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The State of Innovation 2024

WHAT LIFE WAS LIKE FOR INNOVATING BUSINESSES

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A portrait of UK innovation in 2024

FOREWORD

Dr Stella Peace Interim Executive Chair, Innovate UK We are a nation of innovators, driven by bold and ambitious businesses tackling the pressing challenges our society faces. Driven by the opportunity to create a better future.

This report provides valuable insights into businesses' innovation experiences over recent years and their outlook for the future. It is essential reading for stakeholders across the innovation ecosystem, including businesses, government, investors, lenders and academic institutions.

To compile this report, Innovate UK commissioned a survey of over 2,000 businesses spanning every region and devolved nation in the UK. Our sample is geographically representative and representative of all sizes and sectors. Through this we are recognising the crucial role that micro, small and medium-sized enterprises play in driving innovation.

Within the pages of this report, we present the data and provide insights into the real experiences and perspectives of businesses. Our headline findings emphasise the immense value of innovation. Particularly noteworthy is that innovative businesses experienced sales growth **over three times** greater than those that did not innovate. This compelling evidence reinforces the positive impact of business-led innovation on growth and the importance of fostering a culture of innovation for economic progress and prosperity.

The business environment remains challenging. Recovery from the pandemic and cost increases have constrained some firms' innovation activity, particularly that of smaller firms. However, businesses are committed to innovation in the coming year, and to seeking support for it. The following pages offer additional insights on themes such as diversity, collaboration, funding and support.

At Innovate UK, we take these insights seriously. It is only by understanding the challenges and opportunities facing businesses that we can be part of creating the most beneficial environment for innovation. We commit – through our programmes, products and services – to build on these results: to help businesses succeed in the current environment and meet future opportunities.

The State of Innovation report will become a vital part of how we work together to help businesses achieve economic growth and develop the society we all want to see.



"This compelling evidence reinforces the positive impact of business-led innovation on growth and the importance of fostering a culture of innovation for economic progress and prosperity."

Dr Stella Peace Interim Executive Chair, Innovate UK

Key findings

What's life like for innovating businesses in 2024?

The State of Innovation 2024 report draws on the Innovation State of the Nation Survey, a major new initiative from Innovate UK that aims to provide the most up-to-date and comprehensive look at what life is really like for innovating businesses.

2,000

businesses surveyed, of all sizes, from every UK region and nation.

We encourage you to:



- Read, share and discuss the report
- Support, promote and get involved in innovation
- See how Innovate UK could help you at www.ukri.org/councils/ innovate-uk

Despite the recent economic challenges, innovation continues to be a strong driver of growth.



Businesses that innovated over the past year reported average sales growth (7%) over three times greater than other firms (2%).

Innovation levels in UK firms have declined in recent years. Stimulating more innovation is a priority to help deliver UK economic growth.

56%

of UK businesses reported making changes to products or services over the last year: a fall from 61% in 2023.



Innovation rates fell most in small, micro and non-frontier businesses, widening the gap with larger and frontier firms. Business innovation has been held back by a range of barriers. These need to be removed to unleash innovation.

46%

Almost half of innovating businesses reported factors had constrained their innovation activity.



Cost-of-doing-business pressures were consistently the most reported barrier in both 2023 and 2024.

People and collaboration drive research and development (R&D) and additional innovation will not be achieved without a skilled and connected workforce.



of businesses reported recruitment difficulties were restricting their innovation work.



of firms collaborated with other organisations for innovation over the last year – a decrease from 41% in 2023. Smaller businesses face greater barriers but are less likely to seek support or invest in innovation.



Micro businesses (39%) are nearly half as likely to seek external support as large businesses (75%).



Large businesses (86%) are twice as likely as micro businesses (41%) to invest in R&D over the next year.

Pressure on innovation may continue over the next year, but businesses report an increased demand for innovation support.



of those planning to innovate over the next year want to *maintain* or *increase* their spending on R&D and innovation.

The proportion of firms reporting that R&D grants would be useful to them over the next 12 months doubled from 27% in 2023 to 52% in 2024.

Introduction

Innovation is one of the key drivers of productivity growth, which in turn drives economic growth and improvements in living standards.

Given the macro challenges faced in recent years - the lasting shock of the COVID-19 pandemic, the changing relationship with Europe and the cost-of-living crisis – understanding the state of innovation has never been more important.

The State of Innovation 2024

report provides insights directly from UK businesses on key aspects of innovation. The report draws on recent business surveys – specifically the Innovation State of the Nation Surveys (ISNSs) from 2023 and 2024 - whilst also referring to longer-term trend data available from the UK Innovation Survey (UKIS). Together, these surveys provide a comprehensive and up-to-date view of innovation in the UK.

The ISNS is a major new annual survey of businesses of all sizes, from every region and nation of the UK, that asks about key aspects of innovation. It has been developed by Innovate UK, the Enterprise Research Centre and the Innovation & Research Caucus. The ISNS provides insight into firms' current innovation activities, challenges and innovation plans. The ISNS was piloted in early 2023, and between February and May 2024 the survey was repeated, providing two years of data each from over 2,000 businesses.

The survey included businesses if they had more than five employees and were not part of the public sector or a not-forprofit company. In each firm, information was provided by the member of the management team with lead responsibility for aspects of product/service or organisational innovation. It is important to highlight that these businesses were not those who have specifically had support from Innovate UK previously, but a broader representative sample of UK businesses.

Throughout this report, the results draw on comparisons between regions, sectors¹ and firm size bands.² In this report, firms are also split into frontier and nonfrontier firms.³ This notion helps to compare firms at the forefront of innovation in their industries versus those that are not.

The ISNS complements the UKIS⁴ and their results combine to provide a holistic view of UK innovation and ensure that both the long-term trends and latest developments are captured. The surveys also provide different lenses, looking at different themes and asking questions to different groups of businesses.

This report draws on these sources to present the headline findings of what businesses tell us about innovation in the UK in 2024.

Defining innovation

Innovation is a highly conceptual term and can be used to represent either an activity ('we are undertaking innovation') or an output from this activity ('we have a new innovation'). It can also be defined in other ways.

A key attribute of the ISNS is hearing directly from businesses, in their own words, what it is that they think of as innovation and what it means for their firm. Data from the ISNS 2023 illustrate the range in interpretations of the term 'innovation'.

For some firms, innovation is linked to new technologies and their application to reduce costs and improve efficiency.



Other companies stress the creation of added value for customers. enhancements to profitability, or the strategic value of innovation in terms of their position relative to competitors. For other firms, the meaning is simply not clear at all. The clearest common sentiment from responses is that innovation is about changing the business and its products and services for the better; however, the nature of that change is interpreted in a variety of different ways.

The questions used within the ISNS did not ask broadly about innovation but adopted more descriptive language about specific changes. As an annual survey, the ISNS data relate to firms' innovation activity over the previous year.

02 Innovation outcomes





Innovation outcomes

A look at the impacts of innovating

The ISNS data tell us that innovation has been an important priority for many businesses across the UK, despite macroeconomic conditions continuing to make it hard. Introductory questions were asked of all respondents, which helped provide a picture of the context in which businesses were operating, and of their experiences over the past two years. When looking at sales growth over the past year, in 2024, firms reported an average sales growth of 5%. This was slightly less than the 7% growth in 2023. We can also look at whether this change in performance is different for various groups of firms.

