INNOVATION & GROWTH

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This report comes to you courtesy of Ayming, the new group formed from Alma Consulting Group and Lowendalmasaï in 2016. With 30 years' experience improving businesses' financial performance, the award winning Ayming UK team offers expertise across innovation funding, European VAT and procurement.

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Something to smile about

Innovation is a key driver of growth and essential if the UK is to remain competitive in the global economy

Martin Hook
Managing Director

UK businesses have plenty to smile about. The economy is growing, employment is up, and some government reliefs and incentives have improved multiple times in the last six or seven years. But is this enough?

We still linger embarrassingly at the bottom of the G8 when it comes to spending on research and development (R&D). The 0.5 per cent of GDP we allocate towards funding innovation pales in comparison to the United States' 2.7 per cent or Germany's target of 3 per cent.

What's more, many of the UK grants and European funding made available are too often poorly publicised. You know of Nesta and Innovate UK, but what about Horizon 2020?

It's partly for this reason that so many small and medium-sized enterprises fail to even consider applying for grant funding or R&D tax credits and allowances. Another reason is the fault of the applications themselves; they can be overly complex, heavy with jargon and require volumes of information via seemingly endless questions.

But these barriers can be overcome with relative ease. Independent reports, like the one you're reading now, outline UK innovation and growth, and the funding landscape in succinct, straightforward terms. Experienced specialists like Ayming help businesses of all sizes and sectors make successful applications for grants and tax credits. To date, we've claimed more than £100 million of R&D tax benefits for our UK clients.

The other barriers are harder to pull down. Too many businesses fail to see how their products and services are innovative, and miss out on significant funding as a result. In some respects, it's a simple case of not seeing the wood for the trees as business people take the pioneering work their company does for granted. This is why a great deal of our work involves researching different sectors to single out the trailblazers and originators, whether that's a micro business manufacturing toys made from magnets or a global insurance firm.

The greatest barrier of all, however, is inspiring innovation itself. The financial crash of 2007–8 left many businesses feeling fragile and insecure. Bringing a new product or service to market, or even overhauling an existing one, feels too risky, for only now are they safely out of the woods.

And yet, not innovating is even riskier. Businesses must innovate or stagnate.

In a recent report by Frontier Economics and the Department for Business, Innovation and Skills, it was calculated that the private rates of return on R&D investment averaged 30 per cent. That's a considerable gain. Overall, the importance of innovation to the UK economy was estimated at £7.6 billion in gross value for 2012–13.

Innovation, therefore, plays a critical part in the UK's recovery. And it infiltrates all sectors. As you'll see from some of the articles in this report, innovation isn't just reserved for the manufacturing sector. From food technology to skis, it can apply to everything and anything. Now surely that's something to smile about?

— Martin Hook

Creating a climate for innovation

The UK boasts examples of excellence, nurturing innovation across all sectors, but there's no room for complacency

The UK's innovation landscape is, as you might expect, a complex picture. Innovation can be undertaken by organisations in the private, public and charity sectors, and government investment in creating innovation comes from several angles.

The government spends money directly from a national budget, which goes towards supporting institutions such as universities and centres for medical research. It has freed up money for the development of specific areas of research, including graphene, robotics and the internet of things.

Government groups, such as Innovate UK, were set up to partner with individuals, companies and other organisations to fuel new science and technology innovations that boost productivity, create jobs and help to increase UK exports.

Official figures, published in March 2015, reveal that since 2007 Innovate UK and private-sector partners have invested more than £3 billion, benefiting upwards of 5,000 companies. Across a range of programmes, this investment has generated at least £7 billion in value and created 35,000 new jobs.

The Catapult programme is a national network of centres created to increase innovation by companies in eleven specific areas that will drive up economic growth. These include digital technologies, future cities, high-value manufacturing and offshore renewable energy.

Catapult is funded through a mixture of a core grant and commercial funding won on a competitive basis through business-owned research and development contracts. The five-year horizon of the programme is expected to raise £1.4 billion in public and private money.

On top of grandstanding vehicles such as Catapult and Innovate UK, the government also offers a range of tax incentives, grants and loans to organisations taking part in R&D. Its continual investment in education, national infrastructure and business support is a softer measure of its backing for innovation.

Collectively, this investment has pushed the UK towards the top of an international innovation league table. The latest Global Innovation Index, a ranking of innovative countries compiled by a group of academic and research organisations including Cornell University, INSEAD and the World Intellectual Property Organisation, puts the UK second worldwide.

The index takes into account a range of factors covering the public and private sectors, including market sophistication, institutions, human capital and infrastructure.

Top of the list was Switzerland with Sweden third, followed by the Netherlands and United States. South Korea and Japan, widely considered two countries with many of the world's most innovative companies, failed to make the top ten.

According to business minister Baroness Neville-Rolfe: "The UK has soared ahead in these global innovation rankings over the past few years, a further sign that our long-term economic plan is working.

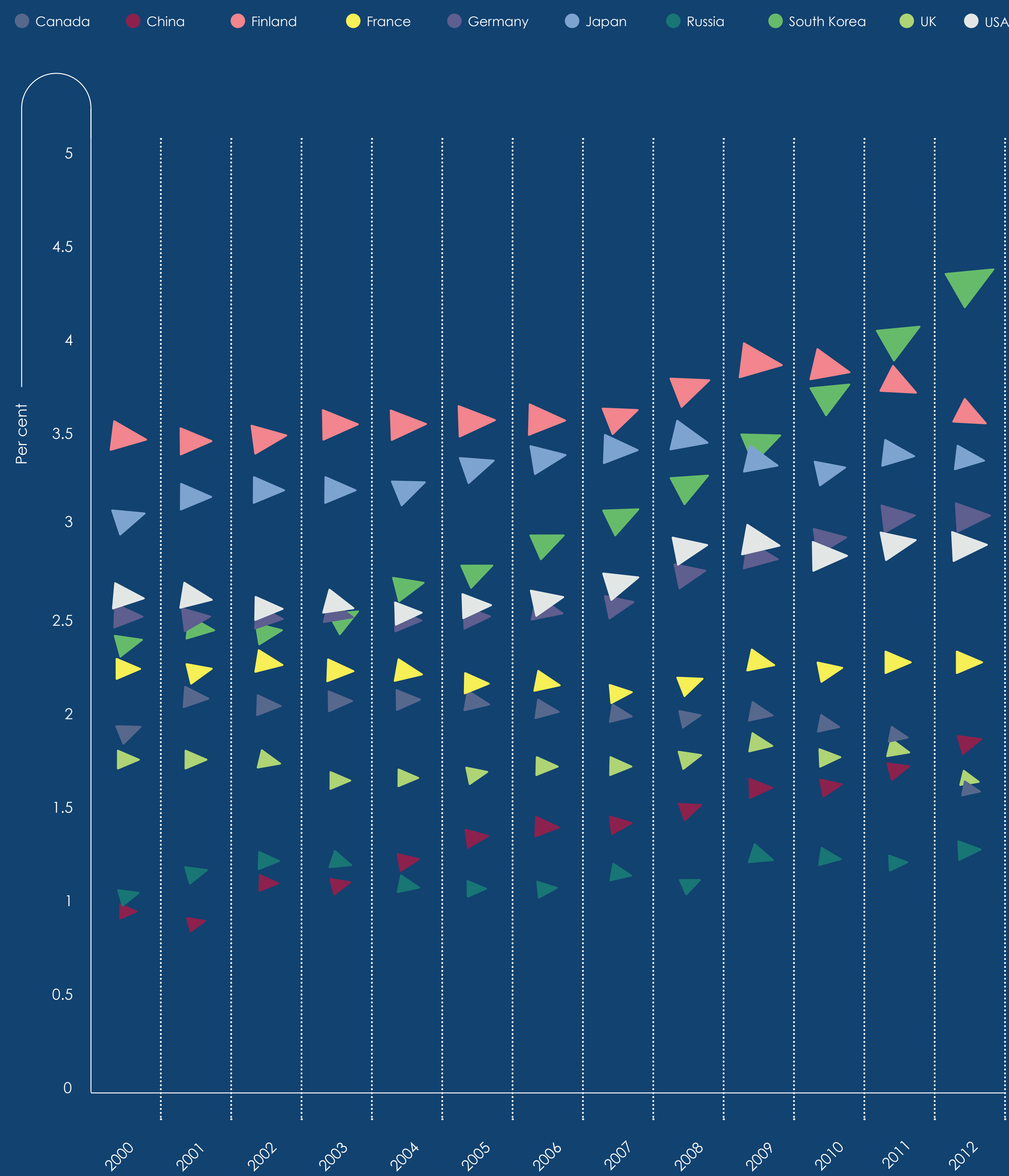
"We have an outstanding tradition in producing the very best in science and research. With less than 1 per cent of the world's population, we produce 16 per cent of the top quality published research. This is a major factor in the UK maintaining its position at number two in the 2015 Global Innovation Index."

