Europe and North America.

In this report, Ufi Ventures and Tyton Partners offer their quarterly review of select current market developments and dynamics. For more information about the methodology we used in compiling this briefing, please refer to our annual report, <u>The Jobs Frontier 2024</u>.



# Five key developments and their potential implications

- The UK budget raised taxes; in the short term, at least, the new burdens on business are negatively affecting hiring plans and morale. Schools received more money.
- 2. The Employment Rights Bill has been introduced to Parliament, and the Get Britain Working White Paper has been launched. These are significant reforms to the UK's employment regulations; changes to provision for young people and to apprenticeships are likely the most important for the VocTech investment community.
- **3. Political turmoil** across Europe and the election of Donald Trump are both likely to have a materially **negative effect on the green transition** and associated jobs and investments.
- **4. Demographics** are becoming a hot topic. Europe including the UK is getting older, and this could have a major effect on productivity and living standards. Immigration as an answer will remain controversial.
- **5. Deal sizes and volumes are at historically low levels**, but some deals are still being made; anecdotally, many are more optimistic about 2025.

# Part I: Context

#### Macroeconomic context

Inflation rose slightly this quarter across the United Kingdom, continental Europe and the United States after previously easing slightly. Most of these increases were due to food inflation, which has risen across the world. Economic growth continues to slow, reducing consumer activity and negatively impacting business performance.

Following the Labour Party's win in the UK elections, economic growth slowed in the third quarter of 2024 as businesses predicted an economically tough start to 2025. The CBI group published results from a services sector survey, showing that the majority of private sector firms in the UK expect business activity to fall in the first three months of 2025. UK households are also predicted to have a tough start to 2025, as ONS estimates indicate disposable income stagnation in the third quarter, which will certainly bite as inflation remains high. Core inflation – which excludes energy, food, alcohol and tobacco – was 3.5%, up from 3.3% in October.

The Bank of England cut interest rates by a quarter point in November but held rates at 4.75% in December. Though the Bank had initially <u>indicated about four rate cuts in 2025</u>, it recently warned that <u>stubborn inflation will prevent it from cutting rates</u> as quickly as previously indicated.

In the Eurozone, inflation rose above <u>the European Central Bank's target to 2.3%</u> in November. Core inflation – which excludes the cost of food and energy – remained flat at 2.7% when compared with the previous month. This rise did not dissuade the ECB from cutting rates by a quarter point to 3% in December, its lowest level since March 2023. The Bank also indicated plans to continue to cut rates in 2025 due to expectations that economic growth will stagnate in 2025. <u>According to a poll of 72 economists by the Financial Times</u>, the Eurozone economic growth will be lower than 1% in 2025 due to geopolitical risks brought about by US President-Elect Donald Trump's proposed tariffs. <u>Germany is experiencing a two-year recession</u> for the first time since the early 2000s due to falling production in its energy-intensive sectors and high competition in the car manufacturing industry from China.

GDP growth increased slightly in Q3 in the United States of America, with retail trade, health care and social assistance as the leading contributors to growth, according to the Bureau of Economic Analysis. Despite <u>US inflation rising to 2.7% in November</u>, the US Federal Reserve <u>cut interest rates</u> to 4.25-4.5% in December, its third cut in a row. Officials at the Fed have projected more cuts in 2025, to the 3.75-4% range. The rise in inflation was due to a 0.3% increase in the shelter index, which tracks housing-related costs. Despite these interest rate cuts, households continue to feel the bite of high inflation. <u>Data collected from BanKRegData and reported by the FT</u> show that credit-card lenders wrote off \$46bn in delinquent loan balances in the first nine months of 2024, a 50% increase compared to the same period last year. These defaults on credit-card loans have now risen to the highest level since the 2008 financial crisis.

Headline Inflation				
Region	Q2 2024	Q3 2024	Q4 2024	Source
United States	3.3%	2.4%	2.7%	Bureau of Labour Statistics
United Kingdom	2.8%	2.2%	2.6%	Office for National Statistics
Eurozone	2.5%	1.8%	2.2%	<u>Eurostat</u>
Germany	2.5%	1.8%	2.4%	<u>Eurostat</u>
France	2.5%	1.5%	1.7%	<u>Eurostat</u>
Spain	3.5%	1.7%	2.4%	<u>Eurostat</u>

GDP / Economic Growth				
Region	Q1 2024	Q2 2024	Q3 2024	Source
United States	1.4%	3.0%	3.1%	Bureau of Economic Analysis
United Kingdom	0.7%	0.6%	0.1%	Office of National Statistics
Eurozone	0.3%	0.2%	0.4%	<u>Eurostat</u>
Germany	0.2%	-0.3%	0.2%	<u>Eurostat</u>
France	0.3%	0.2%	0.4%	<u>Eurostat</u>
Spain	0.7%	0.8%	0.8%	<u>Eurostat</u>

#### Labour market conditions

The unemployment rate rose across the US, the UK and most regions in the Eurozone, whilst skill and labour shortages persist. Demographic trends and youth economic inactivity are also contributing to a shrinking skilled labour force in the world's wealthiest nations. A 2023 report from Bain & Company claimed that, within a decade, workers aged 55 and older will account for a quarter (or more) of the workforce in the US, Canada, Germany, Japan, France and Italy. Perhaps this claim is becoming reality. In England and Wales, birth rates fell to 1.44 children per woman in 2023, the lowest level since records began, according to the ONS. An article from the FT claims that the fertility rate to maintain a stable population in developed countries is 2.1 children per woman. The current rate is well below that level and could have huge consequences for the UK labour market. This could potentially leave the UK more dependent on immigration to make up for shortages. According to ONS figures, the UK population reached 68.3m in the middle of 2023, a 1% increase from the previous period. This was despite deaths outnumbering births for the first time in 50 years, an indication that immigration was a major reason for population growth.

