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INSIGHT FROM INNOVATION STATE OF THE NATION SURVEY (ISNS) 2023 AND 2024

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INSIGHT FROM INNOVATION STATE OF THE NATION SURVEY (ISNS) 2023 AND 2024

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EXECUTIVE SUMMARY

Business innovation - creating or changing products, services, and business methods - is crucial in driving productivity and growth. Evidence from the UK Innovation Survey (UKIS), published earlier this year, currently covers the period up to 2022. Despite some survey-to-survey variation, this suggests a downward trend in the proportion of innovation-active UK firms1. The UKIS also suggests an increasing gap between the proportion of larger and smaller firms that are innovation-active.

New data from the Innovation State of the Nation Survey (ISNS) brings the story to date based on data collected in early 2023 and 2024. The ISNS is an annual survey covering 2,000 firms. It aims to provide a representative view of UK firms' R&D and innovation activity, which can help identify particular challenges and opportunities for policy development and support.

The data in the following sections is based on ISNS 2023 and ISNS 2024 information. The 2023 survey covered 2,018 firms and was conducted between November 2022 and February 2023. The 2024 survey covered 2,001 firms and was undertaken between February and May 2024.

Innovation Activities and Outcomes

In 2024, 56% of UK businesses reported making product or service changes over the last year. Reflecting the longer-term trend in the UK Innovation Survey, this is a fall from 61% in 2023. Again, reflecting longer-term trends, it is also notable that innovation rates fell most in small and micro businesses between 2023 and 20242. For instance, there was a 6.2% decrease in small businesses' rate of innovation activity compared to a 0.4% fall amongst large firms. Interestingly, there was a 6% decrease in frontier businesses' innovation activities between 2023 and 2024 compared to a 4% decrease in non-frontier firms3. The declining trend in innovation activities is linked primarily to product rather

[1]. An 'innovation active' firm is one engaged in R&D, product, service, process, or organisational innovation or one that has either been actively engaged in or abandoned innovation in the last three years.

[2] Micro=5-9 employees, Small=10-49, Medium=50-249, Large=250+

[3] We distinguish between frontier and non-frontier firms as those leading their sectors in terms of technology versus those following.

than service innovation. More innovating firms reported undertaking service innovation only. This trend was also consistent for small and large firms.

Linking to the dimension of innovation novelty, comparing 2023 and 2024, there was a 3% decline in the proportion of innovating firms that reported that some of their innovations were new-to-the-market and a 1% decline in the proportion of firms that reported wholly new-to-firm innovations.

We also see a decline in the proportion of firms introducing process innovations. In 2023, 46% of firms reported process innovation, while only 41% reported it in 2024. Declining rates of process innovation were notably higher for micro and non-frontier businesses. Micro-businesses that undertook process innovation decreased from 42% to 34%, while non-frontier businesses that undertook process innovation decreased from 43% to 36%.

The ISNS also includes questions on the broader range of organisational changes to business practices, work organisation, organising external relationships, and marketing strategies. Overall, we see a mixed pattern in business model innovation. The proportion of firms that undertook changes in business practice, work organisation, and organisation of external relationships fell by 2%, 3%, and 1% in 2024, respectively. Meanwhile, the proportion of firms that undertook changes in marketing concepts increased by 3% in 2024. Notably, these business model innovations were generally more common among frontier and large businesses, whilst micro/small and non-frontier firms drove the increase in marketing innovation.

Innovation and Business Objectives

The survey also asked firms about their business objectives and how they had aimed to achieve them over the past 12 months. The survey suggests the importance of diverse commercial objectives related to efficiency, increasing sales, profit margins, and cashflows in both years.

We also see that firms achieve business objectives through selling to new customers (92% in 2023 and 91% in 2024) and selling to existing customers (87% in 2023 and 84% in 2024). These sales-related objectives may be linked to the increase in marketing activity in 2024. Meanwhile, the importance of introducing new products to achieve business objectives remained similar in the past two years (77% in 2023 and 76% in 2024). This suggests a less significant linkage between business objectives and the declining trend in firms' innovation activities.

Innovation and Growth

The findings suggest that innovation is strongly associated with higher sales growth. For instance, in 2023, the sales growth of innovating firms was 10% compared to 3% for non-innovating firms. In 2024, the gap narrowed slightly, with innovating firms growing around 7% compared to 2% for non-innovators.

Innovation Enablers and Investment

Overall, 39% of UK businesses reported engaging in some form of R&D activity in 2023, which remained the same in 2024. Notably, there is a significant difference in innovation investment activity between large and micro-firms. In 2013, 80% of large firms with more than 250 employees engaged in some form of R&D activity, while only 34% of micro-businesses invested in R&D. Interestingly, while the proportion of large firms engaging in R&D activities remained stable in 2024, the proportion of micro-firms engaging in R&D dropped by 3% in 2024.

The proportion of firms investing in machinery, equipment, or software and firms investing in new market development increased slightly by 1% in 2024. The proportion of firms investing in market research activity increased by around 2% in 2024. There was no change in patent or licensing activities among UK firms. Only 8% of UK businesses had patent or licensing activities in 2023 and 2024. On the other hand, product design activities by UK firms decreased from 31% in 2023 to 29% in 2024, which is notably higher for firms in the West Midlands region. These changes in R&D and related investment are likely to feed through into innovation activity in future years.

Funding Innovation

In 2023 and 2024, internal funding remained the most common approach to funding R&D and innovation. The proportion of firms that used internal funding increased from 67% in 2023 to 70% in 2024 and was notably higher among smaller businesses and frontier firms.

Grants remained a popular source of innovation funding, with the proportion of firms using grants increasing by 2% in 2024. Interestingly, the use of government loans, bank loans, and equity finances fell slightly by around 1% in the past year.

Collaboration for Innovation

Overall, the proportion of firms collaborating with external partners decreased from 41% in 2023 to 39% in 2024. However, this pattern varied between groups of firms and

revealed shifts in the balance of different types of collaboration. For example, while collaboration activities decreased by around 3% among non-frontier and smaller firms with less than 250 employees, they increased by 3-4% among frontier firms and large firms with more than 250 employees.

Collaborations with suppliers, other businesses, clients, and customers (supply-chain partners) are important. However, cooperation with universities, public laboratories, and business support providers (non-supply-chain partners) is relatively uncommon.

The ISNS also includes questions on whether this collaboration was undertaken entirely with local partners, entirely with non-local partners, or with both local and non-local partners. Overall, UK businesses prefer to collaborate with non-local supply chain partners. More than 50% of innovating firms collaborated with non-local suppliers, and more than 44% collaborated with non-local clients in 2023 and 2024.

Innovation Teams

Overall, 42% of UK businesses' innovation team members were women in 2024, an increase from 37% in 2023. This proportion was notably higher among small firms with less than 50 employees. Meanwhile, ethnic minority representation was 28% in 2024, an increase from 15% in 2023. This proportion of ethnic minority representation is notably higher among micro firms with less than ten employees and frontier firms

External Support

Overall, the proportion of UK businesses seeking external advice has remained the same over the last two years, with around 35% of firms. The most common types of support sought relate to running and growing the business. Other types of support—digital technologies, product and service innovation, and net zero—were sought less often but were more likely to be sought by frontier rather than non-frontier firms.

Barriers to Innovation

Around 46% of innovating firms reported barriers in their activities in 2024 compared to 52% in 2023. The cost of doing business crisis was the most common barrier experienced by innovating firms (51% in 2023 and 52% in 2024). Interestingly, there was a significant increase in the proportion of innovating firms that reported barriers due to lack of government support (increased by 9% in 2024), lack of finance (increased by 8% in 2024), and technology risk (increased by 8% in 2024).

Overall, 32% of UK businesses indicated that recruitment issues had restricted their innovation activities in 2024, a decrease from 39% in 2023. This decline in recruitment issues was particularly significant among medium and non-frontier firms. Among those firms experiencing recruitment difficulties (which restricted their innovation activities), it was issues recruiting technicians (27%), graduate-level technicians (23%), and engineering staff (21%), which were more common both in 2023 and 2024.

For non-innovating firms, the most common reasons for not undertaking innovation over the past two years relate to adequate profitability (44% in 2023 and 42% in 2024) and uncertain demand (43% in 2023 and 41% in 2024). Interestingly, more non-innovating firms reported barriers to innovation due to a lack of finance, government support, and regulation/legislation in 2024 than in 2023.

Future Innovation Plans and Support Needs

The ISNS also asks firms about their R&D investment intentions over the next 12 months and their anticipated support needs.

Overall, 47% of UK firms plan to invest in R&D over the next 12 months, a decreased proportion compared to 2023. This declining trend was particularly significant in small firms and non-frontier firms.

Firms expect to need more business support over the next year. They are more likely to seek business development support (14%) than product/service development support (10%). Large firms reported seeking more product/service development support, while small firms with fewer than 250 employees reported seeking more business development support for the following year.

Firms reported a need for more innovation support over the next 12 months. The proportion of firms reporting a need for innovation loans increased from 17% in 2023 to 30% in 2024. Similarly, the need for support through R&D grants, R&D tax credits, IP support, marketing/export support, strategy advice, and finding innovation partners increased by more than 20% in 2024.

ACKNOWLEDGEMENTS

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1. INTRODUCTION

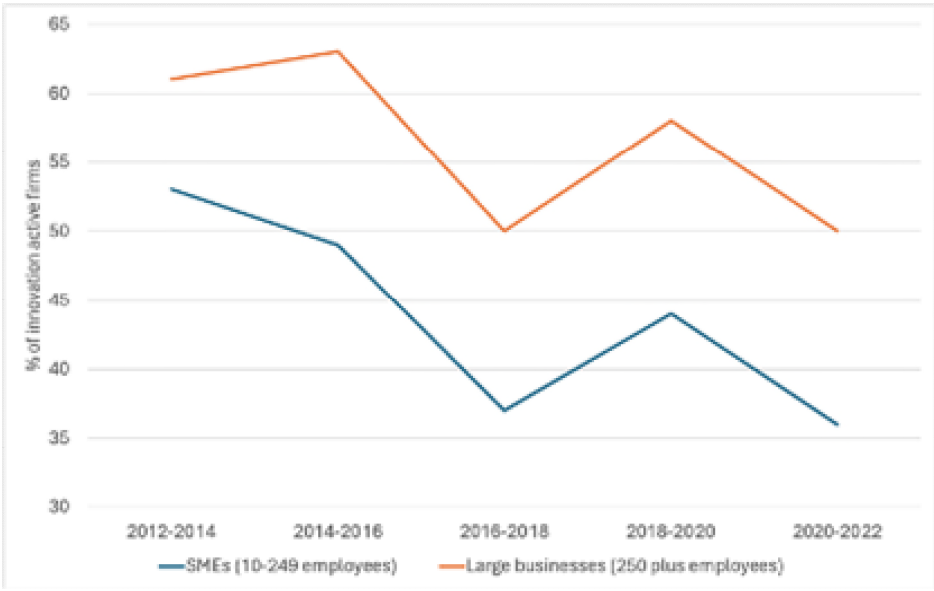
Business innovation—in products, services, and ways of doing business—is crucial in driving productivity and growth. Evidence from the UK Innovation Survey, published earlier this year, currently covers the period up to 2022. Despite some survey-to-survey variation, this suggests a downward trend in the proportion of innovation-active UK firms[4]. The UKIS also suggests an increasing gap between the proportion of larger and smaller firms that are innovation-active.

This report adds to the UKIS findings by drawing on data from the annual Innovation State of the Nation Survey (ISNS) for 2023 and 2024. Troublingly, we see a continuation of the trend suggested by the UKIS data up to 2022. Across a range of metrics, levels of innovation among UK firms fell back slightly further between 2023 and 2024.

The context for the ISNS 2023 and 2024 is provided by trends established by the UK Innovation Survey (UKIS). Conducted every two years and relating to firms' innovation activity in the three years before the survey, the UKIS provides a robust long-term indicator of trends in UK business innovation activity[5]. Drawing on information from around 14,000 companies, the UKIS allows us to observe long-term trends in innovation activity. The most recent UKIS data was published in May 2024 and related to innovation conducted in 2020-2022. Figure 1 illustrates the downward trend in the proportion of innovation-active UK firms over 2012-2022. This downward trend is evident in larger firms (with 250 plus employees) and SMEs (with 10-249 employees).

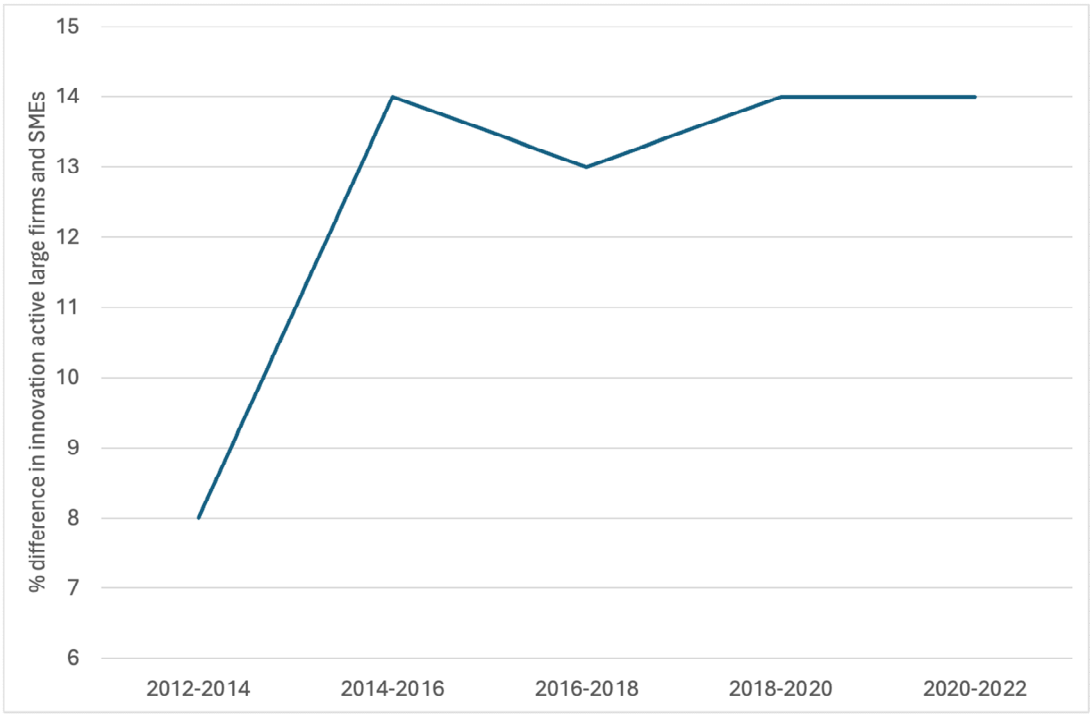
[4]. An 'innovation active' firm is one engaged in R&D, product, service, process, or organisational innovation or one that has either been actively engaged in or abandoned innovation in the last three years.
[5] See https://www.gov.uk/government/collections/uk-innovation-survey.

Figure 1: Percentage of innovation active firms: Source: UKIS



Comparing the proportion of innovation-active large firms to innovation-active SMEs reported by UKIS indicates the persistent innovation activity gap between the two firms. This is illustrated in Figure 2, which suggests a sharp divergence in innovation activity rates between 2012-14 and 2014-16 and the stability of this difference in more recent surveys.

Figure 2: Gap in innovation activity rates between large firms and SMEs (%): Source: UKIS



The Innovation State of the Nation Survey (ISNS) is an annual survey designed to provide a timely view of firms' current innovation activity. It covers around 2,000 firms annually and aims to provide a representative view of UK firms' R&D and innovation activity. This can help identify particular challenges and opportunities for policy development and support. The survey provides insight into firms' current innovation activities, challenges, and R&D and innovation plans. Each company's information is provided by a management team member responsible for product or service development.

By design, the ISNS differs from the UKIS in several significant ways. First, due to their significance in policy terms, the ISNS includes micro-businesses with 5-9 employees. This diverse group of businesses includes long-established, local manufacturing and services companies and high-potential start-ups and spin-outs. In the past, these firms have largely been excluded from innovation surveys, and the ISNS provides the first consistent view of innovation activity in this group of firms.

Second, the definitions of 'innovation' in the ISNS differ from those in the UKIS. As an annual survey, the ISNS data relates to firms' innovation activity over the previous year rather than the last three years, as in the UKIS. As in the UKIS, however, the ISNS distinguishes between product/service, process and organisational innovation and between new-to-the-firm and new-to-the-market innovation. Third, the ISNS uses targeted online data collection through a business panel and telephone interviews to allow timely data collection. This differs from the UKIS, a paper-based survey with firms' responses scanned electronically.

The ISNS survey also provides information on themes central to current policy concerns. First, we distinguish between frontier and non-frontier firms, those leading their sectors in technology and those following[6]. This distinction is important regarding each group's growth, performance, and innovation challenges. Second, we distinguish between firms in other regions and nations, sectors and size bands, providing a detailed understanding of various companies' aspirations and challenges.