Yet the picture is mixed. Published in July 2015, the World Economic Forum's Global Competitiveness Index ranks what it estimates are the top ten most innovative countries in the world. The UK doesn't feature at all, despite countries including Finland, Israel and Switzerland riding high in the top ten.

However, if it's true that the UK is just about top of the pile in the value-added industries, then it is not powered by the country's economic clout alone. Latest figures show the UK's gross domestic expenditure (GDP) on R&D was just under £29 billion in 2013.

FIGURE 1
Gross expenditure on R&D as a share of GDP, 2000–12

Source: Department for Business, Innovation & Skills, 2014



Adjusted for inflation, the figure was 5 per cent higher than the previous year, but the figures also show almost two thirds of R&D expenditure came from businesses, not government groups.

Meanwhile, as a share of total GDP, investment in innovation was just 1.67 per cent. This was up slightly from 2012, but still well below the top spenders globally. The expenditure was significantly under the European Union average of 2.02 per cent and only twelfth highest in the 28-member bloc.

Compared with the US, UK expenditure is vanishingly small. In 2013, the US federal budget alone was nearly $141 billion (£93 billion). According to World Bank figures, the US spent nearly 2.8 per cent of its GDP in this area between 2011 and 2015.

Other developed countries also outstrip the UK by a significant margin. In the same timeframe, Sweden spent 3.41 per cent of its GDP on research, Japan 3.39 per cent and Germany 2.92 per cent. Even countries outwardly lower down the innovation pecking order spent more, including Belgium with 2.24 per cent, Austria 2.84 per cent and Denmark 2.98 per cent.

Meanwhile, anecdotal evidence is emerging that could be a warning sign. Research released by Rare Consulting in November 2015 revealed that only 22 per cent of UK workers feel confident their organisation will meet current innovation demands.

The main barriers to adoption include poor organisational culture, cited by a third of respondents, a lack of education, claimed by three in ten, and a failure of departments to work in a connected way, cited by a quarter of people taking part in the survey.

David Edmundson-Bird, associate director for digital innovation at Manchester Metropolitan University, which partnered with Rare Consulting for the research, says: "This snapshot of UK business innovation should act as a warning from the future. We are at a pivotal moment in economic and social development in the UK."

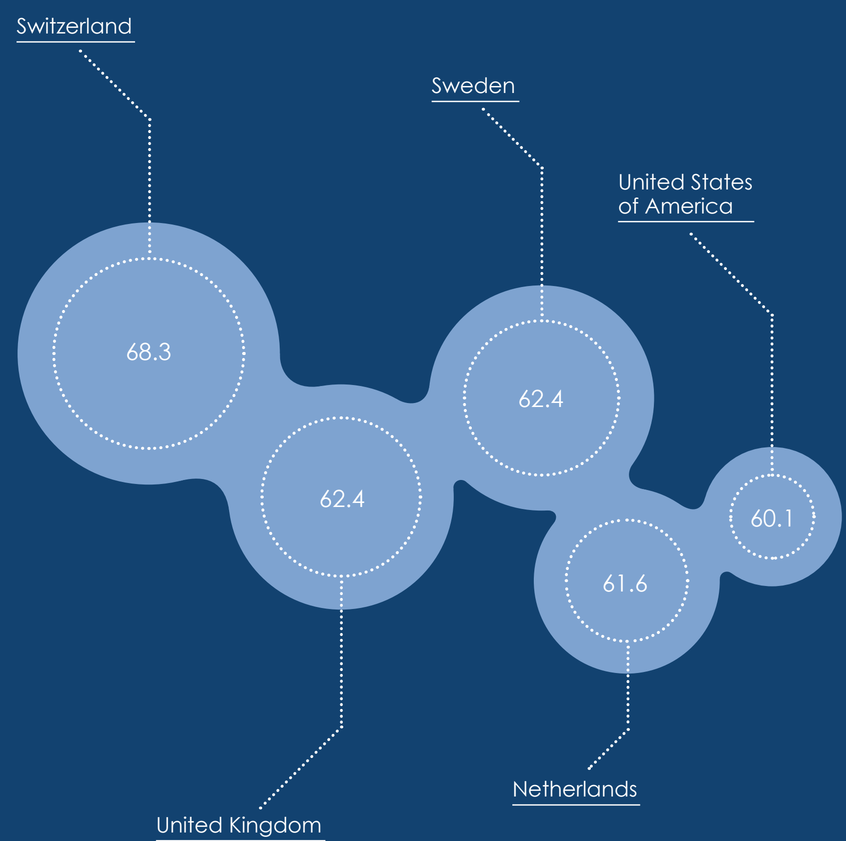
The UK's standing as a beacon of innovation excellence is currently beyond dispute, but less certain is whether the country is coming to the end of a golden era of innovation and what the future holds. Without redoubled investment in this area, the world's emerging economies, as well as established ones across Europe, could begin to push the UK further and further down the world rankings.

The UK's standing as a beacon of innovation excellence is beyond dispute, but less certain is whether the country is coming to the end of a golden era

FIGURE 2
Top five countries for innovation

Source: Global Innovation Index, 2015

The Global Innovation Index (GII) 2015 covers 141 economies around the world and uses 79 indicators across a range of themes. These rankings are scored out of 100.



Case study:

Sacla'

Established brands with a taste for innovation can stay ahead of the competition

Think of pesto and a jar of Sacla's classic sauce probably springs to mind. Brought to the UK in 1991, for many Britons this ready-made pesto was their first taste of the Genoese blend of basil, pine nuts and Parmesan.

Fast forward 25 years and a jar of pesto is now a larder staple. Whether you're a full-time parent, university student or young professional, you're a likely consumer of the Sacla' brand. Few food brands can claim to reach such a wide demographic.

Lying at the core of this success is Sacla's unwavering approach to research and development that's anchored in a deep respect for tradition. "Innovation has an enormous impact on our success," explains Clare Blampied, managing director of Sacla' UK. "It's how we remain brand leader within the pesto category, which is a strong position for a company that's family owned and run."

Now in its third generation, Sacla' has remained a family business since its inception in 1939, and is now a global leader of pesto and pasta products, with a presence in over 50 markets and over 100 million units sold a year. Driving this success is new product development (NPD), which sits at the forefront of the business.

"Year on year we strategically review the year's launches and successes, and build on this knowledge for the forthcoming years," explains Blampied. "We have a continual programme of NPD in place, driven by highly experienced individuals in both the technical and marketing teams – most importantly they are driven by consumer need."

The most recent and visible example of this is the brand's new range of Pesto Shots. Launched in response to consumers' wishes for conveniently sized portions, Sacla' is the first brand to launch pesto in this format – a trailblazing idea says Blampied.

The processes behind Sacla's NPD can be long and involve months of brainstorming and UK research. "Thoughts are compiled, examined and discussed as to viability with our production facilities, as well as considering sourcing and the seasons."

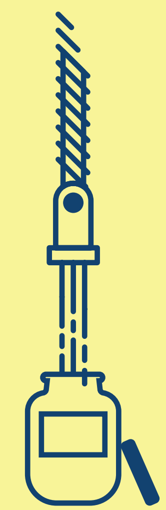
Only after months of discussion are the products then made into a kitchen sample format at Sacla's headquarters in Piedmont, Italy. Focus groups, taste tests and rounds of examination ensue for months before the final product is ready for launch.

