

Introduction	03
Top Trends	04
Industry Overview	06
Review of 2024	14
Outlook for 2025	16
International Opportunities	18
Employment & Skills	20
AI Adoption in Scotland	28
Benchmark One: Smaller Companies	32
Benchmark Two: Medium-sized Companies	36
Benchmark Three: Larger Companies	40
ScotlandIS Commentary	44
About ScotlandIS	46
Methodology	46

NEW MESSAGE
To: Scotland (All)
Cc Bcc

Subject: Introduction

Over the past eighteen years, the Scottish Technology Industry Survey has been a trusted resource for business leaders, investors, and public sector decision-makers, providing critical insights into the sector's performance. This year's survey not only identifies key industry trends but also offers a forward-looking perspective on the opportunities and challenges shaping the year ahead.

ScotlandIS would like to thank all contributors for their valuable insights. These are vital to allow us us to advocate on behalf of the sector and drive change with policymakers.

We encourage you to explore how ScotlandIS is responding to the key issues highlighted by survey participants in the concluding section of this report.

This year's survey is supported by Techscaler, a Scottish Government programme run by CodeBase, designed for creating, developing and scaling tech startups.

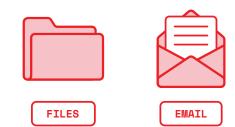
Karen Meechan

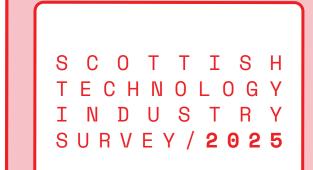
Send

Chief Executive, ScotlandIS











TRASH

Top ______Trends

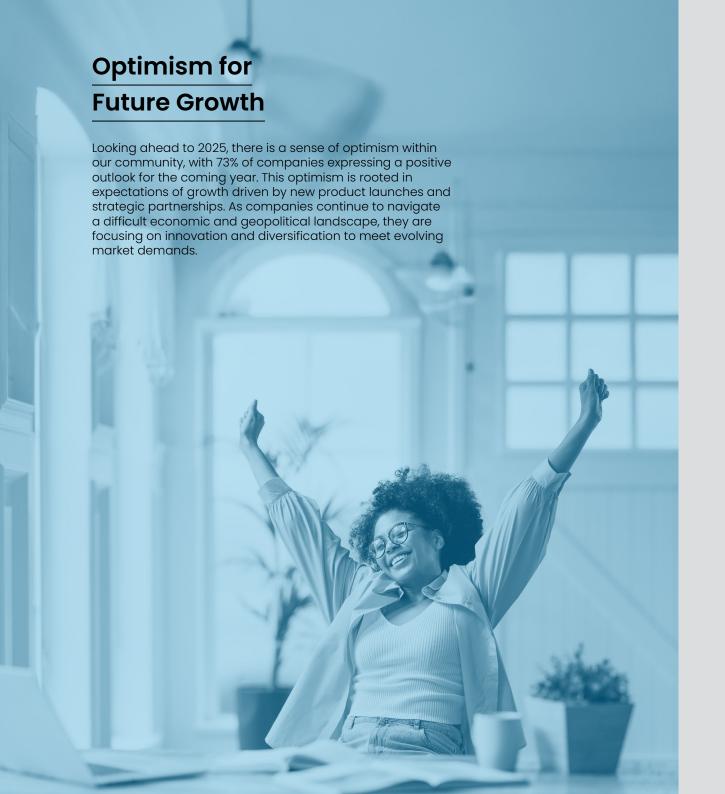


Emerging Opportunities in Artificial Intelligence

The landscape of business operations is undergoing a transformation driven by advancements in artificial intelligence (AI) and machine learning (ML). In 2025, 69% of companies have identified AI and ML as critical growth opportunities, a significant increase from 43% in 2023. This surge reflects a broader trend of companies recognising the potential of AI to enhance operational efficiency, drive innovation, and improve customer experiences.

As organisations increasingly integrate Al into their business strategies, opportunities arise in various areas, including automating repetitive tasks, optimising supply chains, and delivering personalised services to customers. The demand for skilled professionals in Al and ML is consequently rising, highlighting the importance of equipping the workforce with the necessary expertise to harness these technologies effectively.





OF RESPONDENTS ARE OPTIMISTIC A B O U T T H E NEXT 12 MONTHS

Hiring Intentions and Skills Demand

In 2025, 68% of companies plan to hire, focusing on key skill areas such as sales and marketing, AI/ML, and data expertise. As businesses increasingly integrate AI into their operations, the demand for professionals skilled in AI and machine learning is critical for developing algorithms and implementing data-driven solutions. Concurrently, there is a strong need for sales and marketing professionals who can effectively communicate the value of AI-driven products and services. This focus on both technical and commercial skills reflects a strategic approach to preparing for future growth and maintaining competitiveness in a rapidly evolving market.



Scotland's digital technologies sector

In 2024, the Digital Technologies sector in Scotland was valued at £6.87 billion, making up 4.7% of the country's total economic output. Between 2014 and 2024, the sector's Gross Value Added (GVA) grew by an average of 7.1% each year, far outpacing Scotland's overall economic growth of 0.5% during the same period. In 2023, the sector saw moderate growth of 3.5%, but due to economic challenges, this was expected to slow to just 0.5% in 2024.

Looking ahead, the sector is forecast to grow by an average of 2.6% per year between 2024 and 2034—faster than Scotland's economy as a whole. By 2034, it is expected to contribute 5.3% of Scotland's total economic output.

As of 2024, Scotland's digital technologies sector included around 10,395 registered businesses, accounting for 5.8% of the economy. The sector employed 87,700 people, representing 4.3% of all private sector jobs. It generated £6.87 billion in GVA, with productivity per worker 40% higher than the national average.

The industry is expected to continue growing at 1.5 times the rate of Scotland's overall economy until 2029. The largest subsector is computer programming and consultancy, making up 85% of businesses and employing 62% of tech workers. Telecommunications follows, accounting for 4% of businesses and 24% of the workforce.

Demand for digital skills remains high, with over 13,000 job opportunities created each year. However, challenges persist, including a significant skills shortage and a gender imbalance, women make up just 23% of the tech workforce. Tackling these issues is essential for ensuring the sector's continued growth and contribution to Scotland's economy.

 $\label{lem:https://www.skillsdevelopmentscotland.co.uk/media/4z3dkfbx/sectoral-skills-assessment-digital-technologies.pdf$



COMPUTER PROGRAMMING AND CONSULTANCY MAKES UP 85% OF ALL D I G I T A L T E C H N O L O G Y 87,700
EMPLOYED
IN THE
SCOTTISH
DIGITAL
TECHNOLOGY
SECTOR

Headquarters location

For the past three years, Edinburgh & Lothians has held the highest percentage among respondents (35%). The next most common places are Glasgow, Lanarkshire, Renfrewshire & Dumbartonshire (22%) and UK outwith Scotland (15%). However, these figures reflect only respondents' location, not their actual share of digital technology companies.

Highlands and Islands

2025 / 2024 / 2023

2% / 2% / 4%

Aberdeen & Grampian

7% / 13% / 5%

Argyll and Bute

0% / 0% / 0%

Forth Valley

3% / 0% / 1%

Glasgow, Lanarkshire, Renfrewshire & Dunbartonshire

22% / 19% / 28%

Ayrshire

1% / 1% / 0%

Fife & Tayside

6% / 6% / 5%

Edinburgh & Lothians

35% / 36% / 36%

orders, Dumfries & Galloway

1% / 1% / 2%

2025 / 2024 / 2023

UK outwith Scotland

15% / 14% / 8%

EU outwith UK

3% / 3% / 4%

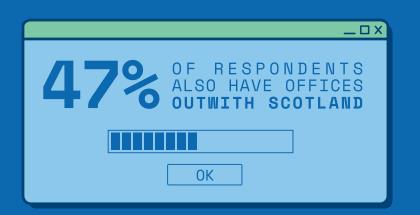
US headquartered

4% / 5% / 6%



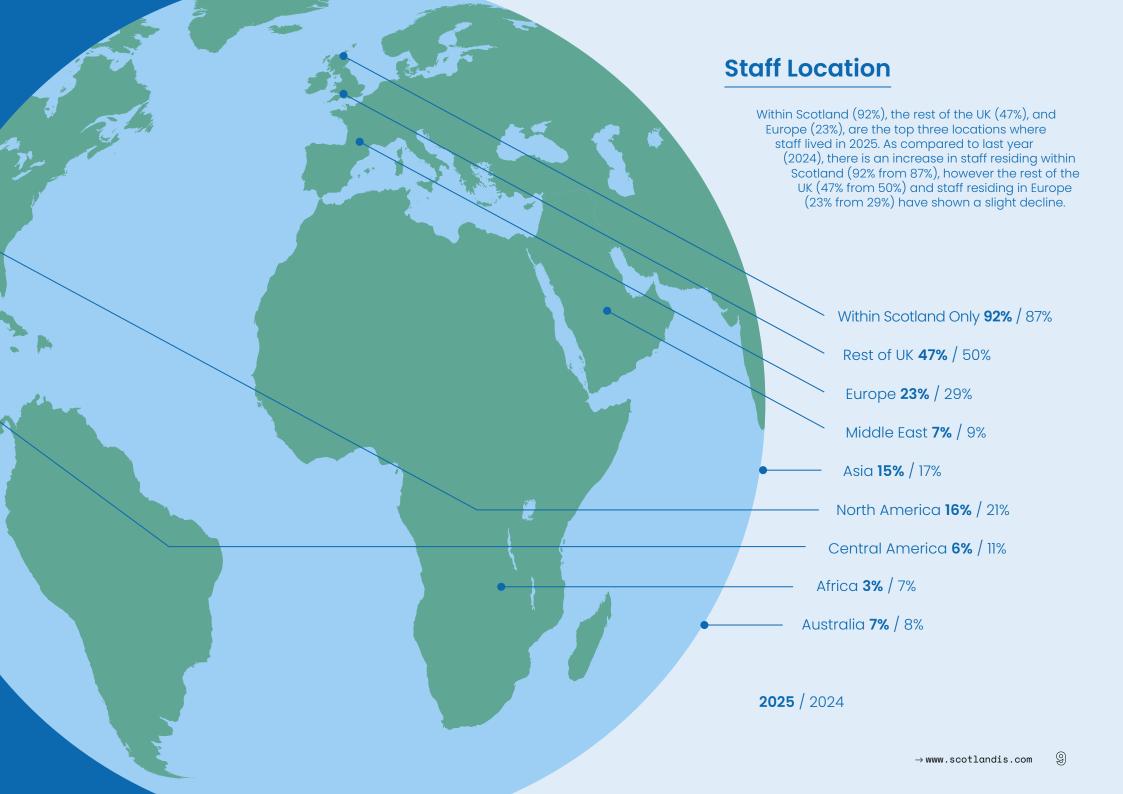
Offices outwith Scotland

Last year, 50% of respondents operated solely within Scotland, but this has risen to 53% in 2025. While UK-wide expansion has grown, international presence has seen mixed trends, with a decline in Europe but slight increases in North America and Asia. This suggests a shift towards strengthening domestic operations while being more selective about overseas growth.