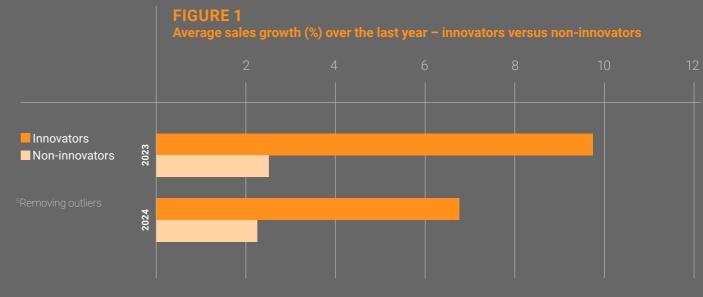
rowth of 2%.

Figure 1 summarises the mean reported sales growth⁵ over the past two years of innovating and non-innovating firms. In 2023, the sales growth of innovating firms was 10% compared to 3% for non-innovating firms. In 2024 it was 7% versus 2%, respectively. Overall, the findings suggest that innovation is strongly associated with higher sales growth.

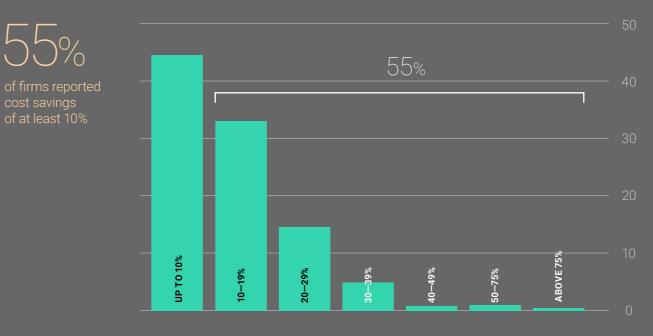
Another potential benefit innovation brings to businesses is the potential to drive efficiency

and reduce cost. To help understand this, one question in the ISNS asked businesses that reported undertaking process innovation over the last 12 months whether or not it had had any impact on costs. Data from 2023 and 2024 show a consistent pattern: over half of the firms that undertook process innovation identified that it led to cost savings. Of the firms that had experienced cost savings in 2024, 55% reported them to be of at least 10% (Figure 2).





cost savings of at least 10%



Cost saving achieved as a result of process innovation over the last year (percentage of firms that reported achieving cost reductions)

Innovation enablers





Investment in research and development

How have firms been investing in innovation?

Investing in research and development (R&D) and other innovation-related activities is critical to innovation success. Yet we know economic conditions have put significant financial pressure on businesses. In this section, we explore to what extent firms have been investing in innovation.

Overall, in 2024, 39% of UK firms reported engaging in some form of R&D activity over the last year, remaining stable from 2023. Generally, the smaller the business, the smaller the proportion of firms conducting R&D. Engagement was significantly greater among frontier firms (56%) and large firms (80%). By contrast, only 31% of micro businesses reported R&D investment activity, emphasising the gulf between large and smaller firms. Notably, between 2023 and 2024, the proportion of micro firms investing in R&D dropped by 3%, whereas all other firm sizes increased R&D investment or remained stable (Figure 3). 0 10 UK average 2023 2024 Business size 2023 2024 Firm type 2023 2024 MICRO SMALL MEDIUM LARGE FRONTIER

NON-FRONTIER

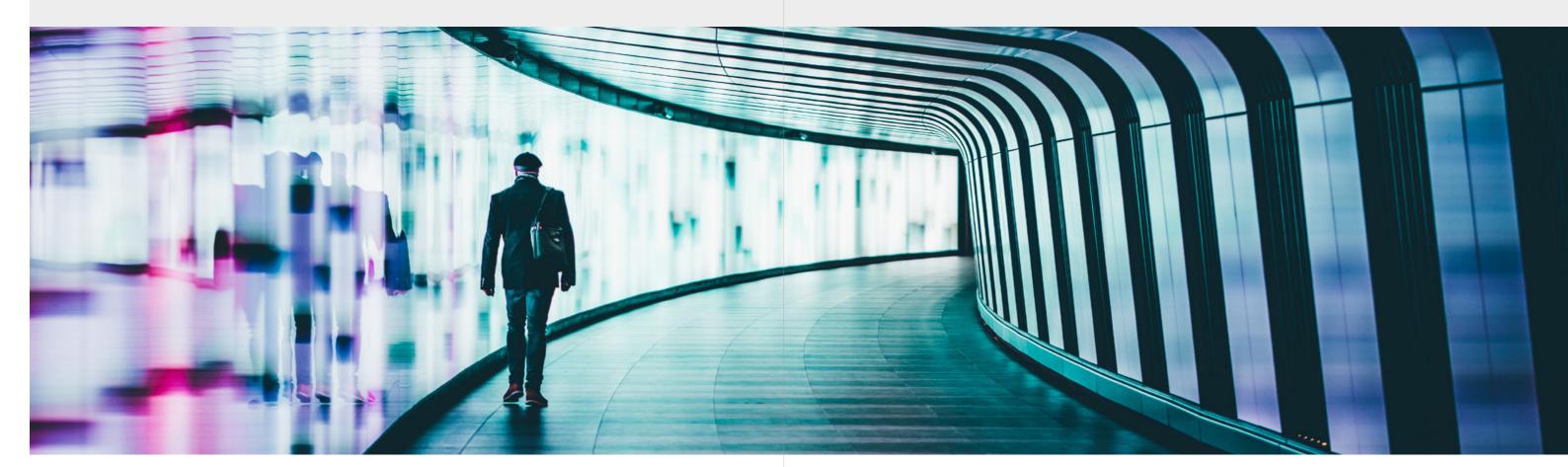
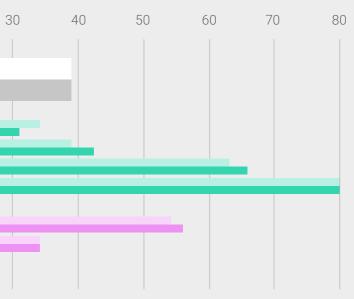


FIGURE 3 Percentage of firms investing in R&D activities over the last 12 months

20



Investment in research and development (continued)

How have firms been investing in innovation?

Firms were then asked about the specific investments they had made towards innovation. These cover a range of activities.

Frontier and larger firms were more involved in each area of innovation investment.

Around 56% of firms identified that they had purchased machinery, equipment or software within the last year. In addition, considerable numbers of firms reported investing in other elements to help with innovation: 42% of firms reported investment in training, 33% in new marketing arrangements and 29% in design activities. Lower proportions of firms invested in licensing of patents or know-how from others (8%) or market research (23%).

Frontier firms were more involved in each area of innovation investment, as were larger firms. Small and micro businesses were much less likely to be involved in licensing of patents (Figure 4).

Looking at changes between 2023 and 2024, overall, patterns and proportions were fairly consistent. Investment in innovation training saw the greatest overall change between 2023 and 2024, with a 4% increase.

However, looking solely at overall levels hides several notable nuances. For example, investment in machinery, equipment or software varied significantly by business size – micro firms saw a 1% decrease in investment between 2023 and 2024 whereas large firms reported a 13% increase.