But while the process is necessarily thorough, the company can be comparatively quick to bring the right product to market at the right time, says Blampied – and it's this agility that has helped put Sacla' at the top of its game.

Behind this new product development is an infrastructure with innovation also at its centre. Sustainable and pioneering farming techniques are used to grow key ingredients, while 5,000m^2 of solar panels help reduce the environmental impact of the main manufacturing plant.

Even Sacla's marketing initiatives are groundbreaking. In 2013, Waitrose shoppers were left flabbergasted when five opera singers dressed as shop assistants and customers broke out into the Italian classic *Funiculì, Funiculà*. The video has since been viewed more than six million times on YouTube. No doubt many Britons have enjoyed their first taste of opera thanks to Sacla' too.

Behind new product development is an infrastructure with innovation at its centre



Business growth & innovation

Research and development offers big rewards for companies who invest

FIGURE 3
R&D tax credit claims by top three industry sectors, 2015

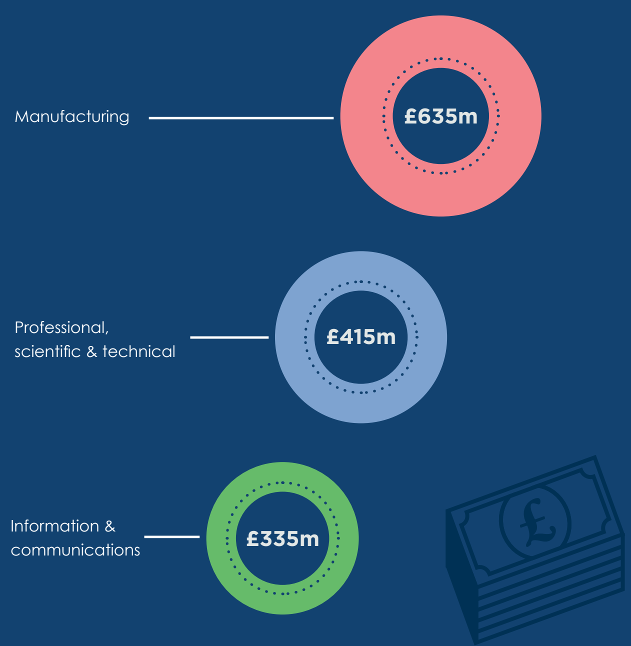


FIGURE 4
R&D tax credit claims by region, 2015

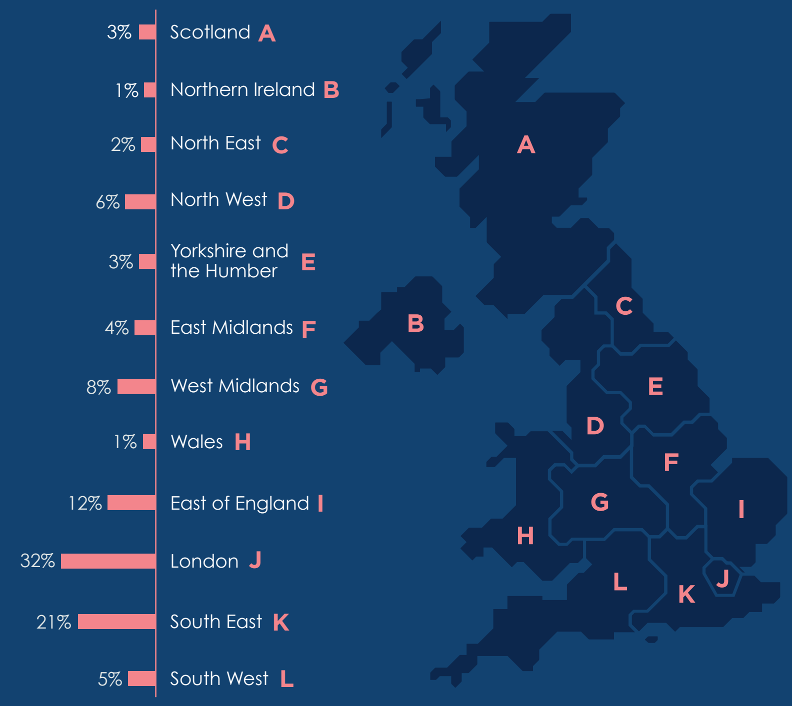


FIGURE 6
SME R&D tax credits per £100,000 R&D expenditure

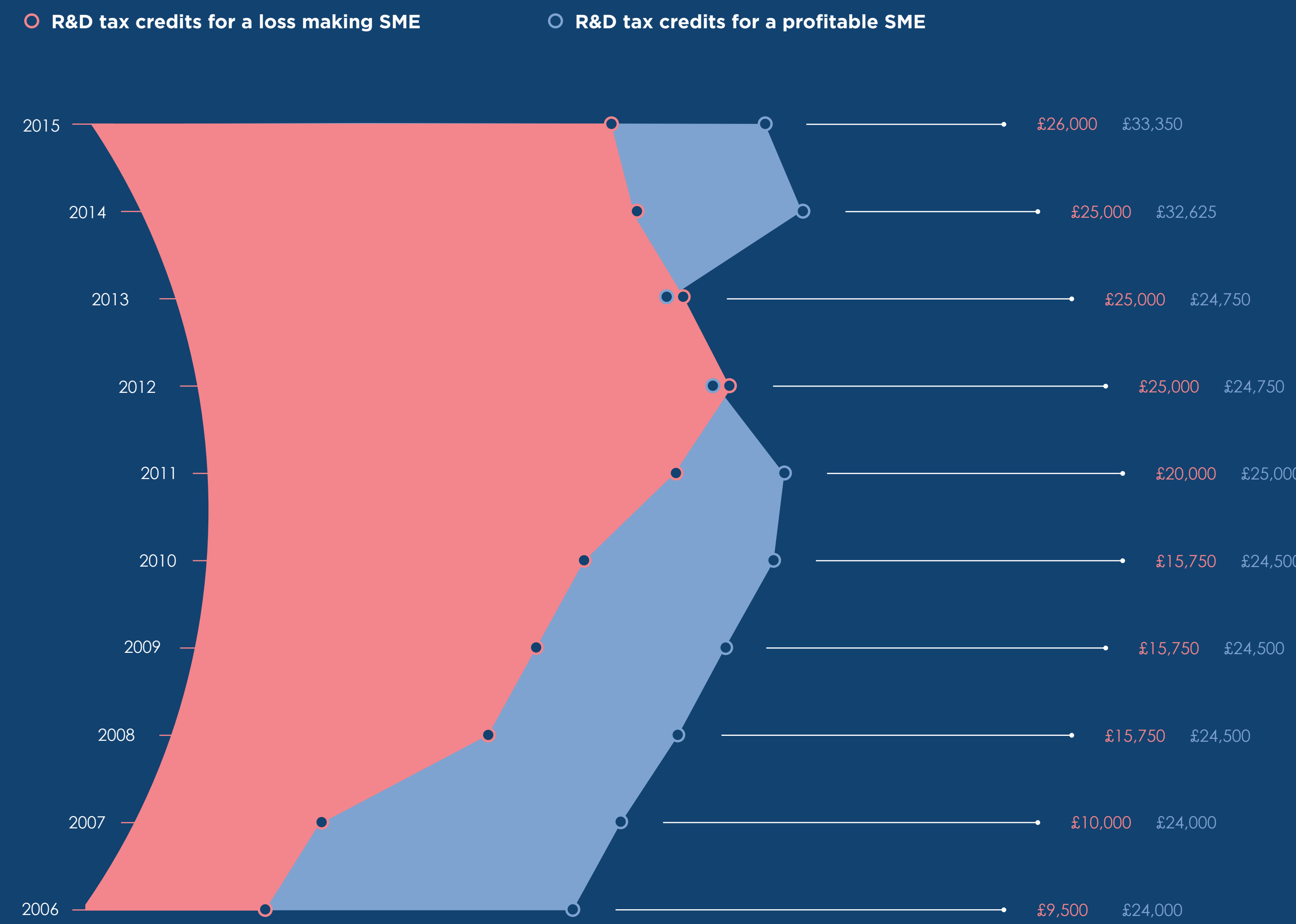
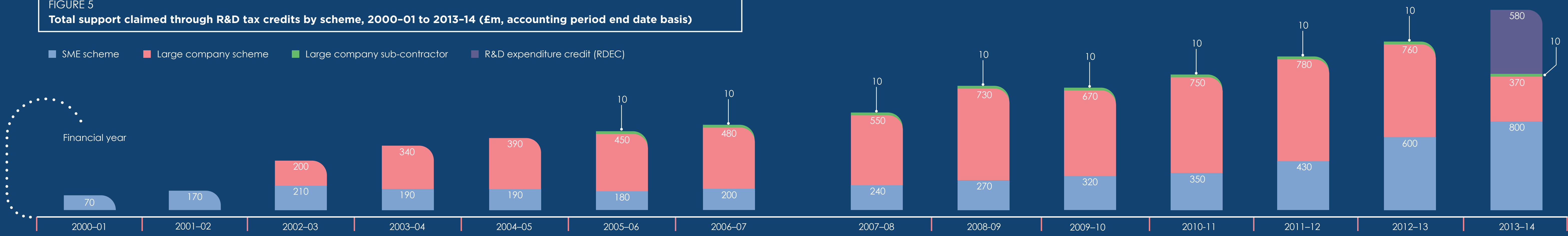