[6] Respondents were asked 'Thinking about how your firm compares to your main UK competitors. How strongly do you agree that: We are often the first to introduce innovative products or services'. Where a respondent strongly agreed with this statement, we classify their firm as a 'frontier' company; all other firms are classified as non-frontier

The data in the following sections are based on ISNS 2023 and ISNS 2024 information. The 2023 survey covered 2,018 firms and was conducted between 14 November 2022 and 28 February 2023. The 2024 survey covered 2,001 firms and was conducted between 1 February 2024 and 22 May 2024. Appendix 1 provides further detail on both surveys.

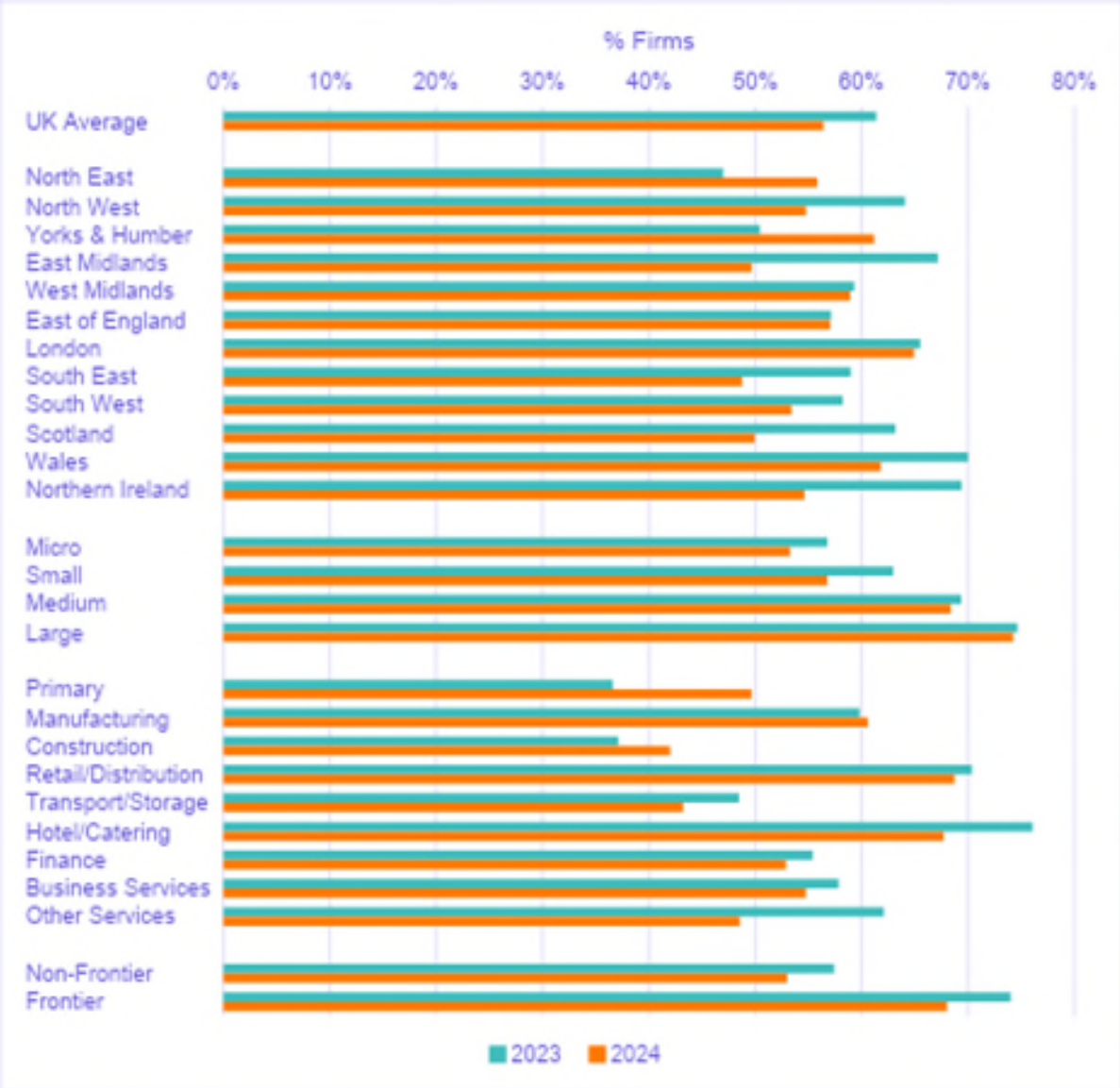
2. INNOVATION ACTIVITIES AND OUTCOMES

2.1 Innovation activity

In 2024, 56% of UK businesses reported product or service changes in the ISNS. This is a fall from 61% in 2023 (Figure 3). The probability of innovating increases consistently with firm size in both 2023 and 2024 and is notably lower in small and micro businesses. Reflecting the innovation gap between smaller and larger companies observed in the UKIS, it is notable that innovation rates fell most in small and micro firms between 2023 and 2024. For instance, there was a 6.2% decrease in small businesses' rate of innovation activity, compared to just 0.4% amongst large firms.

While most regions in the UK experienced declines in innovation activity, there was a positive trend in innovation activity in the North East and Yorks & Humber. Levels of innovation activity also vary markedly by sector, with the highest increase in the primary industries and the largest falls in the ‘other services’ sector. Interestingly, there was a 6% decrease in frontier businesses' innovation activities between 2023 and 2024 compared to a 4% decrease in non-frontier firms (Figure 3).

Figure 3: Proportion of Firms Making Product or Service Changes



(N, Y 2023 = 2,018; N, Y 2024 = 2,000)

The declining trend in innovation activities is linked primarily to product rather than service innovation. An increased proportion of innovating firms reported undertaking service innovation only, and this is notably higher in the East of England region (Table 1). This increasing trend was also consistent for small and large firms. Nevertheless, the declining trend is notable for innovating firms that reported product and service innovation. In particular, there was a 9% decrease in small firms reporting both product and service innovation.

Table 1: Product or service Innovation? Or both?

	Product Development Only		Service Development Only		Both Product and Service Development	
	2023	2024	2023	2024	2023	2024
UK Average	17%	15%	14%	16%	30%	26%
North East	12%	7%	15%	14%	20%	35%
North West	13%	23%	20%	11%	31%	21%
Yorks & Humber	17%	24%	9%	9%	24%	28%
East Midlands	19%	7%	13%	19%	34%	23%
West Midlands	16%	18%	16%	9%	27%	32%
East of England	13%	13%	10%	23%	34%	21%
London	20%	19%	18%	19%	27%	27%
South East	17%	13%	13%	16%	29%	20%
South West	20%	13%	8%	12%	30%	28%
Scotland	18%	7%	13%	15%	32%	28%
Wales	19%	11%	15%	21%	34%	29%
Northern Ireland	16%	17%	6%	10%	47%	27%
Micro	17%	15%	12%	13%	27%	26%
Small	16%	15%	13%	17%	34%	25%
Medium	23%	21%	20%	19%	26%	28%
Large	22%	21%	21%	23%	32%	30%
Primary	11%	25%	11%	9%	14%	16%
Manufacturing	27%	29%	6%	6%	27%	25%
Construction	12%	12%	6%	11%	19%	19%
Retail/Distribution	31%	25%	5%	8%	34%	36%
Transport/Storage	3%	5%	27%	20%	18%	19%
Hotel/Catering	16%	19%	9%	7%	51%	41%
Finance	11%	6%	27%	17%	18%	30%
Business Services	10%	7%	20%	23%	27%	24%
Other Services	14%	8%	21%	25%	28%	15%
Non-Frontier	16%	14%	14%	15%	28%	24%
Frontier	21%	20%	14%	16%	39%	32%

(N, Year 2023= 1,204; N, Year 2024 = 1,185)

Another important dimension of innovation is whether firms' product and service changes were new-to-the-firm or new-to-the-market, i.e., whether they were 'introduced before competitors.' Comparing 2023 and 2024, there was a 3% decline in the proportion of innovating firms that reported that some of their innovations were new-to-the-market and a 1% decline in the proportion of firms that reported wholly new-to-firm innovations (Table 2).

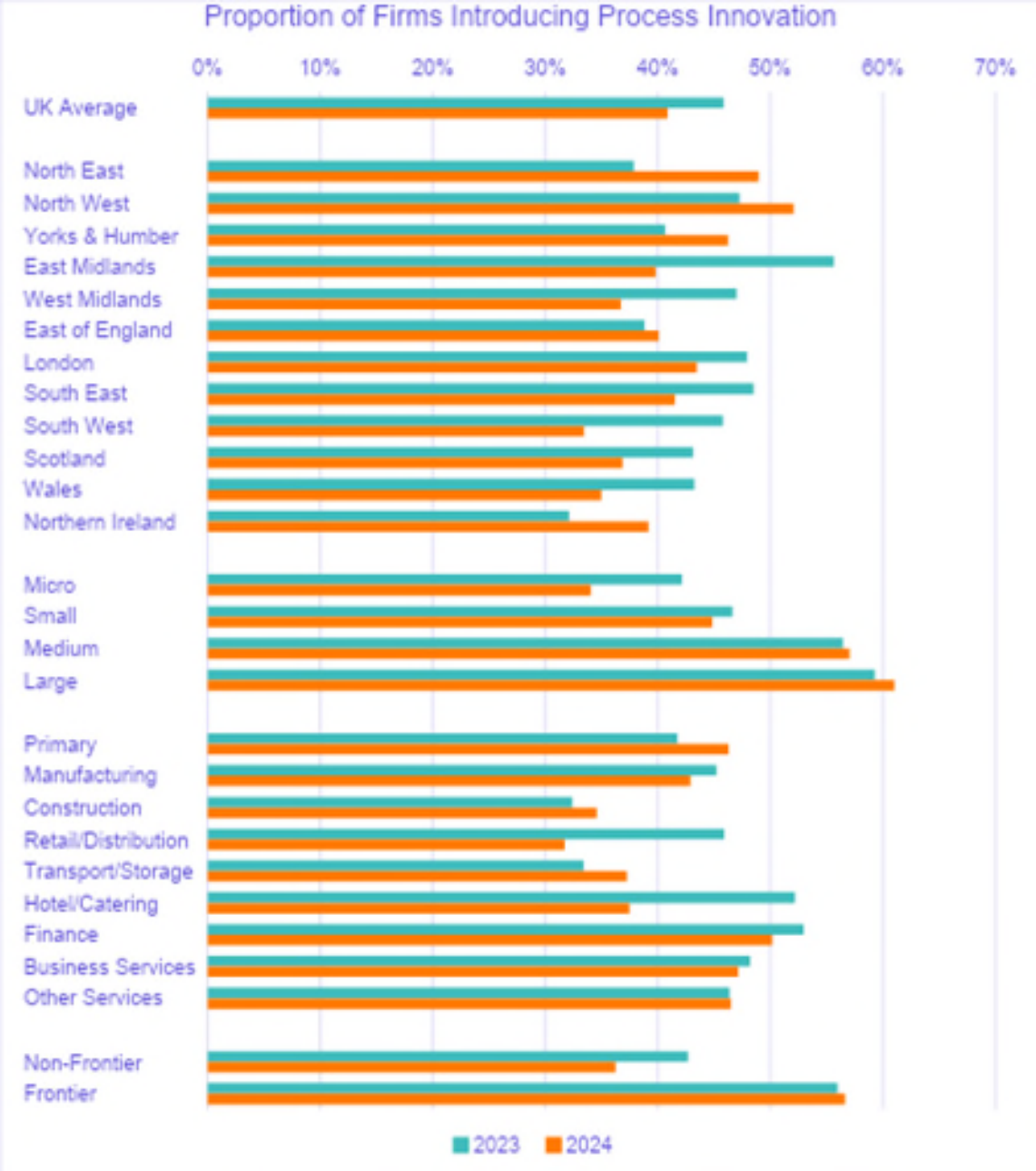
Table 2: New to the Firm or New-to-the-market Innovation?

	Some New-to-the-market		Wholly-New-to-the- firm	
	2023	2024	2023	2024
UK Average	28%	25%	30%	29%
North East	24%	18%	23%	34%
North West	30%	31%	33%	21%
Yorks & Humber	34%	29%	11%	30%
East Midlands	37%	22%	27%	24%
West Midlands	30%	28%	29%	30%
East of England	22%	21%	32%	32%
London	34%	30%	29%	31%
South East	28%	19%	26%	29%
South West	19%	20%	38%	33%
Scotland	29%	27%	33%	22%
Wales	23%	33%	41%	28%
Northern Ireland	20%	22%	49%	32%
Micro	26%	21%	28%	30%
Small	27%	26%	34%	29%
Medium	45%	42%	21%	23%
Large	58%	55%	13%	18%
Primary	13%	19%	20%	29%
Manufacturing	34%	31%	24%	28%
Construction	20%	21%	15%	21%
Retail/Distribution	35%	27%	32%	37%
Transport/Storage	13%	17%	35%	25%
Hotel/Catering	33%	24%	39%	41%
Finance	28%	25%	26%	27%
Business Services	25%	31%	30%	22%
Other Services	26%	22%	33%	25%
Non-Frontier	21%	18%	34%	33%
Frontier	51%	50%	20%	16%

(N, Year 2023= 1,204 and N, Year 2024 = 1,185)

We also see a decline in the proportion of firms introducing process innovations. 46% of firms reported process innovation in 2023, while only 41% reported process innovation in 2024 (Figure 4). Declining rates of process innovation were notably higher for micro and non-frontier businesses. Micro-businesses who undertook process innovation decreased from 42% to 34%, while non-frontier businesses who undertook process innovation decreased from 43% to 36%. There were also mixed regional and sectoral patterns. For instance, the proportion of firms that undertook process innovation in the North East increased from 38% to 49%.

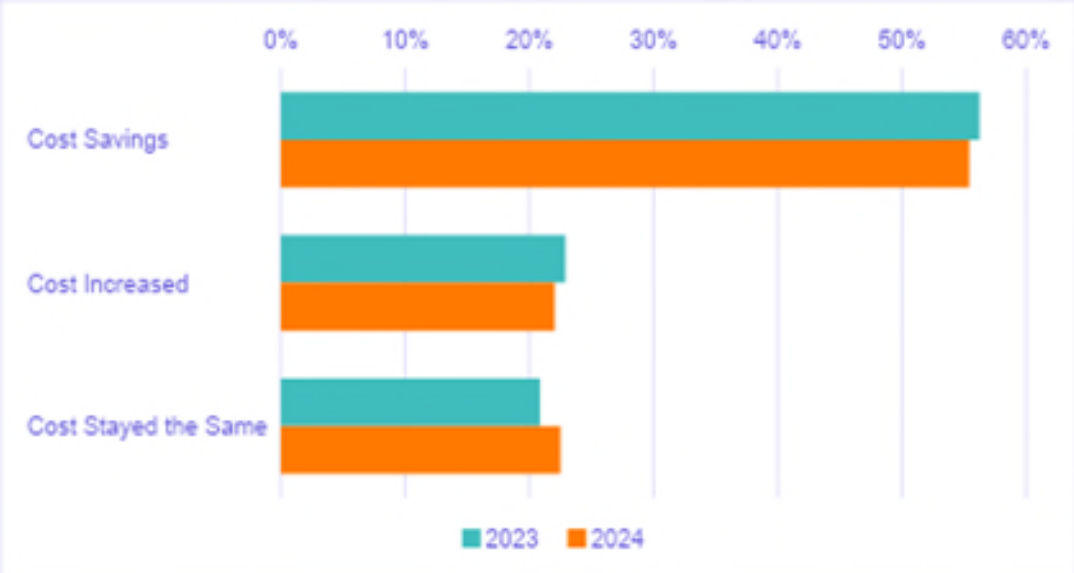
Figure 4: Proportion of Firms Introducing Process Innovations



(N, Y 2023 = 2,018; N, Y 2024 = 2,000)

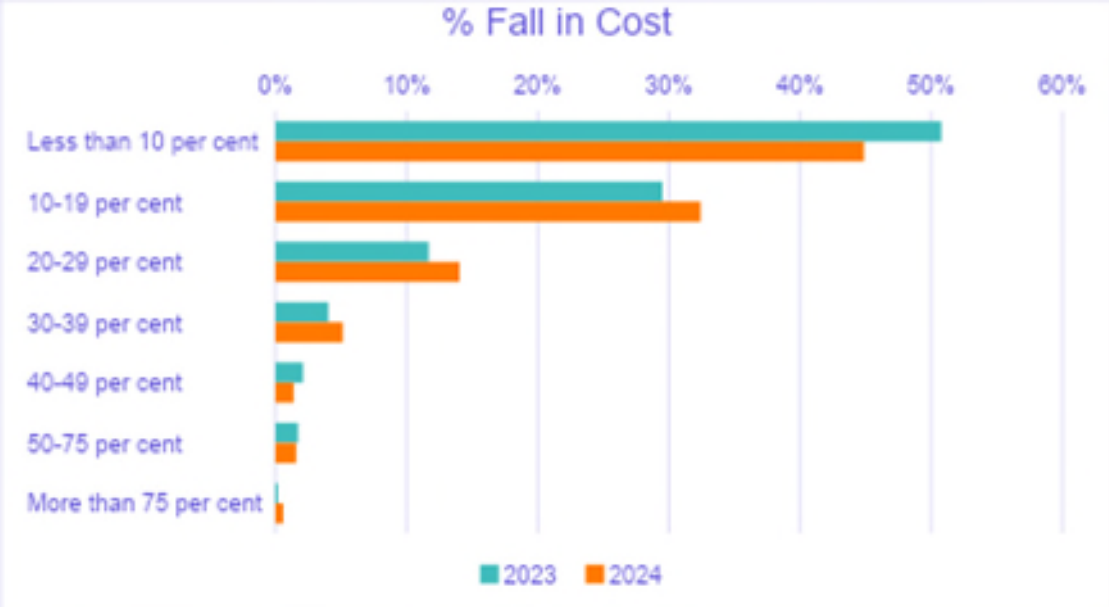
Among those firms that had made process innovations in 2024, 56% reported cost savings, 23% reported costs had increased, and 21% reported no changes in costs (Figure 5). This trend is relatively similar to the 2023 survey, Figure 6 profiles the distribution of cost reduction achieved by those firms who did report cost reduction.