According to ONS figures, 13% of 16- to 24-year-olds in the UK were Not in Employment, Education or Training (NEET): nearly a million people. About two-fifths of them are looking for work, while the rest are considered 'economically inactive' because they are neither working nor looking for work. Recent FT analysis explores the reasons for the high level of inactivity, including increased numbers of young people reporting mental health disorders and their lacking the skills required to get quality jobs, both of which are at relatively higher rates in the UK compared to other similar countries. However, there is commentary that these labour statistics may be painting an incorrect picture due to a significant drop in responses to the Labour Force Survey. A report by the Resolution Foundation using HMRC tax records suggests that the survey has underestimated growth in the workforce by 930,000 people.

In the Eurozone, the unemployment rate remained flat, while the total 'labour market slack' – the unmet need for work in the EU – fell to 23.6m people from 23.8m people in the previous quarter, <u>according to Eurostat data</u>. Denmark, Slovenia and Luxembourg saw the largest increases in labour market slack in Q3 2024.

In the United States, job openings rose to 8.1m at the end of November, <u>according to the US Bureau of Labor Statistics</u>, indicating that labour shortages still persist. The majority of the openings were in the professional and business services sector (273,000), finance and insurance (105,000) and private educational services (38,000), though there were decreases in the information services sector (89,000). The US economy also added 227,000 jobs in November after only adding about 36,000 jobs in October due to hurricanes and strike action by Boeing employees. The healthcare, leisure, hospitality and government sectors reported the largest gains, <u>according to the FT.</u> Although there has been adequate job creation and labour shortages, many individuals are still struggling to find jobs, evidenced by a two-month consecutive drop in the job-finding rate for unemployed workers, according to Goldman Sachs and the Department of Labor. <u>According to FT analysis</u>, this is due to foreign-born workers finding it harder to find jobs amid uncertainty of immigration policy under the Trump administration.

Unemployment rate				
Region	Q1 2024	Q2 2024	Q3 2024	Source
United States	4.1%	4.1%	4.2%(NOV)	<u>Bureau of Labour</u> <u>Statistics</u>
United Kingdom	4.4%	4.1%	4.3%	Office for National Statistics
Eurozone	6.1%	6.0%	6.0%	<u>Eurostat</u>
Germany	3.3%	3.4%	3.5%	<u>Eurostat</u>
France	7.5%	7.4%	7.5%	<u>Eurostat</u>
Spain	11.7%	11.7%	11.4%	<u>Eurostat</u>

Total number of vacancies				
Region	Q1 2024	Q2 2024	Q3 2024	Source
United States	8,100,000	8,000,000	7,700,000	Bureau of Labour Statistics
United Kingdom	919,000	875,000	837,000	Office for National Statistics
Germany	1,710,958	1,555,930	1,326,523	<u>Eurostat</u>
France	556,190	555,262	488,764	<u>Eurostat</u>
Spain	149,963	151,378	147,946	<u>Eurostat</u>

Number of Youth out of Employment and Education (15- 24yr olds)					
Region	Q1 2024	Q2 2024	Q3 2024	Source	
United States	Similar stats are unavailable				
United Kingdom	900,000	872,000	946,000	Office for National Statistics	
Eurozone	3,411,000	3,407,000	3,377,000	<u>Eurostat</u>	
Germany	578,000	598,000	619,000	<u>Eurostat</u>	
France	852,000	855,000	805,000	<u>Eurostat</u>	
Spain	544,000	539,000	518,000	<u>Eurostat</u>	

(Note: Some values may not match previous reports as numbers were revised or updated)

## Political developments

#### **UK** budget

The UK government announced an <u>increase in employers' national insurance</u> <u>contributions</u> to raise £20bn. Many business leaders have warned that the move will <u>lead to significant job losses</u>, cuts to hiring plans and a lowering of discretionary spending on training. The cuts are projected to have the <u>most significant impact on jobs in the hospitality sector</u>. <u>A survey of UK businesses by CBI</u> found that almost half of companies surveyed had plans to reduce headcount, while two-thirds had plans to cut hiring plans. These changes are already beginning to impact recruitment, as <u>UK recruiters reported a slowdown in December hiring</u> as employers brace for tax rises and the impact of the Employment Rights Bill (see below).