The latest wave of the UKIS (2020–22) also reported decreases in the percentage of businesses investing in each innovation activity compared to the previous wave (2018–20). The largest decreases were in investments in computer hardware and software since the previous survey; however, these still remained the most common investment activities.6



FIGURE 4 Percentage of firms investing in different aspects of innovation within the past year (ISNS 2024)

	Purchase of machinery, equipment or software	Investment in innovation training	Investment in new marketing arrangements	Investment in product or service design	Investment in market research	Investment in patents/ licensing
UK AVERAGE	56	42	33	29	23	8
NORTHERN IRELAND	69	43	29	26	26	6
SCOTLAND	57	46	27	27	19	11
WALES	51	47	31	28	23	5
EAST MIDLANDS	54	35	37	24	15	
EAST OF ENGLAND	52	46	35	32	27	13
LONDON	63	45	38	35	28	
NORTH EAST	56	20	26	48	32	22
NORTH WEST	56	40	25	23	16	11
SOUTH EAST	50	43	43	27	22	5
SOUTH WEST	54	47	34	33	20	9
WEST MIDLANDS	55	36	30	17	32	5
YORKSHIRE & HUMBER	54	42	31	27	23	
FRONTIER	65	51	46	39	33	12
NON-FRONTIER	54	40	30	26	20	
MICRO	51	35	31	23	20	6
SMALL	58	47	35	32	24	8
MEDIUM	73	50	36	38	34	15
LARGE	79	56	43	44	43	23
PRIMARY	71	42	29	19	14	9
MANUFACTURING	65	37	37	41	21	8
CONSTRUCTION	58	46	29	24	20	6
RETAIL/DISTRIBUTION	59	34	32	25	23	12
TRANSPORT/STORAGE	57	42	23	21	20	7
HOTEL/CATERING	56	40	28	33	24	5
FINANCE	47	49	43	23	23	10
BUSINESS SERVICES	52	41	37	29	23	8
OTHER SERVICES	52	50	37	28	27	6



Funding What does innovation funding look like?

Understanding how businesses fund innovation activity is important if we are to increase the amount of innovation taking place, which is particularly relevant for funding organisations such as Innovate UK.

⁷https://www.gov.uk/ government/statistics/ uk-innovation-survey-2023-report/unitedkingdom-innovationsurvey-2023-report The ISNS found that by far the most common approach to funding research, development and innovation was internal funding by the business – something used by 7 out of 10 innovators. Other funding mechanisms were reported by smaller proportions of innovators, including R&D tax credits (12%), grants (10%), bank loans (7%), government loans (6%) and equity finance (3%).

Larger businesses clearly use a greater variety of innovation funding sources than smaller firms (Figure 5). Equity funding was unsurprisingly more common among medium and large firms, as well as frontier firms (7%) compared with non-frontier

FIGURE 5

Percentage of firms using various funding sources for innovation over the last year

firms (2%). R&D tax credits had the most even profile when looking across the range of different firm sizes.

Businesses accessing financial support for innovation may increase their capacity to innovate. Past data from the UKIS found that businesses that received financial support for innovation were more likely to experience increases in turnover and employment.⁷

Looking at 2023 against 2024, around one in five innovative firms reported seeking external funding **(Figure 6)**. The increased need for external financing was more significant for small firms and frontier firms. Note: Due to interview restrictions, only half of the survey respondents were asked this question, so sectoral and regional sample sizes here are small.

UK average

Business size

Firm type

2023 2024

2023 2024

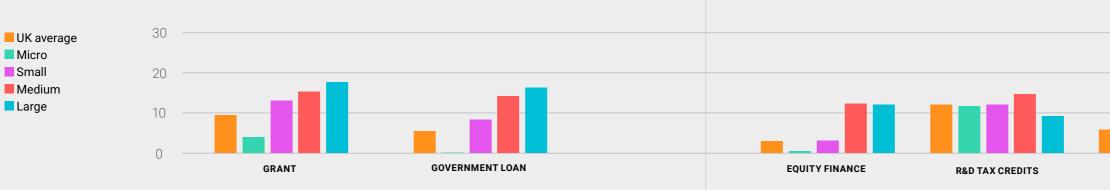
2023 2024

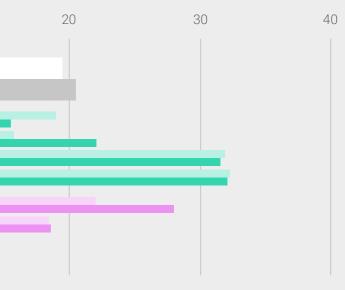
FIGURE 6 Percentage of firms seeking ext

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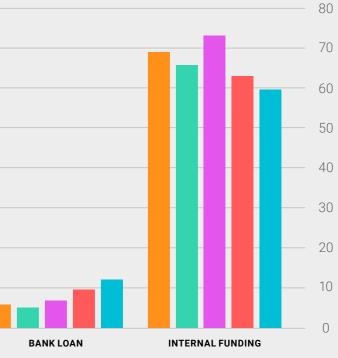
10 UK AVERAGE MICRO SMALL MEDIUM LARGE FRONTIER NON-FRONTIER







Percentage of firms seeking external funding over the last year



Collaboration

How have firms worked with others to innovate?

Collaboration in R&D and innovation has a range of benefits for businesses. Whether formal or informal, collaboration can help firms access new opportunities, reduce risks, share costs, and access skills and technologies. Connecting ideas, people and communities with both expertise and facilities is critical to driving positive change through innovation.

of firms reported collaborating with other organisations for innovation over the last year.

The work of Innovate UK Business Connect (formerly KTN), Catapults and programmes such as Knowledge Transfer Partnerships, plays a vital role in boosting collaboration.

As part of the ISNS, firms were asked about their collaboration with other external partners for innovation purposes. In 2024, overall, 39% reported collaborating with other organisations a decrease from 41% in 2023.

We see from **Figure 7** that the proportion of collaboration is highest amongst frontier and larger firms. By sector, we see higher collaboration rates in the finance sector, with some significant regional differences.

The decreasing trend between 2023 and 2024 was most significant among firms in the West Midlands and Yorkshire & Humber regions. And, whilst a 3% decrease in collaboration was reported by micro and non-frontier firms, collaboration activities increased by the same amount among frontier firms and large firms. Across the sectors there was a notable increase in collaboration activity among firms in the construction sector.

A detailed breakdown of collaboration by firm type is included in **Figure 8**. The results emphasise the relative importance of collaborations with suppliers, other businesses, clients and customers.

Levels of collaboration with universities, public laboratories and business support providers are much lower, though we can see patterns in the types of partner that certain firms collaborate with. For example, large and frontier firms have much higher engagement with universities.

Additional analysis of the collaboration data from ISNS 2023 by the Innovation & Research Caucus⁸ showed that increasing the collaboration levels of smaller firms to the levels seen in larger firms would potentially unlock a further 150,000 innovating businesses a sizeable opportunity.

Positively, comparing data between 2023 and 2024, there are signs of increasing linkages. In 2024, the percentage of micro firms and medium firms that collaborated with universities doubled. Similarly, an increased proportion of smaller firms reported collaborating with business support providers. The proportion of micro and small firms that collaborated with business support providers increased by 7% and 3% between 2023 and 2024, respectively.