FIGURE 5
Total support claimed through R&D tax credits by scheme, 2000–01 to 2013–14 (£m, accounting period end date basis)



Source: HMRC Research and Development Tax Credits Statistics, 2015

High-risk, high-reward innovation: worth the gamble?

Risk is an unavoidable aspect of business, but there are ways of measuring exposure as well as success

They say that necessity is the mother of invention, but how do we know that something is necessary before someone creates it? It's a chicken-and-egg problem that all innovators must deal with.

Even established businesses with a long history of sales have to place bets on future demand for the products and services they create. It's almost impossible to be sure of something before it hits the market.

Apple gambled that consumers would love the idea of a connected watch, while Facebook and Google take a risk with every new acquisition, staking millions, even billions, of dollars that this or that piece of software will flourish in their care.

People creating or developing any business, from the smallest startup to the biggest corporate titan, must go in for a bit of guesswork. But just how much risk they should take on – in other words how much information they need before they act – is open to debate.

The gung-ho group of successful entrepreneurs, people such as Lord Alan Sugar of TV's *The Apprentice* fame, act on raw instincts and gut feel. But the number of people prepared to act without a lot of information is dwindling in the 21st-century technological era.

Today, meaningful data is cheap and accessible so it seems remiss to ignore the abundance of information and just plough ahead. Doing so simply hands a competitive advantage to your rivals, like fighting with one hand tied behind your back.

Stuart Cochran, chief technology officer at collaboration software business Huddle, says to guarantee the best outcomes over time it is important to combine an appreciation of the numbers with a preparedness to make decisions.

"You need to trust your gut to a degree, because otherwise it's easy to be hit with 'analysis paralysis' waiting for the perfect set of data to fall into your lap," he explains. "It is better to move fast in certain situations knowing you won't always get it right, than to wait until you are 100 per cent sure."

But Cochran has a caveat: you should never make a decision without knowing the metrics by which you will judge its success or failure. You must assess the outcome of the decision and, if it starts to fail, take action to address the problem quickly.

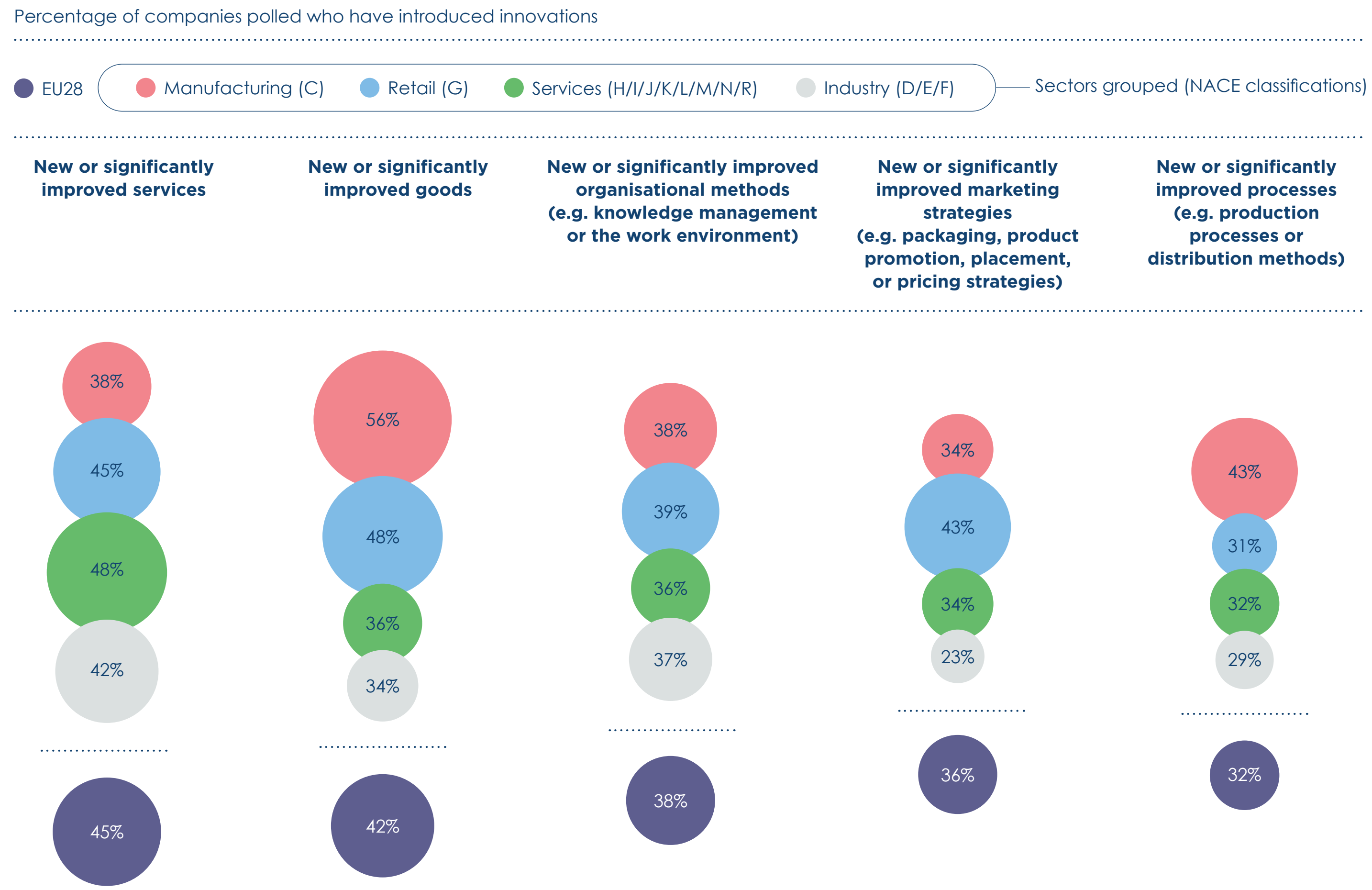
"We always have a very clear understanding of the metrics of what we expect to improve or change as a result of a decision," he says. "It means we can monitor the situation and make quick corrections if necessary. It's important to start with a hypothesis and test outcomes."

Huddle has taken a few calculated risks in its history since launching in 2006, recalls Cochran. The first was the decision to launch the business at all at a time when cloud technology was in its infancy and was not universally accepted as it is today.

The second was switching from a freemium to a paid model, meaning that anyone accessing the service has to put their hands in their pocket first. This was a gamble, as freemium is considered a neat way to develop a dedicated user base before introducing fees for those who want a greater level of access.

FIGURE 7
Types of innovation since January 2012

Source: Innobarometer 2015 – The innovation trends at EU enterprises, European Commission



The third risk was moving headquarters from the UK to San Francisco. This split the business, from an operational point of view, into distinct chunks working in different time zones. Logistically the move was a gamble.

