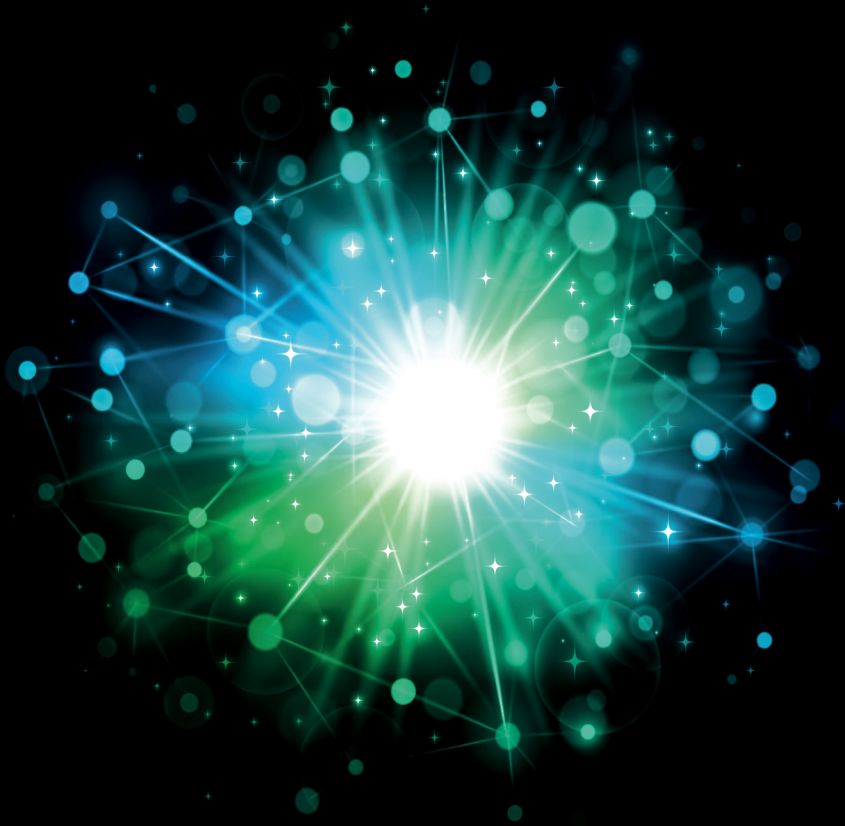


Deloitte.



**Two decades of
ground-breaking growth**

2017 UK Technology Fast 50

50

**Technology Fast 50
2017 UK**

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Foreword

The Deloitte UK Technology Fast 50 programme celebrates its 20th anniversary in 2017.

The programme exists to recognise and celebrate the achievements of the UK's fastest growing technology companies and our commitment to this exciting competition remains as strong as ever.

In this edition, we profile and highlight the success of this year's cohort, and also look back upon 20 years of Fast 50 winners to understand how this unique group of businesses has evolved over time. Whilst the makeup and identity of our winners have changed, they share a common and enviable achievement of having recorded ultra-rapid growth, often in an uncertain environment.

Our findings are derived from a data set of 662 unique winners gathered over the past 20 years, combined with information provided by 147 entrants to the 2017 edition of the competition and 93 responses to a survey completed by their CEOs. This report is not representative of the UK tech sector, or the small and medium-sized business community as a whole, rather focuses on some of the sector's leading lights to provide insight into their success.

I would like to offer my personal congratulations to each and every winner in this year's Fast 50 on the outstanding revenue growth they have delivered over the past four years. A special mention must also be made to recognise the overall winner of this year's programme, Deliveroo, and their record-breaking net revenue growth rate for a UK Fast 50 winner of 107,117 per cent. Deliveroo's remarkable success has even eclipsed their counterpart in the US Fast 50 competition and demonstrates the UK tech scene can generate companies that truly compete on a global level.

I trust that you will enjoy the findings in this report and will join me in acknowledging the incredible success of this year's winners.

David Cobb

*Deloitte UK Technology Fast 50
Programme Lead*

Deloitte UK Technology Fast 50 winners 2017

Rank	Company	Growth	Region	Sector
1	Deliveroo	107,117%	London	Internet
2	Bloom & Wild	13,818%	London	Internet
3	MoveGB	6,053%	South West	Internet
4	Smarkets	5,390%	London	FinTech
5	Stratajet	3,634%	London	Internet
6	Paddle	3,239%	London	Software
7	Receipt Bank	2,947%	London	FinTech
8	GoCardless Ltd	2,097%	London	FinTech
9	Cooll	1,915%	South West	Media & Entertainment
10	Brainlabs	1,913%	London	Media & Entertainment
11	Outplay Entertainment	1,904%	Scotland	Media & Entertainment
12	LoopMe	1,825%	London	Software
13	VIRTUS Data Centres	1,729%	London	Software
14	Optal	1,714%	London	FinTech
15	Kantox	1,688%	London	FinTech
16	mobstuff	1,635%	London	Media & Entertainment
17	Duco	1,590%	London	FinTech
18	In Touch Networks	1,572%	North West	Internet
19	WDX	1,563%	London	FinTech
20	Volta Data Centres	1,562%	London	Software
21	PM Connect Ltd	1,319%	Midlands	Media & Entertainment
22	CyanConnode	1,221%	Cambridgeshire & East	Telecommunications
23	Ieso Digital Health	1,175%	Cambridgeshire & East	Healthcare & Life Sciences
24	Yieldify	1,144%	London	Media & Entertainment
25	BigChange	1,095%	North East	Software

Rank	Company	Growth	Region	Sector
26	Poq	1,015%	London	Software
27	Exsel Group	959%	Scotland	Software
28	Realeyes	932%	London	Software
29	Funding Circle	853%	London	FinTech
30	Reddico	851%	South East	Internet
31	Fonix	785%	London	FinTech
32	StarLeaf	782%	London	Software
33	Kymab Ltd	763%	South East	Healthcare & Life Sciences
34	Victor	716%	London	Internet
35	Blis Media	702%	London	Media & Entertainment
36	Featurespace	677%	Cambridgeshire & East	Software
37	Mighty Social	651%	London	Media & Entertainment
38	Farfetch	649%	London	Internet
39	WorldRemit	642%	London	FinTech
40	Nervecentre Software	636%	South East	Software
41	Black Swan Data	597%	London	Software
42	BlueGlass	561%	London	Media & Entertainment
43	BookingBug	554%	London	Software
44	Peppermint Technology	552%	Midlands	Software
45	Ebury Partners Ltd	548%	London	FinTech
46	SIPHON	539%	South West	Telecommunications
47	Cloud Technology Solutions	510%	North West	Software
48	AccessPay	497%	North West	FinTech
49	Arcus Global	491%	Cambridgeshire & East	Software
50	Seedrs Ltd	481%	London	FinTech

Ground-breaking growth amidst economic and socio-political uncertainty

Against a backdrop of fluctuating uncertainty, success of the UK technology sector has been driven by individual businesses capitalising on the opportunities before them. Led by the record-breaking Deliveroo, this year's Fast 50 help demonstrate how many of the defining characteristics of the cohort have evolved over time, whilst others remain unchanged.

The past 20 years have seen a myriad of economic, political and social uncertainties affect the UK. The bursting of the dotcom bubble, the global financial crisis and most recently, Britain's decision to leave the EU, have all impacted economic growth and confidence.^{1,2,3}

Despite these broad macro challenges, the UK tech scene has continued to develop and flourish. The 2017 Tech Nation report positions the UK as the digital capital of Europe, with greater investment, availability of skills and collaboration within ecosystems compared to its peers.

In numerical terms, this equated to £28bn of digital tech investment from private equity and venture capital over the past five years (almost two and a half times more than any other European country).

The UK has been recognised as contributing eight of the top 20 ranked universities in Europe and hosted over 22,000 Meetups in London during 2016 (more than Berlin, Amsterdam or Paris).^{4,5}

This year's Fast 50 cohort represent a collection of the very highest performing businesses, having achieved an average four year revenue growth rate of 3,756 per cent. Their remarkable growth enabled them to deliver cumulative revenues of c. £1bn, employing over 9,000 staff (1,800 in R&D).

The achievements of this year's winner, online food courier service Deliveroo, is a case in point, establishing itself as the fastest-growing technology company in the history of the competition with an average growth rate of 107,117 per cent. With an array of tech investors having lined up to order a slice of the takeaway business, the company has recently been added to the exclusive list of UK-based "unicorns".⁶

As we look back on previous winners of the Fast 50, we consider both the changes and similarities amongst our cohort over time. Regional makeup, technology sectors and the business models of our winners have all evolved. We uncover how different hubs have formed and entire markets are being disrupted by the emergence of new business models.⁷

Other features of our winners remain surprisingly consistent. We explore the motivations for CEOs to start their businesses and the drivers behind the decision to prioritise growth. We also consider the importance of support networks, both formal and informal, as mechanisms to help enable growth ambitions. Finally, we seek to understand the influence of previous startup experiences on our CEOs, both positive and negative, and their impact on helping to grow a successful scaleup business.