UK average 2023 2024

Nation/region 2023 2024

Business size 2023 2024

Firm type ■ 2023 ■ 2024

Sector 2023 2024

FIGURE 7

0	20

UK AVERAGE

NORTHERN IR	ELAND
SCOTLAND	
WALES	
-	
EAST MIDLAN	DS
EAST OF ENGL	AND
LONDON	
NORTH EAST	
NORTH WEST	
SOUTH EAST	
SOUTH WEST	
WEST MIDLAN	IDS
YORKSHIRE &	
TURNSHIRE &	HUMBER
MICRO	
SMALL	
MEDIUM	
LARGE	
FRONTIER	
NON-FRONTIE	R
PRIMARY	
MANUFACTUR	RING
CONSTRUCTIO	DN
RETAIL/DISTR	IBUTION
TRANSPORT/S	STORAGE
HOTEL/CATER	ING
FINANCE	
BUSINESS SEI	RVICES
OTHER SERVI	CES





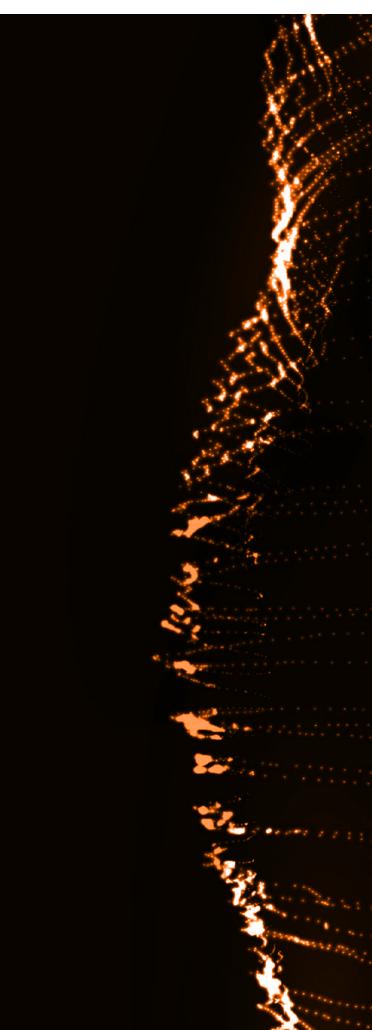


Collaboration (continued) How have firms worked with others to innovate?

FIGURE 8

Percentage of firms collaborating for innovation with various partners over the last year (ISNS 2024)

	Suppliers	Clients or customers	Other businesses	Consultants, commercial labs or private R&D institutes	Universities or other higher education institutions	Accelerator incubators or science parks	Technology hubs or innovation centres	Government or public research institutes	Business support providers
UK AVERAGE	43	30	39	17	9	4	13	9	10
NORTHERN IRELAND	39	22	35	18	14	0	9	9	12
SCOTLAND	42	34	45	15	9	2	6	19	7
WALES	42	34	27	26	16	5	12	27	22
EAST MIDLANDS	34	16	36	17	19	1	22	1	11
EAST OF ENGLAND	61	40	47	16	14	2	12	7	9
LONDON	35	31	41	17	5	6	14	2	9
NORTH EAST	44	52	40	14	13	14	32	30	38
NORTH WEST	41	29	31	23	8	10	11	4	6
SOUTH EAST	48	26	30	10	6	1	6	10	4
SOUTH WEST	38	32	57	10	1	2	16	19	7
WEST MIDLANDS	52	28	37	11	9	3	12	6	13
YORKSHIRE & HUMBER	67	41	54	27	24	9	9	2	9
FRONTIER	38	29	35	18	17	8	19	12	10
NON-FRONTIER	45	30	41	16	6	2	10	8	10
MICRO	41	25	46	13	9	0	10	6	9
SMALL	43	33	35	17	7	5	12	10	10
MEDIUM	51	36	35	24	21	13	25	16	13
LARGE	56	44	23	44	26	19	29	16	17
PRIMARY	43	29	31	23	14	9	15	3	5
MANUFACTURING	43	25	41	18	13	6	9	6	6
CONSTRUCTION	45	23	36	22	6	2	15	14	12
RETAIL/DISTRIBUTION	36	27	38	12	15	3	18	5	16
TRANSPORT/STORAGE	47	27	37	19	22	4	9	14	9
HOTEL/CATERING	55	46	34	20	4	4	17	13	21
FINANCE	37	27	41	30	9	8	17	7	16
BUSINESS SERVICES	41	28	41	20	9	3	15	7	8
OTHER SERVICES	45	32	43	10	7	6	4	14	3





External support

What advice have firms sought for innovation?

A range of innovation and business support measures are available to firms across the UK. Innovate UK is a key provider of financial support such as grants and loans to support R&D and innovation, as are other agencies in the devolved nations.



seeking some form of external advice over the past 12 months. Other types of support – such as business advice, leadership and management training – are available through schemes such as Innovate UK Business Growth (formerly EDGE). In this section, we provide a brief profile of firms' appetite for external advice over the past year.

Across the whole sample of UK firms, 35% reported seeking some form of external advice over the past 12 months. This proportion remained the same for both 2023 and 2024. Frontier firms, medium and large firms and those in the services and primary sectors were more likely to seek advice than smaller, non-frontier and transport and construction firms (Figure 9). Interestingly, between 2023 and 2024, there was a significant increase in the proportion of firms in the North East seeking external advice, compared to a significant decrease among firms in the West Midlands. Similarly, there was an 11% increase in the proportion of firms seeking external advice among firms in the construction sector but a 12% reduction among firms in the hotel/catering sector.



10

UK average 2023 ■ 2024

Nation/region 2023 2024

Business size

2023 2024

Firm type 2023 2024

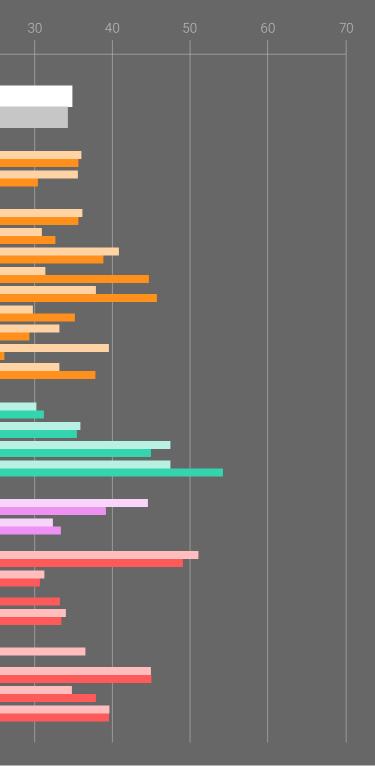
Sector 2023 2024

UK AVERAGE

FIGURE 9

NORTHERN IRELAND SCOTLAND WALES EAST MIDLANDS EAST OF ENGLAND LONDON NORTH EAST NORTH WEST SOUTH EAST SOUTH WEST WEST MIDLANDS YORKSHIRE & HUMBER MICRO SMALL MEDIUM LARGE FRONTIER NON-FRONTIER PRIMARY MANUFACTURING CONSTRUCTION **RETAIL/DISTRIBUTION** TRANSPORT/STORAGE HOTEL/CATERING FINANCE **BUSINESS SERVICES** OTHER SERVICES

Irms seeking external advice





People who innovate

Understanding the make-up of innovation teams

Skilled employees are a critical factor in delivering R&D and innovation. We also know that diversity in all its many forms matters. Diversity in businesses contributes to enhanced performance and commercial success.^{9,10,11}

19%

of businesses' innovation team members across the UK were from a minority ethnic group. A lack of information has often hindered the development of initiatives to address skills- and diversity-related issues, however, or made it difficult to benchmark and monitor progress. The ISNS provides, for the first time, a profile of the gender and ethnic composition of firms' innovation teams, and an overview of any innovation-specific recruitment challenges they have faced over the past year. Businesses were asked about the overall size and composition of their innovation teams, before questions went on to explore the proportion of women and people from minority ethnic groups in these teams.

