Business and the Digital Revolution

RACONTEUR

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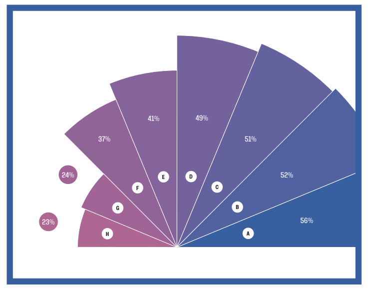

Embracing the opportunity

What does the digital revolution mean for private equity? 3i's Menno Antal explains

Menno Antal
Managing partner and co-head of private equity 3i

More than ever, private equity investors need to understand fully where potential investments sit on their digital journey in order to support and advise appropriately. It almost goes without saying that, regardless of sector, all businesses will face a level of disruption at some stage. Is this a threat or an opportunity?

"From a private equity perspective, understanding the digital challenge is really no different to any other challenge facing a business on an evolutionary path," says Menno Antal, managing partner and co-head of private equity at 3i. "The key is to build digital into your investment strategy rather than reinvent it. We spend time thinking about how more traditional business models can learn from more digitally advanced ones and vice versa – it's mutually beneficial."

Mr Antal cites meetings held with contacts in Silicon Valley to share ideas and best practice. "We had a fascinating discussion recently with Airbnb, for example. While they have come at the market from a different angle to Audley Travel, a leader in worldwide tailor-made holidays and one of 3i's portfolio companies, there were clear shared learnings, especially around the need to personalise the customer experience," he says.

"All travel businesses need to understand their customers better and by building deep online relationships with them, they will be able to tailor their offers more successfully, however digitally advanced their business model.

"Broadly speaking, we are seeing a convergence of modern and more traditional business models across sectors."

He references an example from 3i's portfolio, Aspen, a specialised mini pump designer, manufacturer and distributor, which has developed a new digital sensing technology for its pumps.

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Becoming a digital forerunner

There are two typical approaches for private equity investors in the digital space. The more familiar route is to tackle the burgeoning technology, "digital-first" sector. The other, more untapped approach is in non-digital companies where digital can be used to create value.

A key opportunity for 3i, as a private equity house focused on mid-market companies across the consumer, business services and industrials sectors, lies in those mid-sized companies that accept they face a digital journey, recognise they are at risk of being disrupted, yet do not have the capability to transform by themselves. "This is where I see a lot of value being created by private equity," says Mr Antal.

And devising and executing a digital strategy goes beyond setting up e-commerce platforms. Mike Tobin, entrepreneur and former chief executive of Telecity, says: "A real digital vision requires a complex and ever-changing set of levers to equip a business to succeed in the new digital world, and the capability of the business to take advantage of them.

"It's easy to say that 'we have a digital strategy as we have a great transactional website', but it's so much more than that. You need a coherent omnichannel strategy, product and service innovation, digitisation of workflows, and improved real-time management information and systems, to name a few.

"Successfully creating and implementing such a vision can be a challenge, especially in a world that for the first time in history not only looks to improve business models constantly, but also to disrupt them actively. Yet it is essential if you are to future-proof your business."

> The key is to build digital into your investment strategy rather than reinvent it