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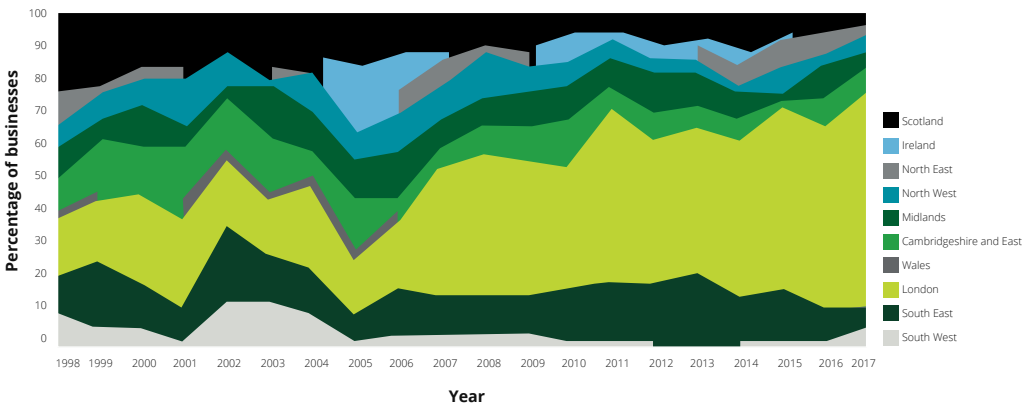
Two decades of change in tech

Over the past 20 years, there has been a clear evolution in the defining characteristics of the Fast 50. The technology sectors of our winners have diversified and developed around regional technology clusters but overall, the 662 unique winners in our Fast 50 cohorts have increasingly located themselves in London. Additionally there has been a significant evolution of the business models adopted by our Fast 50, as "Broker" and "Landlord" businesses challenge traditional "Creators".

London's land grab: businesses from the capital dominate the Fast 50 rankings

At the inception of the Fast 50 programme, winners heralded in near equal proportions from across the major regions of the UK. In 1998, Scotland was in fact the single biggest contributor to the Fast 50, with 11 winners. However, since the middle of the last decade, London has experienced considerable growth in the number of winners it contributes to the Fast 50, rising from eight (16 per cent) in 2005 to 32 (64 per cent) in 2017.

Figure 1: UK Technology Fast 50 winners by region, 1998 – 2017



Source: Deloitte UK Technology Fast 50 company data, 1998 – 2017

Looking at the broader drivers behind economic and technology investment in the UK helps to explain some of the reasons behind this shift. Over the past five years, London has attracted a total of £13.8bn in tech investment, greater than that of Paris, Berlin and Amsterdam combined.⁸

The city's fundamental strengths include great infrastructure, a world-leading finance hub, multiple world class universities and talent, which continue to make London an attractive place to do business.⁹ CEO survey respondents highlighted talent as the biggest influence (37 per cent) on deciding upon the location of their business, reaffirming the importance of having a strong tech hub capable of attracting highly skilled practitioners. These drivers along with the self-reinforcing cluster effects of a world leading startup hub, have undoubtedly helped influence recent Fast 50 winners to locate their growing businesses in the capital, despite the higher associated costs.¹⁰

However, data from recent years suggests that the makeup of the UK tech investment is starting to change and be shared more equally amongst the regions. In 2016, two-thirds of digital tech investment was recorded away from the capital, up from 34 per cent in 2013 and 40 per cent in 2015.¹¹

Examples include Edinburgh, which attracted £159m of investment in 2016 and boasts a strong supply of skills from the University's School of Informatics, Cambridge (£153m of investment in 2016) and the Silicon Fen tech hub, that has helped promote its leadership position in bioscience, have both established themselves as important tech hubs.^{12,13} The Northern Powerhouse Investment Fund also helps SMEs access commercial finance to address the challenges experienced by local businesses when fundraising.¹⁴ Time will tell if this diversification of investment away from the capital can help rebalance the makeup of the Fast 50 and support more fast-growing companies in Britain's regions.

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Software reigns supreme: software dominates the rankings but FinTech, Media & Entertainment and Internet businesses increase their presence in the top 50

Analysing our company dataset using consistent definitions for technology sectors over time outlines the emergence of other sectors amongst our Fast 50 winners.

Software-led businesses have always provided more winners than any other category, yet, its absolute contribution to the Fast 50 has varied year on year, from a high of 60 per cent in 1998, to a low of 34 per cent in 2009. The recent growth of "soft tech" sectors, namely FinTech, Media & Entertainment and Internet-based businesses, is due in part to the scalability of the business models they adopt.

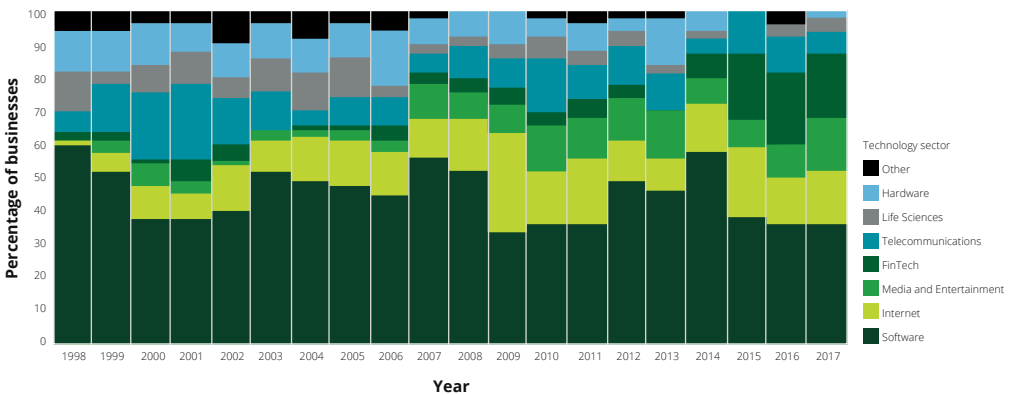
Deloitte's report on the impact of FinTech on the Financial Services industry outlines how these nascent businesses have actively "defined the direction, shape, and pace of change across almost every financial service subsector" in just a few short years.¹⁵ Whilst there is still some way to go before they truly disrupt the competitive landscape, the foundations have been laid. The representation of FinTech businesses in the Fast 50 has accelerated rapidly over the past five years, totalling as much as 22 per cent of all winners in 2016. The 2015 edition of the competition also included the overall winner, WorldRemit, an online money transfer service that enables people send money abroad using their smartphone or tablet.

The recent growth of "soft tech" sectors, namely FinTech, Media & Entertainment and Internet-based businesses, is due in part to the scalability of the business models they adopt.

The Media & Entertainment and Internet sectors have also gradually increased their presence in the Fast 50. Enabled by the increased convenience of transacting online, the total value of eCommerce sales in the UK soared by almost 60 per cent, from £335bn in 2008 to £533bn in 2015.¹⁶

This growth has supported new sub-sectors of businesses specialising in digital marketing, programmatic advertising, such as 2014 winner Switch Concepts, as well as other platform-based business models built around, food, transport and accommodation.

Figure 2: Technology sector of UK Technology Fast 50 winners, 1998 – 2017



Source: Deloitte UK Technology Fast 50 company data, 1998 – 2017

London has established itself as the clear home for our FinTech cohort, hosting 85 per cent of winners over the past 20 years.

As new "soft tech" sectors have expanded, Hardware and Life Sciences have witnessed a decline in representation within the Fast 50, particularly over the past four years. We do not think that this is reflective of a decline in the UK's broader success in these sectors. Instead, this is due to the business models available to "hard tech" companies compared to their peers, which has likely reduced their ability to grow revenue in a non-linear fashion.¹⁷ Delving deeper into the cross section of Fast 50 winners by region and technology sector highlights the clear development of tech clusters that align with broader national trends.