On average, people from minority ethnic groups accounted for 19% of businesses' innovation teams in 2024 **(Figure 10)**. The proportion varies between different sizes of firms but is notably higher in larger firms. Overall, 42% of the members of innovation teams across the UK were women.



of innovation team members across the UK were women.

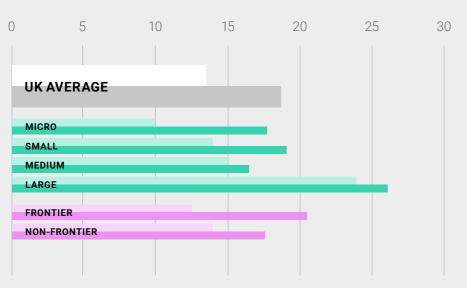
Note: Due to interview restrictions, only half of the survey respondents were asked this question, so sectoral and regional sample sizes here are small. UK AVERAGE

10

FIGURE 11

MICRO	
SMALL	
MEDIUM	
LARGE	
FRONTIER	
INONTIER	
NON-FRONTIER	

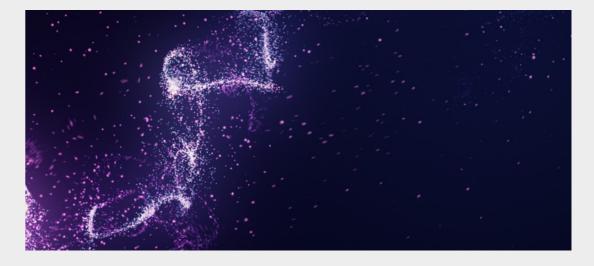
FIGURE 10 Average percentage of innovation team members who are from a minority ethnic group



^ahttps://www. enterpriseresearch. ac.uk/publications/ leadership-diversitybusiness-advice-andfirm-level-innovationoutcomes/

¹⁰https://www.mckinsey. com/featuredinsights/diversity-andinclusion/diversitywins-how-inclusionmatters

¹¹https://www.bcg.com/ publications/2018/ how-diverseleadership-teamsboost-innovation

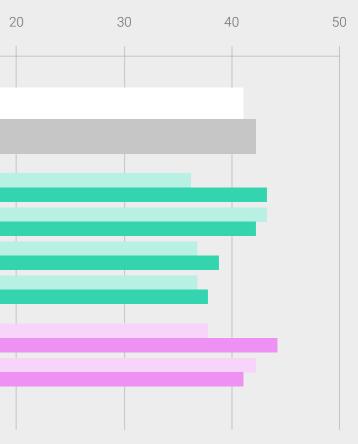


UK average 2023 2024

Business size 2023 2024

Firm type 2023 2024

For this analysis we include only those firms with more than five team members in their innovation teams and exclude the outliers.



Average percentage of the innovation team who are women

People who innovate Finding the talent for innovation

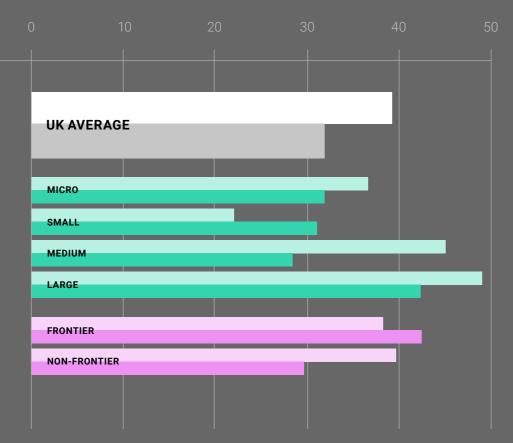
We were interested in hearing firms' experiences around recruitment and if this had limited innovation activity. Across the UK, 33% of businesses said recruitment issues had restricted their innovation activities over the previous year. This was more common in large firms (42%) than in micro firms (33%).

1 in 3 firms saw recruitment difficulties restrict their innovation.

We have also identified specific occupational groups for which recruitment challenges were most intense. Among those experiencing innovation-related recruitment difficulties, the most common

issues were with recruiting technicians (27%), graduate-level technicians (23%), engineering staff (21%) and software developers (17%) **(Figure 12)**.

FIGURE 12 Proportion of innovating firms experiencing recruitment difficulties





Note: Due to interview restrictions, only half of the survey respondents were aske this question, so secto and regional sample sizes here are small.

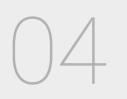
UK average 2023 2024

Business size 2023 2024

Firm type ■ 2023 ■ 2024

Innovation barriers





Barriers to innovation

What barriers have been holding innovators back over the past year?

In order to unleash the UK's untapped innovation potential, it is important to understand what is holding firms back. In 2024, just under half of all innovating firms (46%) reported factors that had constrained their innovation activities over the last year. Positively, this was a decrease from 52% of firms in 2023. Perhaps surprisingly, the decrease was greatest among micro businesses and non-frontier firms.

of innovating firms reported their innovation activities over the last year had been constrained. For those firms experiencing barriers, the cost-of-doing-business crisis was the most reported challenge in 2024 (52%) and 2023 (51%). Other factors playing a significant role in constraining innovation in 2024 were uncertain demand (39%), lack of finance (38%), lack of government support (40%), regulations and legislation (38%) and lack of skills (33%) - see Figure 13. Between 2023 and 2024, there were notable increases in the proportions of innovating firms that reported barriers due to lack of finance, lack of government support and technology risk, whereas lack of skills and regulations/legislation were two barriers that saw modest decreases.

Figure 14 provides a detailed breakdown of the barriers experienced by different groups of innovating firms in 2024. The pattern is varied.

For example, while some of these barriers affect firms relatively equally, such as the cost of doing business, others are far more prominent for smaller firms, including the lack of finance, uncertainty around demand and lack of government support.

Looking at longer-term data from the UKIS, we see that barriers to innovation have generally been expanding and deepening since comparable data began in 2014–16. Constraints around availability and cost of finance, lack of qualified personnel, regulations and demand uncertainty have all seen higher proportions of firms experiencing them in the latest survey wave (2020-22).