#### **German elections**

In Germany, Chancellor Olaf Scholz lost a vote of confidence in the Bundestag after his proposed three-way coalition failed, which led to the scheduling of a snap election set to take place on February 23. The main parties in the election are Friedrich Merz (the Christian Democratic Union leader), Olaf Scholz's Social Democrats and the Greens. Merz has claimed in his campaign that he will reduce spending by €100bn by reducing Germany's dependency on migration as well as spending on welfare. He will also initiate tax cuts and reduce electricity prices. Some of his rivals have <u>questioned the plans</u>. Chancellor Olaf Scholz, under the Social Democrats, has <u>promised a €100bn Germany fund</u> with the aim of boosting growth and investment. They also promise to cut value-added tax on groceries, increase the minimum wage, extend parental leave and offer protections for renters. The Greens plan to set a billionaire tax to fund green transition subsidies for low-income households. They also want to raise the minimum wage.

#### French government turmoil

In France, Michel Barnier looked to introduce a budget that included €60bn of spending cuts and tax increases in efforts <u>to reduce the increasing deficit</u>, which was forecast at over 6% in 2024, to 5% by 2025. The budget faced significant opposition from farright leader Marine Le Pen and other opposition party members, which led to a <u>vote of no confidence</u> by 331 votes in the French Parliament and, ultimately, Michel Barner's resignation as prime minister. Francois Bayrou was later <u>appointed prime minister</u>.

#### **United States election**

The re-election of Donald Trump clearly has the potential to change the landscape of global trade, the green transition, immigration and much else. Restricting our commentary to the implications on the Future of Work landscape in Europe, perhaps the most significant policies to watch will be those around tariffs and the war in Ukraine, which may materially affect economic growth and investment patterns. At the time of writing, announcements from the new administration are coming thick, fast and unpredictably; so are interventions and lawsuits to stop some of them. We will continue to monitor and comment on developments as they emerge.



## Sector developments of note

We continue to focus on sectors relevant to VocTech investing, particularly those with significant skills gaps and/or job vacancies and where there have been notable developments over the quarter.

#### **Green economy**

The transition to renewable energy sources reached its highest levels in 2023, according to REN21. However, political and economic uncertainty and significant competition from Chinese manufacturers have become major bottlenecks to the green transition in the US, the UK and the rest of Europe. The green transition could create 135-725,000 green jobs by 2030, contributing £37bn-£57bn annually to GDP, according to projections from the Confederation of British Industry released in September. The National Grid also estimates that by 2050, 400,000 roles will need to be filled for the UK to meet demand for renewable energy and its net-zero targets. It is expected that many of these jobs will be filled by the 270,000-strong oil and gas workforce who can transfer their skills to the green sector; however, a PWC report highlights a potential skilled worker shortage emerging, given that a majority of these workers are set to retire by or before 2030.

Electric vehicle (EV) sales in the UK made up 18.7% of new vehicle sales in the year by November, lower than the 22% required by a UK government mandate, <u>according to the FT</u>. Car manufacturers are not only affected by lower revenues against their investments in developing these vehicles, but also because they face fines for not meeting annual targets. The mandate currently requires that 80% of car manufacturer sales must be zero-emission vehicles by the end of the decade. Stellantis cited the mandate as a reason for <u>closing its factory based in Luton</u>. Other car manufacturers, such as <u>Nissan</u> and <u>Ford</u>, also announced cuts to their UK plans due to low EV sales and the EV mandate. Perhaps as a result of these proposed job losses, UK ministers have begun <u>exploring</u> <u>ways to ease pressure on car manufacturers</u>. In more positive news for this sector, the UK is currently on track to install 300,000 public charging points by 2030, <u>according to the National Audit Office</u>, although only 15% of those charging points are in rural areas.

The UK government <u>announced plans to cut the fines</u> aimed at boiler makers who fail to sell enough heat pumps to meet government targets. Manufacturers were set to be fined £5,000 per missed heat pump from April 2025. However, the Labour government reduced the fines to £500. The move comes after the government increased the grant funding available for households to install heat pumps to £295m next year.

In Europe, more than 30,000 jobs were cut at car-part suppliers. This was double the amount in 2023, according to analysis from the European Association of Automotive Suppliers. These job cuts are due to falling sales of vehicles amid cheaper competition from China, which AlixPartners projects could account for a quarter of all electric vehicles in Europe. European auto manufacturers are also potentially facing fines of up to £10bn for failing to meet EU emissions standards. As a result, some auto manufacturers have announced plans to supply cheaper EV models next year in efforts to fend off competition. Volkswagen, Europe's largest carmaker, announced plans to cut thousands of jobs and slash pay by 10% due to slowing sales across major markets as well as in an effort to transition to electric vehicles. WolfSpeed, a US-based technology company, abandoned plans to build a €3bn semiconductor plant in Germany due to falling demand for EVs in Europe.

Germany's industrial sector is also suffering from an oversupply of cheap industrial products from China. Thyssenkrupp, a steelmaker based in Germany, <u>announced plans</u> to cut 5,000 jobs (40% of its workforce) by 2030.