The good news for Huddle is that each move has paid off. For example, splitting the business between the UK and US has earned it several high-profile clients in America, including government groups and major businesses.

Despite this, Cochran believes there is no such thing as a 100 per cent certainty in business. It's why Huddle puts emphasis on sharing data. It grants all its engineers access to company and market information, so they can act from a position of knowledge.

"As a growing business, our speed is a competitive advantage over some of our bigger rivals," he says. "You used to have to wait until the end of the month or quarter for information to be produced; now it's instant and we get it in real time.

"Sharing data is a good thing because you empower people to get involved in the decision-making process and encourage them to come up with useful ideas. You bring people with you when you are transparent and they can be a bigger part in creating successes."

The answer to the question "should you be decisive or gather information?" is yes to both. A cavalier approach to business is fine as long as your guesswork is educated and you have a system for correcting any mistakes that crop up.

In a business environment that is changing minute by minute, it's important to structure your business in such a way that it can change tack even after embarking on a course of action. That way you'll enjoy a win-win of being able to take decisive action without accepting undue risk.

Survival of the innovator

Re-invention is the hallmark of the 21st century's most successful businesses

It wasn't very long ago that HMV went bust. The once beloved music chain fell out of favour among the general public, racking up debts of £176 million in doing so.

You didn't need to be a retail analyst to fear for its future. HMV would soon join the likes of Woolworths, Comet, Virgin and countless other retail casualties.

For how could a business selling CDs from the high street possibly survive in an age of streaming, e-commerce, digital downloads and soaring business rates? HMV was an anachronism; it couldn't compete with digital giants such as Amazon and Spotify.

That was 2012. In January 2013, Deloitte was appointed its company administrators. Commentators immediately took to the internet, eulogising the brand's rise to glory and detailing its dramatic fall. The 92-year-old business was toast.

Or was it? Today HMV is enjoying a glorious comeback. It is now Britain's biggest music retailer, bigger than Amazon and Apple, and the hero of a cautionary tale that typifies what happens when a business stops innovating, and then starts again.

Hilco, the restructuring firm that bought HMV out of administration, has put innovation back into the core of the retailer's operations. HMV now has a first-rate online offering that includes music blogs, reviews and an online store. It has grown an impressive vinyl collection – records are now the fashionable medium for trendy millennials – and hosts regular gigs, special events and celebrity appearances in its branches.

HMV is hip again, with a healthy balance sheet to prove it.

Not everyone on the high street has been so clever. And while it's easy to blame the demise on e-commerce, success stories like HMV and Topshop prove physical retailers can still disrupt in ways online can't.

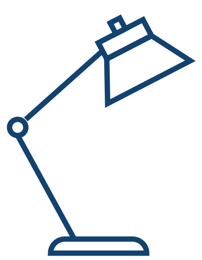
Topshop's flagship store on Oxford Street is now a must-visit destination for fashionistas around the world. From Japanese schoolgirls to Saudi billionaires, anyone with an interest in fashion goes to Topshop in London's West End.

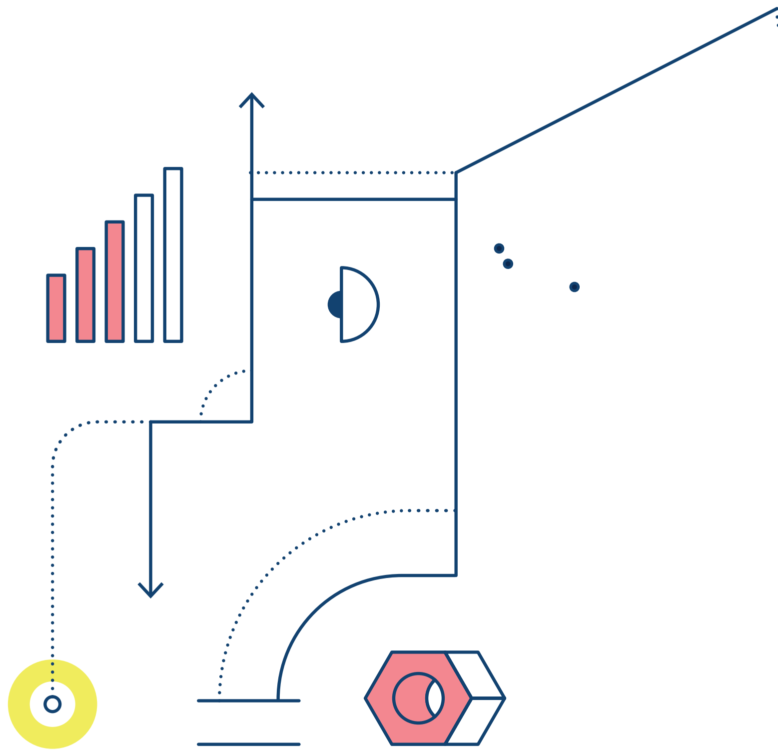
Why? Because it's given over an entire floor to achingly cool, up-and-coming labels, it holds events during London Fashion Week, it has a nail bar, hair salon, café, personal shopping services – the list goes on.

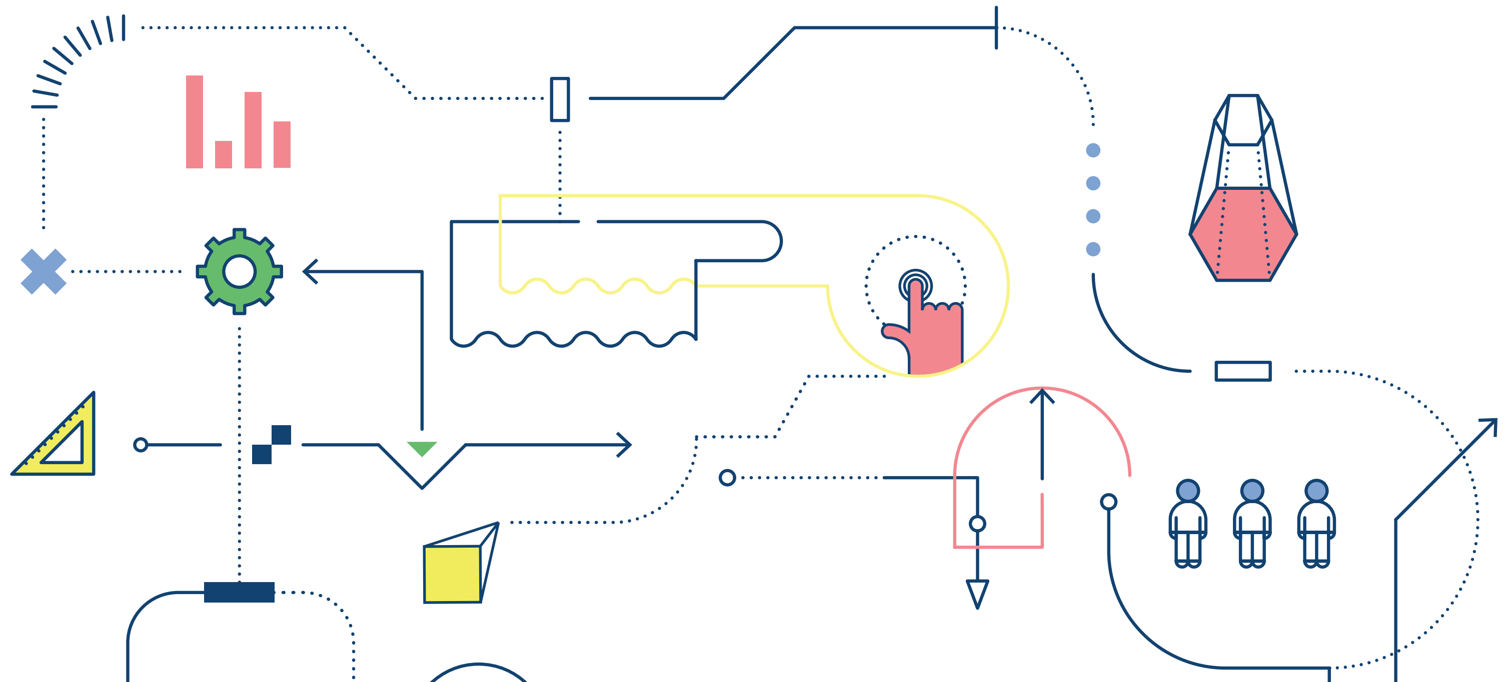
What businesses like Topshop and Hilco understand so well is that the hegemony long enjoyed by established brands is under threat – they must innovate if they're to survive.