Figure 5: Whether innovation process leads to any Cost Savings



(N, Y 2023 = 943; N, Y 2024 = 911)

Figure 6: Cost Reductions due to Process Innovation (% Firms Achieving Cost Reductions)



(N, Y 2023 = 573; N, Y 2024 = 549)

The ISNS also includes questions on the broader range of organisational changes to business practices, work organisation, organising external relationships, and marketing

strategies. Overall, we see a mixed pattern in business model innovation. The proportion of firms that undertook changes in business practice, work organisation, and organisation of external relationships reduced by 2%, 3%, and 1% in 2024, respectively (Table 3).

Table 3: Business Model Innovation (% Firms)

	Business Practice		Work Organization		Organising External Relationship		Marketing Concepts/ Strategies	
	2023	2024	2023	2024	2023	2024	2023	2024
UK Average	31%	29%	39%	36%	21%	20%	35%	38%
North East	18%	16%	32%	45%	7%	37%	48%	38%
North West	26%	38%	39%	40%	23%	23%	40%	39%
Yorks & Humber	24%	31%	43%	39%	25%	8%	25%	31%
East Midlands	30%	35%	48%	29%	24%	25%	38%	39%
West Midlands	38%	27%	43%	38%	20%	13%	40%	35%
East of England	35%	26%	34%	27%	24%	17%	35%	31%
London	33%	34%	33%	35%	20%	27%	35%	46%
South East	25%	23%	36%	37%	19%	24%	34%	40%
South West	32%	25%	46%	43%	27%	20%	29%	44%
Scotland	30%	35%	37%	43%	15%	17%	32%	41%
Wales	48%	20%	43%	34%	18%	14%	36%	31%
Northern Ireland	26%	35%	26%	36%	8%	20%	40%	37%
Micro	30%	26%	40%	34%	21%	20%	34%	36%
Small	29%	31%	36%	37%	20%	21%	35%	40%
Medium	36%	40%	42%	45%	27%	20%	41%	41%
Large	40%	42%	46%	49%	30%	31%	45%	44%
Primary	28%	32%	31%	31%	16%	23%	24%	31%
Manufacturing	29%	29%	36%	38%	19%	20%	33%	33%
Construction	25%	28%	37%	38%	18%	19%	21%	31%
Retail/Distribution	26%	28%	39%	34%	22%	19%	38%	46%
Transport/Storage	35%	33%	34%	34%	20%	13%	26%	28%
Hotel/Catering	35%	26%	48%	34%	23%	20%	42%	45%
Finance	39%	34%	43%	35%	21%	27%	33%	36%
Business Services	34%	29%	41%	41%	24%	22%	36%	35%
Other Services	30%	31%	33%	36%	19%	21%	38%	39%
Non-Frontier	29%	26%	38%	33%	18%	17%	32%	36%
Frontier	36%	39%	42%	46%	30%	31%	45%	46%

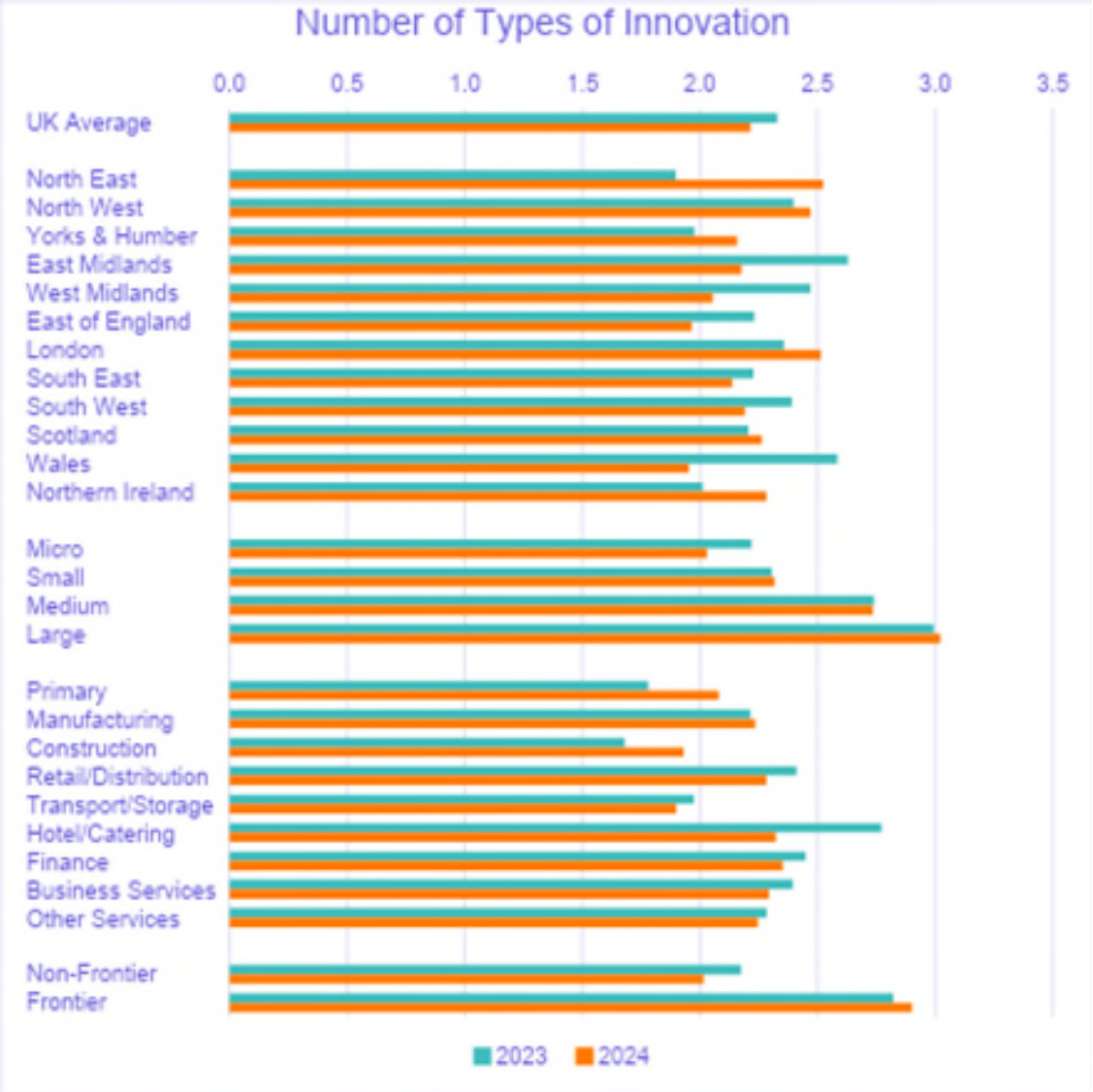
(N, Y 2023 = 2,018; N, Y 2024 = 2,000)

Meanwhile, the proportion of firms that undertook changes in marketing concepts increased by 3% in 2024. Notably, these business model innovations were generally more common among frontier and large businesses, whilst the increase in marketing innovation was driven by micro/small and non-frontier firms.

To summarise the overall picture of innovation activities, we use a variable representing innovation diversity to consider various forms of innovation measured in ISNS (i.e., product/service, process, business practices, work organisation, organising external relationships, marketing strategies) and create a 'count' variable reflecting the number of types of innovation undertaken by each firm.

Overall, the number of types of innovation undertaken by firms decreased slightly from 2.3 in 2023 to 2.2 in 2024 (Figure 7). This decrease is most notable for micro-businesses (with less than ten employees) and non-frontier businesses. The total number of types of innovation undertaken by micro and non-frontier businesses decreased from 2.2 to 2.0 in 2024. Interestingly, there is a notable increase in innovation diversity in the North East and Wales, i.e., by 0.6. Similarly, firms in the primary and construction sectors experienced an increase in innovation diversity by 0.3.

Figure 7: Number of Types of Innovation Being Undertaken (max 6.0)



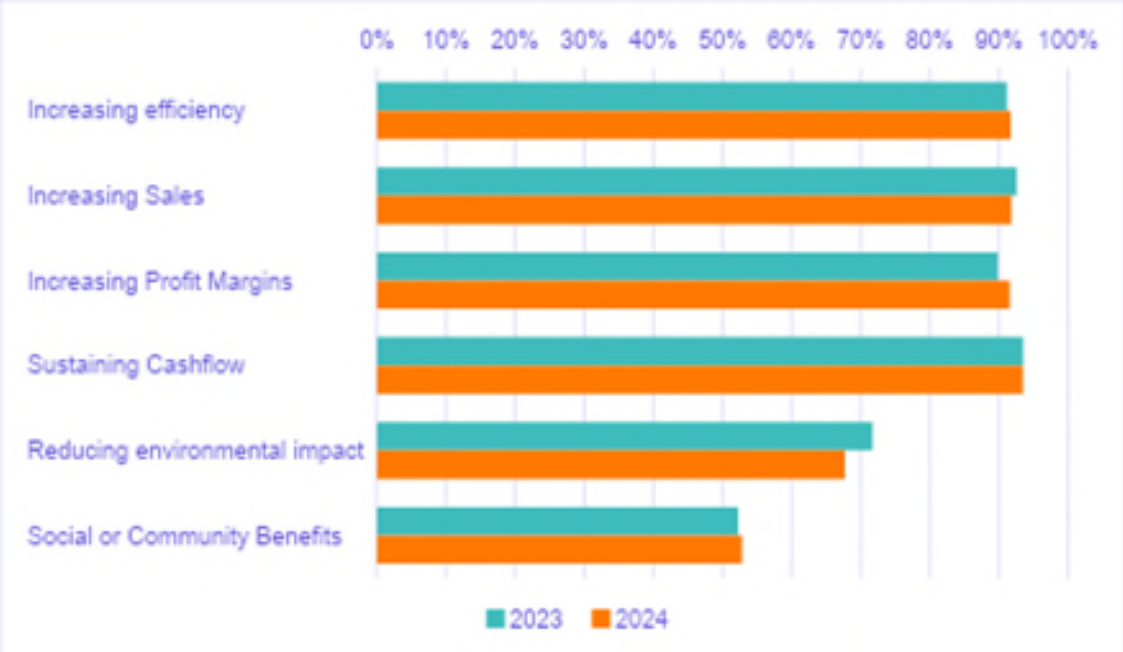
(N, Y 2023 = 2,018; N, Y 2024 = 2,000)

2.2 Innovation and Business Objectives

In addition to these innovation activity indicators, firms were also asked in the survey about their business objectives and how they had aimed to achieve these objectives over the past 12 months. Figures 8 and 9 summarise firms' responses in each case, reporting the percentage that a particular business objective or means of achieving their objectives was either 'important' or 'very important'. Figure 8 highlights the importance of diverse commercial objectives for efficiency, increasing sales, profit margins and cashflows in both years. It is important to note that there have been no significant changes in business objectives over the last two years.

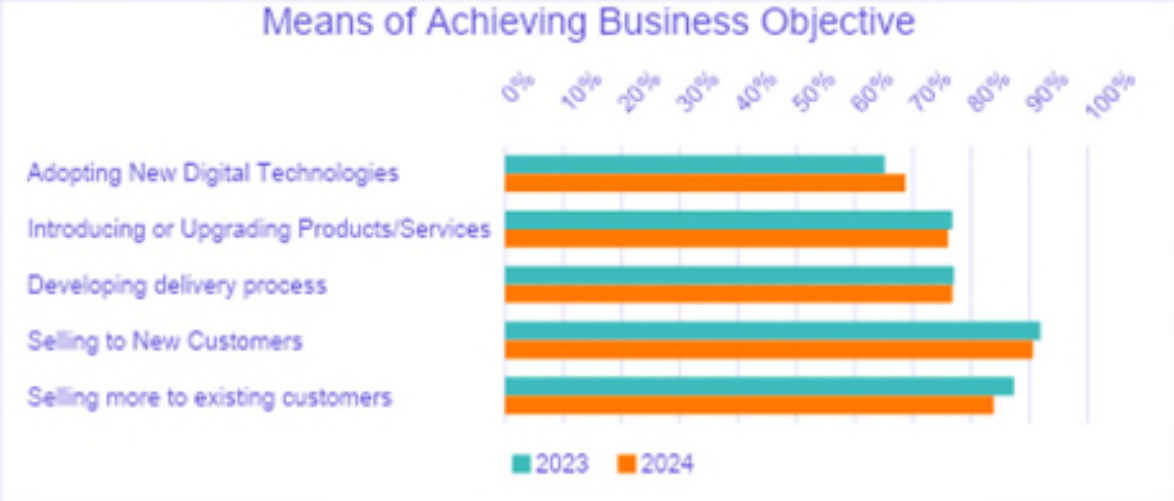
Figure 9 highlights the role of increasing sales as a means of achieving business objectives in both years. In particular, firms tend to achieve business objectives through selling to new customers (92% in 2023 and 91% in 2024) and selling to existing customers (87% in 2023 and 84% in 2024). These sales-related objectives may be linked to the increase in marketing activity in 2024. Meanwhile, the important means of introducing new products to achieve business objectives remains similar in the past two years (77% in 2023 and 76% in 2024). This suggests a less significant linkage between business objectives and the declining trend in firms' innovation activities.

Figure 8: Business Objectives over the year before the survey



(N, Y 2023 = 2,018; N, Y 2024 = 2,000)

Figure 9: Important Means of Achieving Business Objectives over the Year Before the Survey (% Firms)



(N, Y 2023 = 2,018; N, Y 2024 = 2,000)

The survey also includes questions on how important their innovation activities have been in achieving firms' business objectives over the past 12 months. Figure 10 summarises firms' responses in each case, reporting the percentage of firms which suggested that the innovation activities were either 'important' or 'very important' in helping firms achieve business objectives. Linking to the trend of innovation activity, it is important to note that there are no significant differences in the degree of importance of business objectives over the past two years. The surveys suggest the importance of innovation activities in increasing efficiency, sales, profit margins, and sustaining cash flows in 2023 and 2024.

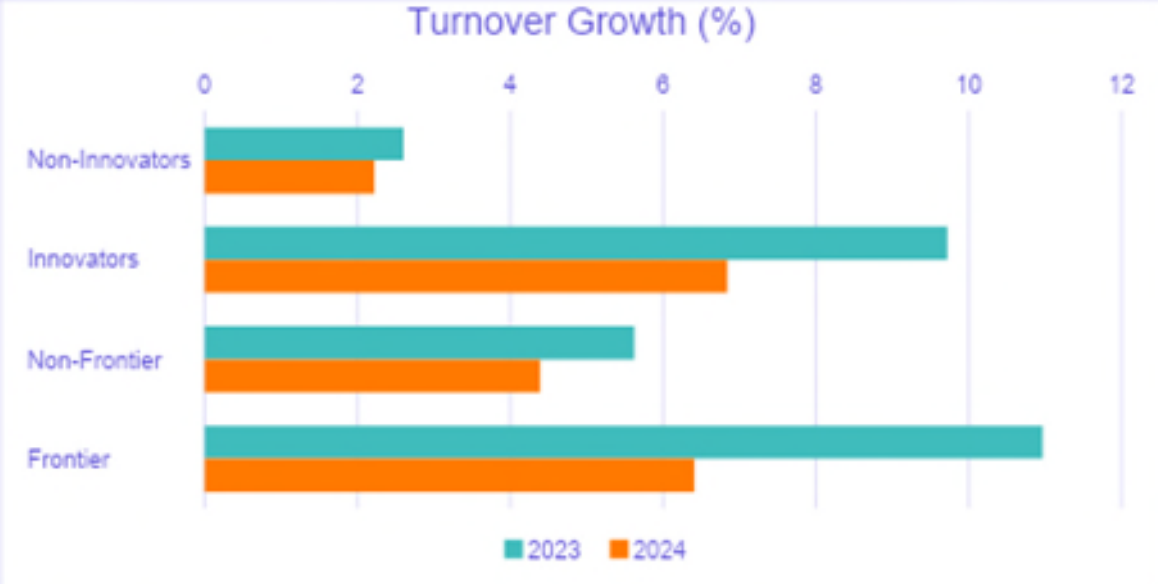
Figure 10: How Innovation Helps Firms Achieving Business Objectives

(N, Y 2023 = 2,018; N, Y 2024 = 2,000)

2.3. Innovation and Sales Growth

The ISNS includes the question of whether their sales had grown, remained stable, or declined in the previous 12 months. In this study, we are particularly interested in exploring the link between innovation and sales growth. Figure 11 summarises the mean sales growth over the past two years within groups of innovating, non-innovating, frontier, and non-frontier firms. Overall, the findings suggest that innovation is strongly associated with higher sales growth. For instance, in 2023, the sales growth of innovating firms was 10% compared to 3% for non-innovating firms. In 2024, the gap narrowed slightly with innovating firms growing around 7% compared to 2% for non-innovators.