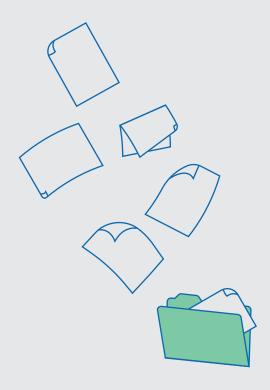


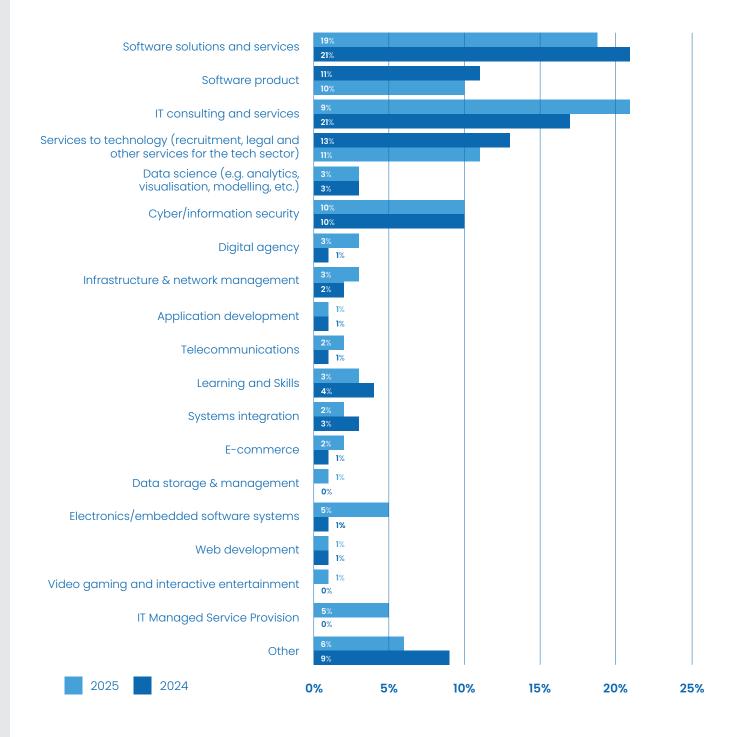


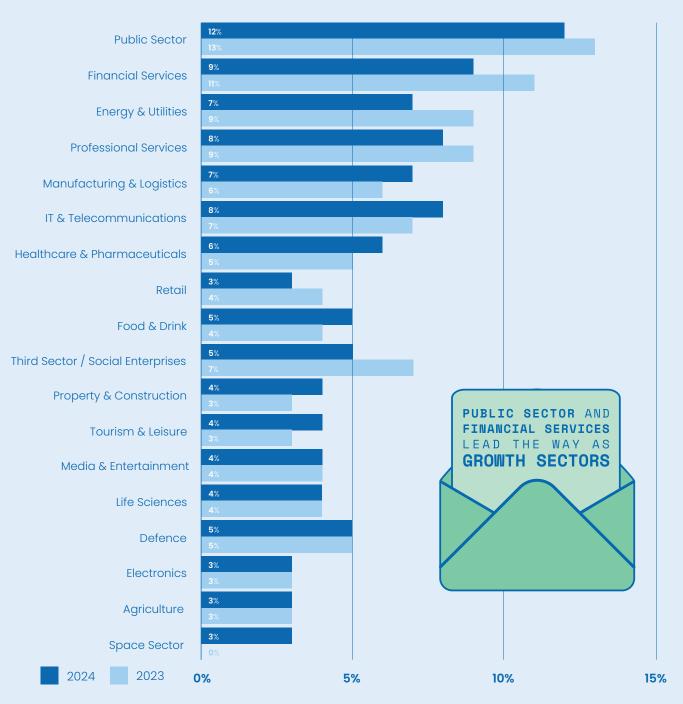


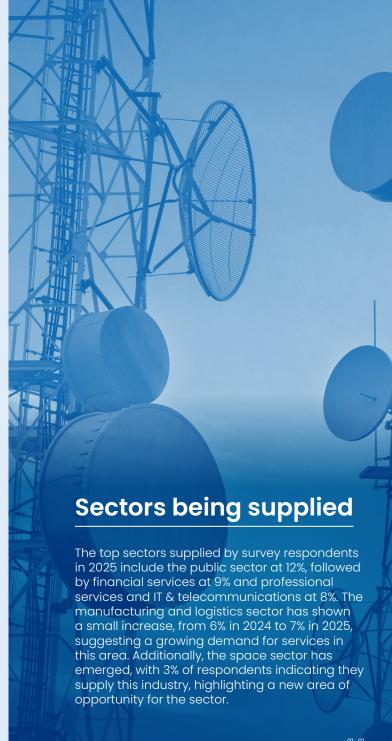
Main activity of business

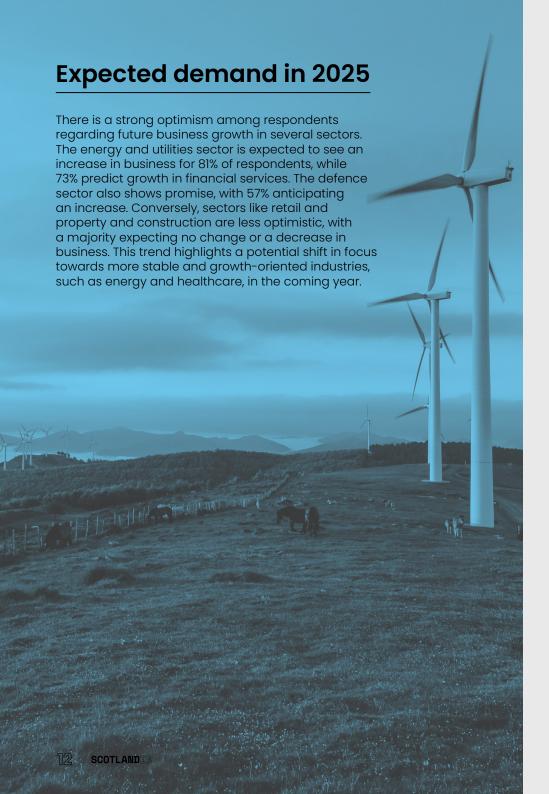
There has been a change in the primary business activities of the survey respondents between 2024 and 2025. The proportion of respondents engaged in IT consulting and services has decreased significantly, falling from 21% to 9%. In contrast, the share of those involved in software solutions and services remains relatively stable, dropping slightly from 21% to 19%. Additionally, there has been a notable increase in the digital agency sector, which rose from 1% to 3% in 2025.