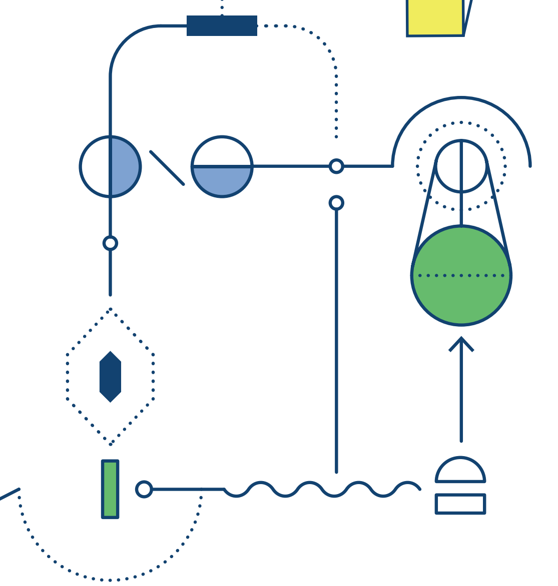
Reasons for this "threat" are numerous and intricate. New and exciting startups can now access substantial finance to fund rapid growth thanks to a flurry of peer-to-peer lenders, crowdfunding platforms, business angels and venture capitalists.

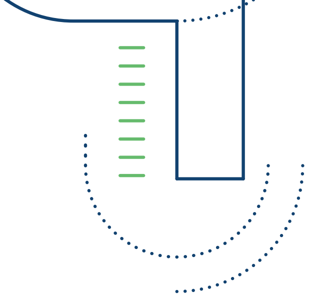
And once up and running, these startups need only launch a viral campaign on social media to gain critical mass overnight, generating the kind of buzzy publicity that renowned brands can only dream about.











Pushing this wave forward is the consumer; or to be more precise, a new generation of consumer for whom brand loyalty is much more complex.

Millennials, those born between 1980 and the early 2000s, understand brands differently. Writing in *Forbes* magazine recently, the venture capitalist (and millennial) Ezra Galston explains why: "The millennial's expectation of immediacy, transparency, simplicity and relatability are the mandates now driving disruption in every industry… not only in consumables and fashion, but also heavy industries such as healthcare, finance and enterprise software."

He's right to single out finance. Fintech, the explosive mash up between the finance and technology sectors, is spawning a new breed of financial products and services destined for this very generation.

Examples include the aforementioned crowdfunding and peer-to-peer lending platforms, as well as personal finance apps, investment products and countless business services.

And while fintech can't devour the banking sector completely, as many of their services rely on existing bank accounts to work, banks just can't compete with the proliferation of new services the fintech boom is providing.

As a result, crucial profit-making services are being lost to these new competitors, while opportunities for disruption are being devoured by the quicker, more agile fintech startup.

But the City is fighting back. Many banks are now partnering with existing fintech businesses and even financing the next wave of startups, while banks such as Deutsche and Barclays have launched in-house innovation hubs. Too little too late? Time will tell.

Another sector slowly being challenged by startup businesses is telecommunications.

New entrants, such as broadband provider Relish and a host of virtual network operators including Lebara, promise to provide better services at better prices than their telco competitors by tapping into consumers' changing habits and removing supposedly obsolete services such as landlines and customer help desks.

Businesses such as these prove innovation isn't just a synonym for technology; it encapsulates improvement, advancement and originality too. It's what happens when businesses, both established and startup, take calculated risks, cross-pollinate and, most importantly of all, ask: "How can we help you?"

Fintech for the future

Fintech companies are revolutionising the financial services sector with technology, offering new products for consumers and exciting job opportunities for techies

Going on holiday soon? If so you may benefit from a rather clever foreign currency service by British startup Revolut. You get an app, plus an optional credit card, which allows you to make payments in multiple currencies with zero fees and zero spread. Revolut means tourists can avoid getting gouged 20 per cent by money changers. The concept is so good Revolut has won £1.5 million in funding from Balderton Capital. The old foreign exchange companies must be wondering how they'll make a living.

Revolut is just one of the stars in the fintech galaxy. As the name suggests, fintech is the industry where finance meets technology. And it is, in the opinion of the British Banking Association, a revolution.

There is a rash of new mobile-first banks. Atom Bank will have no call centre and no branches; merely an app. The back-office infrastructure will be bang up to date. Not like the creaky Fortran-based systems from the 1980s you'll find at the current high street banks. Secco Bank will offer account balances through social media.

Fintech is changing every area of asset finance. Nutmeg is a user-friendly asset management startup. There's no paperwork to sign up. An account can be opened online in minutes. Then users can select a portfolio based on their risk appetite. The old independent financial adviser model, where customers sit in an office and get paper brochures shoved under their noses, looks obsolete.

Lending is being done peer-to-peer, via fintech ventures such as Zopa and Funding Circle. Both the investors and borrowers get better rates by cutting out the middle man.

Accounting is now paperless and automated. FreeAgent is a cloud-based accounting service for small firms. For invoice processing there is Receipt Bank. Got a bill? Just take a photo of it, and Receipt Bank converts it to text and feeds the data into your system. All the big four accountancy firms use it.

The UK is the home of fintech – the powerbase of the City of London, fused with the entrepreneurial energy of the capital, is proving a potent combination. Last year, 42 per cent of fintech investments in Europe were in the UK and Ireland, and 80 per cent of the venture capital cash and 70 per cent of all these deals were in London.

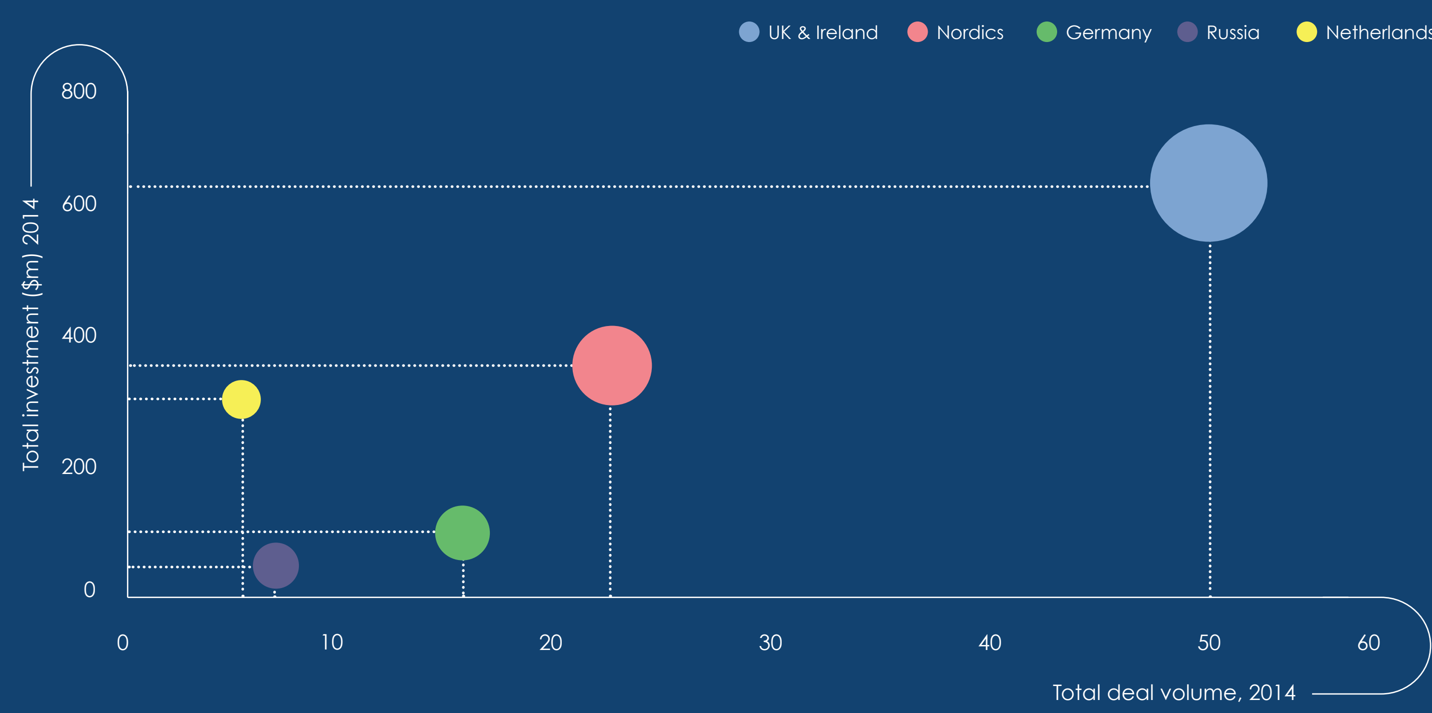
Naturally, fintech companies are hungry for talent. Take a company like TransferWise, founded by former Skype employees Kristo Käärmann and Taavet Hinrikus. The business model allows companies swapping currencies to find a counterparty making the same deal the other way. So no fees. TransferWise handles 300 currencies, is valued at $1 billion plus and employs 450 staff. There is a big cohort of coders. At the front end these include JavaScript and CSS developers. They work with full-stack developers and database engineers. Sysadmins (or system administrators) keep everything ticking over.