Figure 11: Turnover Growth (%)



(N, Y 2023 = 2,018; N, Y 2024 = 2,000)

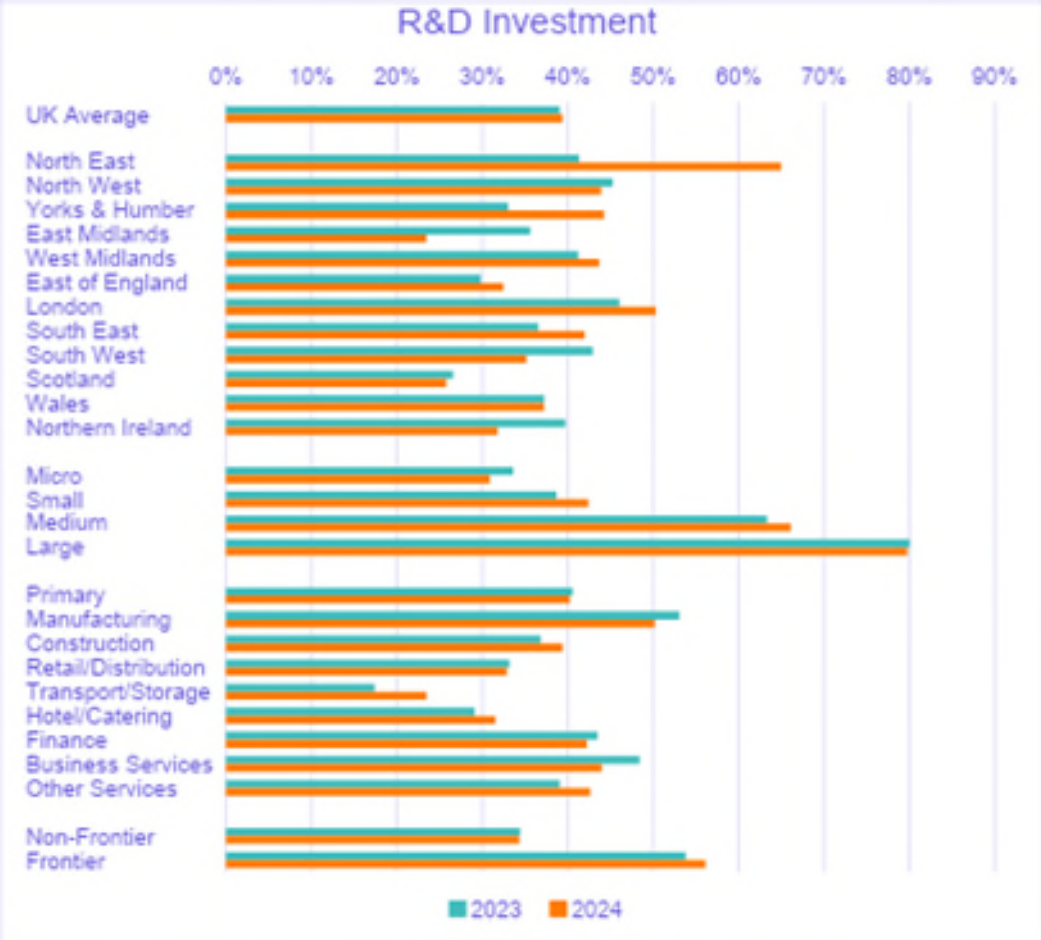
3. ENABLERS OF INNOVATION

In this section, we provide a brief overview of innovation enablers. We focus on four types of innovation enablers that play prominent roles in the innovation literature: innovation investment, funding innovation, collaboration activity, and external support.

3.1. Innovation Investment Activity

Investment through Research & Development (R&D) or other inputs is critical to successful innovation. Overall, 39% of UK businesses reported engaging in some form of R&D activity in 2023, which remains the same in 2024 (Figure 12). Notably, there is a significant difference in innovation investment activity between large firms and micro-firms. In 2023, 80% of large firms with more than 250 employees engaged in some form of R&D activity, while only 34% of micro-businesses invested in R&D. Interestingly, while the proportion of large firms engaging in R&D activities remained stable in 2024, the proportion of micro-firms engaging in R&D dropped by 3% in 2024.

Figure 12: Proportion of Firms Investing in R&D Activities



(N, Y 2023 = 2,018; N, Y 2024 = 2,000)

In ISNS 2023 and ISNS 2024, businesses were also asked about their financial commitments to innovation through other innovation-related activities. Overall, the proportion of firms investing in machinery, equipment, or software and firms investing in new market development activity increased slightly by 1% in 2024 (Table 4). Notably, investment in machinery, equipment, or software increased with sizeband over the last year, i.e., large firms had the most significant increase in investment equalling 12%. The increasing trend was significantly greater among firms in the North East and retail/distribution firms.

The proportion of firms investing in market research increased by around 2% in 2024. This proportion was significantly greater among large firms with more than 250 employees and frontier firms. Notably, innovation training activities increased by 4% in 2024. This increased trend doubled in percentage in medium-sized firms and frontier firms. This suggests the conscious effort of firms to increase their innovation outputs.

There was no change in patent or licensing activities among UK firms. Only 8% of UK businesses had patent or licensing activities in 2023 and 2024. On the other hand, product design activities by UK firms decreased from 31% in 2023 to 29% in 2024.

Table 4: Proportion of firms investing in other aspects of innovation

	Machinery/ Equipment /Software		Investment in Patent/ Licensing		Investment in Innovation Training		Investment in Product Design		Investment in Market Research		Developing New Market Relationships/ Channels	
	2023	2024	2023	2024	2023	2024	2023	2024	2023	2024	2023	2024
UK Average	55%	56%	8%	8%	38%	42%	31%	29%	20%	23%	32%	33%
North East	36%	56%	9%	22%	34%	20%	36%	48%	37%	32%	43%	26%
North West	54%	56%	8%	11%	35%	40%	32%	24%	20%	16%	30%	25%
Yorks & Humber	44%	54%	8%	4%	41%	42%	33%	27%	18%	23%	20%	31%
East Midlands	65%	54%	7%	5%	28%	35%	32%	24%	22%	15%	36%	37%
West Midlands	61%	55%	14%	5%	44%	36%	36%	17%	23%	32%	34%	30%
East of England	54%	52%	9%	13%	44%	46%	24%	32%	20%	27%	31%	35%
London	55%	63%	9%	7%	40%	45%	35%	35%	25%	28%	35%	38%
South East	52%	50%	7%	5%	32%	43%	28%	28%	15%	22%	30%	43%
South West	52%	54%	7%	9%	35%	47%	27%	33%	16%	20%	31%	34%
Scotland	59%	57%	5%	11%	48%	46%	30%	27%	23%	19%	24%	27%
Wales	69%	51%	3%	5%	43%	47%	29%	28%	23%	23%	28%	31%
Northern Ireland	58%	69%	10%	6%	35%	43%	35%	26%	11%	26%	31%	29%
Micro	52%	51%	6%	6%	34%	35%	29%	23%	17%	20%	29%	31%
Small	55%	58%	8%	8%	41%	47%	31%	32%	20%	24%	32%	35%
Medium	63%	73%	22%	15%	40%	50%	37%	38%	33%	34%	39%	36%
Large	66%	79%	24%	23%	50%	56%	31%	44%	44%	43%	44%	43%
Primary	69%	71%	7%	9%	41%	42%	17%	19%	15%	14%	29%	29%
Manufacturing	58%	65%	8%	8%	34%	37%	39%	41%	23%	21%	35%	37%
Construction	51%	58%	5%	6%	38%	46%	20%	24%	11%	20%	21%	29%
Retail/Distribution	49%	59%	5%	12%	34%	34%	32%	25%	20%	23%	29%	32%
Transport/Storage	51%	57%	4%	7%	32%	42%	23%	22%	17%	20%	30%	23%
Hotel/Catering	57%	56%	11%	5%	48%	40%	26%	33%	21%	24%	34%	28%
Finance	47%	47%	7%	10%	38%	49%	28%	24%	20%	23%	35%	43%
Business Services	59%	52%	10%	9%	37%	41%	38%	29%	21%	23%	41%	37%
Other Services	53%	52%	10%	6%	38%	50%	30%	28%	24%	27%	26%	38%
Non-Frontier	53%	54%	6%	7%	38%	40%	27%	26%	17%	20%	29%	30%
Frontier	62%	65%	14%	12%	41%	51%	44%	39%	32%	33%	41%	46%

(N, Y 2023 = 2,018; N, Y 2024 = 2,000)

3.2. Funding Innovation

Internal funding was the most common approach to funding R&D and innovation in 2023 and 2024 (Table 5). The proportion of firms that used internal funding also increased from 67% in 2023 to 70% in 2024 and was notably higher among small businesses and frontier firms. Grants remained a popular source for funding innovation, with the proportion of firms that use grants increasing by 2% in 2024. Interestingly, the use of government loans, bank loans, and equity finances fell by around 1% in the past year.

Table 5: Funding of R&D and innovation in the year before the survey

	Internal		Grants		Government Loans		Bank Loans		Equity Finance		R&D Tax Relief/ Tax Credits	
	2023	2024	2023	2024	2023	2024	2023	2024	2023	2024	2023	2024
UK Average	67%	70%	8%	10%	7%	6%	8%	7%	4%	3%	12%	12%
Micro	74%	66%	8%	4%	5%	0%	10%	5%	3%	1%	13%	12%
Small	63%	73%	7%	13%	8%	8%	5%	7%	4%	3%	11%	12%
Medium	56%	63%	9%	16%	6%	14%	23%	10%	10%	13%	16%	15%
Large	61%	60%	18%	18%	22%	17%	19%	12%	17%	12%	15%	9%
Non-Frontier	67%	68%	8%	7%	7%	5%	7%	5%	3%	2%	11%	9%
Frontier	65%	74%	8%	16%	7%	7%	12%	11%	7%	7%	15%	21%

(N, Year 2023=1,001, N, Year 2024 = 1,013)

Notes: Due to interview restrictions, only half of the survey respondents were asked this question, so sectoral and regional sample sizes here are small. Sectoral and regional results are therefore not reported. As firms could use more than one source of finance, the totals do not add to 100. ISNS 2023 asks about tax relief, while ISNS asks about tax credits.

Interestingly, there was a slightly increased incidence of innovative firms seeking external funding (Figure 13). 21% of innovative firms in the UK reported seeking external funding in 2024 compared to 19% in 2023. The increased need for external financing was more significant for small firms with less than 50 employees and frontier firms.

Figure 13: Proportion of Firms Seeking for External Funding

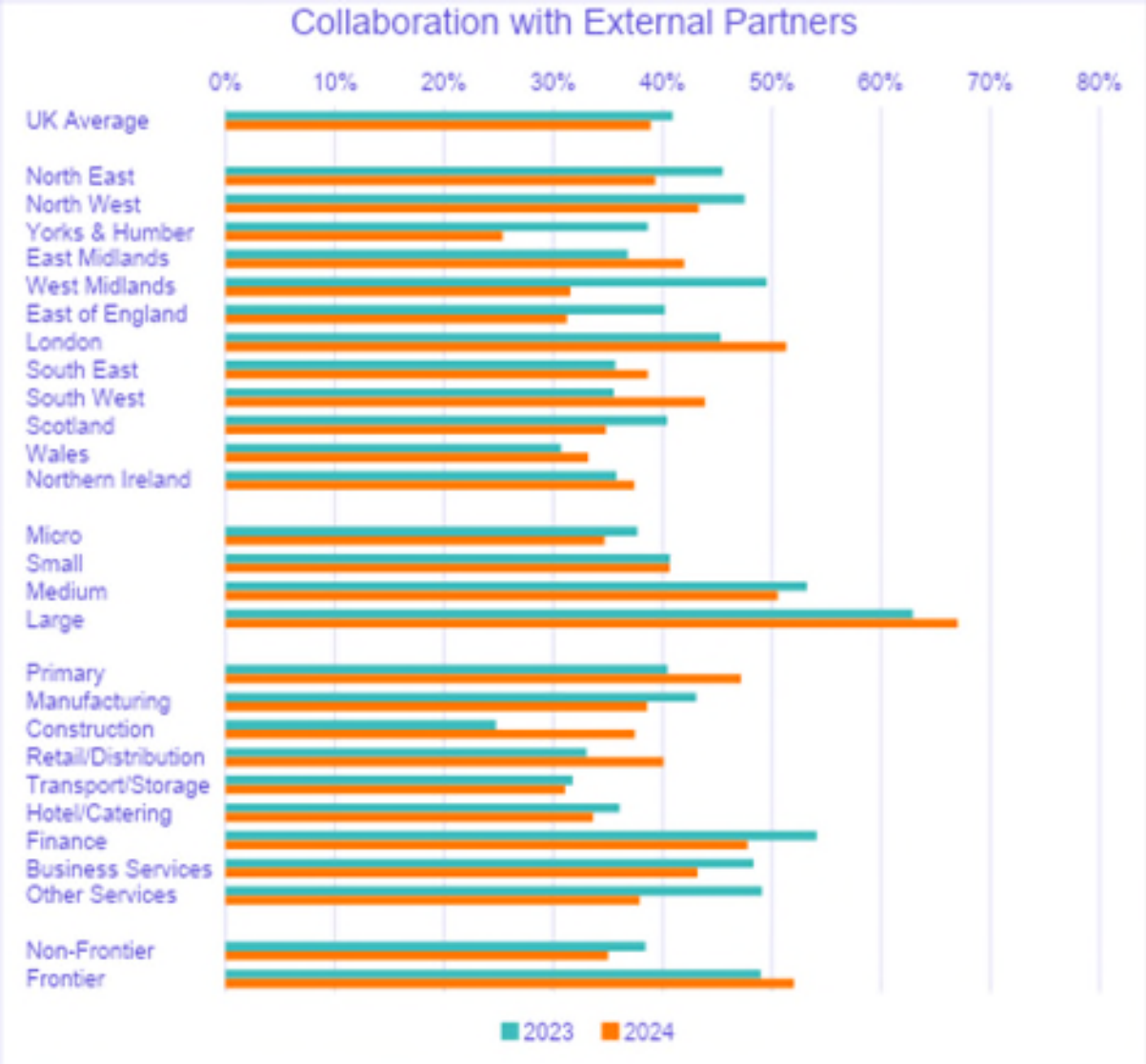
(N, Y 2023 = 2,018; N, Y 2024 = 2,000)
Notes: Due to interview restrictions, this question was asked of only half of the survey respondents

3.3. Collaboration Activity

In the Innovation State of the Nation Survey, firms are asked whether they collaborate with other organisations as part of their product, service, process or organisational development activity. If they respond positively, they are then asked which partners they have worked with over the last year.

Overall, there is a decreasing pattern of collaboration activities across UK firms. The proportion of firms collaborating with external partners decreased from 41% in 2023 to 39% in 2024 (Figure 14). Despite the regional variation, the decreasing trend was most significant among firms in the West Midlands and Yorks and Humber regions. Interestingly, while collaboration activities decreased by around 3% among non-frontier and smaller firms in 2024. There was an increase in collaboration activities by around 3-4% among frontier firms and large firms with more than 250 employees. Similarly, there was a notable increase in collaboration activity among firms in the construction sector.

Figure 14: Collaboration with External Partners for Innovation



(N, Year 2023=1,001, N, Year 2024 = 1,013)

Innovating firms in the UK prefer collaborating with supply chain partners, i.e., suppliers, customers and other businesses (Table 6). The proportion of firms collaborating with suppliers in 2024 declined by 1%, decreasing consistently with firm size. The proportion of firms collaborating with other businesses was 39%, consistent in 2023 and 2024. Interestingly, the proportion of firms collaborating with clients and business support providers increased by 4% in 2024.