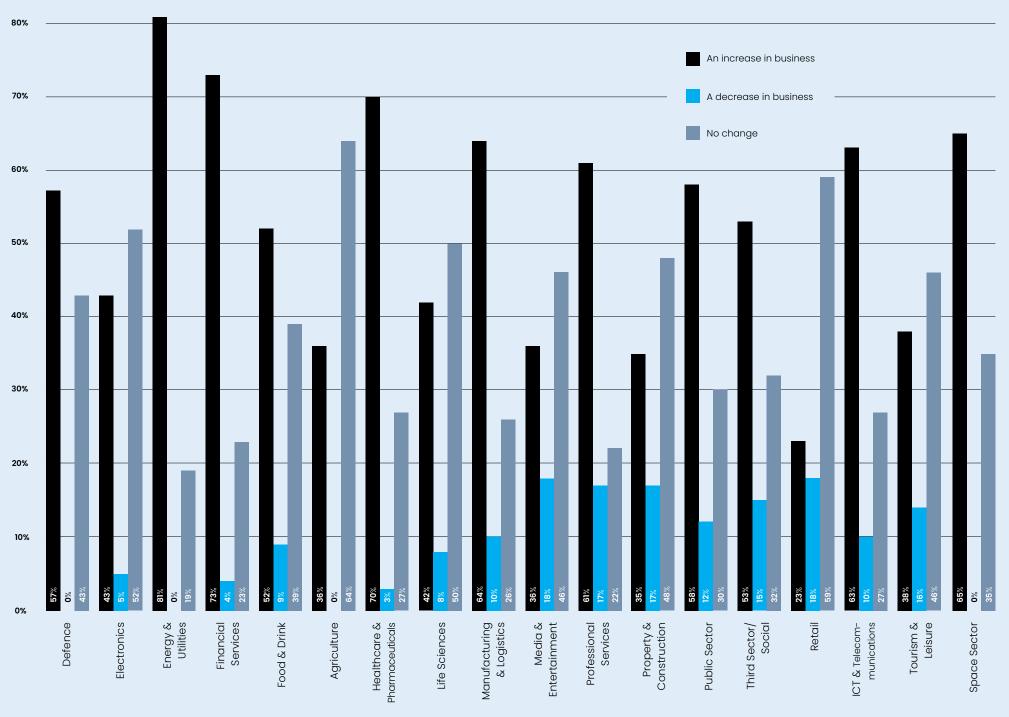






81% OF RESPONDENTS
ENERGY
UTILITIES
EXPECT TO SEE AN
INCREASE
OF BUSINESS



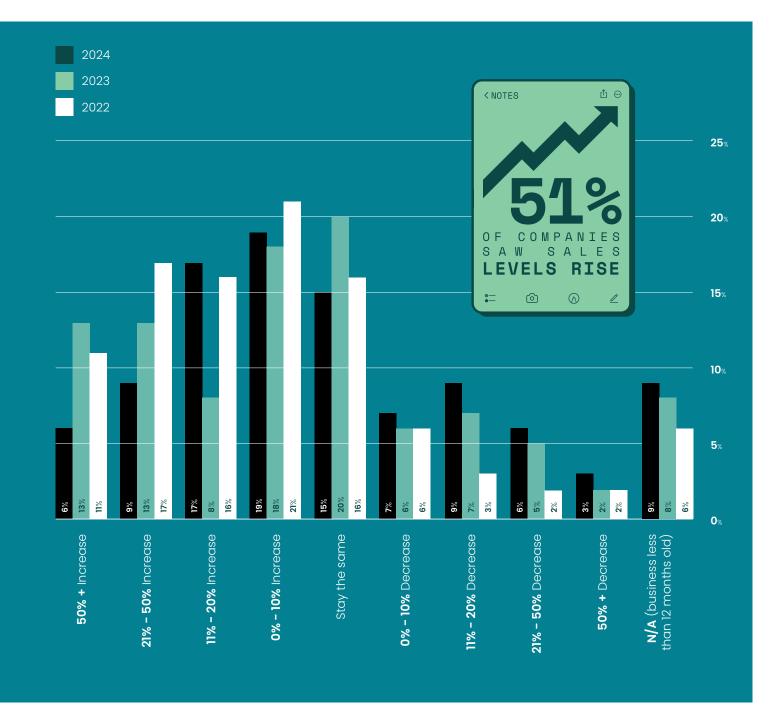


Review of 2024

Sales levels

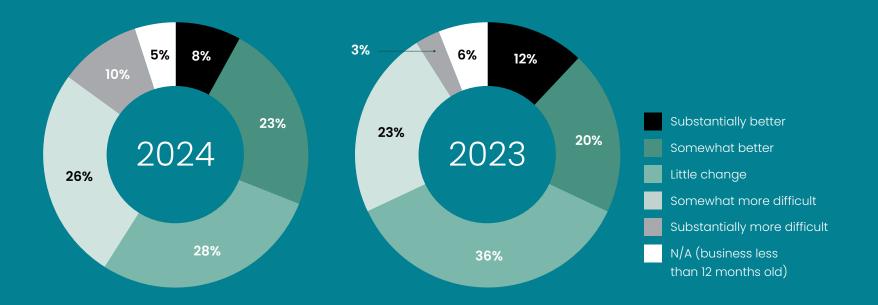
Sales levels in 2024 show a positive shift towards more moderate growth among respondents compared to 2023. While the percentage reporting a 50% or more increase has decreased from 13% in 2023 to 6% in 2024, the proportion experiencing an 11-20% increase has risen significantly from 8% to 17%. Additionally, those reporting a 0-10% increase remains steady at 19%. Although fewer respondents are experiencing dramatic sales increases, there is a growing trend of steady and sustainable growth within the sector.





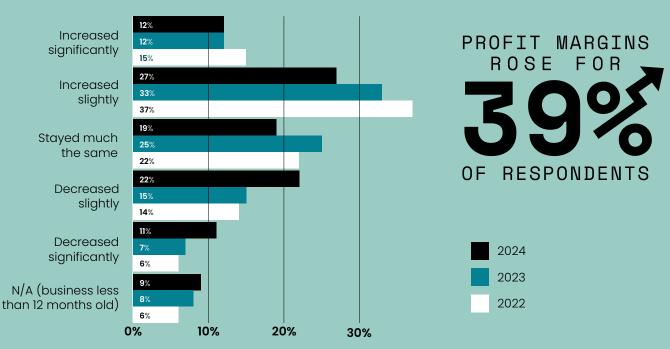
Cashflow

Cash flow changes in 2024 present a mixed outlook. The share of firms reporting "substantially better" cash flow fell from 12% to 8%, while "somewhat better" rose from 20% to 23%. Those seeing "little change" dropped from 36% to 28%, and "somewhat more difficult" increased from 23% to 26%. Overall, cash flow for the year ahead appears more challenging in 2025, with fewer businesses seeing major improvements and a slight rise in difficulties



Profit margin performance in 2024 compared to 2023

Profit margins data in 2024 indicate a less optimistic outlook compared to 2023. While the percentage of respondents reporting "increased significantly" remains steady at 12%, those indicating "increased slightly" has decreased from 33% to 27%. Similarly, the proportion stating their profit margins "stayed much the same" has fallen from 25% to 19%, while those experiencing a "decreased slightly" has risen from 15% to 22%. The percentage reporting a "decreased significantly" has also increased from 7% to 11%.



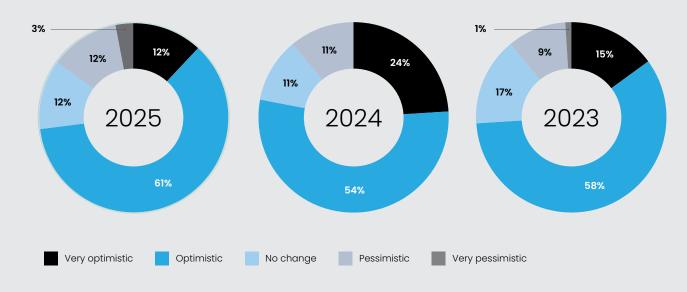


There is a strong sense of optimism among respondents for 2025, with 61% identifying as "optimistic," an increase from 54% in 2024 and 58% in 2023. A primary reason for this optimism is the anticipated growth in new product launches and partnerships, particularly within the energy sector and internationally. Many businesses report strong order forecasts from existing customers and an expanding pipeline of opportunities, indicating a recovery and increased demand across various markets.

The proportion of respondents reporting "no change" remains consistent at 12%, while those expressing "pessimistic" views has stayed steady at 12%. Additionally, the percentage of "very pessimistic" respondents has risen slightly to 3%.

Overall, the data indicates that the majority of respondents are feeling optimistic about the future, driven by expectations of growth and new opportunities, despite a slight reduction in those feeling extremely optimistic. This reflects a cautious yet hopeful outlook as businesses navigate challenges and capitalise on emerging trends.





Expected change in sales over the next 12

months

82% of companies anticipate sales growth in 2025, with 31% expecting a modest increase of 0-10% and 21% forecasting an 11-20% increase. While the percentage of companies predicting significant growth (50%+) has decreased to 13%, 17% still expect a growth of 21-50%. This overall trend indicates a stable outlook for sales growth despite a slight decline in highgrowth expectations.



20%

50% +

Increase

21% - 50%

Increase

11% - 20%

Increase

0% - 10%

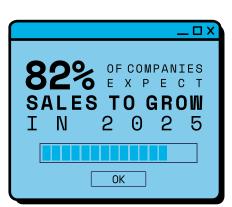
Increase

Stay the

same

0% - 10%

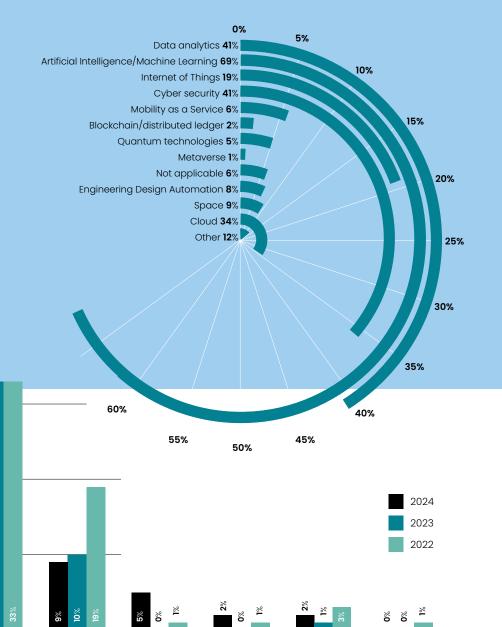
Decrease



New opportunities

Artificial Intelligence/Machine Learning (69%), data analytics (41%), and cyber security (41%), are the top three areas for new opportunities in 2025.

Companies see the biggest new opportunities in Artificial Intelligence and Machine Learning, which has grown steadily from 43% in 2023 to 69% in 2025, indicating strong momentum in AI adoption. Data analytics, cloud, and cyber security have all declined as priority areas compared to previous years, suggesting that while they remain important, businesses may see them as more mature rather than emerging opportunities. Interest in blockchain, the metaverse, and quantum technologies continues to decline, while Mobility as a Service and Engineering Design Automation show little change, remaining niche areas.



11% - 20%

Decrease

50% +

Decrease

21% - 50%

Decrease

International Opportunities



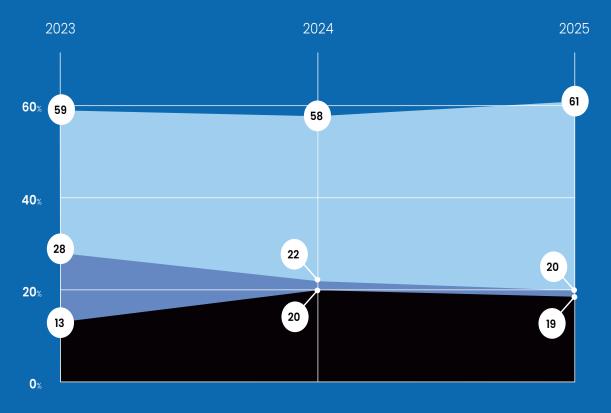
Export levels

The majority of companies (61%) are actively exporting, showing a gradual increase from 58% in 2024 and 59% in 2023, indicating stable international trade engagement. However, the percentage of businesses planning to start exporting has declined from 28% in 2023 to 20% in 2025, suggesting fewer companies are considering expansion into international markets. Meanwhile, those with no plans to export have risen to 19%, most of these companies are focused on UK and Ireland markets, citing strategic priorities, limited capacity, or past international operations that have ceased.

Exporting

Planning to

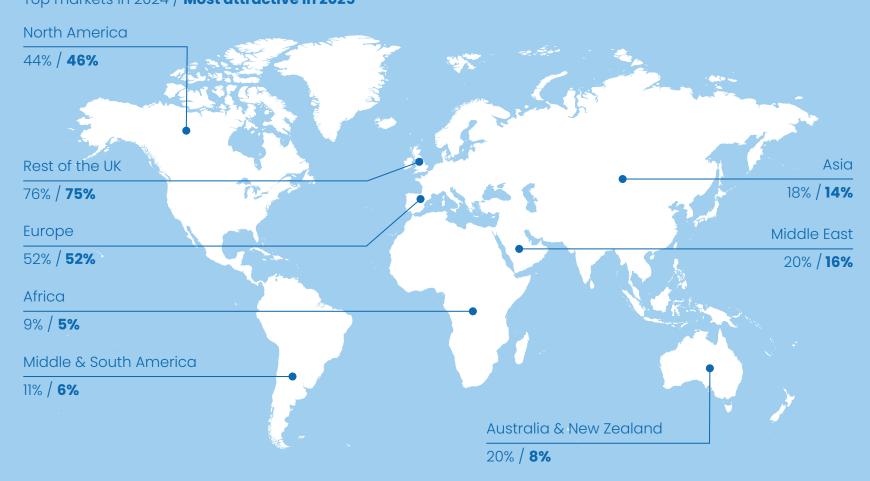
No plans



Top markets in 2024 / Most attractive in 2025

Export markets

The rest of the UK remains the primary export market for respondents, with 75% identifying it as a key region in 2025, only slightly down from 76% in 2024. Europe (52%) and North America (46%, up from 44%) continue to be major areas of focus, while interest in Asia (14%), Australia & New Zealand (8%), and Africa (5%) has declined. This suggests a cautious approach to expanding into less established markets, with companies prioritising more familiar regions.





Digital technologies employment in Scotland



Scotland's digital technologies sector continues to be a key driver of employment, with approximately 87,700 people working in digital technology companies as of 2024. The demand for skilled professionals remains strong, as the UK as a whole has seen a 45% increase in tech job vacancies compared to 2020, reaching 175,000 in late 2024. Notably, over half of these vacancies are based outside London and the South East, highlighting Scotland's growing role in the wider UK tech landscape. Despite this expansion, a persistent gap remains between the number of job opportunities and the available workforce, including graduates, apprentices, and career changers.