Driven by the concentration of financial services firms and the benefits of partnering with larger industry players, London has established itself as the clear home for our FinTech cohort, hosting 84 per cent of winners over the past 20 years. Amongst this cohort are 2017 winners Receipt Bank (7th place overall, average growth rate of 2,947 per cent) and GoCardless (8th place overall, average growth rate of 2,097 per cent). At a nationwide level, this trend shows little sign of abating in the future; investors in the sector have already injected over £800m since the beginning of the year, with London attracting over 90 per cent of that investment.¹⁸

Figure 3: UK Technology Fast 50 winner cluster: Absolute and proportion of sector winners per region 1998 – 2017ⁱ

Technology sector	Region										Total
	Cambridgeshire and East	Ireland	London	Midlands	North East	North West	Scotland	South East	South West	Wales	
Hardware	12 14%		17 20%	12 14%	3 4%	4 5%	20 24%	9 11%	6 7%		83 100%
Life Sciences	25 45%	3 5%	5 9%	3 5%	1 2%	2 4%	9 16%	3 5%	5 9%		56 100%
Telecommunications	9 8%	6 6%	33 31%	13 12%	3 3%	19 18%	7 6%	14 13%	2 2%	2 2%	108 100%
FinTech	1 2%		52 84%	1 4%	3 2%	2 3%		3 5%			62 100%
Media & Entertainment	4 6%	3 4%	39 55%	3 4%	3 4%	1 1%	7 10%	9 13%	2 3%		71 100%
Internet	5 4%	6 4%	68 49%	10 7%	1 1%	15 11%	17 12%	12 9%	6 4%		140 100%
Software	40 9%	14 3%	119 27%	48 11%	18 4%	31 7%	55 12%	90 20%	27 6%	4 1%	446 100%
Other	1 3%	1 3%	14 41%	1 3%	3 9%	3 9%	2 6%	2 6%	1 3%	6 18%	34 100%
Total	97 10%	33 3%	347 35%	91 9%	35 4%	77 8%	117 12%	142 14%	49 5%	12 1%	1,000 100%

■ >=40% of Businesses in a sector

■ >=20% and <40% of Businesses in a sector

Source: Deloitte UK Technology Fast 50 company data, 1998 – 2017

ⁱ Fast 50 winners that have appeared in multiple competitions are recognised in each qualifying year

The publication of a new Life Sciences Industrial Strategy for the Government highlights the key role Cambridge has to play in the continued success of this sector. It's positioning as part of the Golden Triangle, together with Oxford and London, makes it an ideal candidate for a new life sciences business.

The Triangle houses three of the world's top ten universities, 40 per cent of the top ten medical science faculties and many large research centres including the Francis Crick Institute¹⁹. Over 40 per cent of all Fast 50 winners from the sector have based themselves in the Cambridgeshire and East region, including members of the 2017 cohort, Ieso Digital Health (23rd place overall, average growth rate of 1,175 per cent) and Kymab (33rd place overall, average growth rate of 763 per cent), to take advantage of this incredible talent pool.

Historically, Scotland was also renowned for hosting a number of hardware and electronics manufacturers located within the Silicon Glen tech hub. Whilst the hub witnessed a decline due to growth in the quality and breadth of manufacturing available in China and Central Europe, data from Fast 50 companies supports the historical prominence of this tech sector.

Scotland supplied almost one-quarter of all hardware winners over the past 20 years²⁰. This includes electronics equipment producer ePoint (member of the Fast 50 in 2001, 2002 and 2004) and laser designer and manufacturer M Squared (member of the Fast 50 in 2012 and 2013).

The publication of a new Life Sciences Industrial Strategy for the Government highlights the key role Cambridge has to play in the continued success of this sector.

Business model evolution: a shift from "Creators" to "Landlord" and "Broker"-based businesses

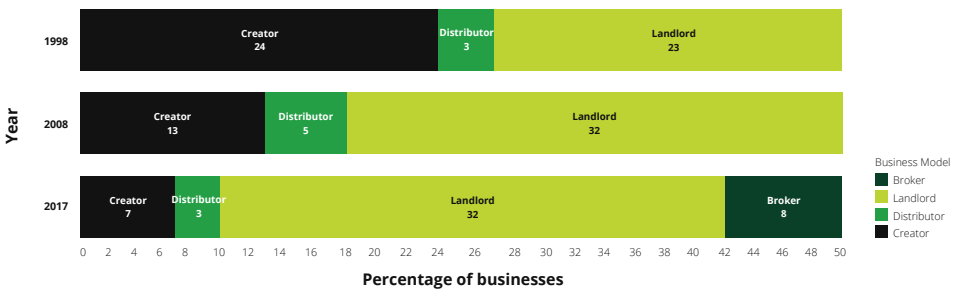
Just as James Watt's invention of the steam engine had a transformational impact on humanity during the 18th century, the rise of the computer age has seen society reach a similar inflection point. As Erik Brynjolfsson and Andrew McAfee explain in their book, *The Second Machine Age*, humanity's ability to utilise the "full force of these technologies has recently been achieved".

The building blocks are now firmly established to enable new offerings and business models to have the same transformational impact on economic and social progress as the advent of the steam engine.²¹

Analysis of the evolution of models adopted by Fast 50 winners over the past 20 years helps bring to life the transformation as the "digitisation" of industries has opened up new business model opportunities.ⁱⁱ

The growth in broker (facilitates sales by matching buyers and sellers without owning the asset) and landlord-based (those who sell the right to use, but not own, an asset for a specified period of time) models is visible in-line with a reduction in the number of firms using creator-based models.²²

Figure 4: Business model adopted by UK Technology Fast 50 winners, 1998 – 2008 – 2017



Source: Deloitte UK Technology Fast 50 company data, 1998 – 2017

ⁱⁱ Utilising the business model classification devised by the Sloane School of Management at MIT. Full definitions of business models can be found in the Appendix

At the inception of the Fast 50 programme in 1998, driven by the high proportion of businesses from the software sector, the majority of winners were Creators (those who assemble and sell goods from raw materials for indefinite use), such as the overall winner, video game developer Eidos (member of the Fast 50 in 1998 and 1999).

With the arrival of high speed internet and cloud computing, SaaS-based business models emerged and were keenly adopted by those in the sector. This shift to paying for ongoing access with a "landlord" model is typified by software giant Adobe's shift from a product to a service-based model in 2012 and the subsequent surge in its stock price. Landlords have seen a small increase in their contribution to Fast 50 winners over the years, with winners including technology solutions provider Assima (member of the Fast 50 2007– 2009).²³

The evolution of Distributors, firms that aggregate and bundle products to sell to their customers, has remained relatively stable over time. This category includes businesses such as 2017 winner, online fashion retail provider Far Fetch (38th place overall, average growth rate of 649 per cent).

Broker-based business models have existed for centuries, however, as outlined by Brynjolfsson and McAfee, digital businesses can now fully leverage network effects of the platforms they have established to unlock hyper-growth. This year's overall winner, Deliveroo, exemplifies the success of the broker or platform-based business model, facilitating sales by matching buyers and sellers, without owning any of the products being bought or sold. Their success has been achieved by opening up new sources of supply to the takeaway food market, coupled with an in-house logistics platform to optimise driver routes to ensure high quality food is delivered on time.²⁴

This year's overall winner, Deliveroo, exemplifies the success of the broker or platform-based business model, facilitating sales by matching buyers and sellers, without owning any of the products being bought or sold.

Different decades, consistent focus

The technology sectors, business models and geographic clustering of Fast 50 winners have changed over time, but many characteristics remain the same. Over two decades, the winning CEOs consistently reported their passion for solving customer problems; balancing the need for growth and profitability; leveraging the surrounding ecosystem and learning from past experiences.

Falling in love with the problem: remaining committed to solving customer pain points is key to success

Successfully identifying a market opportunity is the critical first step for the majority of our winners. Asking this year's CEOs about the primary reasons behind starting their own business revealed that over half felt that *there was an opportunity to do better than market incumbents (57 per cent) or that their product or service didn't exist (56 per cent).*

This appears far more important than the *desire to be my own boss (20 per cent)* or other "personal" motivations.

Our interviews with CEOs, including Aron Gelbard of Bloom & Wild (second place overall, average growth rate of 13,818 per cent), highlighted the importance attached to solving business and social problems and the motivation he derives from customer feedback.

Bloom & Wild's steadfast commitment to the customer and willingness to solve their pain points has played a key role in its success. It's clear that maintaining fast-paced growth over a sustained period of time requires passion, focus and excellent execution, and demonstrates how market opportunity alone is rarely enough.

Balancing the need for profit and growth: at the point of winning Fast 50 businesses' focus is switching from revenue to profit growth

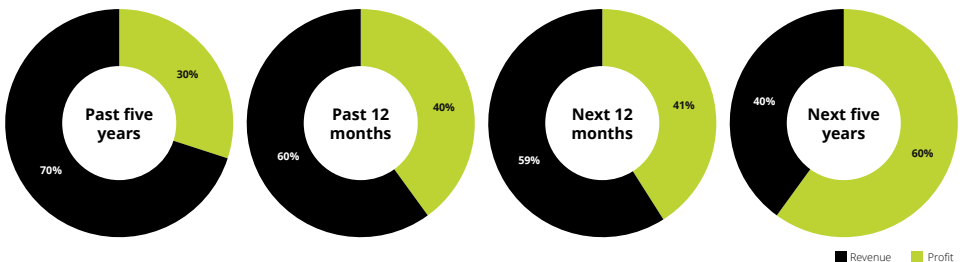
Successful pursuit of growth is an implicit characteristic amongst Fast 50 winners but this is a far from simple feat. Founders need to balance the need for growth and profitability, given the nature of their business, industry and stakeholder interests. Our experience tells us that winning CEOs are very deliberate in their choice and are often at an inflection point when they feature in the competition. The majority have doggedly pursued growth and delayed the search for profit as key financial objectives during the scaleup phase.

In 2017, 70 per cent of respondents confirmed that revenue was a more important objective than profit (30 per cent) over the last five years.

However, as businesses mature, CEOs predict that this focus will gradually shift over time, with profit expected to become the more important financial objective for 60 per cent of businesses in the next five years.