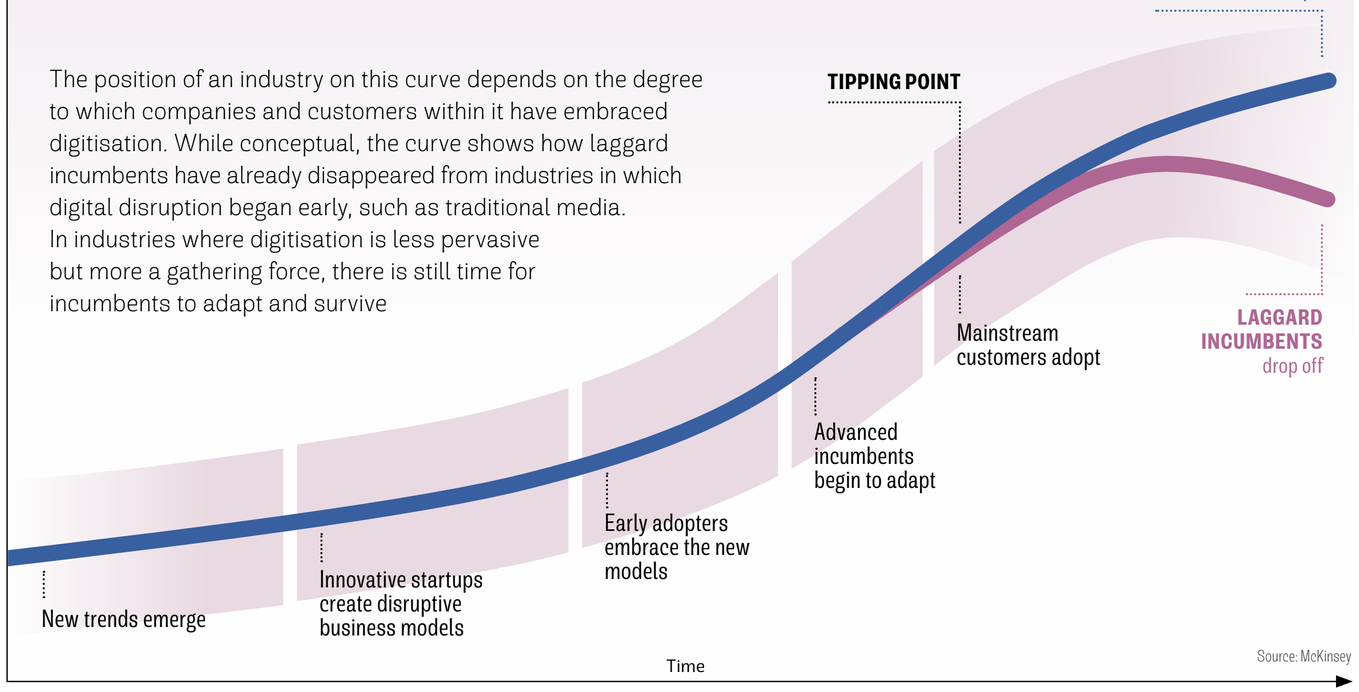
Mr Antal explains: "At 3i, we continue to develop our own digital strategy and network. We constantly challenge ourselves to think not only about big-picture trends and themes, but also to take a granular approach and consider the individual impact on sectors across our portfolio, and what 'good' looks like in each.

"As well as bringing our portfolio companies together to share knowledge and experience, we also deepen our own insight by learning from industry leaders. For example, a recent team meeting was held at McLaren's UK head offices to observe how they apply innovative technology to drive improved performance across both products and services."

The cost of not addressing digital change is high. "As an investor, it's imperative to be alive to these trends and recognise their impact. There are no sectors or companies that we would look to invest in now without considering the impact of digital on the business," Mr Antal concludes.

HOW DIGITISATION TRANSFORMS INDUSTRIES

The position of an industry on this curve depends on the degree to which companies and customers within it have embraced digitisation. While conceptual, the curve shows how laggard incumbents have already disappeared from industries in which digital disruption began early, such as traditional media. In industries where digitisation is less pervasive but more a gathering force, there is still time for incumbents to adapt and survive



Source: McKinsey

No time to stand still

How can companies hire and embed the right talent to address the digital shift?

Europe is facing widespread digital transformation, driven from multiple angles – start-ups, blue chips wanting to nurture innovation, independent technology hubs and consultancies all chasing a slice of the pie.

And what an opportunity it is. With the exception of digital heartlands, such as London, Stockholm, Berlin and Madrid, much of Europe is dragging its feet in terms of embracing digital. According to McKinsey, if all Europe's laggards doubled their digital efforts, €2.5 trillion could be added to the continent's gross domestic product by 2025, boosting GDP by 1 per cent a year over the next decade.

So how do we get there? Who do we need in the driving seat?

According to Clare Hill, managing director at global change management business Sysdoc, digital transformation needs to come from the top down.

Open-minded leaders are essential, not just to recognise the benefits that come with embracing change and having the conviction and gravitas to engage their management teams, but because with higher digital uptake comes greater transparency and this can be a difficult hurdle to overcome.

"To really drive digital transformation, CDOs are hiring data scientists, analysts, designers, user-experience experts, product managers, engineers, and digital marketers." says Ms Hill.

While the rise of the chief transformation officer (CTO) or chief digital officer (CDO) might be permeating most sectors, having a single evangelist is just the beginning.

Clare Johnston, co-chief executive and founder of executive search firm The Up Group, says the CDO is just the tip of the talent iceberg.