AS OF 2024

87,766

P E O P L E

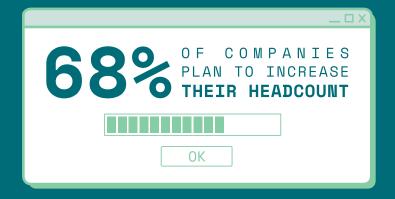
WERE EMPLOYED IN

DIGITAL TECHNOLOGIES

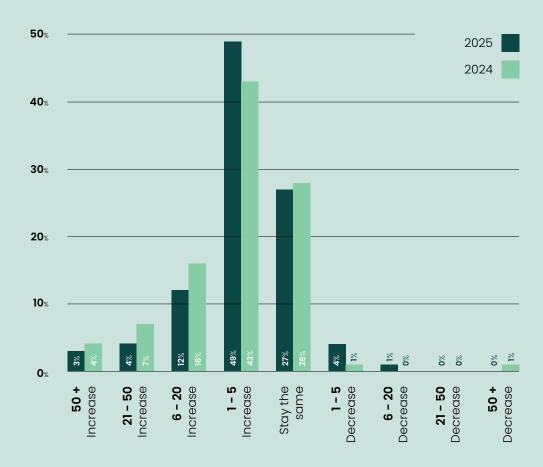
C O M P A N I E S

Software development remains the most in-demand area within digital technologies, accounting for 10% of all tech jobs. Salaries for these roles continue to rise, with the average software developer now earning £68,000— a 6% increase since 2020. Certain specialised roles command even higher wages, with Java developers earning an average of £85,000 and IT systems architects reaching £98,000. These high salaries reflect the critical need for experienced talent to meet the demands of an increasingly digital economy, where expertise in software, data, and cloud infrastructure is vital.

Each year, around 14,000 new positions in digital technologies are created, yet the supply of qualified candidates struggles to keep pace. The talent shortage presents a challenge for businesses looking to scale, as well as an opportunity for individuals seeking to enter the industry. With digital transformation accelerating across sectors, companies must continue investing in training, apprenticeships, and retraining initiatives to ensure Scotland remains competitive in the global tech market.

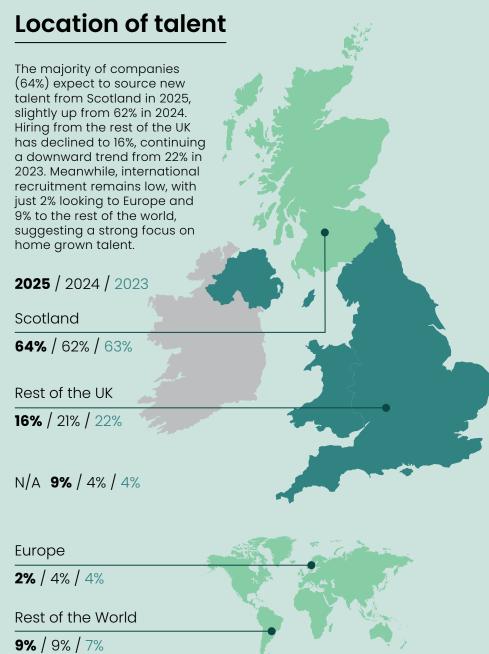


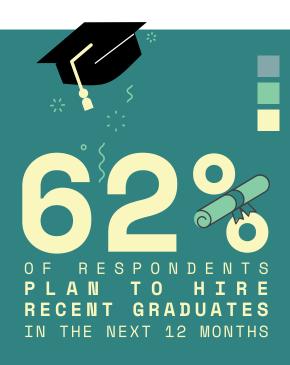




Change in employee numbers over the next 12 months

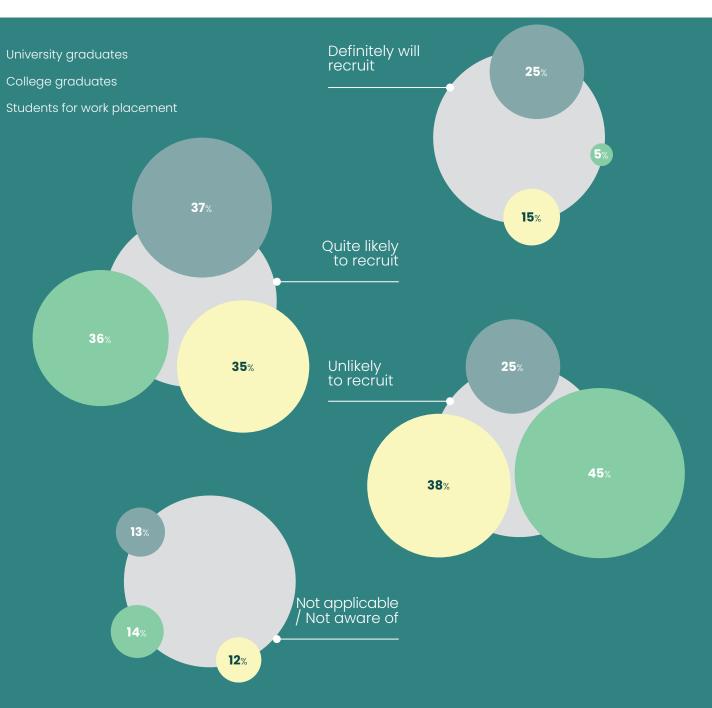
Almost all companies (95%) plan to maintain or increase their headcounts. The majority of companies (49%) expect a small increase in headcount (1-5 roles) in 2025, in line with 2023 but slightly higher than 2024 (43%). Larger increases are less common, with only 3% anticipating growth of 50+ employees, down from 11% in 2023. Meanwhile, 27% expect their workforce to remain the same, and only 5% foresee any level of decline, indicating cautious but stable hiring trends.





Recruitment from colleges and universities

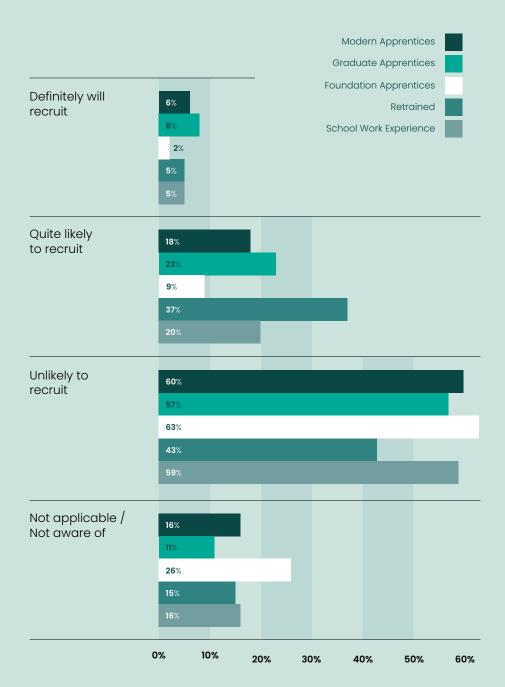
In 2025, 62% of businesses are considering hiring university graduates, though only 25% are certain they will, down from 29% in 2024 and 34% in 2023. Similarly, long term student work placement remains a good option for many, with 50% considering this option. Interest in hiring college graduates has fallen, with just 5% definitely recruiting, but 41% still open to the possibility.



Recruitment of apprentices

In 2025, 24% of businesses are considering hiring modern apprentices, though only 6% are certain to do so, down from 12% in 2024. Graduate apprenticeships see slightly higher interest, with 31% considering them, though definite commitments have also fallen. Retraining remains a strong focus, with 42% open to hiring those undergoing retraining, showing stability from 2024. However, work experience opportunities for senior school pupils are declining, with just 25% of businesses considering them, compared to 44% last year.

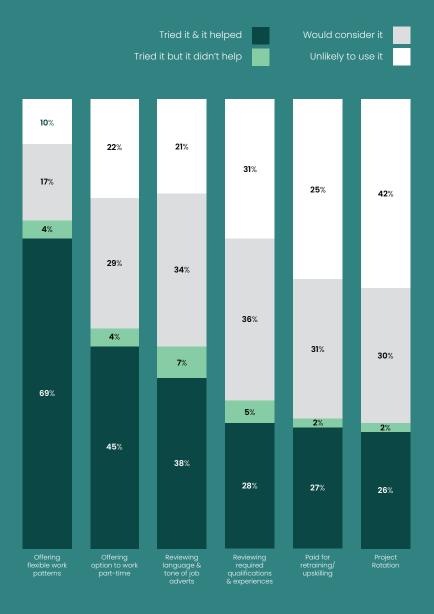




Expanding your talent pool

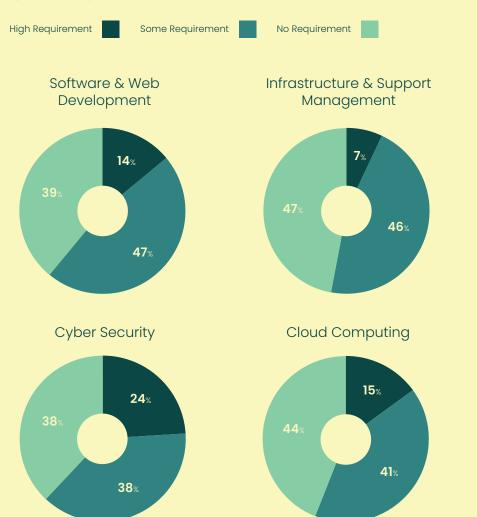
Businesses are adopting various strategies to expand their talent pool, though some approaches have seen declining uptake compared to last year. Offering flexible work patterns remains the most widely used and effective strategy, with 69% of respondents saying it helped, though this is down from 83% in 2024. Similarly, offering part-time options has been beneficial for 45%, but this too has decreased from 51%. Reviewing job adverts to improve inclusivity (38%) and reassessing qualification requirements (28%) remain areas of interest, though both have seen reduced adoption. Paid retraining (27%) and project rotation (26%) have been tried by some companies, but many remain sceptical about their effectiveness, with 40% and 42%, respectively, saying they are unlikely to use these approaches.

Beyond structured recruitment strategies, businesses are also turning to enhanced employee benefits to attract and retain talent. Popular incentives include private healthcare, increased pension contributions, additional leave, and bonus schemes. Some companies are exploring alternative work structures such as a nine-day fortnight, while others are engaging in community and open-source projects to expand their reach. However, financial constraints remain a barrier for some, particularly early-stage startups and SME's, which are focusing more on vision and opportunity rather than traditional perks. Others are adopting more flexible hiring models, such as working with freelancers and contractors. Overall, while businesses are exploring different approaches, financial pressures and the need for highly skilled workers remain key challenges in expanding the talent pool.