Political changes are also influencing the green transition. In Germany, heat-pump installers reported <u>significant increases in sales</u> due to fears of an incoming conservative government. The conservatives are projected to win a snap election in February and aim to remove grants for replacing gas boilers. The grants currently cover 70% of the procurement and installation costs. Despite the grants, German heat pump sales are projected at only 200,000 units, a drop from record numbers of 356,000 units sold in 2023.

In the United States, President Donald Trump has already started to <u>unpick the Inflation Reduction Act</u>'s push towards a green transition in the US implemented by his predecessor. Whilst President Biden rushed through a wide range of disbursements in his final days, Trump has already halted more than \$300bn in funding. However, some oil bosses are questioning <u>whether Trump's 'drill, baby, drill!' agenda will be possible</u>.

#### **Education**

The UK budget sees day-to-day spending on education rising by £2.3bn over a two-year period. This includes an <u>extra £1bn for special needs education</u> (see below). On the capital expenditure side, £1.4bn will be used to rebuild 500 schools, and £2.1bn will go towards school maintenance.

After more than 50 universities announced job cuts this year, UK <u>universities have been</u> <u>allowed to increase tuition fees</u> in line with inflation for the first time in eight years, from £9,250 to £9,535. The move is not a surprise, as many universities have struggled with financial challenges through the year, as reported in our last quarterly report.

The UK special needs education sector is facing a funding crisis following a rise in the number of children diagnosed with autism and communication/mental health problems. According to official SEND data, the number of education health and care plans, which are used to provide funded specialist support for SEND children, has risen by 83% since 2015. Councils are struggling to meet demand. Data from the County Councils Network (CCN) found that 26 of the 38 county and rural councils risk bankruptcy before 2027 if SEND deficits are not addressed by the government. These deficits are projected to rise from £2.7bn to £3.8bn by March 2027 if there are no significant changes to the system.

#### **Technology**

The recently published <u>World Economic Forum Future of Jobs Report 2025</u> highlights how companies think technology will change their ways of working. Ninety-three per cent of businesses in Germany expect that Al and information processing will transform their business operations, while 67% believe that robots and autonomous systems will be transformative to their operations. In the UK, the WEF report projects that the impact of digitalisation will continue, leading to a rise in demand for workers with technological literacy, Al, big data, flexibility and agility. In the United States, roles projected for significant growth by 2030 are data analysts/scientists and Al and machine learning specialists.



#### Structural Shifts

#### **Employment law reform**

During the quarter, the new UK labour government <u>announced its Employment Rights Bill</u>, which will introduce 28 individual employment reforms. The reforms include new laws on statutory sick pay, parental leave, paternity leave, new protections against dismissal for workers, flexible working arrangements, trade unions and zero-hour contracts reform. A government assessment found that these <u>worker rights reforms will cost businesses up to £5bn a year</u>. These costs will arise as companies adjust to new legislation, administrative and compliance costs. <u>Business groups have warned</u> that these worker rights will make it harder to hire new workers, particularly those stuck outside the job market.

The UK government also <u>announced a different approach to the employment support system</u> backed by £240m with the aim of reducing unemployment and inactivity. The efforts will include deploying more healthcare staff to cut waiting lists and reduce inactivity. There is also a plan to use £55m of investment to revamp the focus of the Jobcentre system to a National Jobs and Careers Service, focused on people's skills and careers. The UK government is also <u>introducing a new 'youth guarantee'</u>, backed with £40m, to ensure that every young person has access to education and training to help them find a job. The guarantee comes with a caveat: young people who reject the offer will see their benefits cut.

<u>UK staffing companies have raised alarms</u> over the UK government's new reforms that include a ban on zero-hour contracts for agency workers. The staffing groups, including Adecco, Hays and Randstad, stated that the new reforms would undermine the job market for both permanent and temporary workers.

#### **Artificial intelligence**

Al technology continues to disrupt, replace and augment industries. Big companies look to continue to invest huge amounts into the technology. Companies such as Amazon, Meta, Microsoft and Google were predicted to have <u>spent over \$200bn in 2024</u> with plans to spend even more in 2025.

#### AI in education

The education sector ranks highly as one of the sectors to significantly benefit from Al, according to a 'Shaping the future of learning report' by the WEF (published April 2024). This is due to its capacity to save time by personalising learning and simplifying administrative tasks, functions that the WEF claims could potentially ease the global teacher shortage. In advance of its January conference, BETT published 'The Rise of Al in Education 2024', which contains results of a survey of teachers across the UK. It found that AI is still in the early stages of implementation in UK schools. Sixty-nine per cent of schools have not yet implemented any AI technologies, and only 32% of teachers using Al report a decrease in workload. A report from the Brookings Institution backs this claim, stating that teachers could save time on up to one-third of tasks such as grading, planning activities, administering tests, maintaining records and preparing reports. Perhaps in a bid to stay ahead of the competition, OpenAI released a free online course aimed at helping teachers leverage ChatGPT to use the platform in their classrooms. However, some educators, such as Lance Warwick at the University of Illinois, have questioned the ethical, privacy and safety implications of such a move, as reported on TechCrunch.