Founders need to balance the need for growth and profitability, given the nature of their business, industry and stakeholder interests.

Figure 5: CEO views on importance of revenue vs. profit growth as an objective for their business



Source: Deloitte UK Technology Fast 50 CEO survey, October 2017. Sample: all respondents (93)

The outright prioritisation of revenue over profit growth is particularly important for scaleup organisations and is influenced by a number of different factors.

First, private equity and venture capital funding has shown a stronger propensity to exhibit sales and employment growth in small and medium sized businesses compared to firms without similar backing.

Comparing the individual impact of both forms of financing demonstrates that venture capital has a larger and more immediate impact on business growth compared to private equity. However, the effect of private equity was found to be longer-lasting than venture capital.²⁵

Over half (52 per cent) of this year's Fast 50 winners report to have received funding from private equity or venture capital.ⁱⁱⁱ

Amongst entrants outside the top 50, this drops to less than one-third, reinforcing research findings concerning the positive relationship between these investors and revenue growth.

Further to this, the trend for winners raising finance from these types of investors appears to have strengthened over recent years; rising from 32 per cent in 2015 and 40 per cent in 2016.²⁶

Indeed, the trend of firms prioritising revenue over profit growth is also more significant amongst Fast 50 winners financed by these investors, rising to 84 per cent of winners (vs. 70 per cent amongst all CEO survey respondents).

Outplay Entertainment (11th place overall, Scotland regional winner, average growth rate of 1,904 per cent) CEO, Douglas Hare, captures their journey to profitability; "It took us over five years to reach profitability which is not uncommon for VC-backed businesses but which was psychologically challenging".

ⁱⁱⁱ Reported investment from "private equity or venture capital" may refer to investments from traditional private equity houses, venture capital funds, angel investors, foundations or corporate venture funds

Second, research into SaaS company valuations suggests that revenue growth is twice as important when determining a company valuation multiple as EBITDA margin. This is due to the importance attached to capturing market share through investment in product development and customer acquisition during the growth phase of a business.

The sentiment that there is basically “no reward for profitability”, is echoed by other market observers and bankers alike.²⁷ As software businesses represent the largest single technology sector in every edition of the Fast 50, and 42 per cent of all winners in 2017 it is no surprise that early revenue growth focus is seen as both attractive from a valuation standpoint as well as important to future success.

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It's a team effort: support networks have an important role to play to help create revenue growth

Accessing and leveraging support networks are commonly cited as factors that play an important role in the success of startup and scaleup businesses. Interviews with CEOs from the 2017 cohort support this position, and particularly highlight the influence of informal support networks as channels to obtain advice and guidance on critical business issues.

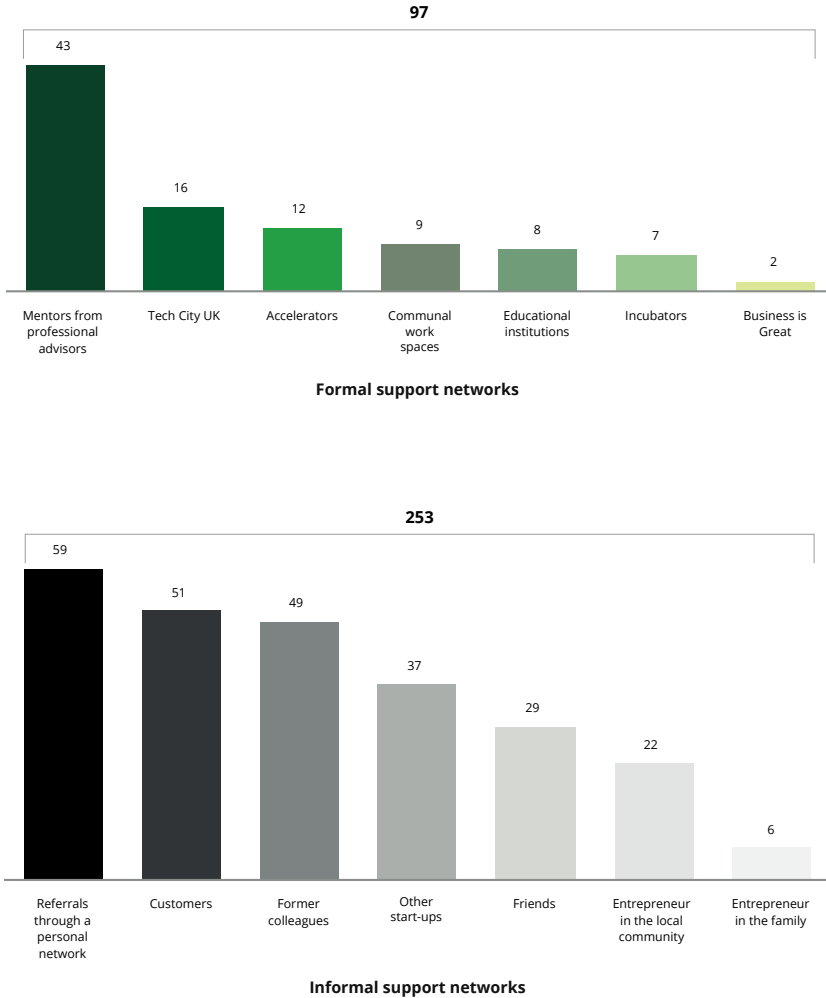
The broader startup eco-system has matured considerably over recent years and is far better equipped to help support growth amongst Britain's newest businesses today. Nesta estimate that there are now over 200 incubators and 160 accelerators currently active in the UK, with accelerators providing c. £33m of investment into startups each year.

Encouragingly, Scotland, Wales and Northern Ireland have a greater concentration of incubators and accelerators relative to the number of new businesses compared to other regions, including London.²⁸

The strength of this network in 2017 is a far cry from the experiences of some of the Fast 50 alumni. Audrey Mandela, co-founder of Multimap (member of the Fast 50 in 2005 and 2006) and angel investor, recalls how at the time there were “no angel networks, no accelerators. Office space and bandwidth weren't cheap, and there wasn't the startup culture we have today”.

Nesta estimate that there are now over 200 incubators and 160 accelerators currently active in the UK, with accelerators providing c. £33m of investment into startups each year.

Figure 6: Fast 50 use of formal and informal support networks over the past five years to help accelerate business growth



Note: respondents could select all relevant answers

Source: Deloitte UK Technology Fast 50 CEO survey, October 2017. Sample: all respondents (93)

Despite these encouraging signs, there remains progress to be made. Led by *mentors from professional advisors (46 per cent) and Tech City UK (17 per cent)*, Fast 50 winners and entrants from 2017 report to have accessed on average just over one type of formal support network over the past five years to help support business growth.

The strong adoption of professional advisors is likely preferred, as they can share experiences and best practice from other similar businesses, as well as providing specialist support on tax issues such as Enterprise Investment schemes, R&D tax credits and advice on tax implications during overseas expansion.

For every formal support network accessed, our Fast 50 community have interacted with c. 2.5 informal support networks, suggesting that there is considerable value to be derived from using these alternative channels.

Findings from Deloitte's Power Up report on the growth challenges facing scaleups, the Oxford Innovation report on the mind-set of an entrepreneur and the Economist Intelligence Unit also promote the use of informal networks and collaboration between peers and organisations as strong support mechanisms.^{29,30,31}

Over 100 responses from our CEO survey highlighted the benefits of *referrals through a personal network (63 per cent)* or re-connecting with *former colleagues (53 per cent)*, re-emphasising the importance of the role a professional network can play in helping enable revenue growth.

Over half of survey respondents also demonstrated the customer-centricity of their organisations, citing that customer feedback was vital in helping to fine tune their business proposition to unlock fast-paced growth.

Learning from past experiences: responding to feedback and bouncing back from failure are key components of building a fast-growing business

This report is designed to recognise and celebrate the success of the Fast 50 community; it should not be forgotten that their outstanding growth is positioned against a broader backdrop where over half of new businesses fail to reach their fifth birthday.^{iv} Whilst failure is an inevitable part of venturing, the experiences gained from endeavours that don't succeed can often prove to be invaluable in future decision-making of the individual or organisation.

Many of our CEOs can relate to these experiences. Nearly 60 per cent of our CEOs have previously founded, or been part of the founding team of another startup and almost 20 per cent of CEO survey respondents stated that they had previously been a part of a startup that had failed. Similarly, when asked to rank important experiences from starting their own business, 44 per cent of CEOs believed that one of the top three learnings was that *failure is OK as long as you take away learnings from your mistakes.*

This was only surpassed by *the need to attract and access the right talent early (73 per cent),^{iv}* together with *the need to test and obtain feedback on the product/service early on in the process to validate the value hypotheses (52 per cent).*

Alister Rollins, CEO of South West regional winner MoveGB (third place overall, average growth rate of 6,053 per cent) set out to build a company that could not only withstand failure but prosper from it. He captures the required attitude as he recalls; "I didn't want Move to take four years to find product-market fit so we went to market early and expected to fail so we could learn and improve. You only ever truly fail if you give up. I'm comfortable with the idea of failure along the way. I expect it now. The trick is bet small, validate your assumptions and build a company that can withstand failure... and don't make big bets on the unknowns".