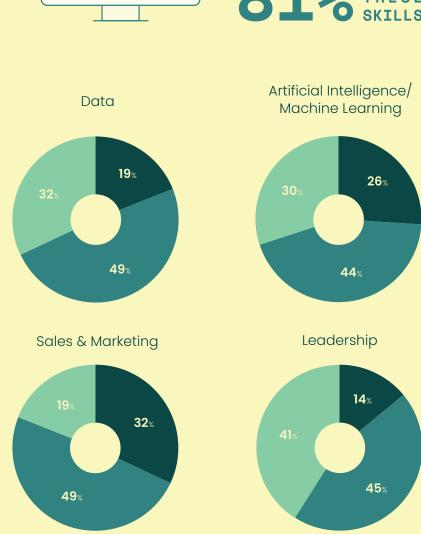


Most in demand skill sets

Sales & Marketing remains the most in-demand skill in 2025 (32% high, 49% some). Al and Machine Learning (26% high, 44% some) and Data skills (19% high, 49% some) also seeing strong demand, driven by digital transformation. Cyber security needs have risen (24% high, up from 18% in 2024), while software and web development demand has declined. Leadership remains steady (14% high). Businesses prioritise Al, data, and cyber security for innovation.







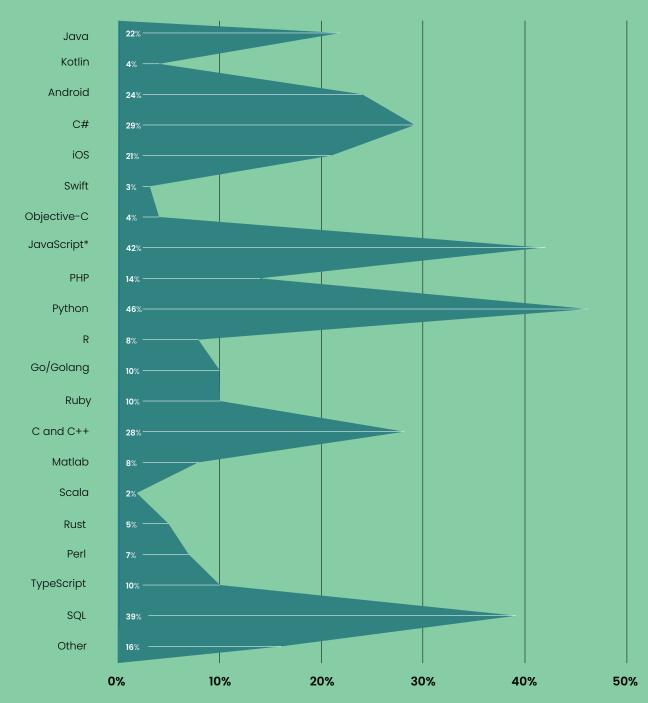
Technical skills

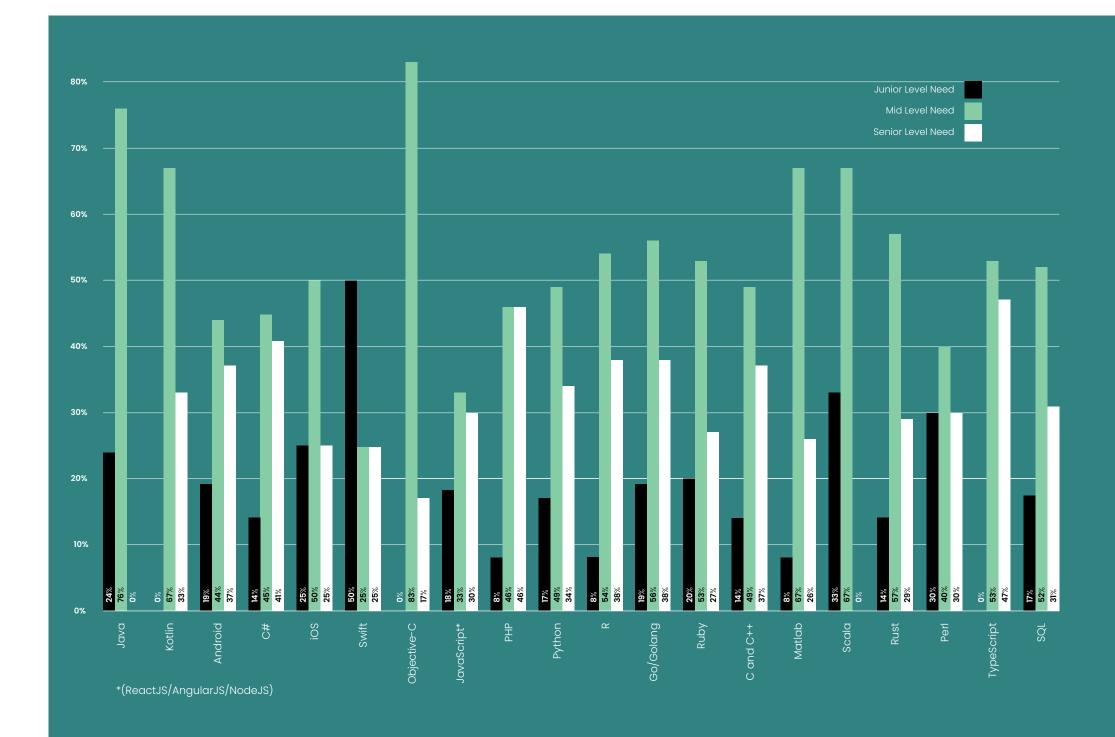
In 2025, the most in-demand technical skills are Python (46%), JavaScript (42%), and SQL (39%). These skills are primarily sought at the mid-level (49-55%), with a notable portion of senior-level demand (31-34%).

Java (22%) and C# (29%) also see significant demand, mainly at the mid-senior level. Niche skills like Kotlin, Objective-C, and Rust are needed in smaller volumes but predominantly at midsenior levels.

Other responses indicated a growing need for expertise in industrial programming, cyber security, and system architecture. The demand for junior talent is limited, with businesses focusing more on experienced hires.









Al Adoption in the Digital Technology Sector in Scotland

While there is considerable interest and optimism about Al's potential, the actual adoption rates reflect a more cautious approach, with many businesses still in the exploratory stages or implementing Al in limited capacities. The strong understanding of Al's benefits among most respondents suggests that awareness is growing, but there is also a recognition of the challenges and ethical considerations associated with Al technologies.

As companies plan for the next year, their focus on marketing, product development, and research indicates a strategic approach to integrating Al into areas that can enhance customer engagement and drive innovation. The varied responses regarding future deployment highlight the diverse applications of Al across different business functions, suggesting that companies are increasingly recognising the technology's potential to improve operations and support growth.

Respondents seem to be going through a transition phase, where businesses are keen to explore and implement Al tools but remain mindful of the implications and challenges that accompany this technological shift.



Al maturity within business

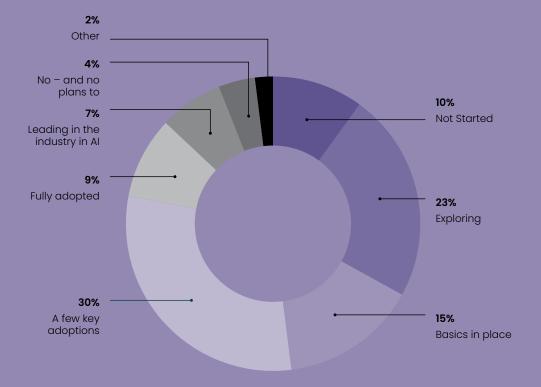
Adoption of AI technology varies significantly among respondents. 30%, reported having made a few key adoptions, while 15% have just the basics in place. In contrast, only 9% stated they have fully adopted AI tools.

An even smaller segment (7%) considers themselves leaders in the industry regarding Al adoption. While, conversely, 10% have not started exploring Al, and 4% have no plans to do so.

Some respondents provided additional insights, suggesting that while AI has been a topic of interest, there is a perception that the current hype may not align with tangible business benefits.

OF RESPONDENTS
HAVE ADOPTED AI
IN SOME FORM
REFLECTING THE SECTOR'S
RAPID INTEGRATION OF
CUTTING-EDGE TECHNOLOGY

OK



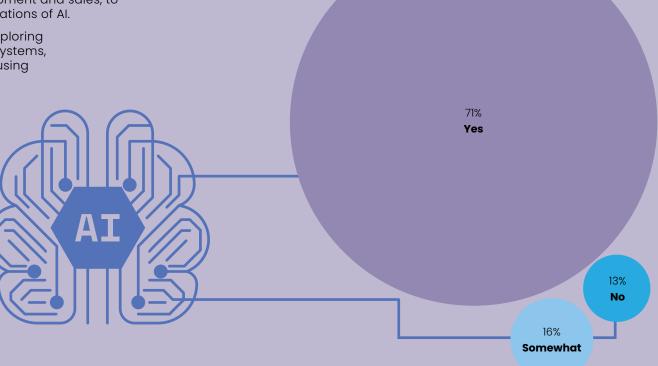
Understanding AI for Growth

71% of respondents reported having a good understanding of how AI technology can support their business growth. However, 13% indicated a lack of understanding, and 16% expressed a partial understanding, often noting that while they may not be well-versed, their teams have more knowledge.

The responses highlight a range of sentiments, from recognising Al's potential to enhance efficiency in various functions, such as development and sales, to concerns about the ethical implications of Al.

Some respondents are actively exploring opportunities or trialling specific systems, while others remain cautious, focusing on core skills and the need for more concrete evidence of Al's effectiveness.

OF BUSINESSES RECOGNISE HOW AI CAN FUEL THEIR GROWTH



Planned Deployment of Al Technologies in the Next 12

Months

Respondents have indicated they will deploy AI technologies across most business areas in the next 12 months. The most frequently cited areas include marketing (42%), product development (47%), and R&D (46%).

Customer service and sales were also significant focuses, with 34% of respondents indicating plans for deployment in these areas. Other areas included human resources (18%), finance (10%), and cyber security (23%).

Some respondents noted their current use of Al across various functions, while others pointed out limitations in the quality or cost of available Al tools, particularly large language models.



PRODUCT
DEVELOPMENT
AND R&D
TOPAREAS
FOR DEPLOYMENT



Benchmark 1: Smaller Companies (up to 35 employees)

Reflections on 2024

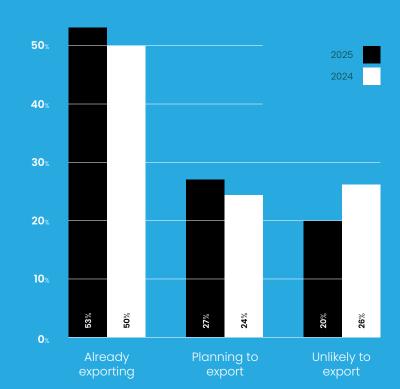
Despite a challenging 2024, 63% of small businesses are optimistic for 2025, driven by new product launches, increased orders from key customers, and growth in the energy and water sectors. Many have strong Ql forecasts, new customers, and additional support, helping them scale. Demand for consulting services is rising, budgets are unlocking as sectors recover, and transitions like RTOs are reshaping business models. However, 43% faced cashflow difficulties, with economic conditions seen as the biggest barrier to growth. Still, 37% reported increased profit margins in 2024, reinforcing confidence that the only way is up.