#### AI in the workplace

Al's significant impact on the workplace continues to take shape. Its potential to boost labour productivity continues to encourage investment and adoption, although adoption seems to be slower in Europe than in the US. According to a McKinsey report, Al has the potential to boost European productivity by 3% annually through 2030. Despite this, European organisations still fall behind US organisations in adoption by 40-45%, according to the same McKinsey report. This gap is mostly due to a high-tech and software sector in the US that is almost 5x larger than that of the UK and a disparity of 45-70% spending on Al and IT in all sectors in the US versus the UK. The UK government claims that the Al sector is currently supporting over 12,000 jobs and generating over £1bn in revenue, with projections to reach £6.5bn by 2035. It has responded to the rapid adoption of Al technology by introducing an Al assurance platform aimed at helping organisations identify and manage potential risks associated with Al.

A report by the Brookings Institution on the emerging risks of generative AI found that over 30% of US workers may experience at least 50% of their tasks affected by the technology. The roles that would be significantly impacted include marketing, customer service and content creation. 85% of other occupations will see at least 10% of their tasks affected, according to the report. Both high-paying and low-paying jobs are likely to experience the impact of AI technologies. The report claims that STEM, business and finance, architecture and engineering, and law, are the high-paying sectors facing the greatest exposure, whilst manually intensive, blue-collar sectors currently face the least. Those administrative support roles, which are typically held by a diverse group of lower-middle-class women, are also at a high risk of work displacement. According to Brookings' analysis of Open AI's GPT-4 ratings of task susceptibility, 36% of female workers are in roles where AI could save 50% of time on tasks compared to 25% of male workers.

Brookings was also eloquent on the challenge of managing AI responsibly: 'Currently, there are few guidelines or codes of conduct for how companies should ethically implement AI with respect to their workforce. At the same time, many companies, especially those publicly traded or aiming to go public, feel intense pressure from competitors and investors to adopt AI to save on labor costs and increase efficiency.'

This rapid disruption of AI emphasises the need for individuals to upskill; this was highlighted at an <u>expert panel session by the WEF</u>, where businesses predicted that by 2027, almost half of workers' core skills will be disrupted by AI. <u>A survey on AI in the workplace by Gallup</u> found that 72% of Fortune 500 chief human resources officer s predict that AI will begin replacing roles in their organisation within the next three years.

#### Al and its impact on recruitment

The recruitment sector is also adopting AI to improve its processes. <u>LinkedIn has developed a new AI hiring assistant</u> to help recruiters develop job descriptions, create notes on qualifications, automatically generate a shortlist of candidates and indicate which of the candidates may be a good fit. While this may be welcome for recruiters, this creates a significant increase in competition for roles as more applicants find it easier to find and apply for jobs . <u>According to an article on the FT</u>, UK graduates are facing the toughest competition for jobs on record due to AI technology making it easier to apply for jobs. The Institute of Student Employers found that employers running graduate training schemes received 59% more applications in 2024 than in 2023.

#### **VR/AR** education

Meta launched a new partnership with UK- and US-based universities to test its virtualreality and mixed-reality prototypes in developing interactive educational content. The universities include Arizona State University, Houston Community College, Imperial College London, Miami Dade College, Morehouse College, New Mexico State University, San Diego State University, Savannah College of Art and Design, the University of Glasgow, the University of Iowa, the University of Leeds, the University of Miami and the University of Michigan. The company is also looking to launch its 'digital twin' metaversity program, which it delivers in collaboration with VictoryXR, to universities, including the University of Leeds in the UK, the University of the Basque Country in Spain, and the University of Hannover in Germany. Meta has also <u>announced a collaboration</u> with Cornerstone OnDemand, a provider of workforce solutions, to enhance immersive learning experiences through Al-powered extended reality. Meta has also partnered with Ufi portfolio company Bodyswaps to explore the integration of VR soft skills training into the healthcare curriculum through the Meta Healthcare Training Grant, providing institutions in the US, UK, and Canada free access to immersive learning experiences and hardware.



## Responses/emerging themes

#### **Upskilling initiatives/partnerships**

There was a multitude of AI upskilling initiatives during the quarter as organisations looked to equip their workforce and future workers with the necessary skills to leverage Al. Simplilearn, a digital skills training provider, partnered with Degreed, an enterprise learning company, to create courses in artificial intelligence, machine learning, cloud computing, data science and digital marketing. Microsoft announced a \$1.3bn investment over three years in cloud and AI infrastructure aimed at teaching digital marketing and AI skills in Mexico. The announcement also includes the launching of an Artificial Intelligence National Skills Initiative, in partnership with governments, industry, academia and civil society, to train 5m people – including users, developers, teachers and organisational leaders – over three years. A National Skills Initiative was also launched in the UAE, with the aim of empowering 100,000 government employees with AI skills to drive Al transformation. The Chan Zuckerberg Initiative announced three grants supporting artificial intelligence education initiatives to empower educators as cocreators of future technologies. The grants will support **Education First**, **the International** Society for Technology in Education (ISTE) and Leanlab Education. Adobe announced an initiative to prepare 30m learners with essential AI and digital skills by 2030. Adobe will partner with K-12 schools, colleges and other education providers. Google started two AI education programmes in Ireland aimed at providing AI literacy skills to thousands of Irish students. The first initiative, called Experience AI, which has been co-developed with Raspberry Pi Foundation and Google DeepMind, aims to provide classroom resources and professional development for teachers to help them teach students about AI. The second, AI Literacy in the Classroom, aims to give students and teachers essential AI skills. Amazon's cloud computing unit AWS <u>announced the launch</u> of the Education Equity Initiative, which aims to aid 'education organisations with technologies to build learning innovations for underrepresented communities'. They aim to do this by providing \$100m in cloud credits to nonprofit organisations across the globe over the next five years to help them build tech infrastructure to teach local communities coding and technology skills.