"You only ever truly fail if you give up. I'm comfortable with the idea of failure along the way. I expect it now."
Alister Rollins,
CEO of MoveGB

^{iv} See last year's UK Technology Fast 50 report for our in-depth look at talent in scaleup businesses at <http://www.deloitte.co.uk/fast50/index.html>

Outlook

The evolution of the UK Technology Fast 50 over the past 20 years demonstrates that there is no single secret formula for success. Businesses from across the Fast 50 cohorts demonstrate how the face of the technology sector has changed over time. Winners have all spotted opportunities for tech-enabled growth in new and existing sectors, and have captured those opportunities using a variety of different business models. We expect the diversity of the sector and our winners to increase, with technology continuing to seep into other industries and further propagation of scaleable business models to power the fast-growth companies of the future.

Underpinning past and future successes are the common themes and character traits of passion, determination and focus on meeting customer needs. These businesses also recognise that they can't always do it alone and are not afraid to ask for help, or learn from their mistakes.

Following a slump after the snap general election, optimism amongst CFOs surveyed by Deloitte has rebounded to neutral in Q3 2017. Yet, over one-third of these leaders still perceive the level of external financial and economic uncertainty facing their large businesses to be *high* or *very high*.³³

The Fast 50 CEOs also highlighted concerns that the ambiguity caused by Britain's decision to leave the EU and a lack of new talent with relevant skills pose the biggest threat to the health of the tech sector over the next five years.

In spite of these headwinds, Britain's tech sector remains in rude health and continues to prosper thanks to the continued inflow of investment and growth in formal support networks for young businesses. Fast 50 CEOs remain bullish about their own business outlook, with 44 per cent expecting *significantly higher* revenue growth and 60 per cent prioritising international expansion over the next 12 months.

For the UK to build on these strong foundations we must ensure the voice of startup and scaleup businesses is incorporated into future policy discussions concerning trade, investment, immigration and talent. This year's cohort of special businesses and their predecessors serve as proof points that it's possible to prosper in the face of uncertainty. Other startups, corporates, and Government should acknowledge the example they have set, and do their part to ensure the UK remains an attractive business and technology destination in the years to come.

Winners case studies



107,117%
Overall winner
London regional winner
Internet sector winner

"Fries, mash, sweet potato chips... People love potatoes!" says Philip Green, chief financial officer of Deliveroo, the fast-growing food delivery business. Potatoes, he reveals, are the bestselling products across all menus on the platform. "The potato is so versatile, you couldn't design a better product."

Green, who has been with the firm for 18 months, likes to know what people are buying. He is a self-confessed data junkie, using it to make better strategic decisions at the London-based firm. "As we continue to scale we have a much richer source of data - in terms of what food types customers are looking for and eating, and what kinds of restaurants and cuisines do well," he explains. This has been hugely useful when considering which new restaurants to add to the portfolio.

Deliveroo currently delivers meals on behalf of brands including Wagamama, Byron, Carluccio's and Pho and there are always up-and-coming names clamouring to be added to its books. This prompted Deliveroo to launch its Editions arms, a pop-up kitchen concept. "It's a great solution for restaurants," Green claims. "Access to real estate is incredibly hard, rental and food costs are going up - especially in the UK. They put their kitchen in our site and it costs them about a tenth of the capital." Data helps Deliveroo decide which restaurant's fill the gaps in its offering, and the team has a solid track record with its selections: "We rarely have to flip a restaurant out," says Green.

Deliveroo has been on an astonishing journey over the five years since inception, most recently raising \$385m, bringing its valuation to \$2bn. The business is still losing money - "\$130m in losses last year," reveals Green - but it's the price you pay for growth. "We're now in 150 cities reaching 27,000 residents and employing 27,000 riders."

The company made its biggest international push in 2015, which has been expensive but will be worthwhile in the long-term, he adds. "Marketing continues to be an investment as we build the brand in new countries." Technology is also a big overhead, as Deliveroo future-proofs its platform. "That should help us see efficiencies," says Green. One of Deliveroo's biggest technology plays is in its logistics algorithm: "That's our secret sauce," he explains. "It used to simply find closest rider to the restaurant but now we see the network effect. What is the next order likely to be and where is the rider going? We start to make predictions that make the system more efficient." This algorithm reduces waiting times for customers, ensures the food arrives hot, and increases the earning potential of Deliveroo's network of riders. "It's win win for everyone," claims Green.

This kind of innovation is crucial in an industry as competitive as food tech. The slicker Deliveroo's model, and the more data it harnesses, the more likely it is to emerge victorious in these food wars. "It makes us more thoughtful about our investment decisions, not just on a transactional basis but also through the customer lifetime. When we think, 'Shall we launch in another country or shall we spend more money investing in a new product or feature? We know the best use of our money for a financial return.'"

Like many successful ventures, Bloom & Wild was born out of frustration with the status quo. "I'd tried to order flowers online many times," says co-founder Aron Gelbard, 35. "I'd struggled to do it on my mobile and there just wasn't a brand that stood out."

Many online brands in other sectors were building emotive brands that really resonated with their customers, he explains, yet ordering online flowers – even for emotional occasions – was strangely commoditised and clinical.

Gelbard also became friends with the team behind Graze, the snackbox delivery company, and saw an opportunity to apply their innovative letterbox delivery model to an old-fashioned market. "One of the main pain points with flowers is that you have to be home to receive them," he says. "That ruins the surprise."

In 2013, Gelbard and Ben Stanway launched the London-based start-up, stating an ambitious mission to "create a business with a great supply chain, a great brand, top customer service, and delivering flowers through the letterbox."

Over the last three years, Bloom & Wild has proven its model, growing revenues by a factor of 40. "Our growth has been viral," says Gelbard. "We doubled in size last year alone".

Part of the start-up's success has been down to sheer grit and determination – "We quit our day jobs, used our savings to fund the business and juggled a huge number of balls," says Gelbard. But it was also down to something more intangible: "Luck. A lot of it was luck."

He recalls a fortunate event that helped him build a robust supply chain. "In the beginning, we were doing everything ourselves, including buying flowers from auctions in the Netherlands," says Gelbard. "Then we met someone from one of the UK's leading flower growers at a social event. We went into partnership with them and they still supply most of our flowers."

The flower entrepreneurs are shaking up the flower market in many different ways. "We have started to create new gifting occasions, reasons for people to send flowers," reveals Gelbard. One example is the relatively unknown Grandparents Day, which falls on October 1 in the UK. "We encourage our customers to reconnect with their grandparents on that day," says Gelbard. "They often don't live in the same part of the country, and may not be tech savvy, so flowers can be a thoughtful way to stay in touch." Bloom & Wild also introduces innovative products to "delight and surprise" its customers, he adds. "We do mini Christmas trees through the letterbox now. They're been super popular, especially with our business customers."

Having built a solid business in the UK, Bloom & Wild is now looking further afield. "Gifting is a cross-border phenomenon," says Gelbard. "Our customers wanted to send flowers to Europe, so now we're in Germany, France and Ireland. That's been crucial to our growth. And we would like to move into other countries in Europe and beyond." To help accelerate growth both home and abroad, the business has raised a total of £7.25m from the likes of MMC Ventures.

Unlike many venture-backed businesses, however, Bloom & Wild is keen to balance growth and profitability. "Profitability must always be in reach," says Gelbard. "We want to be profitable in the UK next year. I want the future to be in our hands, and keep an eye on the unit economics of our business."

"We could borrow more and advertise in lots of new channels but would it be the right kind of customer? Would it help the long-term health of the business?" Gelbard says that we wouldn't rule out raising further venture capital but only when it's right for the business, "not because we have to keep the lights on".

"We want to be Europe's leading flower company," he continues. "We're already rated 4.8 out of 5 stars on every review platform, so we hope this customer advocacy will turn into market leadership."



6,053%
3rd place
South West regional winner

If everyone wants to be active and healthy, why are so many of us neglecting our fitness? This is the question that MoveGB founder Alister Rollins has set out to answer. "Most gyms only keep consumers engaged for a few weeks," he says. "The model is broken as high churn mean neither the operator or consumer get what they want."

In 2013, Rollins launched his innovative fitness start-up to help solve the issue. MoveGB connects hundreds of gyms, exercise studios and fitness instructors, to 100,000s of 'Movers' (users of the service) allowing them to dip in and out of different types of activity. "Our interests change all the time," he explains. "But there are so many barriers to trying new things. Maybe a friend is into boxing but you're not a member of their club, or you just want to try something new but don't know there's a local hula hooping or parkour class nearby. We make that possible."

MoveGB's subscribers are reaping the benefits of the model, they are twice as active as traditional fitness users, and they keep active for four times as long. Customers become fervent fans because of MoveGB's top-notch service: it sends flowers to injured members and if a membership is unused, it credits the cash back.