FIGURE 13

Most commonly reported barriers constraining innovation (percentage of innovating firms that had experienced barriers)

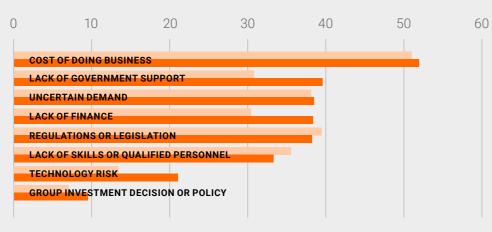


FIGURE 14 Percentage of innovating firms reporting specific barriers (ISNS 2024)

	Cost of doing business	Lack of government support	Uncertain demand	Lack of finance	Regulations or legislation	Lack of skills or qualified personnel	Technology risk	Group investment decision or policy
UK AVERAGE	52	40	39	38	38	33	21	10
NORTHERN IRELAND	64	56	16	38	60	38	4	2
SCOTLAND	61	47	67	53	31	58	36	0
WALES	60	38	41	59	41	30	25	7
EAST MIDLANDS	67	39	46	38	30	46	33	24
EAST OF ENGLAND	62	45	53	39	41	22	38	18
LONDON	52	29	40	33	30	24	16	16
NORTH EAST	37	59	36	41	56	32	21	2
NORTH WEST	26	52	26	25	37	35	12	1
SOUTH EAST	60	36	30	41	48	20	22	4
SOUTH WEST	39	43	49	41	38	58	13	12
WEST MIDLANDS	39	25	32	28	20	24	25	1
YORKSHIRE & HUMBER	71	31	25	46	60	35	21	9
MICRO	56	48	45	39	32	28	17	8
SMALL	50	36	35	39	42	39	24	8
MEDIUM	46	28	36	39	46	28	23	23
LARGE	48	25	31	21	44	24	29	15
FRONTIER	50	43	35	51	38	37	25	13
NON-FRONTIER	53	38	40	33	39	32	20	8
PRIMARY	38	53	29	40	43	10	22	8
MANUFACTURING	51	44	48	29	52	42	25	б
CONSTRUCTION	30	32	29	26	43	27	23	17
RETAIL/DISTRIBUTION	68	32	35	34	43	25	13	16
TRANSPORT/STORAGE	59	30	46	30	47	48	37	19
HOTEL/CATERING	60	43	43	29	28	32	12	0
FINANCE	35	28	23	28	51	33	26	9
BUSINESS SERVICES	52	45	35	43	30	37	24	2
OTHER SERVICES	44	40	41	52	38	37	27	17

The ISNS also asked businesses that had *not* undertaken any innovation within the last year (i.e. non-innovators) what their reasons were for not innovating. The most cited reasons were

related to already making sufficient profit (42%) and uncertainty over the demand for innovation (41%). Lack of finance (34%) or skills (25%) were less commonly cited as barriers to non-innovators.

2023 2024

Innovation activity

The innovation activities of firms can be grouped into three commonly used categories: product or service changes, process changes, or changes to the way the firm does business (organisational innovation). These three types of innovation are the focus of this section.

Product innovation

A review of product innovation

of businesses reported making changes to their products or services within the last year.

Looking first at product innovation, overall, in 2024, 56% of UK businesses reported product or service changes in the ISNS. This is a fall from 61% in 2023 (Figure 15). The data also show how the likelihood of innovating increases consistently with firm size and is notably lower in smaller businesses.

Perhaps most concerning, given their significant contribution to the economy,¹² is that innovation rates fell most in small and micro businesses between 2023 and 2024. Both micro and small businesses saw a decrease of innovation activity by at least 4%, whereas large firms saw a fall of just 0.4%.

Levels of innovative activity also vary markedly by region. While most regions in the UK experienced declines in innovation activity, there was a positive trend in innovation activity in the North East and Yorkshire & Humber. Similarly, levels of innovation activity also vary by sector, with the highest increases between 2023 and 2024 being in the primary industries, and the largest falls in the 'other services' sector.

We also see that there was a decrease in innovation levels across both frontier and non-frontier firms between 2023 and 2024.

Whilst not directly comparable due to differing definitions, data from the UKIS also highlight a longer-term decreasing trend in the proportion of firms undertaking innovation, reducing from 53% of firms in 2012-14 to 36% in 2020–22. Also mirrored in the UKIS data is the finding that innovation levels have decreased to a greater extent amongst smaller businesses when compared to large ones.

Of course, it is important to remember the broader context here. The UK is considered an innovation leader, having consistently ranked in the top five countries in the Global Innovation Index, produced annually by the World Intellectual Property Organization. In 2024, the UK ranked fifth out of 133 countries measured, and third among the economies in Europe.¹

Within this type of innovation, in 2024, a greater proportion of businesses reported undertaking a mix of both product and service innovation (26%), compared with those that focus on just product innovation (15%) or just service innovation (16%). Larger firms were more likely to be undertaking both types of innovation. By sector, we see both manufacturing and retail focusing on product innovation, while service-based industries had a stronger service innovation focus.

Comparing 2023 and 2024, there was an increased proportion of firms that reported undertaking just service innovation. The proportion of firms undertaking just product innovation and both product and service innovation decreased between 2023 and 2024.

UK average 2023 2024

Nation/region

Business size 2023 2024

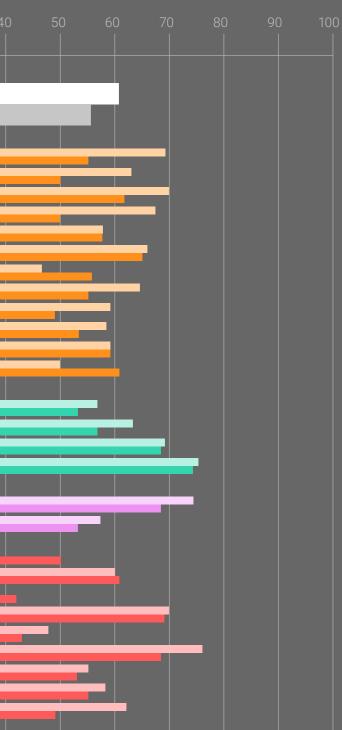
Firm type 2023 2024

Sector 2023 2024

Percentage of firms that reported making chan to their products or services within the last yea

UK AVERAGE

NORTHERN IRELAND
SCOTLAND
WALES
EAST MIDLANDS
EAST OF ENGLAND
LONDON
NORTHEAST
NORTHWEST
SOUTHEAST
SOUTH WEST
WEST MIDLANDS
YORKSHIRE & HUMBER
MICRO
SMALL
MEDIUM
LARGE
FRONTIER
NON-FRONTIER
PRIMARY
MANUFACTURING
CONSTRUCTION
RETAIL/DISTRIBUTION
TRANSPORT/STORAGE
HOTEL/CATERING
FINANCE
BUSINESS SERVICES
OTHER SERVICES





Process innovation A look at process innovation

of businesses reported undertaking process innovation within the last year.

Another key dimension of innovation, reflected in the definitions provided by responding businesses, relates to process innovation: in other words, improving the methods used to produce or deliver things.

Of the firms surveyed in 2024, 41% reported carrying out process innovation (Figure 16). Rates of process innovation were again higher among frontier firms and larger companies, and higher in a range of service sectors. Interestingly, there are differences in the sectoral and regional patterns for process innovation when comparing with those seen previously in the profile of product/ service innovation (Figure 15).

As seen with product innovation, the proportion of firms introducing process innovations also decreased, from

46% in 2023 to 41% in 2024; and declining rates of process innovation were notably higher for micro businesses (42% in 2023 and 34% in 2024). Whilst frontier businesses maintained similar levels of process innovation between 2023 and 2024, there was a 6% drop reported in nonfrontier firms. There were also mixed patterns with regard to regional and sectoral breakdowns.

Research shows that different types of innovation lead to different have a role to play in influencing business performance and economic growth.¹⁵ Of course, they are not necessarily mutually exclusive; for example, developing a new product may itself require a new process.