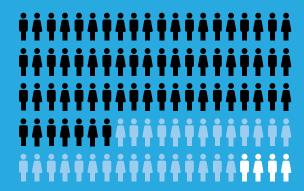


International

sales

International sales and exporting remain a priority, with 53% of businesses exporting, an increase from previous years, while 27% plan to start. Key markets include the Rest of the UK (62%), Europe (42%), and North America (35%), with 29% of sales generated outside the UK. Although fewer firms plan to export compared to 2023, overall participation in international markets continues to grow.





Recruit more staff 67%

Stay the same 29%

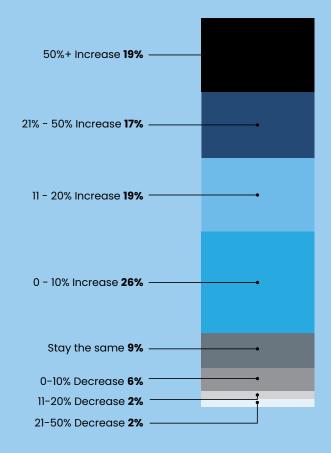
Decrease in staff 4%

People and skills

Hiring remains a priority, with 67% of businesses planning to recruit in 2025, up slightly from last year. Demand is strongest for Sales & Marketing (84%), Data skills (67%), and AI & Machine Learning (66%). University graduates (56%), college graduates (35%), and long-term student placements (43%) are key talent sources, with 68% expecting to hire from Scotland and 11% from the Rest of the UK. While most businesses aim to grow their workforce, staffing levels are expected to remain stable for nearly a third, with only 4% planning reductions.

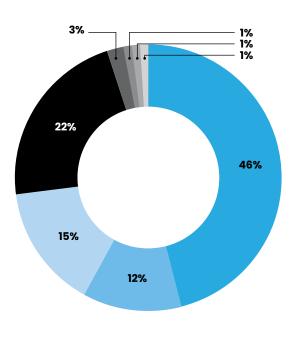
Sales outlook for 2025

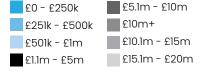
The sales outlook for 2025 reflects a cautious yet optimistic perspective, with 19% of businesses expecting a sales increase of over 50%, although this is a decline from previous years. 17% anticipate a 21%–50% increase, and 19% foresee an 11–20% rise, while 26% expect a modest 0–10% increase. Stability is on the horizon for 9%, with minimal expectations for decreases, as only 6% anticipate a 0–10% decrease. Overall, the outlook remains positive, with many businesses planning for growth amid varying degrees of expected increases.



Financial environment

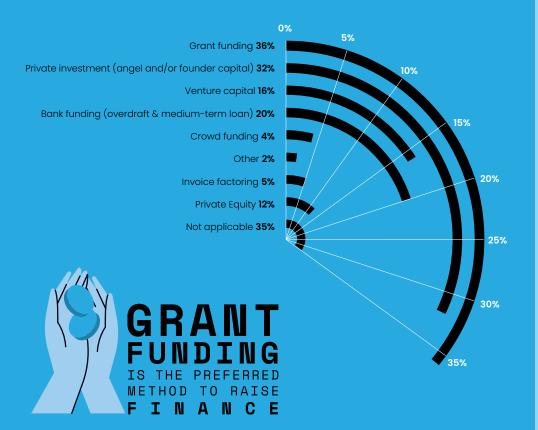
In 2025, 46% of businesses report turnover up to £250k, an increase from previous years. The £251k - £500k range has declined to 12%, while 15% fall within £501k - £1m. Those earning £1.1m - £5m have dropped to 22% from 28% last year. Businesses turning over £5.1m to £10m remain rate at just 2% and those exceeding £10m at 1%.

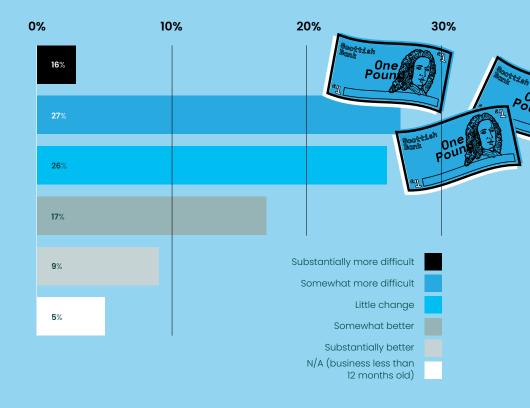




Funding needs

Funding needs for 2025 indicate a growing reliance on various sources, with 36% of businesses seeking grant funding, an increase from 30% in 2024. Private investment from angel investors and founders follows closely at 32%, while venture capital interest has risen to 16%. Bank funding, including overdrafts and medium-term loans, remains stable at 20%, and invoice factoring is sought by 5%. Only 4% plan to pursue crowdfunding, reflecting a slight increase, while 12% express interest in private equity. A notable 35% of respondents indicated that funding is not applicable to their situation. Overall, the landscape shows an evolving approach to financing as businesses prepare for the upcoming year.





Cashflow compared to last year

Cashflow conditions in 2024 compared to 2023 reveal increasing concerns among businesses. 16% reported cashflow being substantially more difficult, a notable rise from just 3% in 2023. 27% find it somewhat more difficult, up from 21%, indicating growing challenges. In contrast, 26% experienced little change, down from 37% in 2023.

The percentage of businesses feeling somewhat better with cashflow increased slightly to 17%, while 9% noted substantial improvement, down from 13%. Overall, there appears to be a shift towards more difficulties in managing cashflow as businesses navigate the economic landscape.

2024 sales levels compared with 2023

Sales levels in 2024 compared to 2023 show a decline in growth among businesses. Only 8% experienced a sales increase of over 50%, a significant drop from 18% in 2023. Similarly, those with a 21%-50% increase decreased to 10%, down from 15% last year. However, 12% did have a 11-20% increase, up from 7% in 2023. Those with a 0-10% increase is also lower at 14%, compared to 18% in the previous year. Conversely, the percentage of businesses that found sales staying the same rose to 18%, up from 11%. There is also an increase in those anticipating decreases, with 8% expecting a 0-10% decrease, 11% a 11-20% decrease, and 7% a 21-50%

decrease.

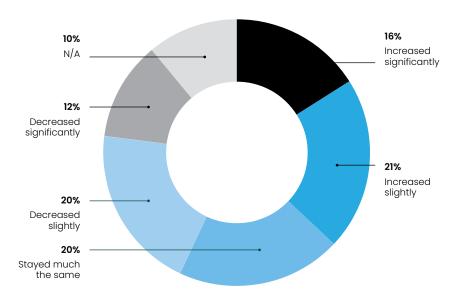


8% 12% 18% 11% 3% 50% 11% - 20% 50% 11% - 20% Stay the Increase Increase same Decrease Decrease 0% 100% 10% 14% 8% 7% 9% 21% - 50% 0% - 10% 0% - 10% 21% - 50% N/A Increase Increase Decrease Decrease

Profit margins

Profit margins in 2024 reflected a more cautious outlook compared to 2023. 16% of businesses reported a significant increase, which was consistent with the previous year, while those experiencing a slight increase dropped to 21% from 32%. The percentage of companies indicating that profit margins stayed the same rose to 20%, and 20% reported a slight decrease, up from 16%. Additionally, 12% indicated a significant decrease, rising from 6% in 2023. Overall, the responding businesses suggested increased caution regarding profit margins amid economic challenges.





Benchmark 2:

Medium-sized Companies (36 - 500 employees)



Reflections on 2024

Medium sized company respondents reflected on 2024 with a mix of cautious optimism and recognition of economic challenges. 66% expressed optimism for 2025, citing reasons such as launching new products and partnerships in Europe and beyond. While acknowledging a very slight increase in revenue, many see 2025 as a building year that may require additional spending.

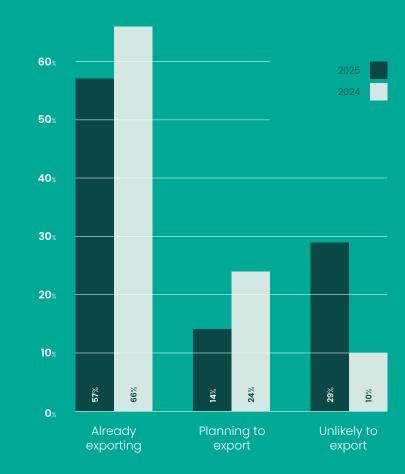
Respondents highlighted improving market conditions for traditional customers and anticipated payoffs from diversification efforts in 2024. They reported strong demand for training to help organisations navigate data and Al, leading to secured orders and forecasts of more to come.

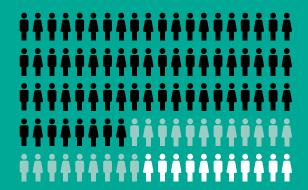
However, only 35% reported slightly better cashflow, and economic conditions remain the biggest barrier to growth in 2025.

International sales

57% of businesses reported they were already exporting, a decrease from 66% last year, while only 14% plan to start exporting compared to 24% in 2024. Additionally, 29% indicated they are unlikely to export, up from 10% in 2024.

On average, 28% of sales were made to customers outside the UK, with the Rest of the UK (65%), Europe (51%), and North America (38%) identified as the largest markets. Looking ahead, the most attractive markets for 2025 are the Rest of the UK (73%), Europe (43%), and Scotland (38%).





Recruit more staff 68%

Stay the same 21%

Decrease in staff 11%

People and skills

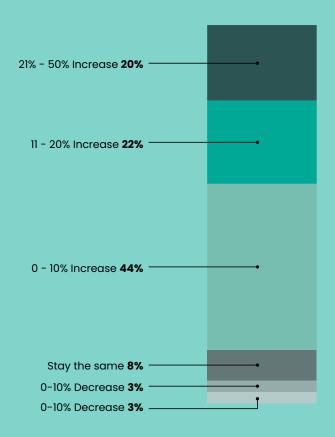
In 2025, 68% of businesses plan to recruit more staff, a decrease from 79% in 2024, while 21% expect to maintain their current workforce. Notably, 11% anticipate a decrease in staff, up from just 4% last year.

With this strong focus on hiring, 87% are likely to recruit University Graduates, 56% targeting College Graduates, and 49% considering students for long-term placements.

56% of respondents expect to find new talent in Scotland, while 32% will look to the Rest of the UK. A significant demand for skills in Artificial Intelligence and Machine Learning is evident, with 80% of respondents citing this need, alongside a requirement for Sales and Marketing skills at 76%.