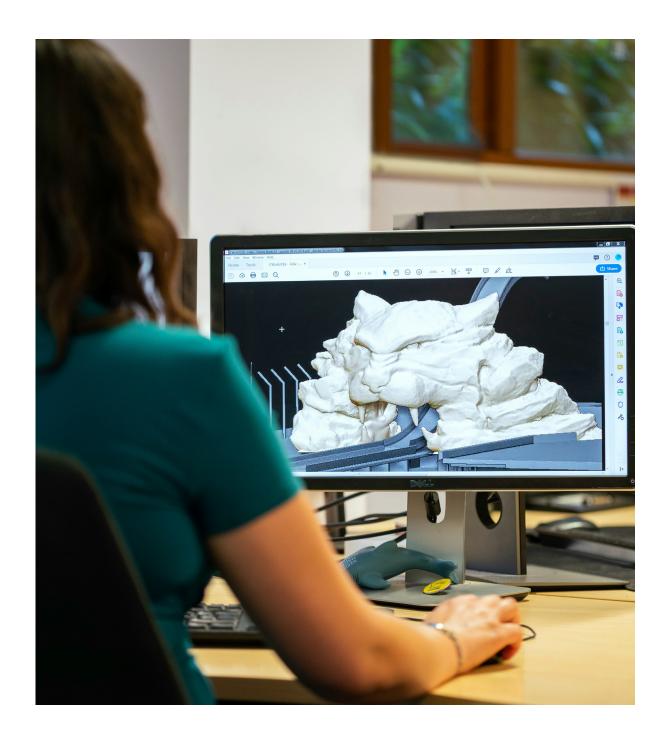
IN4 Group, a UK-based provider of technology skills training, <u>announced plans to train and place</u> 1,000 'career break mums' and female carers into highly skilled data roles within the NHS, housing associations and local authorities by the end of 2025. The German government <u>announced an upskilling initiative</u> through a €12m investment to launch a skills academy named Microtec Academy, aimed at equipping the German workforce with semiconductor skills to support the microelectronics sector.

#### Workforce pipeline expansion and education/workforce-focused grants

Jobs for the Future (JFF), a US national nonprofit, <u>announced six regions that will receive \$750,000</u> each over three years as part of its Quality Green Jobs Regional Challenge. California <u>announced plans to disburse \$450m</u> to about 300 K-12 schools with the aim of setting up internships, increasing dual enrolments in community colleges and furthering other efforts to connect students to high-paying jobs in healthcare, technology and other fields. New York state also <u>announced the launch of a workforce development program</u> named One Network for Regional Advanced Manufacturing Partnerships, a \$200m investment to increase access to skills that enable New Yorkers to join the advanced manufacturing workforce.

#### **Skills-based hiring**

In previous quarters, we have seen various institutions and more than 20 US state governments adopt skills-based hiring policies to expand the talent pool by removing degree requirements for jobs. California has also <u>removed degree requirements</u> from approximately 30,000 state positions, and Governor Gavin Newsom has announced plans to remove degree requirements for another 32,000 in early 2025. However, questions remain about how well these policies are being adopted and if individuals without degrees are getting into these jobs. <u>A report released by the Burning Glass Institute and Harvard Business School</u> in February found that 45% of companies that dropped degree requirements did not make any change in who they hired. Some that made progress with hiring more workers without degrees – including Nike, Uber and HSBC – regressed on the policy. The Burning Glass Institute estimates that the shift to skills-based hiring has only created new jobs for 97,000 workers out of 77m hires.



# Part II: VocTech market activity

#### Capital Invested in HR Tech



Source: Pitchbook

Whilst deal activity fell significantly, the fourth quarter of 2024 was filled with significant mergers and acquisitions in the Future of Work and education space. According to data from HolonIQ, EdTech VC investment reached its lowest level in a decade at \$2.4bn for 2024, an 89% decline from the 2021 peak. Investment appetite seemed to be geared towards upskilling and reskilling, as workforce training and development received over a third of all funding rounds. This was followed by K-12 education, post-secondary education and early childhood education.