Looking across firms' sizes, there are significant increases in linkages with universities. In 2024, the number of micro-firms collaborating with universities doubled from 4% to 9%, while the proportion of medium-sized firms collaborating with universities increased from 11% to 21%. Similarly, there is an increased trend of collaborating with business

support providers for smaller firms in 2024. The proportion of micro-firms and small firms that collaborated with business support increased by 7% and 3% in 2024, respectively.

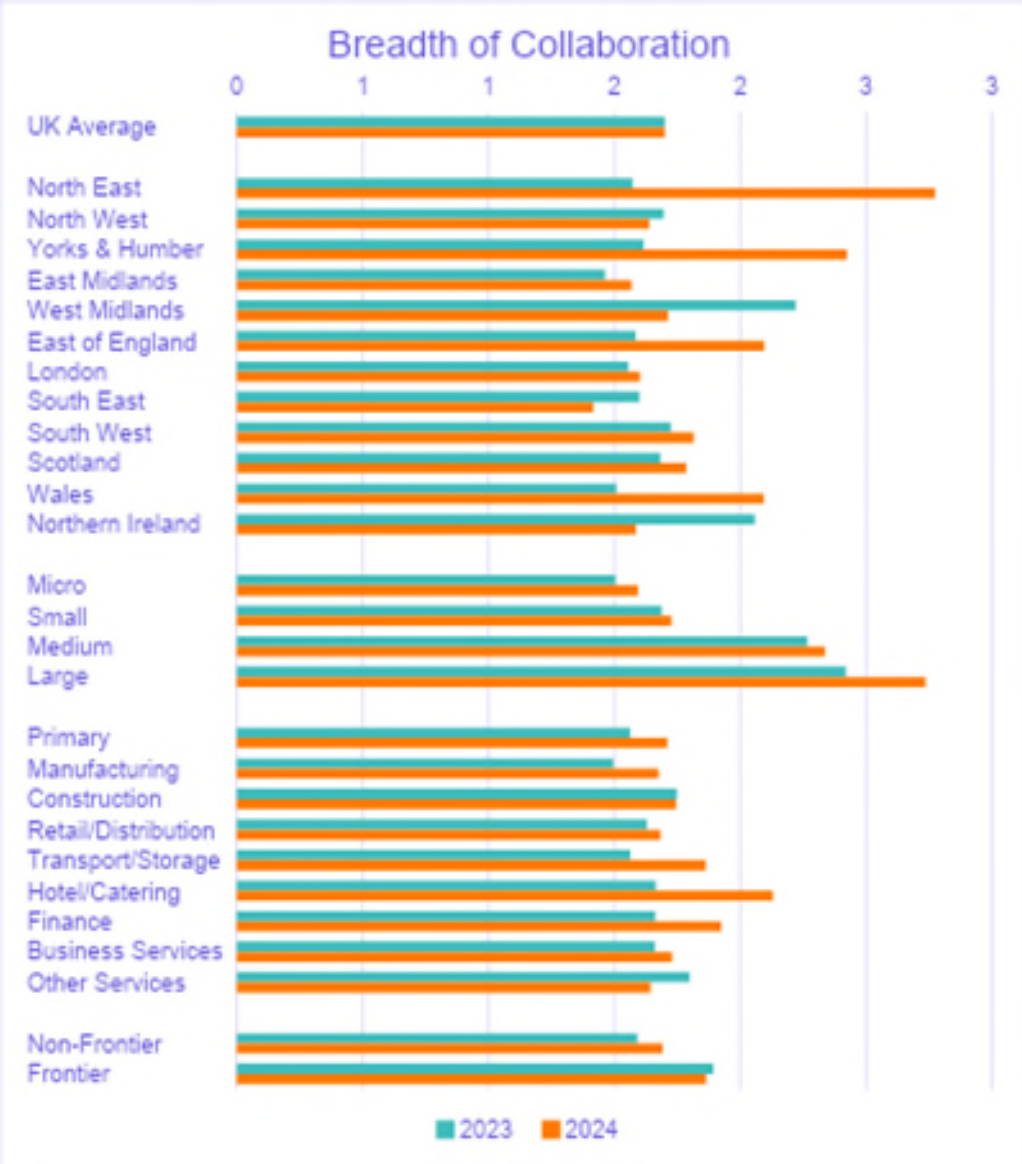
Table 6: Collaboration profile by type of firm

	Suppliers		Clients/ Customers		Other Businesses		Accelerators		Tech Hub/ Innovation Centres		Consultants		Universities		Government/ Public Research Institutes		Business Support Providers	
	2023	2024	2023	2024	2023	2024	2023	2024	2023	2024	2023	2024	2023	2024	2023	2024	2023	2024
UK Average	44%	43%	26%	30%	39%	39%	5%	4%	12%	13%	18%	17%	7%	9%	9%	9%	6%	10%
North East	33%	44%	23%	52%	36%	40%	2%	14%	18%	32%	32%	14%	7%	13%	3%	30%	5%	38%
North West	47%	41%	35%	29%	32%	31%	8%	10%	10%	11%	24%	23%	5%	8%	8%	4%	1%	6%
Yorks & Humber	41%	67%	37%	41%	39%	54%	3%	9%	15%	9%	16%	27%	5%	24%	2%	2%	3%	9%
East Midlands	43%	34%	15%	16%	33%	36%	2%	1%	10%	22%	24%	17%	6%	19%	12%	1%	3%	11%
West Midlands	42%	52%	40%	28%	39%	37%	9%	3%	22%	12%	22%	11%	15%	9%	17%	6%	16%	13%
East of England	42%	61%	23%	40%	48%	47%	8%	2%	10%	12%	12%	16%	6%	14%	7%	7%	3%	9%
London	32%	35%	20%	31%	49%	41%	9%	6%	14%	14%	19%	17%	3%	5%	5%	2%	4%	9%
South East	55%	48%	22%	26%	36%	30%	1%	1%	4%	6%	12%	10%	10%	6%	11%	10%	8%	4%
South West	56%	38%	29%	32%	25%	57%	6%	2%	14%	16%	20%	10%	5%	1%	10%	19%	7%	7%
Scotland	44%	42%	13%	34%	50%	45%	1%	2%	7%	6%	19%	15%	2%	9%	19%	19%	13%	7%
Wales	15%	42%	14%	34%	48%	27%	3%	5%	25%	12%	12%	26%	30%	16%	3%	27%	1%	22%
Northern Ireland	53%	39%	39%	22%	47%	35%	0%	0%	16%	9%	7%	18%	0%	14%	16%	9%	27%	12%
Micro	46%	41%	26%	25%	37%	46%	3%	0%	9%	10%	16%	13%	4%	9%	8%	6%	2%	9%
Small	41%	43%	23%	33%	43%	35%	5%	5%	12%	12%	18%	17%	8%	7%	10%	10%	7%	10%
Medium	47%	51%	43%	36%	36%	35%	14%	13%	25%	25%	20%	24%	11%	21%	12%	16%	20%	13%
Large	53%	56%	30%	44%	23%	23%	18%	19%	25%	29%	37%	44%	22%	26%	13%	16%	22%	17%
Primary	40%	43%	17%	29%	41%	31%	6%	9%	13%	15%	22%	23%	10%	14%	2%	3%	5%	5%
Manufacturing	40%	43%	23%	25%	39%	41%	2%	6%	10%	9%	17%	18%	9%	13%	6%	6%	5%	6%
Construction	48%	45%	27%	23%	35%	36%	3%	2%	12%	15%	22%	22%	10%	6%	11%	14%	6%	12%
Retail/Distribution	51%	36%	26%	27%	38%	38%	6%	3%	12%	18%	20%	12%	3%	15%	3%	5%	4%	16%
Transport/Storage	42%	47%	20%	27%	38%	37%	4%	4%	7%	9%	10%	19%	7%	22%	15%	14%	14%	9%
Hotel/Catering	53%	55%	24%	46%	44%	34%	3%	4%	12%	17%	9%	20%	6%	4%	7%	13%	8%	21%
Finance	31%	37%	23%	27%	45%	41%	8%	8%	19%	17%	21%	30%	7%	9%	4%	7%	9%	16%
Business Services	42%	41%	29%	28%	35%	41%	2%	3%	11%	15%	23%	20%	11%	9%	9%	7%	5%	8%
Other Services	39%	45%	27%	32%	43%	43%	11%	6%	14%	4%	16%	10%	5%	7%	16%	14%	8%	3%
Non-Frontier	44%	45%	26%	30%	38%	41%	3%	2%	12%	10%	16%	16%	4%	6%	9%	8%	6%	10%
Frontier	43%	38%	26%	29%	42%	35%	12%	8%	13%	19%	23%	18%	13%	17%	11%	12%	7%	10%

(N, Year 2023=1,001, N, Year 2024 = 1,013)

Based on the types of collaboration partners, we create a 'count' variable named breadth of collaboration, reflecting the number of types of partners who collaborated with each firm. Overall, the total number of partners collaborating with firms remains the same in 2023 and 2024, i.e., 1.7 (Figure 15). Despite the regional variation, an increasing breadth of collaboration was notable among firms in the North East and Yorkshire & Humber regions. There was also a rising number of collaboration partners in large firms with more than 250 employees.

Figure 15: Breadth of Collaboration (Max 9)



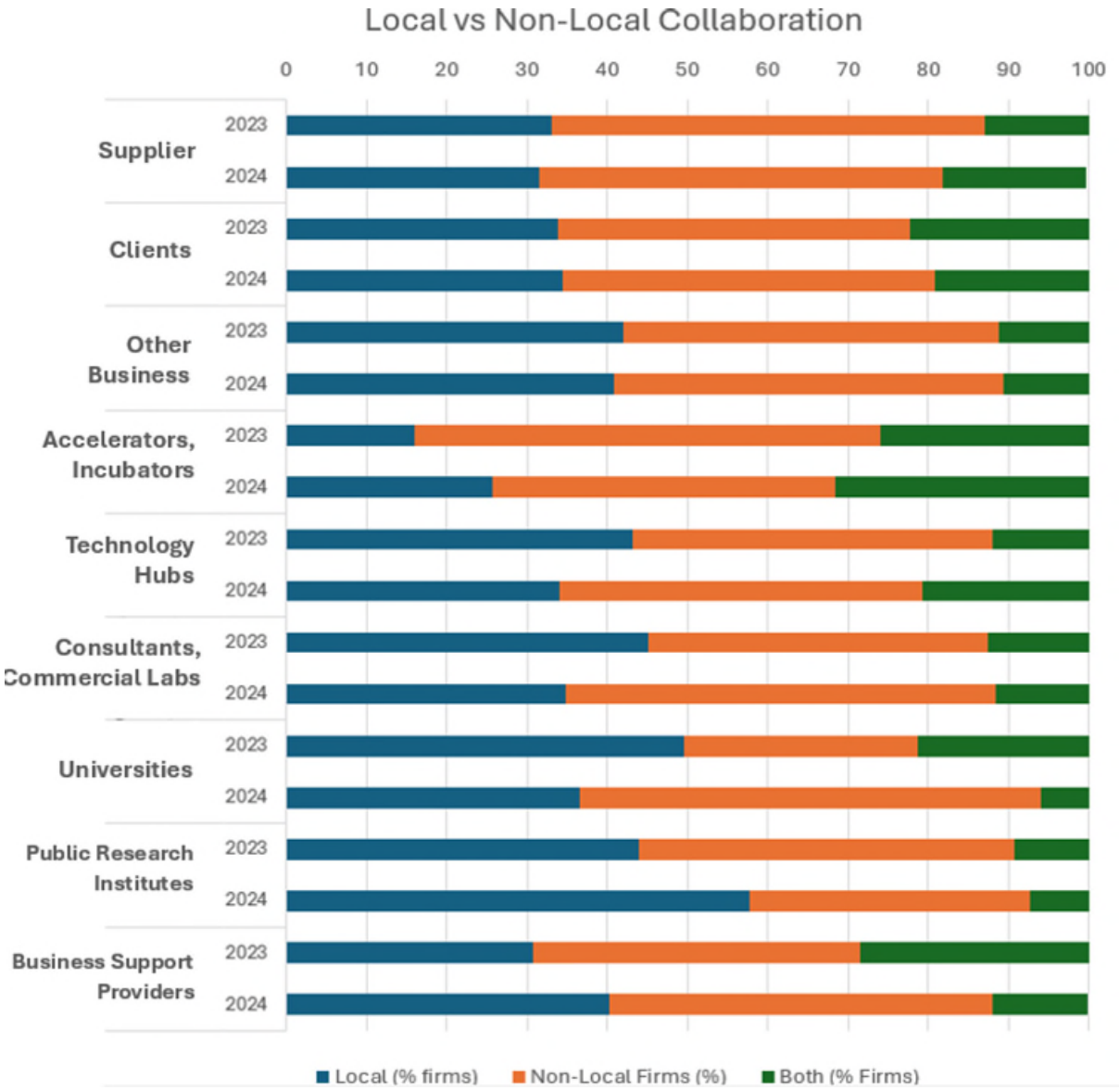
(N, Year 2023=1,001, N, Year 2024 = 1,013)

The ISNS also includes questions on whether the collaboration for innovation was undertaken entirely with local partners, entirely with non-local partners, or with both local and non-local partners. Overall, UK businesses prefer to collaborate with non-local supply chain partners. In 2023 and 2024, more than 50% of innovating firms collaborated with non-local suppliers, and more than 44% collaborated with non-local clients (Figure 16).

Interestingly, there was a shifting collaboration pattern with non-supply chain partners. While UK businesses preferred collaborating with local universities (50%) and local consultants (45%) in 2023, the proportion of collaboration with non-local universities and non-local consultants was higher in 2024. i.e. 57% and 54% respectively. Conversely,

while UK businesses prefer collaborating with non-local public research institutes in 2023 (47%), the proportion of firms collaborating with local public research institutes increased in 2024 (57%). Interestingly, the proportion of firms collaborating with both local and non-local technology hubs increased by 9% in 2024.

Figure 16: Local vs Non-Local Collaboration (%)



(N, Year 2023=1,001, N, Year 2024 = 1,013)

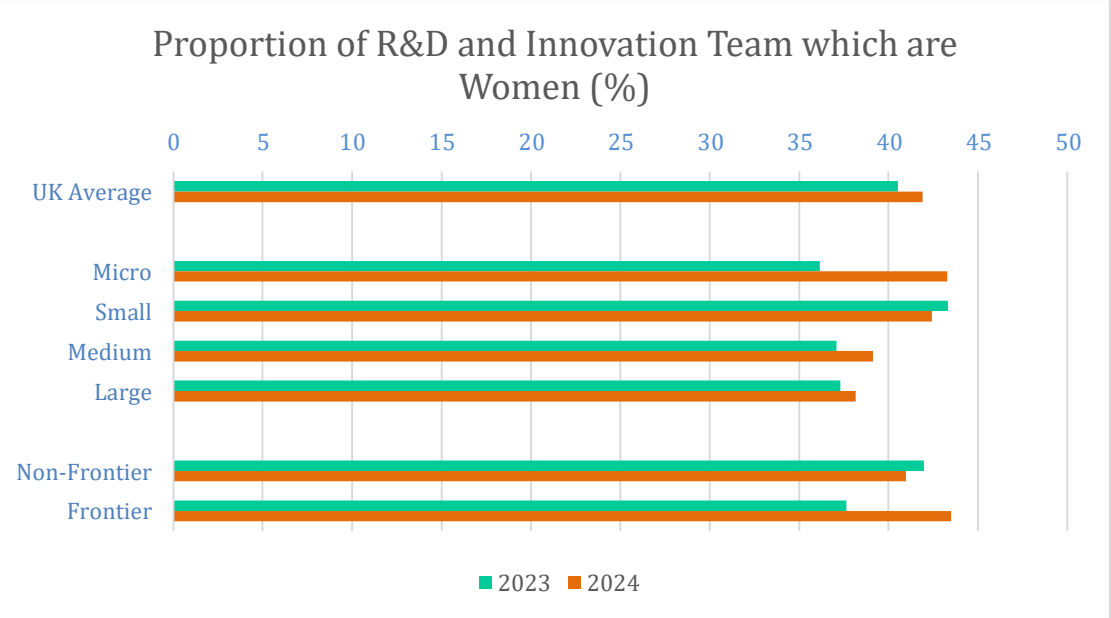
3.4. Innovation Teams

As part of the survey, firms were asked about their innovation teams' overall size and composition. More specifically, firms were asked first: 'How many people are involved in delivering or implementing changes to products or services in your organisation?' This was intended to indicate those involved in providing innovation in the organisation

regardless of whether this related to product, service or business model. Follow-up questions then explored the proportion of the innovation team, which were women (Figure 17) or from ethnic minority groups (Figure 18).