In fintech there is a lot of compliance work. Anyone dealing with customers' money needs to understand the Financial Conduct Authority's banking regulation, as well as data protection legislation. Chartered Insurance Institute and Chartered Institute for Securities & Investment qualifications are highly regarded. Since companies expand internationally, mastery of the national regulations of other major markets is in demand too.

Fraud is a concern. In fintech, data plays a central role, so there is an overlap with that other red-hot sector, data analytics. Data scientists with a knowledge of Hadoop, Pig, Jive and other big data disciplines will find themselves coveted by fintech companies. Presenting findings is also crucial, hence the need for designers with familiar chart tools such as Tableau, QlikView, SAS Visual Analytics and Opinurate.

It is important to note that the big high street banks are not standing still. They see the challenge posed by fintech startups and are moving quickly to modernise. Santander has a $100 million venture fund to invest in fintech companies.

FIGURE 8
Top five European regions for fintech investment activity, 2014
Source: Accenture and CB Insights



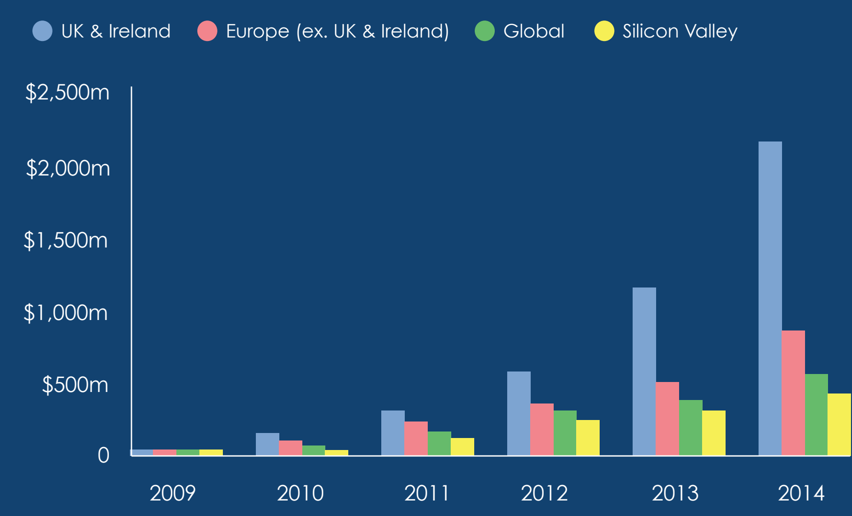
Citi has accelerator funds in Israel, Singapore, the United States and Ireland. Barclays offers free workspace and mentoring for the most innovative companies in London.

Fintech will mean big change for these banks. They are competing for coders, compliance offers, and data scientists, and they'll need project managers and change managers to handle the restructuring. The CBI reckons UK financial services firms will be spending 75 per cent more on IT to cope with the transition to fintech.

Not everyone will be a winner. The rise of fintech means bank tellers have a dim future. Accountants using paper processes will seem archaic. Bookkeepers are almost certainly going to struggle as everything moves online. But Martin Hook, Ayming's UK managing director, expects demand for accountancy and specialist advisory services to increase as a result of fintech. Clients are crying out for help in making sense of the vast array of new services that are emerging. Accountants and specialists are well placed to advise, he says.

The fintech era is going to bring incredible products to consumers and change the way we think about money and banking. The recruitment market will need to work hard to keep up.

FIGURE 9
Five-years growth in fintech investment
Source: Accenture and CB Insights



The UK is the home of fintech – the powerbase of the City of London, fused with the entrepreneurial energy of the capital, is proving a potent combination

Finding funds to flourish

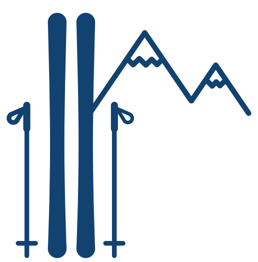
The UK has one of the best funding landscapes in the world for small and growing businesses, with a potent mix of private finance and public-sector support, but there's always room for improvement

For companies seeking funding the options have never been so numerous and so diverse. From the phenomenal growth of crowdfunding to traditional interest-bearing loans and niche products such as asset finance, which is also growing rapidly, entrepreneurs with solid business plans have a broad range of options to choose from.

"I think the UK is a world leader in providing funding for innovation," says Alex Hoye, co-founder of Faction Skis, a disruptive ski hardware and apparel business founded in 2006. Faction raised over a million pounds on Crowdcube and AngelList in 2015, and cites the Enterprise Investment Scheme (EIS) as being helpful in limiting risk for business angels.

"The EIS provides immediate tax breaks of 30 per cent of invested capital immediately and completely shields capital gains tax on the upside, which is an immense incentive. Helpfully this is simple for a prospective angel to implement with minimal red tape, unlike incentives provided in some European countries.

"My experience working with German, French and Swiss regulation is enough to remind me every day that the UK is the best place by leagues to have an executive function for a start-up in Europe," he says.



Hoye, a serial entrepreneur, has gained venture capital investment and crowdfunding for his businesses. Three years ago Faction Skis was self-funded, but for a small-business angel investment, before it sought a venturecapital partner, Octopus Ventures.

"We needed to get the word out about our innovations and we loved getting feedback from customers in diverse regions, from Canada to the Czech Republic, from ardent fans. But we felt it was time to turn up the volume and let more people know about Faction," he explains.

"So we decided to take on material funding. That meant an institution, so we chose carefully. Octopus is not a typical box-ended fund. They take a long view on brand value, so with them and some superb visionary investors, we raised another £3 million over the next two years.

"It's worked. We're now on racks in over 350 retailers in 31 countries, and while we are still small, we are set to sell 13,000 pairs of skis this year and orders have more than doubled."

Hoye describes crowdfunding as "an excellent experience". But the same route wasn't so easy when the team tried it through platforms based in the United States, he says.

"You have to have a fundable business, but the platform has an amplifying effect and it catalyses people that may have been on the fence before and it brings in new people.

"I believe it will serve well in the long term as we look at bonds for working capital in the future. In the US we were not able to get investment to the public unless the people were millionaires. I understand protecting those who are not experts, but it is a hindrance to viable growth."

Crowdfunding is the darling of the UK investment world. It puts investors in front of vetted, ambitious businesses with realistic plans for growth and it gives growing businesses quick access to crowd-sourced capital.

But businesses also get vital information about the viability of their product, particularly if it is customer-facing. If they are funded quickly, the process can be an excellent public relations bonus too, not just exposing the business to hundreds of potential investors, but also to potentially millions of business media consumers.