There were nevertheless significant deals, particularly from private equity firms. Leeds Equity Partners <u>neared its \$1.8bn goal for its new fund</u>. The fund will look to invest \$50m-\$200m, with the aim of making up to a dozen acquisitions. General Atlantic agreed to <u>acquire Learning Technologies Group</u>, a UK-based provider of corporate training, for \$1bn. Philadelphia-based private equity firm <u>Renovus Capital Partners</u>, which looks to invest within the knowledge and talent sectors – including education, technology services, healthcare services and professional services – <u>closed an oversubscribed \$875m fund</u>. London-based VC firm Emerge Education completed a <u>raise of £56m for its second fund</u>. The fund will aim to invest in startups in the future of work and learning sectors at the pre-seed and seed level.

Our lists of other selected deals are organised by subsector.

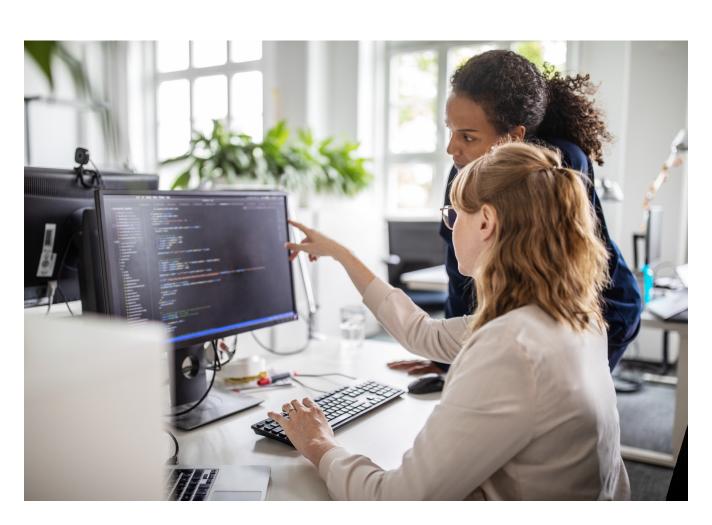
#### Upskilling and corporate training

- <u>Perlego</u>, a London-based provider of a digital subscription-based library, <u>raised \$20m</u> <u>in a funding round</u> led by Sir Terry Leahy, ITHAKA, MediaHuis and KPN Ventures.
- <u>AMBOSS</u>, a German medical knowledge and learning platform, <u>announced the</u>
   <u>acquisition of Novaheal</u>, a platform that provides education for nurses. Financial details
   of the acquisition were undisclosed.
- <u>Doctorflix</u>, a German learning platform for medical professionals, <u>raised €4.1m in a</u> <u>seed round</u> led by Haufe Group Ventures.
- <u>Legacy Education</u>, a California-based provider of post-secondary education programs, <u>announced the closing of its initial public offering</u> of 2,875,000 shares at \$11.5m. Legacy Education also <u>announced a deal</u> to acquire Contra Costa Medical Career College Online and Contra Costa Medical Career College for \$8m.
- <u>Guild</u>, a Denver-based provider of corporate upskilling solutions, <u>announced</u> <u>an agreement</u> to acquire <u>Nomadic Learning</u>, also a provider of corporate upskilling solutions.
- <u>Gaia Learning</u>, a UK-based provider of online classes tailored to neurodivergent students aged 8-16, <u>raised \$720k in venture capital funding</u>. The round was led by Nesta Impact Investments.
- <u>PETE</u>, a Florida-based provider of Al-powered courses used for onboarding, regulatory compliance and more, <u>raised an undisclosed amount</u> from BlueWave Investment Partners.
- OffSec, a provider of cybersecurity workforce development training, was <u>acquired</u> <u>by Leeds Equity Partners</u> from Spectrum Equity. Financial terms of the transaction were not disclosed. Leeds Equity Partners also <u>acquired Archer Review</u>, a provider of a test preparation solution for medical exams, to form a new healthcare education and licensure platform.
- <u>Cyber Guru</u>, a Rome-based cybersecurity awareness training platform, <u>raised €23m in a Series B funding round</u> led by Riverside Acceleration Capital, with participation from Educapital, Adara Ventures and P101 Ventures.
- <u>Coding Giants</u>, a Warsaw-based provider of coding skills training to children and teens, <u>raised €8.5m in a funding round</u> led by True Global Venture, with participation from PortfoLion Capital Partners.
- <u>Springpod</u>, a London-based provider of work-based learning experiences to students, raised £1.9m from American Student Assistance.
- <u>CompTIA</u>, an IT training and certification provider, is <u>set to be jointly acquired</u> by H.I.G.
  Capital and Thomas Bravo. The acquisition will see CompTIA split into the for-profit
  certification and training business, while its nonprofit organisation will operate as a
  separate entity.
- <u>Oboe</u>, a New York-based personalised learning platform, <u>raised \$4m in seed funding</u> led by Eniac Ventures, with participation from Haystack, Factorial Capital, Homebrew, Offline Ventures, Scott Belsky, Kayvon Beykpour, Nikita Bier, Tim Ferriss and Matt Lieber.