The start-up launched in Bristol and grew rapidly in the city, where it now boasts 65,000 customers out of a population of 400,000. It has now launched in Brighton and London too. "Year-on-year, we're growing 100%," says Rollins. "We started small to prove the model, so now we're moving from one location to the next at rapid pace."

"We're not worried about any potential competitors," he adds. "Our only true competitor is inactivity."

Rollins has international ambitions, with a pilot live in NYC and he has been travelling to China to scout out the fitness market there. "It's a rapidly-growing industry that will be huge in a few years," he says. "We want to get in there early and stop them following the Western model, which we know is broken." In China, MoveGB will operate a franchise model, Rollins reveals, which will help the brand to get the offering just right through tapping into local entrepreneurs.

There have been many setbacks along the way, but Rollins says that being a serial entrepreneur has helped him roll with the punches. "It took me four years to get my last business right, then it grew really fast" he says. "I didn't want Move to take four years to find product market fit so we went to market early and expected to fail so we could learn and improve. You only ever truly fail if you give up. I'm comfortable with the idea of failure along the way. I expect it now. The trick is bet small, validate your assumptions and build a company that can withstand failure, and making sure your team are never demoralised, and don't make big bets on the unknowns."

Physical activity is just the beginning for MoveGB, as Rollins has big ambitions to move into related sectors, from nutrition to mental health. "You've heard of FANG, the group of services we engage with the most Facebook, Amazon, Netflix and Google?" he says. "We believe Move will join this club looking after all your health and wellness needs. Amazon started out just selling books, and we are starting with active leisure but we see a future where every consumer invests in preventative health services, where they understand their body, their nutritional needs and have access to the activities to get the most out of their day-to-day lives."

Serial entrepreneur Douglas Hare had the idea for this third venture, Outplay, in 2008. At the time, he was at the helm of Strategic Projects at Foundation 9 Entertainment (F9E), a traditional games maker headquartered in Orange County, California. "We developed and published a relatively simple mobile game as a launch title for the Apple App Store in July of 2008, and I saw an amazing opportunity," he says. "The market was small and undeveloped then but I knew it would be big."

But there was a problem. F9E's customers were all traditional publishers, who used the company's various studios to develop big-ticket games like Star Wars, The Da Vinci Code, and Harry Potter. These were aimed at consoles and PCs – not smartphones. "They weren't interested in moving into mobile," says Hare. "But I was convinced that was where the action was going to be."

Undeterred by the challenge – and despite the global recession – Hare left to create Outplay, a novel social and mobile gaming company. "Very few companies were using the free to play business model back then and the idea of games as a service was only just emerging."

Hare, 50, and his co-founder and brother Richard tried to launch their new venture in California but quickly ran into problems.

"At F9E we had internal teams doing the development work but when we started Outplay we contracted individuals and small companies to do the work for us. We found that process to frustrating and despite some early, quick progress with prototypes things slowed down and it became more and more obvious that we'd need to staff-up and do the work internally again. That realisation got us thinking about different locations and after speaking with Scottish Development International and Scottish Enterprise we made the decision to move back to Scotland.

Hare says: "California was a lovely but very expensive place to live and start a new company. Scotland had a long history in gaming, particularly Dundee, where we ultimately opened the studio."

The move was the making of the business. British venture capitalists were eager to back these proven entrepreneurs, and it took just four months to close their first round of funding. "We then opened our doors in April 2011 and within six months had assembled a team of 30 people and launched our first game," says Hare. "And then the real learning and hard work started."

Unlike boxed games, which tend to generate big sales at launch and fall out of favour quickly, mobile games can become more successful over time. "It's a strange business model, with a very long tail," says Hare. "We have six games now, and the ones that are three years old are having their best revenue years yet."

"It took us over five years to reach profitability which is not uncommon for VC-backed businesses but which was psychologically challenging for Richard and me."

What does it take to survive in the highly competitive gaming industry? "You need extremely good games to get a seat at this table," he says. "Something so well done that players get excited just looking at the name, the theme and some screenshots in the app store." Games makers hoping to win over consumers have to walk a fine line between "the familiar and the new", he adds. "It has to be accessible yet differentiated." Outplay has found this balance, and the proof is in the numbers. In total, the company's games have been downloaded 100m times, with millions of users playing every month. 2015 and 2016 saw revenues more than double year-on-year and 2017 is going to be another big growth year. Hare says: "We started small and built on our success, and now we are very bullish about the future."

In Touch Networks is back in the ranking for the second year running. The disruptive recruiter has changed the way that companies hire board members - especially the elusive yet crucial non-executive director. The platform uses cutting-edge technology to match its users with skilled professionals and consultants. And unlike other recruitment firms, it simply charges a flat subscription fee to access its services. "We now have 220,000 members across six platforms," says boss Matthew Roberts, 32. "We help growing businesses find non execs, finance directors, investors, female directors and business transformation experts."

The Manchester-based firm, which was founded three years ago, has innovation at its heart. Having established a loyal customer base, In Touch has now branched out into training and development - such as career coaching - and the firm now hosts 60 events a year.

"We're obviously doing something right," says Roberts. "We've massively increased our growth rate. Memberships have gone through the roof, and we boast a 97pc renewal rate year-on-year, which we're delighted about." The team has doubled in size over the last 12 months to hit 120 employees, and In Touch is opening an office in New York to meet international demand.

"We've seen an opportunity in the US, and done some trial marketing out there, which has been really well received," reveals Roberts.

"We've been spending loads of time in New York and it's been amazingly fun. And when you enjoy doing something, you create the best possible product and solution for the consumer." Roberts is currently weighing up several acquisitions Stateside to help cement In Touch's American client base. "The market size there is a great lure."

However, Roberts is determined not to allow the US business to distract him from the domestic opportunity. "We haven't even scratched the surface in the UK," he claims. "We currently have 17 networks that are in various stages of development."

In Touch Networks is in the enviable position of balancing growth and profit. "We've been profitable since day one," claims Roberts. "We've never borrowed any money and we're cash flow positive." Roberts credits mentor and chairman John Laithwaite for helping him to build a sustainable business: "He is incredibly inspiring," says Roberts of the JLA Group founder.

Roberts is currently laying the foundations to supercharge future growth. "We've got an amazing business but the secret to successful growth is keeping things as simple as possible," he says. "A lot of companies, as the team gets bigger, add in layers of complexity that aren't always needed."



PM Connect

1,319%
21st place
Midlands regional winner

James Macfarlane was fresh out of university when serial entrepreneur Scott Smith offered him £1m in seed finance to start online business PM Connect. "I was just 21, so as you can imagine, this was an appealing offer," Macfarlane says, laughing. The new graduate was already well versed in creating online successes while at university. "I used to run an online bingo site, then I developed and later sold gold retailer Gold.co.uk," Macfarlane explains. "I also started up one of the UK's largest mothering networks." This portfolio of parenting sites included: pregnancy.co.uk and babynames.co.uk. It attracted advertising revenue from big names such as Johnson & Johnson and Toy R Us.

Then, in 2012, Macfarlane witnessed a strange phenomenon. "Traffic was rising but revenues were down," he says. "We started scratching our heads over why." During that year, PM Connect's mobile visitors went from 30% of total traffic to 60% but the websites were unable to monetise mobile users. "There just wasn't enough advertising real estate and the ads we were serving were invasive," says Macfarlane. "We went back to the drawing board and decided to work out how to monetise mobile."

PM Connect built a handful of mobile-only products, such as iFitness, which recommended healthy meals and workouts to users. But Macfarlane's 'eureka' moment came when he landed upon an unusual model for billing these visitors. "We looked at who had lost the most revenue in mobile space," he explains. "Back in 2006, the carrier was king. It owned the operating system on your mobile, so all your purchases went through them.

"Then iOS and Android brought in their own app stores, which eroded their revenues. We approached the carriers with concept projects they could sell to customers, but of purchasing them through credit cards, they charged them to the phone bill. The carriers were really excited by it and that's when the business exploded." EE, Vodafone and O2 all signed up, and soon brands like WWE, the wrestling giant, were asking PM Connect to create bespoke products for them.

The Worcestershire-based business, which now employs 30 people, has built this idea into a sustainable model, which is profitable. "And we paid Scott back that £1m," says Macfarlane, now 29.

Today, PM Connect has expanded into 10 countries but they have only scratched the surface of the opportunity. "In Africa, there are a lot of bankless people, who don't own credit or debit cards. Paying with the phone in this way opens up a lot of new customers."

Each new country that PM Connect brings online opens up several new carriers. "The opportunity is huge," says Macfarlane. "It's hard for us to predict the level of growth out there."



CYANCONNODE

1221%
22nd place
Cambridgeshire and East regional winner
Telecommunications sector winner

The internet of things (IoT) revolution has arrived, allowing appliances to talk to each other without any interference from human beings. We will soon live in a world where our fridges will automatically order milk when we run out, and where sensors will turn on the heating when we are a mile from home.