Sales outlook for 2025

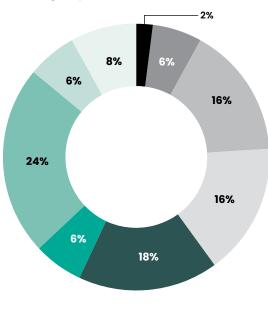
Respondents' sales outlook for 2025 reflects a cautious but somewhat positive sentiment. 20% anticipate a 21%–50% increase in sales, and 22% expect an 11–20% increase. Notably, a significant 44% foresee a 0–10% increase, indicating a preference for modest growth. Only 8% expect sales to stay the same, while a small percentage, 3%, anticipate a decrease in sales. Overall, the conservative optimism indicated earlier in the survey flows through these responses, with many businesses aiming for incremental improvements in their sales performance.

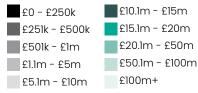


Financial

environment

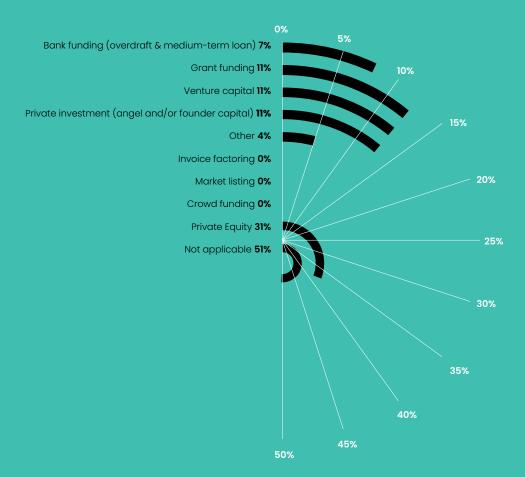
In terms of turnover, the financial environment for respondents has shifted in 2025. Only 2% of businesses are in the lowest revenue bracket of £0 - £250k, a decrease from 8% in 2024. Meanwhile a notable 24% of businesses fall within the £20.1m - £50m range, and 8% are in the £100m+ category, reflecting a growing representation of larger companies among respondents.

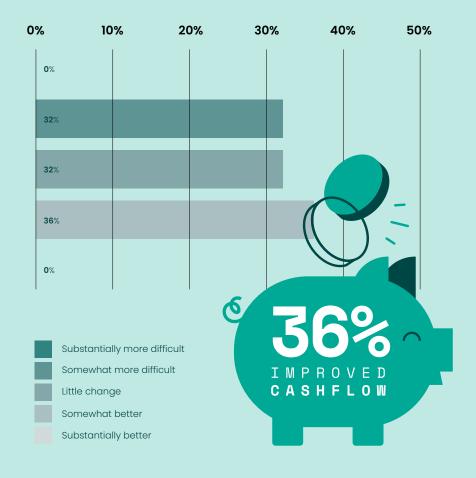




Funding needs

There is a noticeable decline in reliance on traditional sources compared to 2024. Only 7% of respondents indicated a need for bank funding (overdraft and medium-term loans), down from 17% last year. Similarly, grant funding decreased to 11% from 14%, while venture capital needs fell to 11% from 21%. Private investment also saw a decline, dropping to 11% from 14%. Despite these decreases, 31% of respondents are looking towards private equity, suggesting a shift in funding preferences. Furthermore, 51% indicated "not applicable," indicating a stable position or different funding strategies among businesses this year.





Cashflow compared to last year

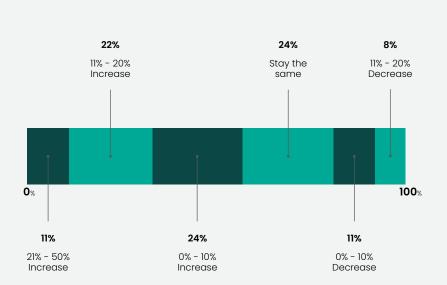
Respondents reported a more challenging environment in 2024 compared to previous years. 32% indicated that cash flow is somewhat more difficult, a slight increase from 28% last year. However, 36% reported that their cash flow is somewhat better, up from 28% last year, suggesting some businesses are managing to improve their financial position.

Additionally, 32% experienced little change, reflecting a stable cash flow situation for many. Overall, the data indicates a mixed landscape, with some businesses facing challenges while others show improvement in their cash flow management.

2024 sales levels compared with 2023

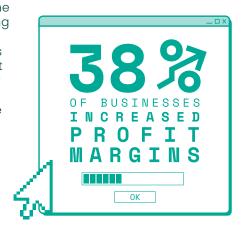
The percentage of respondents reporting a 50%+ increase dropped to 0% from 10% in 2023, indicating fewer businesses experienced significant growth. However, the 21%-50% increase category saw an increase to 11%, up from 8%. Additionally, 22% reported an 11-20% increase, a rise from 14% last year, while 24% experienced a 0-10% increase, up from 17%. On the downside, 24% indicated that sales levels stayed the same, compared to 31% in 2023.

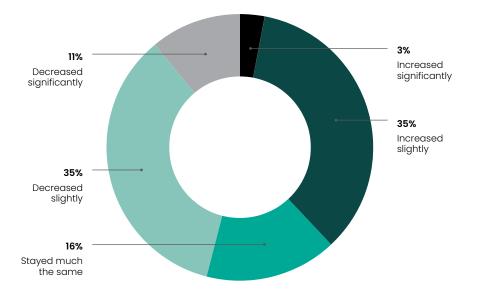




Profit margins

Profit margins in 2024 showed a mixed picture compared to 2023. The percentage of respondents reporting significant increases remained low at 3%, unchanged from the previous year but far below 14% in 2022. Slight increases were seen by 35%, slightly up from 31% in 2023. However, those reporting margins staying the same dropped to 16%, down from 38%. Slight decreases surged to 35%, more than doubling from 14% in 2023, while significant decreases dipped slightly to 11%, down from 14%. While some businesses managed marginal gains, many experienced pressures on profit margins in 2024.





Benchmark 3:



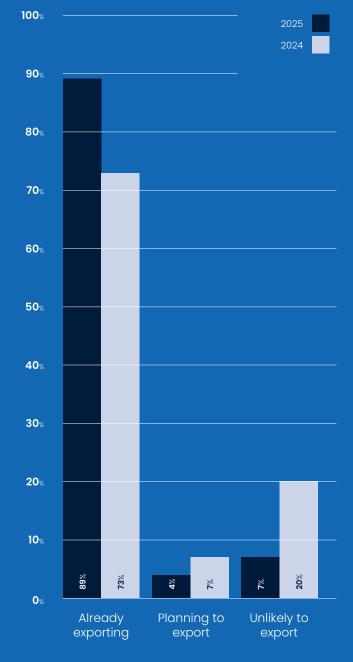
Reflections on 2024

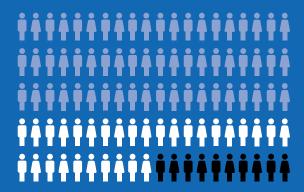
Large company respondents reflected on 2024 with mixed experiences but maintained optimism for 2025 (77%). While sales levels varied, confidence was driven by government focus on technology, a healthy pipeline of deals, and positive market momentum. However, some acknowledged ongoing economic challenges, particularly in the US and Europe, with slow investment in some sectors. Al remained a key growth driver, and despite market difficulties, some firms still expanded market share.

Cashflow remained stable for most (48%), but talent acquisition emerged as a major growth barrier alongside economic conditions and competition. Encouragingly, 55% of respondents reported increased profit margins, reinforcing resilience among established firms, with 69% founded before 1990.

International sales

Large company respondents maintained a strong international presence in 2024, with 89% already exporting, an increase from 73% in 2023. The share of companies planning to export fell to 4%, while those unlikely to export dropped to 7%. On average, 41% of customers were outside the UK, reflecting steady global engagement. Scotland accounted for 27% of sales, with the largest markets beyond Scotland being the rest of the UK (58%), North America (42%), and Europe (30%).





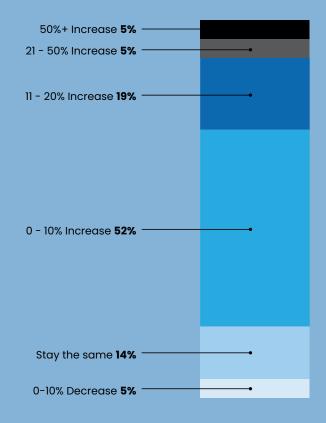
Recruit more staff **60%**Stay the same **30%**Decrease in staff **10%**

People and skills

Large company respondents continue to focus on workforce expansion, with 60% planning to recruit more staff in 2025, slightly up from 57% in 2024 but lower than 89% in 2023. Scotland remains the primary talent source (60%), with 20% looking beyond the UK and Europe. Hiring priorities include university graduates (80%), college graduates (59%), and long-term student placements (89%). The most sought-after skills are data analytics, architecture, and visualisation (88%), followed by AI and machine learning (84%), cyber security (82%), and infrastructure (77%).

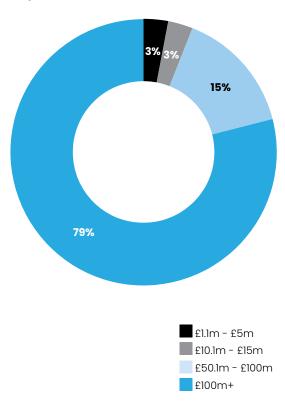
Sales outlook for 2025

The sales outlook for 2025 reflects cautious optimism, with 52% expecting a modest 0–10% increase, slightly down from 60% in 2024 but in line with 48% in 2023. A further 19% anticipate an 11–20% rise, almost doubling from 10% in 2024. While 5% predict sales growth of over 50%, a similar 5% foresee a slight decline (0–10%). The number expecting sales to remain unchanged has increased to 14%, up from 10% in 2024, suggesting a more stable but slowergrowing market.



Financial environment

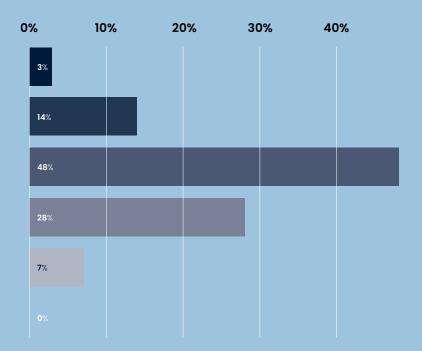
The turnover data for large companies in 2025 highlights a predominantly high-revenue respondent base, with 79% reporting turnover above £100m, consistent with 80% in 2024 and 74% in 2023. Mid-sized companies (£50.1m - £100m) saw an increase to 15% in 2025, up from 4% in 2024, indicating a shift within this range. Lower turnover categories remain minimal, reinforcing that the majority of large company respondents operate at significant scale.