- Galileo Global Education <u>bought THI investments' share in Corndel</u>, a UK-based provider of IT apprenticeships.
- <u>Ziplines Education</u>, a platform that looks to partner with universities to provide industry-focused certificate courses, <u>announced the acquisition</u> of Clicked, a provider of real-world work simulations. Terms of the transaction were not disclosed.
- <u>Stepful</u>, a provider of healthcare training for healthcare professionals, <u>announced a</u>
   \$31.5m Series B funding round, led by Oak HC/FT with participation from Y Combinator,
   Reach Capital, AlleyCorp, SemperVirens, Company Ventures, Green Sands, ECMC
   Education Impact Fund, Intermountain Ventures and Cedar Pine.
- <u>Leland</u>, a US-based provider of career coaches and coaching services, <u>raised \$12m in a Series A funding round</u> led by Forerunner Ventures with participation from GSV Ventures.

#### Al upskilling

- <u>Build Club</u>, an Al-upskilling platform to teach technical and nontechnical people to work on Al projects, <u>raised \$1.75m in a pre-seed round</u> led by Airtree and Blackbird.
- <u>Mendo</u>, a Paris-based provider of employee training in the use of software and generative Al tools, <u>raised €3.5m in a funding round</u> led by Emerge Education.
- <u>Nectir</u>, a US-based provider of personalised AI learning partners for university students, <u>raised a \$6.3m seed round</u> led by Long Journey Ventures, with participation from Entrada Ventures, Precursor Ventures and Behind Genius Ventures.



#### **VR** upskilling

 <u>Uptale</u>, a French provider of immersive and experiential training in virtual reality, <u>announced a €9m funding round</u> from Arkea Capital, Go Capital and other business angels.

#### Talent acquisition and staffing

- <u>Beamery</u>, a London-based provider of an Al-powered platform for identifying and closing skills gaps in organisations, <u>raised undisclosed debt financing</u> from CIBC Innovation Banking.
- <u>Popp AI</u>, a London-based AI-powered recruitment platform, <u>raised €4.3m in a seed</u> <u>funding round</u> led by Emerge and SuperSeed Ventures.
- nGAGE Talent, a UK-based recruitment firm, announced its <u>acquisition of Science</u> <u>Solutions Recruitment</u>, a UK-based life sciences and chemical engineering recruitment business.
- <u>HR Path,</u> a Paris-based provider of human resources services, <u>acquired IN-RGY</u>, a Montreal, Canada-based HR consulting firm that specialises in digital transformation.
- <u>Stema</u>, an Italian staffing platform for engineers, <u>announced a €1.6m in funding</u> led by United Ventures with participation from Eden Ventures, Club degli Investitori and Octopus Ventures.
- MONA AI, a German AI recruitment platform, <u>raised €2m in a seed funding round</u> led by Earlybird-X.
- <u>Bubty</u>, a Dutch-based platform that helps companies manage freelance workers, raised €3m in seed funding.
- <u>Toothio</u>, an Arizona-based platform that connects dental offices with dental professionals, <u>raised \$5m in a funding round</u> led by Roosh Ventures.
- <u>TalentNeuron</u>, a US-based provider of labour market analytics solutions, <u>announced</u>
   <u>the acquisition</u> of HRForecast, a German-based workforce and skills management
   software. Financial details of the transaction were not disclosed.
- <u>Crimson Education</u>, a New Zealand-based college admissions and tutoring services provider, <u>raised \$61m in a Series D round</u> led by Movac, a New Zealand venture capital firm, with participation from HEAL Partners, Icehouse Ventures, US News and HighSage Ventures, as well as US fund Five Sigma.
- <u>Zvoove</u>, a German-based provider of temporary staffing, <u>announced the acquisition</u> <u>of Online Results</u>, a Netherlands-based recruitment platform. Terms of the transaction were not disclosed.



#### **Transnational education**

• <u>ILAC Education Group</u>, a network of over 100 Canadian colleges and universities, <u>announced the acquisition of UniApplyNow</u>, a US-based higher education admission and recruitment platform.

#### Language learning

 <u>Speak</u>, an Al-powered language-learning platform, reached \$1bn valuation after <u>raising \$78m in a venture round</u> led by Accel. Open Al Startup Fund, Khosla Ventures and Y Combinator participated in the round.

#### Other regions

- <u>Eruditus</u>, a provider of professional education programs in collaboration with universities, <u>raised \$150m in a new funding round</u> led by private equity firm TPG.
- <u>Suraasa</u>, an upskilling platform for teachers, <u>raised \$6m in a funding round</u> led by Reach Capital, with participation from ETS Capital, NB Ventures, TSM Ventures and other strategic investors.
- <u>upGrad</u>, a provider of upskilling programs for higher education and professionals, raised \$60m from Temasek at a \$2.25bn valuation.
- <u>Aanaab</u>, a Saudi-based teacher training platform, <u>raised \$7m in a Series A funding</u> <u>round</u> led by Dallah Investment Holding.
- <u>Teachy</u>, an AI-powered platform that helps teachers with tasks such as lesson planning and grading, <u>raised \$7m in a Series A funding round</u> led by Goodwater Capital and Reach Capital.

#### Final remarks

We are in the process of preparing our annual report, looking back at 2024 and anticipating the remainder of 2025. The outlook has never seemed more unpredictable, but we will be providing a balanced view of the prospects and pitfalls in the coming months. As ever, please get in touch comments and particular areas of interest.