UK average 2023 2024 Nation/region 2023 2024

Business size 2023 2024

Firm type ■ 2023 ■ 2024

Sector 2023 2024

FIGURE 16 Percentage of firms that reported undertaking process innovation within the last year

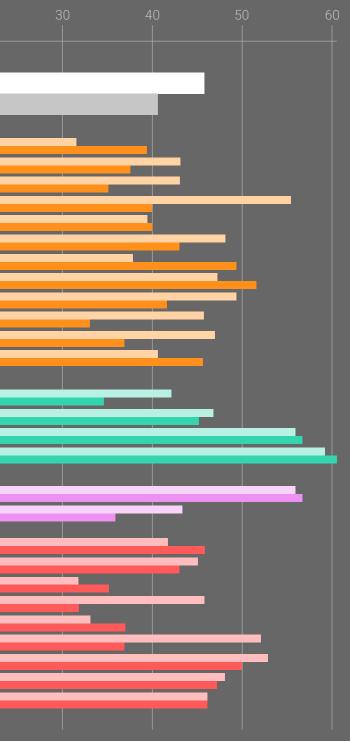
0	20

UK AVERAGE

NORTHERN IRELA	ND
SCOTLAND	
WALES	
EAST MIDLANDS	
EAST OF ENGLAND)
LONDON	
NORTH EAST	
NORTH WEST	
SOUTH EAST	
SOUTH WEST	
WEST MIDLANDS	
YORKSHIRE & HUN	IRED
TORKSHIRE & HOW	
MIODO	
MICRO	
SMALL	
MEDIUM	
LARGE	
FRONTIER	
NON-FRONTIER	
PRIMARY	
MANUFACTURING	
CONSTRUCTION	
RETAIL/DISTRIBUT	FION
TRANSPORT/STOP	AGE
HOTEL/CATERING	
FINANCE	
BUSINESS SERVIC	ES
OTHER SERVICES	









Organisational innovation

Understanding organisational innovation

Organisational innovations were generally more common amongst large and frontier businesses.

The ISNS also asked businesses about a broader range of organisational changes to business practices: the organisation of work, external relationships and how they strategically market themselves.

Overall, in 2024, 36% of firms reported changes in how they organise work and decisionmaking, 38% reported changes in their marketing strategies, 29% reported changes in their business practices, and 20% reported changes in their external relationships.

The proportion of firms that undertook changes in work organisation, business practice and organisation of external relationships reduced by 3%, 2% and 1% respectively between 2023 and 2024. Meanwhile, the proportion of firms that undertook changes in marketing strategies increased by 3% (Figure 17). Notably, these organisational innovations were more common among frontier and large businesses, whilst the increase in marketing innovation was driven by micro, small and non-frontier firms.

On average, innovating firms undertook at least 2 different types of innovation in 2024.

Innovation types Understanding the different types of innovation

One way of summarising the overall picture of innovation activity within firms is to consider the range of innovation types being undertaken. Here, we consider the six different forms of innovation measured in the ISNSs from 2023 and 2024 (i.e. product/service, process, business practices, work organisation, organising external relationships, and marketing strategies) and look at how many types of innovation are undertaken by each firm.

Here, firms undertaking no innovation of any type would score a value of 0, firms that were undertaking all types of

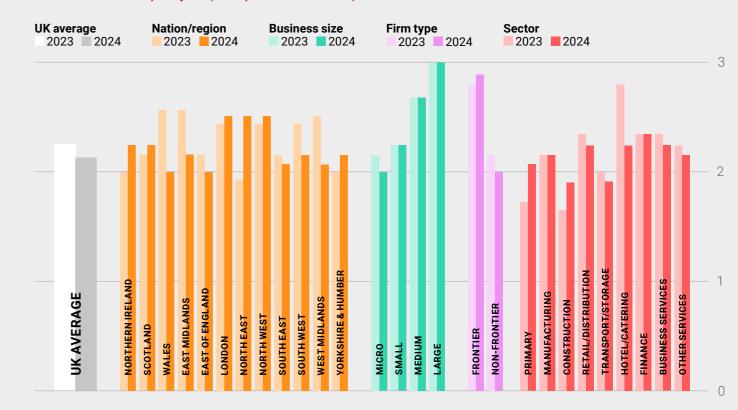
FIGURE 17

Percentage of firms that reported having undertaken organisational innovation within the last year



FIGURE 18

Average number of types of innovation that firms undertook over the past year (max. possible score = 6)



innovation in the past year would score 6. Overall, the average score has decreased slightly from 2.3 in 2023 to 2.2 in 2024 (Figure 18). This means that the average firm now engages in 2.2 types of innovation. This decrease is most notable for micro businesses and non-frontier businesses, whose scores decreased from 2.2 in 2023 to 2.0 in 2024. Interestingly, there has been a notable increase in innovation breadth in the North East (1.9 in 2023 to 2.5 in 2024), but a decrease in Wales (2.6 in 2023 to 2.0 in 2024). Firms in the primary and construction sectors experienced the greatest increase in innovation breadth, whilst the hotels/catering sector recorded a decrease of 0.5.

Innovation intentions



Investing in future innovation

The year ahead for UK businesses' innovation plans

In this final section, we share what businesses told us about their innovation and investment intentions over the next 12 months. As the survey is repeated in future years, questions about R&D investment intentions will become a key barometer for gauging the outlook of UK firms.

Overall, 47% of UK firms plan to invest in R&D over the next 12 months: a decreased proportion compared to 53% in 2023. This suggests a continuing pressure on innovation activity for the year ahead.

As in the previous year, this proportion is significantly higher among frontier, medium and large firms. In fact, large businesses (86%) are twice as likely as micro businesses (41%) to invest in R&D over the next year.

Despite some variance, the declining trend in R&D investment intentions was relatively consistent across regions. Primary and transport were the only industries in which there was an increase in investment intentions from 2023 to 2024 (Figure 19).

Among those firms planning R&D investment over the next 12 months, 56% were planning to increase their level of R&D investment, compared with only 4% planning to *reduce* investment and 39% planning to maintain current levels of R&D investment.