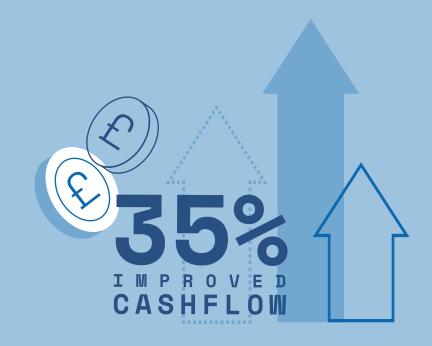


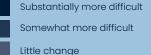
Cashflow compared to

last year

2024 shows an improvement compared to 2023. The proportion finding cashflow somewhat or substantially better increased to 35% (from 33%), while those experiencing more difficulty dropped to 17% (from 34%). Nearly half (48%) reported little change, the highest in three years, suggesting greater stability. Although fewer companies saw substantial improvements (7% vs. 13% in 2023), the overall trend points to a more stable or improving financial position for most respondents.

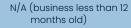








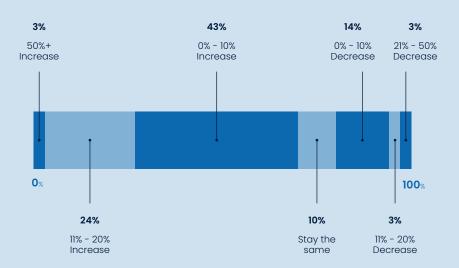




2024 sales levels compared with 2023

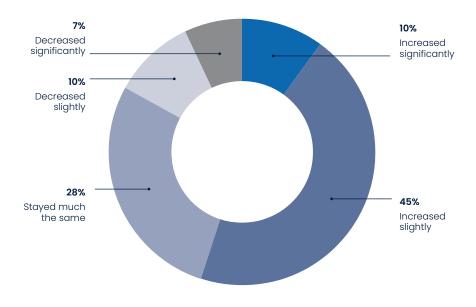
Large companies experienced stronger sales growth in 2024 compared to 2023, with a notable increase in moderate growth rates. While only 7% of businesses saw an 11-20% rise in sales in 2023, this jumped to 24% in 2024, and those reporting a 0-10% increase more than doubled to 43%. Meanwhile, stagnation was far less common, with just 10% of businesses reporting no change in sales compared to 34% the previous year. Additionally, 3% of respondents saw sales surge by over 50%, signalling a return to stronger growth for some. Overall, 2024 saw a more positive sales outlook, with more businesses benefiting from steady gains and fewer reporting no movement.





Profit margins

Profit margins in 2024 showed a mixed but generally positive trend for large companies. While the proportion of businesses experiencing a significant increase in profit margins dropped from 20% in 2023 to 10% in 2024, those seeing a slight increase rose to 45%, up from 40% the previous year. Stability remained similar, with 28% reporting little change, compared to 27% in 2023. Slight declines in profit margins were slightly less common than the previous year (10% vs. 13%), though 7% of respondents reported a significant decrease, a new trend not seen in 2023. Overall, while fewer businesses achieved substantial profit growth, a larger portion experienced moderate gains, indicating a steady, if slightly more cautious, financial outlook.



ScotlandIS commentary



This year's survey offers critical insights into the evolving landscape of the digital economy in Scotland. As we look towards the next year, the data indicates a strong outlook for growth and innovation within the sector, driven primarily by advancements in artificial intelligence (AI) and machine learning (ML).

There is a rising demand for opportunities in AI and ML, with many companies identifying these areas as key growth opportunities for the coming year. This trend highlights the growing momentum in AI adoption and its integration into business strategies, demonstrating the potential of these technologies to enhance efficiency, improve decision-making, and create new revenue streams.

Additionally, there is a strong sense of optimism among businesses about future growth. This optimism is largely driven by expectations for new product launches and strategic partnerships, particularly within the energy sector. Such developments indicate a commitment to innovation and a proactive approach to navigating the challenges of a competitive market.

The survey also highlights the intention of many companies to hire in 2025, with a particular focus on critical skills in sales and marketing, AI/ML, cyber and data analytics. This emphasis on diverse skill sets underscores the importance of both technical expertise and commercial acumen in achieving business success. As organisations increasingly rely on data-driven insights and AI-powered solutions, the demand for professionals who can navigate these technologies while effectively communicating their value will be essential.

ScotlandIS acknowledges the cash flow difficulties that some respondents have faced and understands the barriers to growth that exist within the sector. In response, we are committed to working closely with members, policymakers, and government officials to address these challenges. This collaborative approach will help ensure that the digital technology sector in Scotland is well-supported, enabling businesses to overcome obstacles and realise their full potential.

The increasing emphasis on AI and ML, and with a strong focus on skill development positions Scotland as a burgeoning hub for innovation in the digital economy. As ScotlandIS continues to support its members, these insights will be instrumental in shaping future initiatives aimed at promoting growth and collaboration within the sector.

Reflecting on the findings of the ScotlandIS Technology Industry Survey 2025, one prominent theme emerges: the biggest challenge facing our sector is also its greatest opportunity.

Accessing new markets, expanding customer bases, and developing the necessary skills to drive future success are all critical areas for growth. However, these challenges, along with cash flow constraints, remain significant barriers to progress.

At ScotlandIS, we are taking decisive action to address these issues. Over the past year, we have shared over 400 opportunities with our members, supporting businesses in entering new markets, building strategic partnerships, and accessing the talent essential for growth. We are actively collaborating with policymakers, industry bodies, and educational providers to bridge skills gaps, enhance digital upskilling, and advocate for the right conditions that enable businesses to scale effectively.

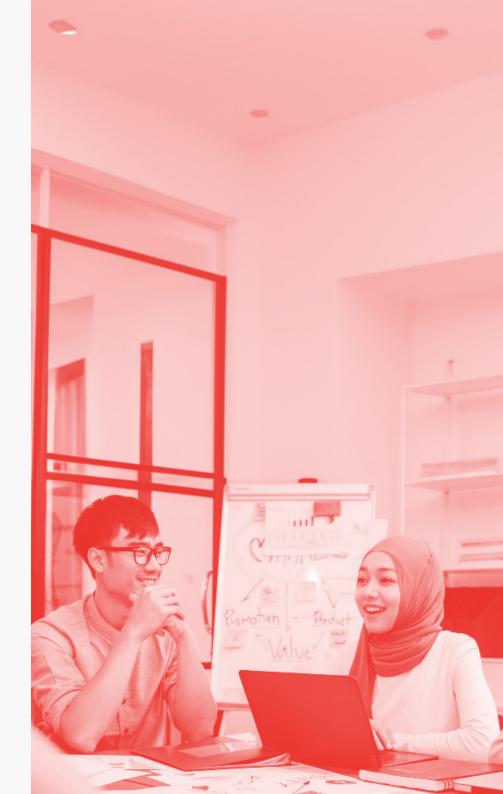
As Al adoption accelerates and the demand for skilled professionals continues to rise, ScotlandIS is committed to championing our sector. Our efforts focus on strengthening collaboration across the industry and ensuring that businesses have the resources and support needed to thrive. The insights from this survey will directly inform our initiatives, helping to ensure that Scotland's digital economy meets current challenges while also paving the way for future innovations.

Our commitment to empowering our members is reflected in our distribution of more than £220,000 of funding for Cyber Essentials certification and almost £500,000 for cyber upskilling. We have successfully run a number of pitching training programmes, along with initiatives aimed at enhancing networking skills. Additionally, we have organised influencers' dinners with all party leaders, and this year, we will host dinners with Directors-General from Scottish Government to facilitate meaningful discussions.

ScotlandIS is actively involved in several strategic groups, including the New Deal for Business group, the Strategic Industry Cluster Group, the SME Advisory Group for the UK Government, and the UK Tech Cluster Group. We have also launched ScotlandIS Scholarships, now in their second year, in partnership with Telefonica Tech.

Our participation in the Scottish Government's procurement supply group further underscores our dedication to supporting our members in navigating growth complexities.

Through these initiatives and collaborations, ScotlandIS is committed to creating a vibrant and resilient digital technologies sector that is well-equipped to embrace the opportunities ahead.



About ScotlandIS

- ScotlandIS is the membership and cluster management organisation for Scotland's digital technologies industry.
- ScotlandIS represents Scotland's digital technologies industries, including software, telecommunications, IT and digital media businesses.
- ScotlandIS members vary from global companies and internationally recognised exporters to very small start-ups and cover a wide range of skills and markets.
- ScotlandIS is at the heart of Scotland's digital economy, shaping, changing and driving it forward. We work with members and partners to support the wider digital transformation of business and society.
- ScotlandIS provides members with connections up, down and across the industry, relevant market intelligence and we act as a single voice to policy makers.
- Ensuring a continuing supply of current and future skills is a major area of focus and we facilitate a range of special interest groups and clusters including cyber, IT managed services, software engineering and Mobility as a Service.
- ScotlandIS works closely with the UK Government and its agencies, Scottish Government, Highlands and Islands Enterprise, Scottish Enterprise and Skills Development Scotland to underline the importance of our industry to the Scottish economy.



Methodology

The Scottish Technology Industry Survey 2025 was conducted between 2nd December 2024 and 14 February 2024 through an online survey platform. The survey received 384 responses in total, of which 264 have been selected for analysis after discounting duplicates and unusable responses. The respondents include both ScotlandIS members and non-members.

For the overviews on Scotland's digital technologies sector and on digital technologies employment the following standard industrial classification (SIC) and standard occupational classification (SOC) codes have been used to define digital technologies businesses and jobs:

Digital technologies sector definition by main area of business

SIC Code Description Reproduction of computer media Manufacture of electronic components Manufacture of loaded electronic boards Manufacture of computers and peripheral equipment Manufacture of communication equipment 264 Manufacture of consumer electronics Manufacture of magnetic and optical media Manufacture of fibre optic cables Publishing of computer games Other software publishing Wireless telecommunications activities Other telecommunications activities Computer programming activities Computer consultancy activities Computer facilities management activities Other information technology and computer service activities Data processing, hosting and related activities Web portals Repair of computers and peripheral equipment

Digital technologies sector definition by occupation

SOC Code	Description
1136	Information Technology and Telecommunications Directors
2133	IT Specialist Managers
2134	IT Project and Programme Managers
2135	IT Business Analysts, Architects and Systems Designers
2136	Programmers and Software Development Professionals
2137	Web Design and Development Professionals
2139	Information Technology and Telecommunications Professionals not elsewhere classified
3131	IT Operations Technicians
3132	IT User Support Technicians
5242	Telecommunications Engineers
5245	IT Engineers



ScotlandIS Oracle Campus Blackness Road

Linlithgow

EH49 7LR

 \rightarrow scotlandis.com

☑ info@scotlandis.com

L +44 (0) 1506 472200

y ascotlandis