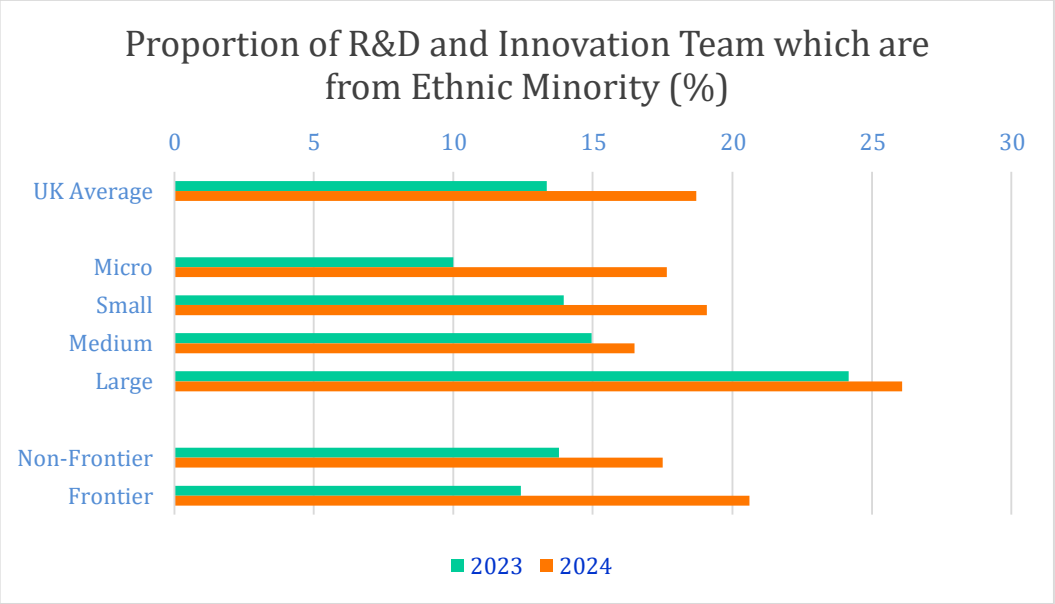
Overall, 42% of UK businesses' innovation team members were women in 2024, an increase from 40% in 2023. Interestingly, this proportion was notably higher among micro firms and small firms with less than 50 employees in 2024. Meanwhile, ethnic minority representation was 19% in 2024, an increase from 13% in 2023. Interestingly, in 2024, the proportion of ethnic minority representation is notably higher among large firms and frontier firms.

Figure 17: Proportion of R&D and Innovation Team which are Women



(N, Y 2023= 374, N, Y 2024 = 368)
Notes: Due to interview restrictions, this question was asked of only half of the survey respondents. We include only those firms with more than 5 R&D teams and exclude the outliers.

Figure 18: Proportion of R&D and Innovation Team which are from Ethnic Minority Groups



(N, Y 2023= 351, N, Y 2024 = 273)
Notes: Due to interview restrictions, this question was asked of only half of the survey respondents. We include only those firms with more than 5 R&D teams and exclude the outliers.

3.5. External Support

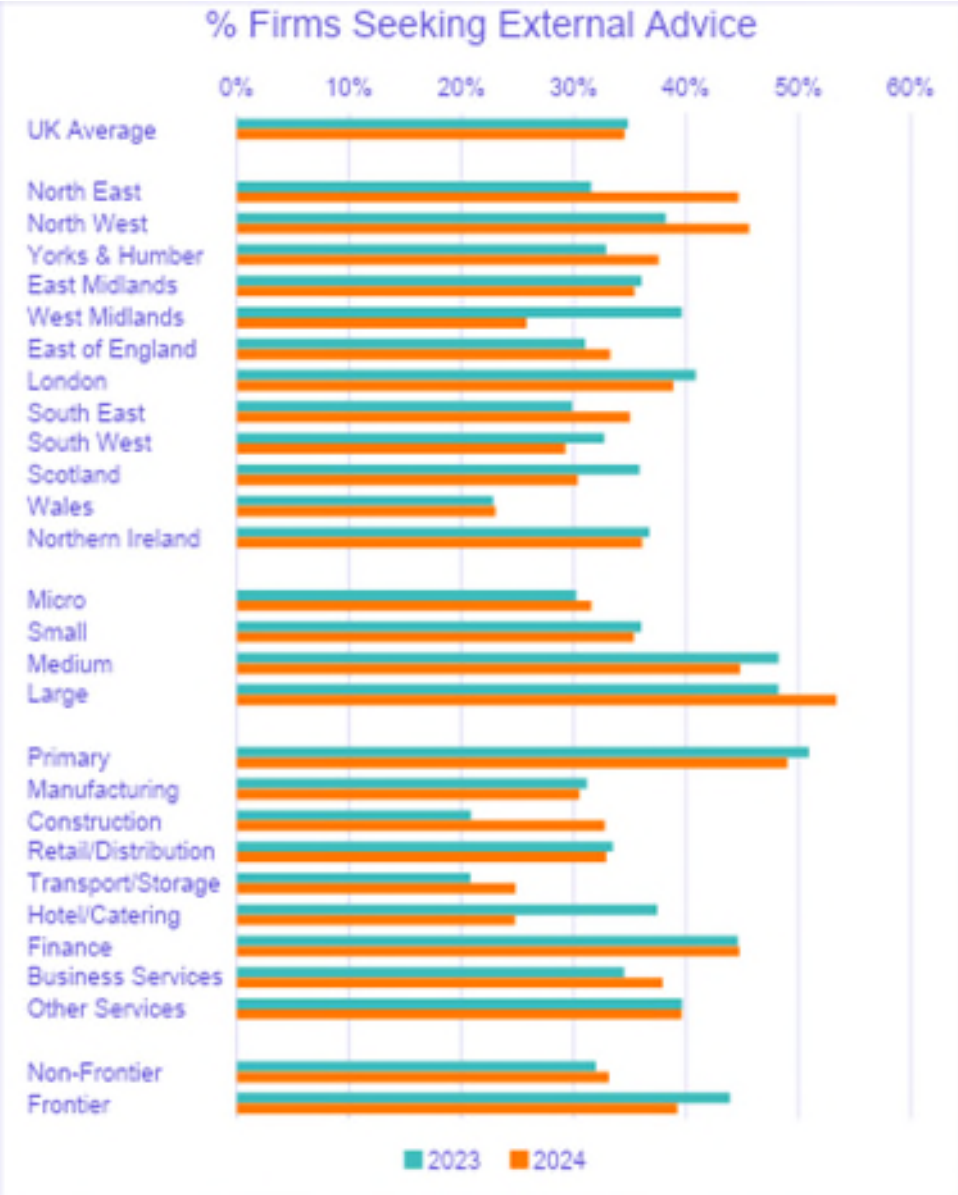
The ISNS includes questions on the range of innovation support measures UK businesses can access for any business purpose. For those firms that had accessed some external support, a follow-up question explored the nature of that support, i.e., whether it related to business growth, innovation, or some other aspect of business performance.

Overall, the proportion of UK businesses seeking external advice has remained the same in the last two years, i.e., around 35% (Figure 19). However this hides some varying patterns Interestingly, there was a 13% increase in the proportion of firms seeking external advice among firms in the North East, compared to a 14% decrease among firms in the West Midlands. Similarly, there was an 12% increase in the proportion of firms seeking external advice in the construction sector but a 13% reduction among firms in the hotel/catering sector. In addition, large firms have sought more external advice in the past year than smaller firms. Frontier firms sought less external advice in 2024, falling by 5% in 2024.

Table 7 considers why firms sought advice. Overall, the most common types of support sought related to running and growing the business. Interestingly, there was a 5% decrease in the proportion of firms that sought support in running their businesses in

2024, and this fall was sharpest for micro-businesses and frontier firms. A slightly increased proportion of firms sought support in growing their businesses. Other types of support – digital technologies, product and service innovation and net zero – were less common but more likely to be sought by frontier rather than non-frontier firms. Fewer firms sought support in product and service changes in 2024, which was reduced significantly in medium and large firms.

Figure 19: Proportion of Firms Seeking for External Advice



(N, Y 2023 = 2,018; N, Y 2024 = 2,000)

Table 7: Percentage of Firms Seeking Advice of Different Types

	Running the Business		Grow the Business		Digital Technologies		Net Zero		Product/ Service Changes	
	2023	2024	2023	2024	2023	2024	2023	2024	2023	2024
UK Average	55%	50%	50%	51%	41%	41%	25%	23%	43%	40%
North East	32%	8%	24%	67%	51%	55%	55%	29%	10%	45%
North West	50%	55%	40%	47%	24%	38%	26%	26%	30%	28%
Yorks & Humber	57%	38%	34%	54%	26%	29%	10%	6%	36%	35%
East Midlands	53%	53%	71%	41%	37%	36%	30%	30%	59%	28%
West Midlands	62%	51%	58%	37%	68%	40%	42%	44%	47%	41%
East of England	53%	55%	53%	53%	44%	41%	37%	20%	52%	48%
London	50%	51%	60%	53%	45%	35%	17%	20%	39%	34%
South East	62%	51%	62%	55%	36%	39%	17%	21%	51%	39%
South West	45%	44%	26%	44%	33%	66%	16%	23%	38%	49%
Scotland	70%	57%	60%	53%	55%	49%	32%	19%	44%	60%
Wales	78%	53%	24%	58%	39%	29%	15%	13%	39%	46%
Northern Ireland	54%	53%	32%	55%	64%	54%	34%	31%	52%	49%
Micro	60%	51%	48%	52%	39%	40%	17%	20%	39%	39%
Small	54%	51%	52%	52%	42%	40%	28%	24%	42%	39%
Medium	42%	45%	47%	43%	46%	54%	32%	27%	58%	46%
Large	35%	34%	46%	44%	44%	45%	51%	46%	51%	37%
Primary	63%	58%	58%	43%	35%	32%	35%	41%	48%	43%
Manufacturing	51%	44%	48%	45%	42%	40%	25%	22%	47%	41%
Construction	49%	52%	25%	46%	49%	37%	19%	30%	40%	39%
Retail/Distribution	55%	43%	57%	47%	36%	33%	24%	25%	43%	37%
Transport/Storage	55%	39%	50%	49%	39%	28%	18%	19%	39%	33%
Hotel/Catering	60%	54%	48%	61%	33%	22%	31%	21%	38%	46%
Finance	47%	53%	45%	55%	46%	44%	20%	30%	29%	54%
Business Services	51%	51%	47%	57%	39%	48%	20%	22%	44%	38%
Other Services	57%	53%	53%	50%	50%	52%	25%	18%	44%	40%
Non-Frontier	55%	52%	48%	49%	37%	39%	21%	20%	40%	39%
Frontier	54%	44%	54%	56%	50%	47%	34%	34%	50%	43%

(N, Y 2023 = 729, N, Y 2024 = 743)

Note: As firms could have sought more than one type of support figures, do not add to 100

4. BARRIERS TO INNOVATION

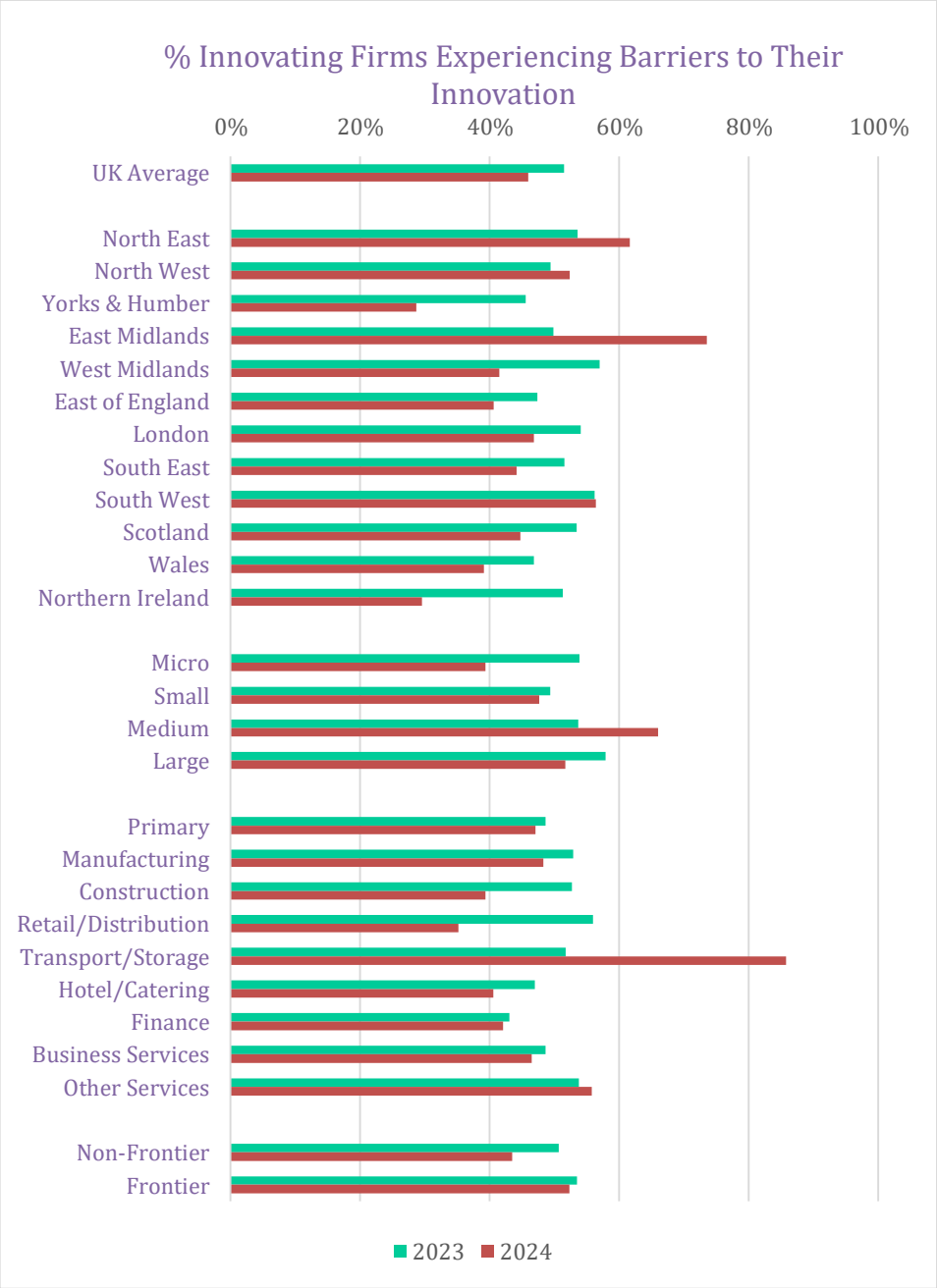
4.1. Barriers to Innovating Firms

Despite the decreasing innovation activity among businesses, fewer innovating firms reported factors that constrained their innovation activity. 46% of innovating firms reported barriers in their activities in 2024 compared to 52% in 2023 (Figure 20). Surprisingly, this declining pattern was stronger among micro-businesses and non-frontier firms. Despite sectoral variance, there was a notably smaller proportion of firms experiencing barriers to innovation among firms in Northern Ireland, Yorkshire and Humber, and the West Midlands. However, transport sector firms experienced more innovation barriers in 2024.

The cost of doing business crisis was the most common barrier experienced by innovating firms (51% in 2023 and 52% in 2024) (Figure 21). Interestingly, there was a significant increase in the proportion of innovating firms that reported barriers due to lack of government support (increased by 9% in 2024), lack of finance (increased by 8% in 2024), and technology risk (increased by 8% in 2024). Interestingly, there was a decline in the number of firms reporting barriers due to lack of skills (declined by 3% in 2024), while regulation/legislation barriers increased by 1% in 2024.