CyanConnode is at the forefront of these bold new IoT technologies, creating a smart way for these devices to communicate. The Cambridge-based firm was founded in 2002, and has developed a successful IoT communications business, connecting smart meters in homes and businesses to their utility providers.

The company supplies the software and contract manufactured hardware that act as the communication platform of the smart meter. Together, these allow utilities to see how much energy is being used by customers, and when. John Cronin, executive chairman of the London Stock Exchange AIM-listed company, explains: "They can then offer incentives to consumers, such as discounts if they use their white goods after midnight."

These meters also help utilities and governments ferret out theft. "In India, they are losing \$32bn a year because energy is stolen or tampered with," claims Cronin. "The Indian government is keen to roll out 250m smart meters over the next few years. This will help the nation recoup that loss."

The company's technology is also at the heart of the smart metering deployment which is now underway in the UK. Its software has been supplied to Telefonica alongside communications hardware from Toshiba.

CyanConnode's communication platform is part of a global movement to help consumers use energy more efficiently. "The population of the world keeps on growing, which means our resources must be managed better," says Cronin. "We need to get peak usage of electricity down." CyanConnode now operates across India, Iran, Thailand, Bangladesh, the Middle East, Indonesia as well as Scandinavia and the UK. Demand has already outstripped supply: "We have a \$100m backlog of orders, and over half of it is recurring software revenue," says Cronin.

CyanConnode-enabled devices communicate using narrowband radio technology, which is a perfect fit for transferring small packets of data. Cronin claims that using a more advanced technology, such as broadband, would be like using a steam roller to crack a nut: "You don't need a big pipe, like broadband."

Smart metering is just the beginning for the technology outfit. "We can hook up any device to our network," says Cronin. "We've started in electricity and gas but we could do water, street lights, any device you can think of." Innovation has helped the company to motor ahead of both UK and international rivals. "Our product used to connect to just 50 devices, now it can talk to 200, which makes it more cost effective to deploy," says Cronin.

According to a recent FinnCap research analyst note, CyanConnode has the opportunity to generate £2.2bn of revenues from their existing markets, with an associated gross profit of £1.4bn. "This market will be worth billions in a few years," claims Cronin. "We are at the start of a very large wave of both smart metering and IoT deployments."

Martin Port's story is one of tenacity, vision and extraordinary chutzpah. The serial entrepreneur was the founder of Masternaut, a successful vehicle tracking and fleet management business which he finally sold in 2011 to a California based private equity house. It wasn't long before he came up with an idea for a new venture. This one-stop-shop, he dreamed, would combine vehicle tracking with job scheduling, customer relationship management and mobile technology to make field workers more efficient. "I wanted to put several technologies together to create a new 'infrastructure-as-a-service' concept," he explains. Unable to ignore the idea, he launched BigChange Apps five years ago.

Building a start-up is never straightforward and the first years were hard, Port admits: "It took a while to get real traction. We set our prices too low at the beginning, and undervalued our service."

It took time but business took off, and Port gradually increased the subscription cost from £40 to £60 a month, and found customers remained loyal. "We've brought on 200 new customers this year through word of mouth alone, and next year we should be on 300," he says.

This year, the young company will turn over £7m, and boasts 600 customers from local councils to utility companies to P&O Ferrymasters, with 15,000 individuals using his technology. By 2020, BigChange Apps will be generating £23m in revenue, with £4m profit. "And that's just based on our UK business," says Port. "We're opening an office in the US now and France is coming soon."

Alongside the software play, Port is building a new concept that he calls "the Yellow Pages for modern trades people". This is a transparent platform that allows consumers to book qualified trades people, and manages the whole process from booking appointments to invoicing. BigChange is also innovating in the subcontracting space, creating a collaboration tool to help businesses share jobs.

Port has a lot on his plate but when you've grown successful businesses in the past, it gives you the courage to follow your instincts. "Vision is a reality for a serial entrepreneur," he explains. "If you haven't done it before, it's just a vision."

Not that all of his businesses have been deemed successful: "Before Masternaut, I ran a bread business for eight years," he recalls. "I remember the FT did an article on me, entitled 'From failure to success'. I don't think my bakery business was a failure. I just didn't sell it for very much."

Now 55, Port doesn't believe start-ups should be the preserve of the young. "I started this business late in life," he says. "I should be an inspiration to pensioners."

There is no limit to what BigChange could achieve, he adds. "We've been told we could become a 'unicorn' business but I keep my feet on the ground. Our light is under a bushel at the moment but it won't be there for long."



851%
30th place
South East regional winner

Private equity giant BlackRock, media conglomerate News UK and top insurer Direct Line. They all have one thing in common - turning to a small company near Tonbridge to help manage their brand and digital reputation.

Reddico, founded by brothers Luke and Nick Redding, has built up an extraordinary reputation for search engine optimisation (SEO), paid search and social media services, thanks largely to award-winning client campaigns and fantastic results in the hugely competitive online marketing sector.

Managing Director, Nick Redding, says: "There's lots of misinformation in this industry, because SEO can be difficult to understand and Google is not transparent about its algorithms.

"We tend to pick up clients that want to see real results, and may have been given incorrect or outdated information in the past."

Nick explains that at Reddico, there are no salespeople - just account managers and techies. Therefore, there are no unrealistic promises or expectations. Reddico's team ask for the client objective first and build an SEO strategy from there, not the other way around.

Mr Redding claims this is unique: "We do a lot of work up front to understand our customer's business and make sure we can give them what they need. That's a huge commitment in terms of resource. Even if we don't get this back initially, the clients win and become very loyal and invested in us."

The Redding brothers live and breathe digital marketing. The younger of the two, Luke, 28, learned his skills while building his first business, an online learning website. He says; "After spending the budget on building the software, I had to learn SEO to grow the business."

However, despite working at large digital agencies, Luke says both always wanted to start their own venture. They believed digital was where the opportunity was, so that's what they did.

Reddico was launched five years ago, and pulls together external and proprietary tools to monitor Google's algorithms, keep up with search engines, manage data, and analyse social platforms.

In its first year, the business turned over £100,000. This year, it will pass 10x that amount. But despite the accelerated growth rate, the Reddings have always kept the business in the black.

Luke says: "We always have four to six months of overheads in the bank. You need a buffer in case the industry moves and we need to quickly change our offering.

"We're looking for manageable growth. Our next big target is £5m in revenue and then on to £10m. That's where we want to be."

Final Fantasy. Tomb Raider. Dragon Quest. These are just a few of the world-beating titles that have been created by legendary game companies Eidos and Square Enix over the past few decades.

The two companies became one in 2009, when Eidos was acquired by Square Enix. Phil Rogers, who was chief executive of Eidos, which appeared in Deloitte's first ever Fast 50 ranking back in 1998, became boss of the Western business after the deal.

"I've always been fascinated by acquisitions," he says. "I was never afraid of them." According to Rogers, the acquisition helped both studios make more of the kind of games their customers loved. "There was a tremendous amount of overlap between the two companies," he explains. "We were both very focused on quality and on our fans, and that shared vision was key."

The videogames industry has been through a period of intense change, disrupted first by the internet and then the smartphone revolution. After some "rough and tumble", Rogers says that Square Enix adapted well to the new digital landscape.

"The rise of mobile gaming and free-to-play brought disruption," he admits. "We are taking on all the smarts from these emerging markets and they play heavily into how we think of our console games." He gives an example: "Free to play is great at onboarding players because if the gamers don't like it, they leave. We've learned to do that with our console games, making the onboarding just as smooth."

Square Enix also makes sure it gives its creative teams free rein to build the worlds and games that will delight future audiences. "We're mindful that size can be detrimental to creativity so where we need to address that, we give our teams the structures that are best suited to their needs," says Rogers.

Back in the days of boxed console games, success was much easier to achieve, he claims. Final Fantasy is 30 this year, while Tomb Raider was first launched just over 20 years ago. "Quick sequels could generate really good returns but then, on balance, innovation and customer satisfaction dwindled," says Rogers. "It was a rinse and repeat formula."

"When I took over at Eidos, I wanted to stem that, to stop IP dying. We had to believe we could reboot something like Tomb Raider. We went from a world where game sales were declining to finding a new audience and thinking about things differently. It took a lot of brave decisions and late nights thinking, 'Can we achieve this?'"

This strategy is clearly working. During the past financial year, Square Enix's sales have jumped 20pc, year-on-year, due to strong sales of Final Fantasy XV and Rise of The Tomb Raider as well as strong download numbers for previously released titles.

Now, Square Enix is pouring its efforts into new models such as games-as-a-service, and developing new games based on world famous characters. "This is how we will engage gamers in future," says Rogers. "We've also announced a partnership with Marvel this year, which is already proving incredibly exciting. The hairs on the back of my neck stand up when I think of what we'll be bringing to fans."

JUST EAT

Previous winner at the 2013, 2014 and 2015 UK Technology Fast 50 awards

"I am in no way a visionary but I do remember always having massive conviction that the takeaway market would explode," says David Buttress, co-founder of Just Eat, the takeaways platform. "I'd seen the digital revolution in hotels and flights. I knew that people wouldn't be ordering from takeaway menus over the phone forever. It wasn't a question of if but when and who would make it happen."