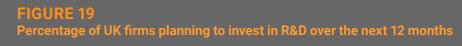
UK average
2023 2024

Nation/region 2023 2024

Business size 2023 2024

Firm type 2023 ■ 2024

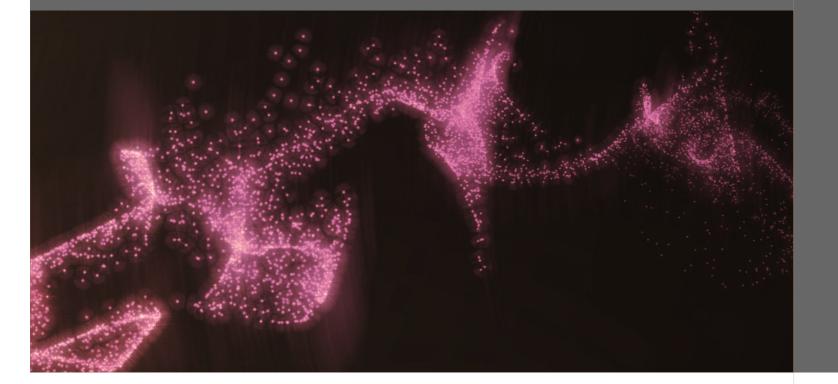
Sector 2023 2024

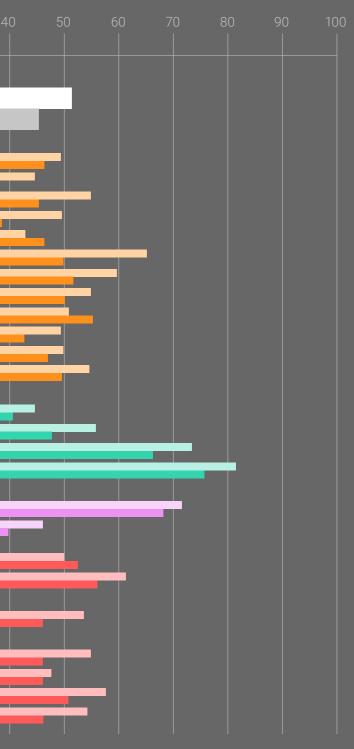


0	20	30

UK AVERAGE

NORTHE	RN IRELAND		
SCOTLA	ND		
WALES	1		I
EAST MI	DLANDS		
	ENGLAND		
LONDON			
NORTH E	AST		
NORTH	VEST		
SOUTH E			
WEST MI	DLANDS		
YORKSH	IRE & HUMB	ER	
MICRO			
SMALL			
MEDIUM	1		
LARGE	1		
LARGE			
FRONTIE	B		
NON-FR	JNTIER		
PRIMAR	Y		
MANUFA	CTURING		
CONSTR	UCTION		
	DISTRIBUTIO		
	ORT/STORA		
HOTEL/C	ATERING		
FINANCE			
	S SERVICES		
OTHER S	ERVICES		







Future innovation support

The year ahead for UK businesses' innovation plans

Finally, we asked firms how likely they are to seek external support for their innovation and business development activity over the next 12 months.

Overall, firms reported an increased need for innovation support over the next 12 months.

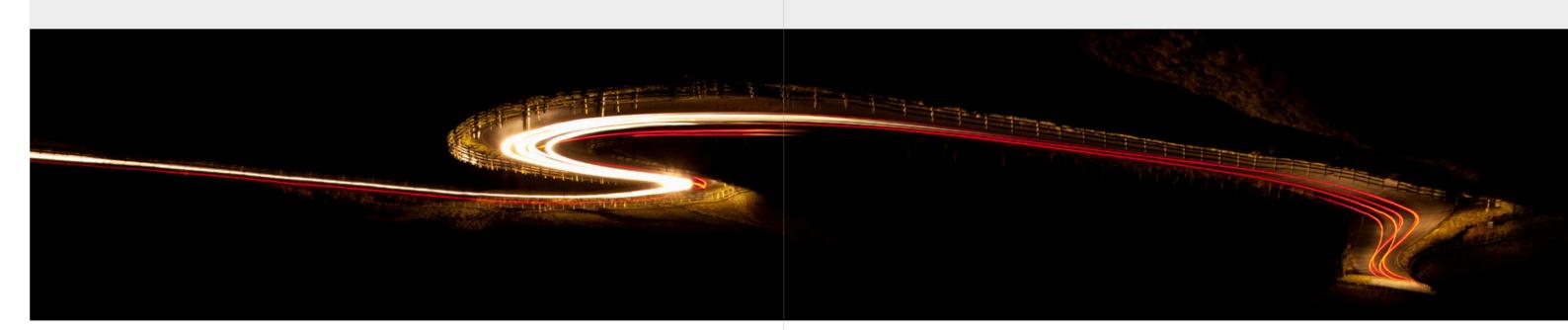
Just under half of all firms (46%) indicated that they are likely to seek external support either for business development, product and service innovation or both: a proportion consistent with 2023. Larger businesses, frontier firms and those in the finance and primary sectors were most likely to be in the group of firms seeking support.

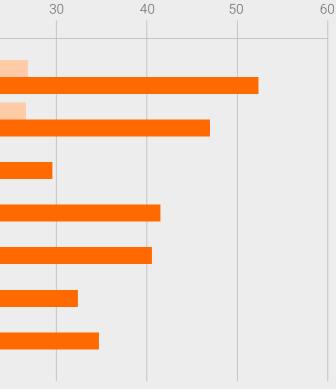
Large firms (75%) are almost twice as likely to seek external advice over the next year compared to micro firms (39%), despite these smaller businesses facing more of a barrier (as shown earlier).

When looking specifically at innovation support, we asked firms that do plan to invest in R&D next year about the usefulness of different types of support. Overall, firms reported an increased need for innovation support over the next 12 months.

R&D grants were the most popular type of support for these businesses (52%), doubling from the previous year (27%). Across the range of support types, there was also a significant increase in the proportion of firms rating them as useful for the year ahead compared to 2023 (Figure 20).

FIGURE 20 Percentage of UK firms that would find the following support types useful over the next 12 months (those planning to invest in R&D) 10 20 2023 2024 **R&D GRANTS R&D TAX CREDITS** INNOVATION LOANS MARKETING/EXPORT SUPPORT STRATEGY ADVICE FINDING INNOVATION PARTNERS INTELLECTUAL PROPERTY SUPPORT





Appendix

Methodology

Overview

The Innovation State of the Nation Surveys (ISNSs) from 2023 and 2024 were conducted using a combination of computer-assisted telephone interviewing (CATI) and an online business-to-business panel.

Within each respondent organisation, a member of the senior management team or a senior decision-maker involved in innovation was sought to be interviewed.

Businesses with five or more employees were in scope for the survey. Organisations were additionally screened to ensure they were not a charity, not-for-profit or public-sector organisation.

Fieldwork and sampling

Following a pilot stage to fully test the questionnaire, fieldwork for ISNS 2023 took place between 14 November 2022 and 28 February 2023. In total, 1,217 CAT interviews and 801 online interviews were completed.

Fieldwork for ISNS 2024 covered 2,001 firms and was undertaken between 1 February 2024 and 22 May 2024.

A stratified sampling approach was used and targets were adopted to ensure a representative spread across sectors, firm size bands and UK regions.

Weighting

Weighting was necessary to provide representative results simple population weights based on the population of private-sector businesses were used to do this.

More detail on the full survey methodology is available from the technical report published by the Enterprise Research Centre and Innovation & Research Caucus.



About the Enterprise Research Centre

The Enterprise Research Centre is the leading centre of excellence in the UK for research into the growth, innovation and productivity of small and medium-sized enterprises. A partnership between Warwick and Aston University Business Schools, the Centre works closely with policymakers, combining academic rigour with accessibility and policy impact.

About the Innovation & Research Caucus

The Innovation & Research Caucus supports the use of robust evidence and insights in UK Research and Innovation's (UKRI's) strategies and investments, as well as undertaking a co-produced programme of research. Caucus members are leading academics from across the social sciences and other disciplines and sectors who are engaged in different aspects of the innovation and research system. We connect academic experts, UKRI, Innovate UK and the Economic and Social Research Council by providing research insights to inform policy and practice.

About Innovate UK

Innovate UK drives productivity and economic growth by supporting businesses to develop and realise the potential of new ideas. We connect businesses to the partners, customers and investors that can help them turn ideas into commercially successful products and services and business growth. We fund business and research collaborations to accelerate innovation and drive business investment into R&D. Our support is available to businesses across all economic sectors, value chains and UK regions. Innovate UK is part of UK Research and Innovation.

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- Those who contributed to the design and development of the survey from across Innovate UK, UKRI, the Department for Science, Innovation and Technology, the ScaleUp Institute, and other organisations.

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