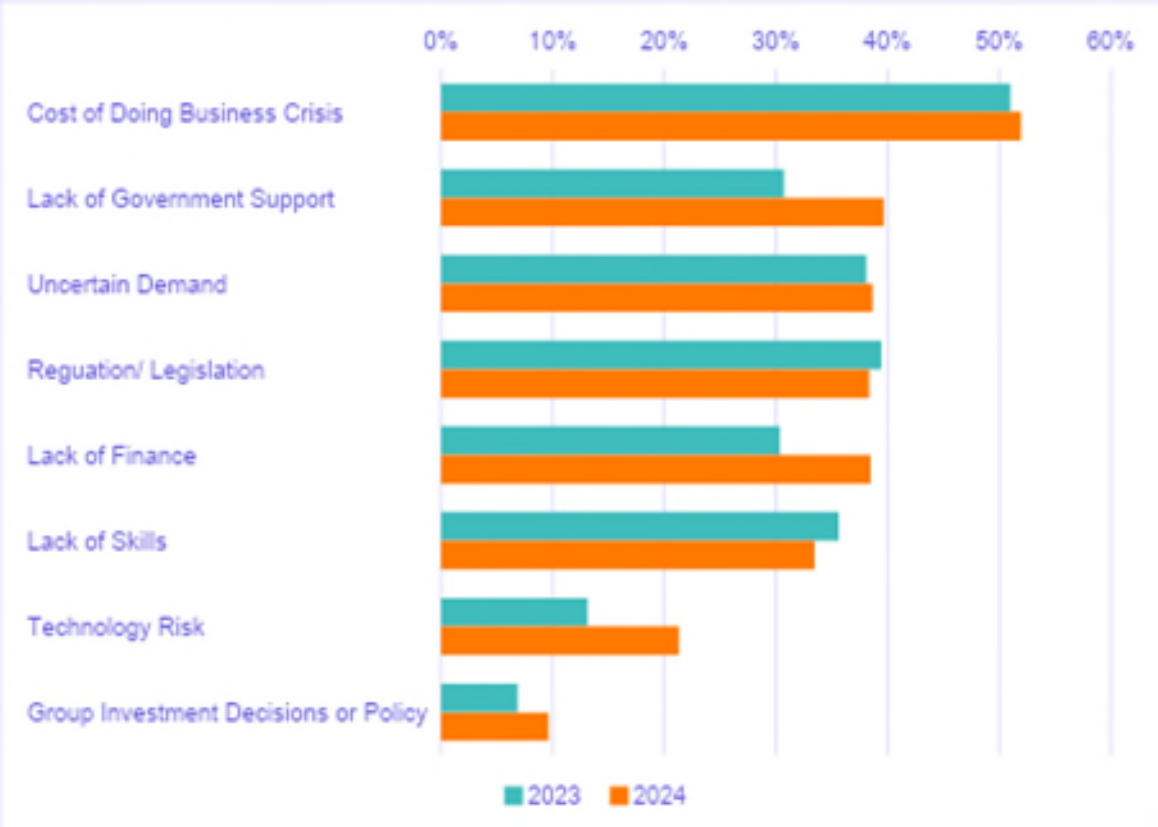
Table 8 provides a detailed breakdown of the barriers experienced by different groups of innovating firms. Interestingly, the proportion of innovating firms that reported barriers related to finance increased from 30% in 2023 to 38% in 2024. This trend is consistent among firms with less than 250 employees. Similarly, the proportion of frontier firms that reported financial barriers increased by 19% in 2024.

Figure 20: Proportion of Innovating Firms Experiencing Barriers to Their Innovation



(N, Y 2023 = 1,204; N, Y 2024 = 1,185)

Figure 21: Barriers to Innovation: All UK Innovating Firms



(N, Y 2023 = 1,204; N, Y 2024 = 1,185)

Table 8: Percentage of innovating firms experiencing different barriers to innovation

	Uncertain Demand		Technology Risk		Lack of Finance		Lack of Skills		Lack of Govt Support		Regulation/ Legislation		Cost of Doing Business		Group Investment Decisions or Policy	
	2023	2024	2023	2024	2023	2024	2023	2024	2023	2024	2023	2024	2023	2024	2023	2024
UK Average	38%	39%	13%	21%	30%	38%	36%	33%	31%	40%	39%	38%	51%	52%	7%	10%
North East	25%	36%	11%	21%	21%	41%	24%	32%	14%	59%	30%	56%	65%	37%	0%	2%
North West	27%	26%	10%	12%	33%	25%	36%	35%	21%	52%	42%	37%	49%	26%	4%	1%
Yorks & Humber	48%	25%	17%	21%	33%	46%	25%	35%	40%	31%	34%	60%	64%	71%	1%	9%
East Midlands	31%	46%	6%	33%	45%	38%	29%	46%	26%	39%	42%	30%	51%	67%	3%	24%
West Midlands	41%	32%	8%	25%	49%	28%	54%	24%	28%	25%	33%	20%	51%	39%	8%	1%
East of England	28%	53%	11%	38%	18%	39%	40%	22%	18%	45%	35%	41%	43%	62%	5%	18%
London	36%	40%	17%	16%	35%	33%	36%	24%	33%	29%	38%	30%	49%	52%	11%	16%
South East	48%	30%	17%	22%	23%	41%	33%	20%	24%	36%	36%	48%	55%	60%	10%	4%
South West	39%	49%	11%	13%	26%	41%	29%	58%	39%	43%	44%	38%	47%	39%	1%	12%
Scotland	63%	67%	12%	36%	36%	53%	32%	58%	47%	47%	42%	31%	45%	61%	0%	0%
Wales	36%	41%	24%	25%	20%	59%	44%	30%	39%	38%	46%	41%	69%	60%	1%	7%
Northern Ireland	18%	16%	1%	4%	22%	38%	39%	36%	76%	56%	65%	60%	50%	64%	29%	2%
Micro	43%	45%	10%	17%	32%	39%	29%	28%	36%	48%	39%	32%	52%	56%	4%	8%
Small	35%	35%	14%	24%	30%	39%	41%	39%	27%	36%	39%	42%	53%	50%	7%	8%
Medium	35%	36%	22%	23%	22%	39%	36%	26%	24%	28%	41%	46%	41%	46%	16%	23%
Large	26%	31%	25%	29%	21%	21%	38%	24%	26%	25%	40%	44%	26%	48%	17%	15%
Primary	47%	29%	9%	22%	32%	40%	57%	10%	47%	53%	60%	43%	38%	38%	2%	8%
Manufacturing	47%	48%	15%	25%	25%	29%	42%	42%	28%	44%	42%	52%	51%	51%	5%	6%
Construction	44%	29%	24%	23%	22%	26%	33%	27%	36%	32%	32%	43%	52%	30%	18%	17%
Retail/Distribution	47%	35%	9%	13%	24%	34%	23%	25%	35%	32%	46%	43%	58%	68%	3%	16%
Transport/Storage	42%	46%	16%	37%	16%	30%	33%	48%	40%	30%	47%	47%	45%	59%	3%	19%
Hotel/Catering	56%	43%	13%	12%	34%	29%	36%	32%	29%	43%	42%	28%	59%	60%	10%	0%
Finance	56%	23%	29%	26%	10%	28%	25%	33%	20%	28%	59%	51%	43%	35%	5%	9%
Business Services	26%	35%	22%	24%	35%	43%	40%	37%	28%	45%	31%	30%	36%	52%	3%	2%
Other Services	19%	41%	7%	27%	38%	52%	42%	37%	29%	40%	34%	38%	51%	44%	10%	17%
Non-Frontier	39%	40%	11%	20%	30%	33%	36%	32%	27%	38%	36%	39%	52%	53%	8%	8%
Frontier	36%	35%	17%	25%	32%	51%	35%	37%	40%	43%	47%	38%	50%	50%	4%	13%

(N, Y 2023 = 1,204; N, Y 2024 = 1,185)

4.2. Recruitment Barriers for Innovating Firms

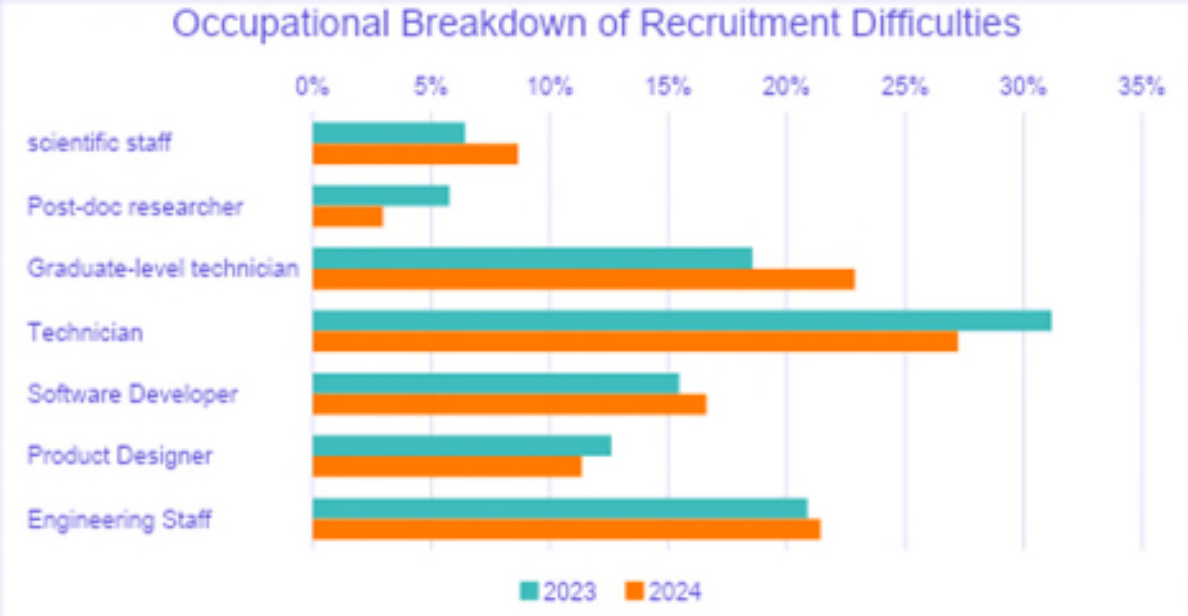
As part of the survey, firms were also asked whether, 'over the last year, your research and development or product/service development activities have been restricted by difficulties recruiting staff?'. Where firms had experienced recruitment difficulties, a follow-up question was asked about the specific occupational groups for which these difficulties had arisen. Overall, 32% of UK businesses indicated that recruitment issues had restricted their innovation activities in 2024, a decrease compared to 39% in 2023 (Figure 22). This decline in recruitment issues was particularly significant among medium firms with less than 250 employees and non-frontier firms.

Among those firms experiencing recruitment difficulties (which restricted their innovation activities), it was issues recruiting technicians (27%), graduate-level technicians (23%), and engineering staff (21%), which were more common both in 2023 and 2024 (Figure 23). Interestingly, there was an increasing issue of recruiting graduate-level technicians (increased by 4% in 2024), scientific staff (increased by 2% in 2024) and software developers (increased by 1% in 2024).

Figure 22: Proportion of Innovating Firms Experiencing Recruitment Difficulties

(N, Y 2023 = 1,030, N, Y 2024 = 987)
Note: Only half of the survey respondents were asked this question due to interview restrictions.

Figure 23: Occupational Breakdown of Recruitment Difficulties



(N, Y 2023 = 1,030, N, Y 2024 = 987)

Note: Only half of the survey respondents were asked this question due to interview restrictions.

4.3. Barriers for Non-Innovating Firms

The ISNS survey asked non-innovators why they were not introducing new products, services, etc. (Table 9). Over the past two years, the most common reasons for not undertaking innovation relate to adequate profitability (44% in 2023 and 42% in 2024) and uncertain demand (43% in 2023 and 41% in 2024). Interestingly, a more significant proportion of non-innovating firms reported barriers to innovation due to lack of finance, government support, and regulation/legislation in 2024 than in 2023. This trend is consistent across firms' sizes, except micro-firms. For instance, the proportion of small, medium, and large firms that reported barriers related to government support increased by 9%-12% in 2024. Similarly, non-innovating frontier firms reported more obstacles related to lack of government support, rising from 44% in 2023 to 55% in 2024.

Table 9: Percentage of non-innovating firms experiencing different barriers to innovation

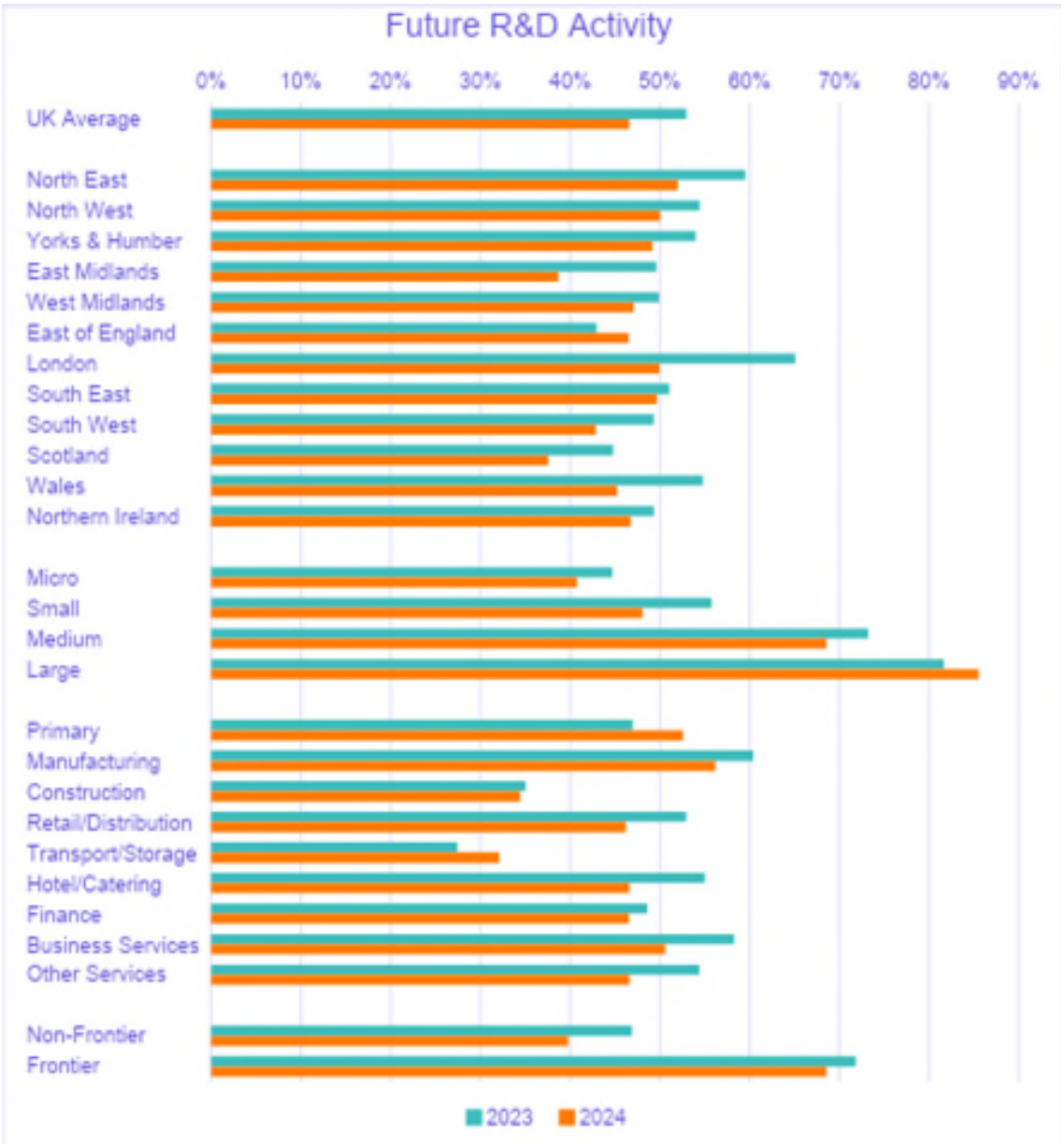
	Making sufficient profit		Uncertain Demand		Lack of Finance		Lack of Skills		Lack of Government Support		Regulation/Legislation	
	2023	2024	2023	2024	2023	2024	2023	2024	2023	2024	2023	2024
UK Average	44%	42%	43%	41%	30%	34%	25%	25%	32%	35%	30%	35%
Micro	49%	42%	41%	43%	34%	33%	27%	26%	32%	29%	28%	30%
Small	38%	41%	38%	42%	26%	32%	20%	24%	31%	40%	34%	40%
Medium	46%	43%	60%	37%	31%	39%	21%	34%	35%	45%	27%	39%
Large	64%	60%	44%	64%	36%	41%	47%	36%	40%	53%	35%	44%
Non-Frontier	43%	41%	44%	41%	28%	35%	23%	25%	30%	31%	28%	34%
Frontier	53%	45%	35%	38%	37%	29%	26%	27%	44%	55%	40%	42%

(N, Y 2023 = 789, N, Y 2024 = 795)

5. FUTURE INNOVATION SUPPORT

The ISNS includes questions about firms' R&D investment intentions over the next 12 months and their anticipated support needs. Overall, 47% of UK firms plan to invest in R&D over the next 12 months, a decreased proportion compared to 53% in 2023 (Figure 24). This declining trend was particularly significant in smaller firms and non-frontier firms. Despite regional variance, investment intentions seem weaker among London and East Midlands firms. Similarly, there was less intention for R&D investment among firms in the hotel/catering and business services sector.

Figure 24: Future R&D Activity



(N, Y 2023 = 2,018; N, Y 2024 = 2,000)

Reflecting the lower innovation activity among UK businesses in 2024 and less intention for R&D investment for the next 12 months, we might anticipate an increasing need for external advice support and innovation support.

As part of the survey, firms were asked about the types of external advice required for the next 12 months. Unsurprisingly, a smaller proportion of firms reported being not likely to seek any advice or support, suggesting that more firms would seek external advice over the next year (Table 10). More firms plan to pursue business development support (14%) than those seeking product/service development support (10%) in the next 12 months.

A need for business development support is more common among firms in London (27%), while product /service development support will be required among firms in the North West (16%) for the next 12 months. Meanwhile, there is an increasing need for both business development and product/service development among firms in the Yorks & Humber, i.e., increased by 13% compared to last year's needs. There are also different preferences across firm sizes. Large firms reported seeking more product/service development support, while smaller firms reported being likely to seek more business development support over the next year.