The listed fast-food platform, which now connects more than 19m customers with 76,000 restaurants across 12 international markets, was an industry pioneer when it launched in 2006. "But we weren't actually the first," admits Buttress. "We certainly thought we were. But Lastminute.com built the first, Urban Bite, back in the early-2000s." Hungryhouse, another rival, launched a month before Just Eat. "We bumped into each other in August 2006 and realised we were both building the same thing," recalls Buttress, laughing.

Just Eat's success didn't come from a first-mover advantage but from the execution of the idea. "I still remember the day we started the business. We bought two laptops from Currys and set up in a basement flat in the Docklands," says Buttress. "We bootstrapped the business for 18 months. Every time we got money in from a restaurant, we would hire a new sales person or engineer." Cash flow was a big challenge in those early days.

"We were always worried about running out of cash," says Buttress. "In our first month, our net turnover was just £36. Can you imagine going home to your wife after giving up your job and telling her that? It was a very humbling reality." There were also some serious technical issues: success was a double-edged sword when the platform struggled to cope with customer demand.

"I remember Valentine's Day 2011, which was a really big night for us in terms of sales," says Buttress. "We had platform issues because it just wasn't engineered to deal with that level of scale." The meltdown led to a massive investment of time and resource into building a new platform, which was robust enough to deal with any future growth. "In the end, we put it right but that was a hairy night." Despite these early growing pains, Just Eat grew to become an industry heavyweight, and was the biggest IPO in Europe at the time of its listing in 2014. Just Eat is also a veteran of the Fast 50, and appeared most recently in the ranking that same year.

Buttress has since stepped down as the boss of the firm and joined venture capital firm 83North at the start of this year. However, he remains a shareholder of Just Eat, and sits on its board. "I spent my whole thirties thinking about takeaways," says Buttress. "It was brilliant but that level of intensity is a challenge.

"I have a young family, so it would be selfish to try and build another start-up right now. Instead, I want to help other entrepreneurs build businesses that stand the test of time, either through investment of through sensible pieces of advice."

Buttress is now helping to encourage this next generation of entrepreneurs through 83North but also through Just Eat's own food-tech accelerator, Just Eat Ventures.

"I believe we're just scratching the surface in this industry," he claims. "From new food types to new delivery methods, novel communications between customers and restaurants, and the smart use of data, there is still a whole lot of innovation still to come." It remains tempting to jump in and build a new business to drive that innovation, he admits: "I love building things. So never say never."

Today it would be difficult to imagine a mobile phone without at least a few mapping and location-based apps. When Sean Phelan started Multimap in 1995, though, the idea of putting maps on mobile phones was viewed by some — including a few major handset providers — as absurd.

Sean had been a consultant working on mobile network licensing, and an avid sailor familiar with GPS and mapping technology. He saw potential in bringing the two together. "That was the vision that made me start the company," he says.

But the networks and phones weren't quite ready for that vision. So Sean turned to the internet, and in 1996 launched Multimap.com's consumer website. "I'd missed the PC revolution," he says. "And the web revolution felt like the same order of magnitude. I thought, 'If I don't jump at this now it will be too late.'"

Multimap was the first company to put maps from UK mapping agency Ordnance Survey online. Sean's original intention was to outsource the development of the mapping services, but he was told that what he wanted to do couldn't be done, was too hard, would take too long, etc. So in the end he built the infrastructure himself, writing code and configuring mapping software and servers in the spare bedroom of the flat he shared with his partner, Audrey Mandela.

"Necessity was the mother of invention then," Sean says. This served us well along the way because the culture of company was always to use technology carefully, not to just throw money and hardware at problems."

As the business started to take off, Audrey began to spend more of her time on Multimap, and invested some of the gains from the sale of her tech consulting employer into the company.

"The start-up environment was very different then," she says. "There were no angel networks, no accelerators. Office space and bandwidth weren't cheap, and there wasn't the start-up culture we have today. It was harder to recruit team members for a new, untested business. These were the days of dial-up internet, with hardly any broadband; the computers themselves were also slow. Not an ideal environment for web-based maps."

Still, consumers and businesses saw the appeal, and both the public website and the provision of maps for others' websites took off. In 1998 Audrey quit her job to join Sean. Just as they started to look into external funding they received a call from Flextech (now part of Virgin Media), which wanted to integrate Multimap's maps into its interactive television services. In 1999 Flextech invested £1.87 million for 25% of the company.

The funds enabled Multimap to launch a significant consumer marketing campaign and to accelerate hiring. Multimap's ad campaign won Ad of the Week in Campaign magazine after its first week on the street and is partially responsible for a close to 50% jump in the following month's traffic. Audrey says 20% of leads for B2B services that year were also generated directly by the ad campaign.

Although the dotcom crash of 2001 had an impact on ad sales on the consumer site, sales of business services were strong. By 2003 the company had more than 800 B2B customers, double the number in 2001. Corporate customers included Hilton, Yell, Ford, Avis, and almost all UK-based high street retailers. Multimap also continued to innovate, launching aerial and satellite imagery, storefinders, asset tracking services, travel directions and, at last, maps on mobile phones.

Multimap featured in the Deloitte Fast 50 in 2005 and 2006. In 2005 Sean was named Deloitte Fast 50 Entrepreneur of the Year for London and the Southeast. The company also received a Queen's Award for Innovation.

By 2007 location-based services was a hot area. But it was also getting increasingly competitive, and consolidating. Earlier in the year TomTom had acquired Tele Atlas, one of Multimap's key data suppliers. Then Nokia bought Navteq, another supplier, for £4bn. The Multimap board decided to seek a round of funding, for further expansion, to allow Flextech to exit, and to give employee option holders some liquidity. "Our goal had been to raise roughly £8m," Sean recalls. "But then the offers started coming in...."

"Microsoft came to us asking if we were interested in a substantial investment," says Phelan. "We knew it was code for 'can we buy you?'. The Multimap board decided to change their fundraising into a two-track process, soliciting bids for either an investment or an acquisition. That led to three offers, and in October Multimap entered into "exclusive negotiations" with Microsoft. The deal was completed in December 2007, for a reported £50m.

At the time of the acquisition, Multimap was one of the world's leading providers of maps on the internet, serving more than 10 million unique users and 200 million page views per month on its consumer site and 1,200 business customers around the world. It had 120 employees in offices in the UK, Australia, and the US, as well as partners in Istanbul and Malaysia.

Deloitte thought leadership



1. TMT Predictions 2017

This 16th edition of Deloitte Technology, Media & Telecommunications (TMT) predictions presents a fascinating array of trends, each developing at its

own momentum, which will impact UK businesses in 2017 and beyond. The 2017 TMT predictions looks at trends including the use of indoor navigation, the development of %G, the rise of vinyl and the introduction of automatic emergency braking.



2. Media Metrics 2017

Media Metrics 2017 analyses the financial performance of the top 100 revenue generating media and entertainment companies in the UK.

The report highlights the main trends and issues facing the sector, and how business models may need to evolve to reflect consumer demand.



3. Mobile Consumer Survey 2017: UK Cut

The seventh edition of Deloitte's Mobile Consumer Survey: The UK Cut explores some of the key themes that this

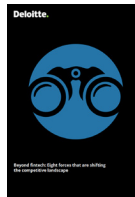
year's survey has revealed, how they are affecting the mobile landscape today and likely to impact it in the next five years.



4. Power Up: UK business

Power Up - the UK workplace is the first report in Deloitte's Power Up series which will explore the critical challenges facing UK government and

business and offer pragmatic advice on competitiveness, innovation and inclusive growth. The report is based on a survey of non-British workers and wider research around the future of the UK workplace. Discover practical recommendations on what we can do to make a difference now, as well as be fit for the future ahead.



5. Beyond FinTech

FinTechs have defined the direction, shape, and pace of change across almost every financial services subsector. While they may not dominate the industry

today, they have laid the foundation for future disruption. This report from the World Economic Forum (Forum) and Deloitte studies the transformative role of FinTech and other disruptive forces on the financial services industry.

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Appendix

Business models are defined as:

1) *Creator*: Buys raw materials from suppliers and then transforms or assembles them to create a product sold to buyers, 2) *Distributor*: Buys a product and essentially resells the same product to someone else. Note, the distributor may provide some additional value, for example, by transporting or re-packaging the product, or by providing customer service, 3) *Landlord*: Sells the right to use, but not own, an asset for a specified period of time. Using the word "landlord" in a more general sense than its ordinary English meaning, we define the basic business model to include not only physical assets (like houses, airline seats and hotel rooms), but also lenders who provide temporary use of financial assets (like money), and contractors and consultants who provide services produced by temporary use of human assets, 4) *Broker*: Facilitate sales by matching potential buyers and sellers. Unlike a distributor, a broker does not take ownership of the product being sold. Instead, the broker receives a fee (or commission) from the buyer, the seller, or both.

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