Since the credit crunch, much has been made of the scarcity of loans for growing businesses from major high street banks. But since 2008, and even before, newer forms of finance have taken some of the slack from the major lenders.

Asset finance is another example. Businesses can purchase assets without taking out a conventional loan or can borrow money with a valuable asset used as collateral, be it a fleet of vehicles, a printing press or some other large piece of machinery.

This funding is popular because it is sustainable, requiring neither equity to be released nor big regular payments. It's useful because it takes the strain off company cash flow and allows businesses to grow largely unencumbered.

These examples reflect the complex landscape for private-sector finance and growing businesses would be forgiven for not knowing the best course of action. It's a hard judgment and most can't spare the time to research which is the best funding method for them.

It's one reason tax breaks and credits are also a popular method of funding growth. Historically, government schemes such as EIS have been extremely popular and well received by industry. But signs are growing that ministers' generosity is waning and some incentives are losing their appeal.

This has been compounded by the announcement in the 2015 Spending Review that one of the main agencies responsible for issuing R&D grants, Innovate UK, will soon swap to loans instead.

Undoubtedly this will have a negative impact on the number of firms applying for R&D support, as Dr Caroline Elston-Giroud, European grants manager at Ayming, explains: "R&D is inherently a risky activity. The provision of grants to support innovation encourages businesses to invest in these riskier activities, reducing the associated worries of return on investment and project failure.

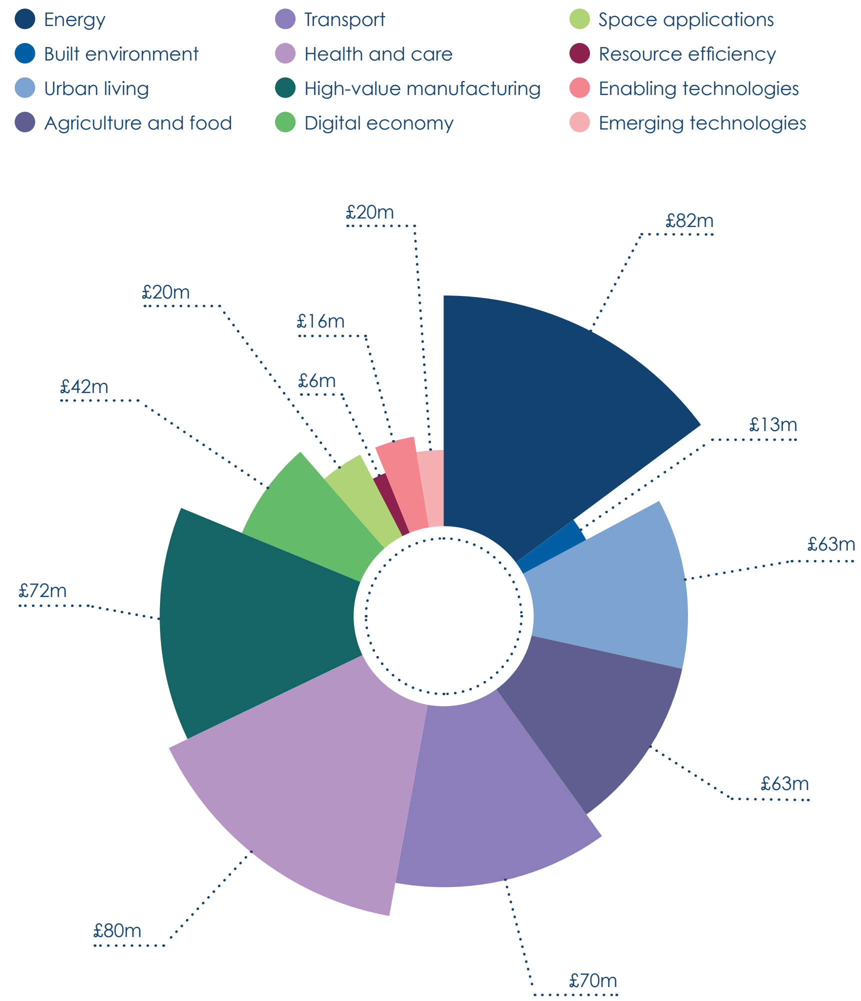
"Expecting businesses to commit to a loan for their innovation activities will only exacerbate the risk aversion which R&D grants seek to remove."

Yet there are still public-sector opportunities out there, as Elston-Giroud points out: "Despite the demise of Innovate UK's grants, there's still an impressive European funding pot up for grabs for organisations of all shapes and sizes.

"With a budget of €80 billion over seven years to support projects across a diverse range of sectors, the European Commission's Horizon 2020 funding programme shouldn't be overlooked as a lucrative source of grants and opportunities for funding and growth."

When it comes to R&D tax credits, the outlook is still very positive. With numerous favourable amendments to the schemes over the years, this will provide a strong impetus for UK firms to devote energy to creating new and better products and services.

FIGURE 10
2014–15 investment by Innovate UK Source: Technology Strategy Board, 2014



The government provides R&D tax relief and tax credits because studies show this investment is more than made up for by the economic benefits it triggers.

Justin Arnesen, R&D tax director at Ayming, says: "By incentivising businesses to invest in innovation, the government creates a multiplier effect, with the estimated private rates of return for R&D investment standing at around 30 per cent. An R&D tax scheme also makes the UK a more attractive place for international organisations to do business."

The UK remains a top country in which to find finance. But as the funding landscape continues to mature, it will become even more complex for entrepreneurs to uncover the right forms of funding.

The government should take note and safeguard measures to boost initiatives, such as R&D, that provide enormous benefit to the UK economy. Without these, the UK could slip behind other countries as a leading place to do business.

Managing change

Changes by government to the way it supports innovation must be carefully managed, argues Jen Rae, senior researcher at Nesta, the UK's innovation foundation

At least on the surface, the government's 2015 Spending Review was kinder than predicted on innovation support, and particularly on investment in "basic" science and research of the kind primarily undertaken by universities.

Although this has been widely heralded as a positive move for the UK economy, the general relief hides potential problems when we take a more sophisticated analysis of the drivers of innovation: economic growth will come from more than simply investing in science and research.

Research and development conjures images for most people of scientists in lab coats, but in fact it was private business that contributed the majority – 64 per cent in 2013 – of the total UK investment.

And although this investment is an important factor in creating business growth, we also know that activities such as developing new software, training staff on new processes or signing new products are forming a far larger part of innovative investment and activity by businesses.

Research by Nesta has found that in the UK this wider innovation investment far outstripped "tangible" investments in things such as buildings and machinery – £137 billion compared with £89.8 billion for tangible investments in 2011 – and the gap has been widening.

We also know that businesses look to a variety of sources for innovation, going beyond universities and public research institutes. These include clients or customers and suppliers of equipment, materials, services or software. Therefore, any changes to the way in which the government supports businesses to innovate could have a substantial impact on the UK economy.

Take, for example, the government's main agency for directly funding business innovation, Innovate UK. Established in 2004, it has weathered much of the recent politics of austerity. In fact, its budget has steadily increased as it took on programmes from other casualties of reductions in government spending, and responsibility for the rapidly expanding network of institutions in key technologies that link universities and commercial research, known as Catapult centres.

However, the Spending Review gave some ominous signals on how the government now sees Innovate UK's future: it will be "integrated" into a new research umbrella body, Research UK, alongside the seven Research Councils.

Although it's easy to see the thinking behind better aligning research and business innovation funding, it will be essential to ensure that the business-facing elements of Innovate UK's work are not lost along the way.

There will also be changes to the way in which government structures and funds its business support programmes. Some of Innovate UK's portfolio of grants, which currently go to businesses for innovation activities, will be transferred to a loans system. The details of how this will work are still to be determined, but balancing the objectives of getting some return to the public purse with a product that encourages businesses to experiment and take risks is a tricky task.

And following the Spending Review, the government announced it is ceasing activity on its national Business Growth Service, potentially with a view to delivering this business support at a regional or local level.

Given the importance of innovation created by businesses, the big challenge for the government will be implementing these changes in a way that continues to encourage businesses to invest in innovation.

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