Apart from the types of external advice support, the ISNS also asked firms that plan to engage in R&D investment how helpful various types of innovation support would be over the next 12 months. Firms reported an increased need for innovation support over the next 12 months (Table 11). For instance, the proportion of firms reporting the value of innovation loans increased from 17% in 2023 to 30% in 2024, which is most notable among large and frontier firms. Similarly, firms reported more than a 20% increase in the value attached to R&D grants, R&D tax credits, IP support, marketing/export support, strategy advice, and finding innovation partners in 2024.

Table 10: The Likelihood that Firms will Seek External Advice in the Future

	Business Development		Product/Service Development		Both Business Development and Product/Service Development		Not Likely to Seek Support	
	2023	2024	2023	2024	2023	2024	2023	2024
UK Average	13%	14%	11%	10%	21%	22%	55%	54%
North East	8%	15%	4%	10%	28%	27%	61%	48%
North West	19%	16%	7%	16%	24%	17%	51%	51%
Yorks & Humber	14%	9%	8%	9%	17%	30%	62%	52%
East Midlands	9%	19%	13%	9%	15%	17%	63%	56%
West Midlands	16%	12%	16%	6%	21%	21%	47%	60%
East of England	12%	10%	11%	7%	19%	25%	58%	58%
London	14%	27%	18%	11%	24%	20%	44%	42%
South East	13%	19%	7%	9%	17%	21%	63%	52%
South West	8%	11%	8%	11%	18%	13%	66%	64%
Scotland	13%	9%	7%	7%	26%	27%	55%	57%
Wales	12%	7%	15%	10%	30%	22%	43%	61%
Northern Ireland	10%	9%	8%	6%	34%	28%	48%	57%
Micro	12%	13%	8%	6%	18%	20%	61%	61%
Small	12%	16%	11%	11%	23%	22%	54%	51%
Medium	21%	22%	20%	18%	24%	24%	35%	36%
Large	20%	17%	29%	25%	27%	33%	23%	25%
Primary	9%	14%	8%	11%	32%	30%	51%	45%
Manufacturing	10%	13%	8%	9%	21%	20%	60%	57%
Construction	10%	12%	6%	9%	17%	20%	68%	59%
Retail/Distribution	14%	20%	9%	9%	15%	18%	61%	53%
Transport/Storage	5%	12%	8%	8%	15%	18%	72%	62%
Hotel/Catering	12%	14%	11%	11%	25%	18%	52%	57%
Finance	18%	17%	24%	15%	24%	23%	34%	44%
Business Services	15%	14%	11%	7%	24%	25%	50%	54%
Other Services	14%	14%	13%	11%	22%	24%	51%	51%
Non-Frontier	12%	14%	10%	7%	21%	21%	58%	58%
Frontier	16%	17%	14%	17%	22%	22%	48%	44%

(N, Y 2023 = 2,018; N, Y 2024 = 2,000)

Table 11: The Value of Different Types of Innovation Support for the year ahead

	Innovation Loans		R&D Grants		R&D Tax Credits		IP Support		Marketing/Export Support		Strategy Advice		Finding Innovation Partners	
	2023	2024	2023	2024	2023	2024	2023	2024	2023	2024	2023	2024	2023	2024
UK Average	17%	30%	27%	52%	27%	47%	13%	35%	19%	42%	17%	41%	12%	32%
Micro	19%	27%	32%	54%	31%	47%	12%	31%	22%	37%	17%	37%	12%	20%
Small	16%	28%	26%	49%	27%	45%	13%	36%	17%	41%	17%	39%	12%	37%
Medium	15%	40%	22%	61%	21%	54%	15%	42%	14%	53%	14%	54%	8%	50%
Large	18%	40%	7%	60%	7%	59%	12%	52%	11%	61%	9%	63%	8%	57%
Non-Frontier	18%	27%	26%	52%	25%	42%	12%	30%	20%	40%	19%	39%	12%	29%
Frontier	15%	34%	31%	54%	31%	56%	16%	42%	16%	44%	13%	44%	10%	39%

(N, Y 2023 = 1,068, N, Y 2024 = 1,010)

APPENDIX 1:

The Innovation State of the National Survey 2023 and 2024

A1.1 Survey Overview

The Innovation State of the Nation Survey (ISNS) provides insight into firms' current innovation activities, challenges, and their R&D and innovation plans. The ISNS was conducted using a combination of Computer-Assisted Telephone Interviewing (CATI) and an online B2B panel, resulting in 2,018 observations for the wave of 2023 and 2,001 observations for the wave of 2024. Firms were included in the survey if they had more than five employees and were not part of the public sector or a not-for-profit company.

Both ISNS 2023 and ISNS 2024 include companies from 12 UK regions (North East, North West, Yorks & Humber, East Midlands, West Midlands, East of England, London, South East, South West, Scotland, Wales, and Northern Ireland, nine broad sectors (SIC codes: ABDE, C, F, G, H, I, K, JLM, NPQRS), and four firm size bands (5-9,10-49, 50-249, 250+ employees). Table A1.1 provides an overview of the achieved responses. In the analysis, observations are weighted by size and sector to provide representative coverage of the UK, industries and size bands.

A1.2 Profiling Respondent Firms

The survey includes questions about the length of time the business has been operating. Figure A2.1 provides an overview of the average number of years the respondent has been operating. Respondents have been operating for an average of 16 years for both surveys. In addition, the survey asks whether businesses have customers outside the UK to reflect exporting activity. Figure A.2.2 provides an overview of the proportion of exports in both surveys and suggests that 42% of respondents in the 2023 survey and 39% of respondents in the 2024 survey are exporters.

We also distinguish between frontiers and non-frontier firms based on whether they are leading their sectors in terms of technology. As part of the survey, respondents were asked, 'Thinking about how your firm compares to your main UK competitors. How strongly do you agree, 'We are often the first to introduce innovative products or services.' Where a respondent strongly agreed with this statement, we classify their firm as a 'frontier' company; all other firms are classified as non-frontier. Figure A.2.3 provides an overview of the proportion of firms classified as frontier. Overall, the proportion of frontier firms was 23% and 24% in the 2024 and 2023 surveys, respectively.

The survey also includes questions on gender and ethnic minority diversity. Firms were asked, 'How many of the people who manage the business are women?' to represent gender diversity in managerial function. Firms were also asked, 'How many of the people who manage the business are from ethnic minority groups' to reflect on ethnic diversity in managerial function. Figure A.2.4. provides an overview of the proportion of firms with women involved in management and suggests that only 9-10% of respondent firms involved women in their management. Interestingly, large firms have fewer women involved (i.e., 1% of firms), while micro-firms have more participation by women (i.e., around 12% of firms). Meanwhile, Figure A.2.5. provides an overview of the proportion of firms with ethnic minorities involved in management. Overall, the proportion of respondent firms that had ethnic minorities involved in the management has doubled from 3% in 2023 to 6% in 2024.

Table A.1.1: Achieved responses by employment size band

	ISNS Wave 2023					ISNS Wave 2024				
	Micro 5-9	Small 10-49	Medium 50-249	Large 250+	Total	Micro 5-9	Small 10-49	Medium 50-249	Large 250+	Total
Agriculture/Mining/Energy (A B D E)	48	62	23	10	143	47	45	20	15	127
Manufacturing (C)	199	303	97	59	658	150	257	112	63	582
Construction (F)	38	74	33	14	159	70	94	31	22	217
Retail/Distribution (G)	65	88	35	29	217	53	65	28	28	174
Transport/Storage (H)	20	72	24	17	133	40	54	35	26	155
Hotel/Catering (I)	34	75	31	15	155	34	68	33	20	155
Finance (K)	34	47	35	32	148	45	72	24	25	166
Property/Business Services	67	120	50	46	283	88	112	41	26	267
Other Services (N P Q..	29	59	17	16	121	38	65	30	24	157
Total	534	900	345	238	2,017	565	832	354	249	2000

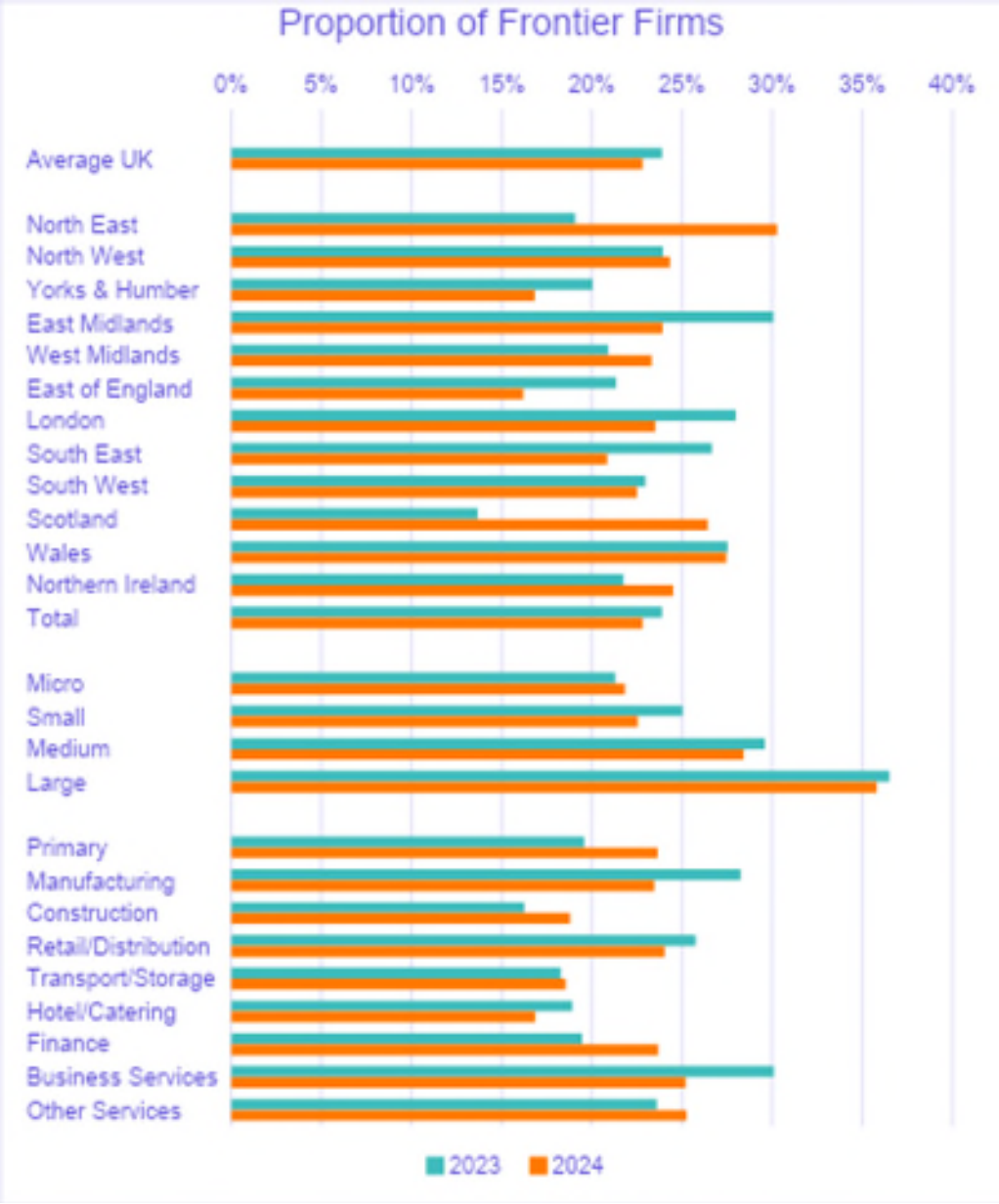
Figure A.2.1: Average Years the Respondents Have Been Operating

(N, Y 2023 = 2,018; N, Y 2024 = 2,000)

Figure A.2.2: Proportion of Exporters

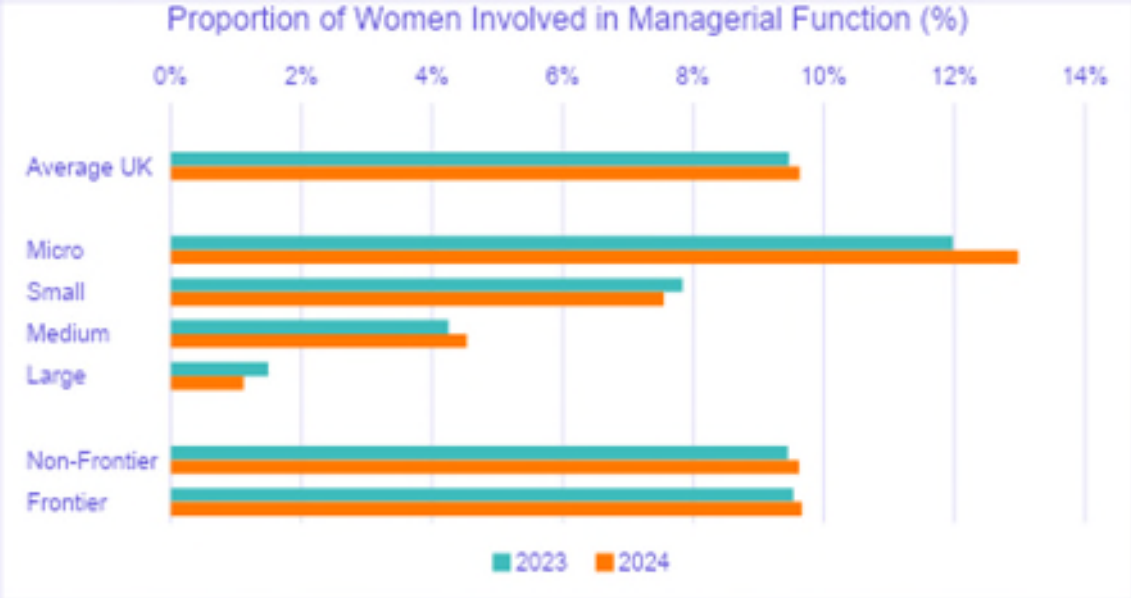
(N, Y 2023 = 2,018; N, Y 2024 = 2,000)

Figure A.2.3: Proportion of Frontier Firms



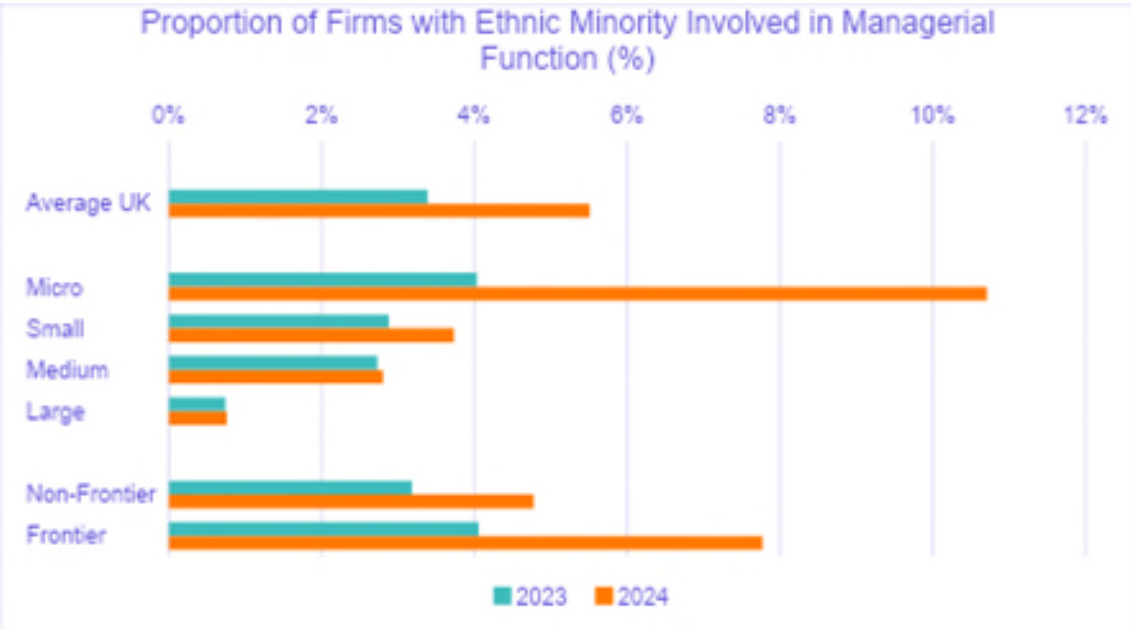
(N, Y 2023 = 2,018; N, Y 2024 = 2,000)

Figure A.2.4: Proportion of Firms with Women Involved in Managerial Functions



(N, Y 2023 = 2,018; N, Y 2024 = 2,000)

Figure A.2.5: Proportion of Firms with Ethnic Minority Involved in Managerial Function



(N, Y 2023 = 2,018; N, Y 2024 = 2,000)

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