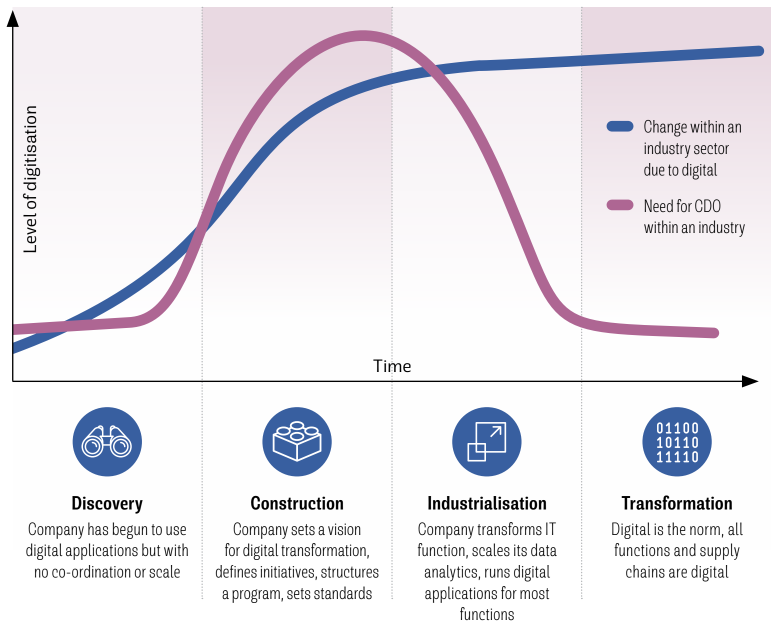
"To really drive digital transformation, CDOs are hiring data scientists, analysts, designers, user-experience experts, product management, engineering, online and digital marketing. Those are the sorts of skills and talents in demand because often traditional organisations have never done product development, they've only had an IT department."

Hiring the talent is one thing, but embedding it across the business is the next challenge.

Sean Cornwell, CDO at Travelex, heeds caution to companies whose digital hub operates as a silo, suggesting it is too easy for an organisation to reverse on its digital journey.

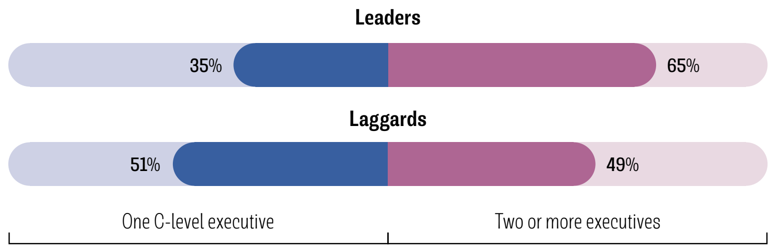
"You need to make digital relevant to the whole organisation. If it is just the cool kids sitting in the corner, it's very easy to turn your back," he says.

THE NEED FOR A CDO DURING EACH PHASE OF THE DIGITAL REVOLUTION



Source: Strategy and analysis

DIGITAL LEADERSHIP IS NOT A ONE-PERSON JOB



Source: The Economist Group

"Whereas embarking on a fully integrated end-to-end change programme, incorporating data science, human resources, finance and the whole organisational structure, not just by particular product lines, this is how you can drive change through the entire company."

Marrying the traditional with the more digital-savvy tends to work; Ms Johnston says being sector-agnostic is the favoured approach.

"We rarely, if ever, source just from one vertical," she says. "We are always sourcing digital talent across sectors and that is definitely a feature of digital as opposed to more traditional hiring."

She points to more traditional sectors, such as financial services, which are hiring in from more creative, tech-savvy, consumer-centric industries.

"You're trying to provide solutions for engaging with customers or synergies around product, not solve the domain expertise. Whether it's financial services, retail or travel, they will already have that within the organisation," says Ms Johnston.

"Whereas if a retailer is trying to drive volume and user experience, that might come from online travel, financial services, gaming... the list goes on."

TOMORROW'S DIGITAL LEADERS

Why the Chief Digital Officer role is evolving so rapidly

In today's changing commercial environment, the position of chief digital officer (CDO) is the pivotal point on which a company's digital transformation succeeds or fails.

However, Clare Johnston, co-chief executive and founder of specialist digital executive search firm The Up Group, believes fundamental to the success of a CDO is their rank within the corporate hierarchy.

"If the CDO reports directly to the chief executive, this signifies the company is taking digital transformation seriously," says Ms Johnston.

To effect the level of change often desired, very senior leadership is required, feeding into the transformation of systems, culture, processes, talent and development, measurement, and entire ways of working, as well as user experience, she says.

"It's important to have a senior CDO as opposed to them sitting a few levels down, reporting to a chief marketing officer or a chief technology officer, because digital transformation is central to how a business operates," says Ms Johnston.

Sean Cornwell, CDO at Travelex, says the role is often created by frustrated chief executives seeking catalysts for change.

"Other C-suite roles are seldom able to drive the required change because they are not broad-reaching enough," he says. "I think these roles will be with us for a few years, but they are ultimately temporary as digitisation becomes part of every employee's DNA. You wouldn't catch Google or Facebook talking about a CDO – they'd be laughed out of the room."

Those recruited as CDOs will often have grown up in pure-play digital businesses, yet in order to be effective at driving transformation, they need to be able to communicate in a more traditional environment.

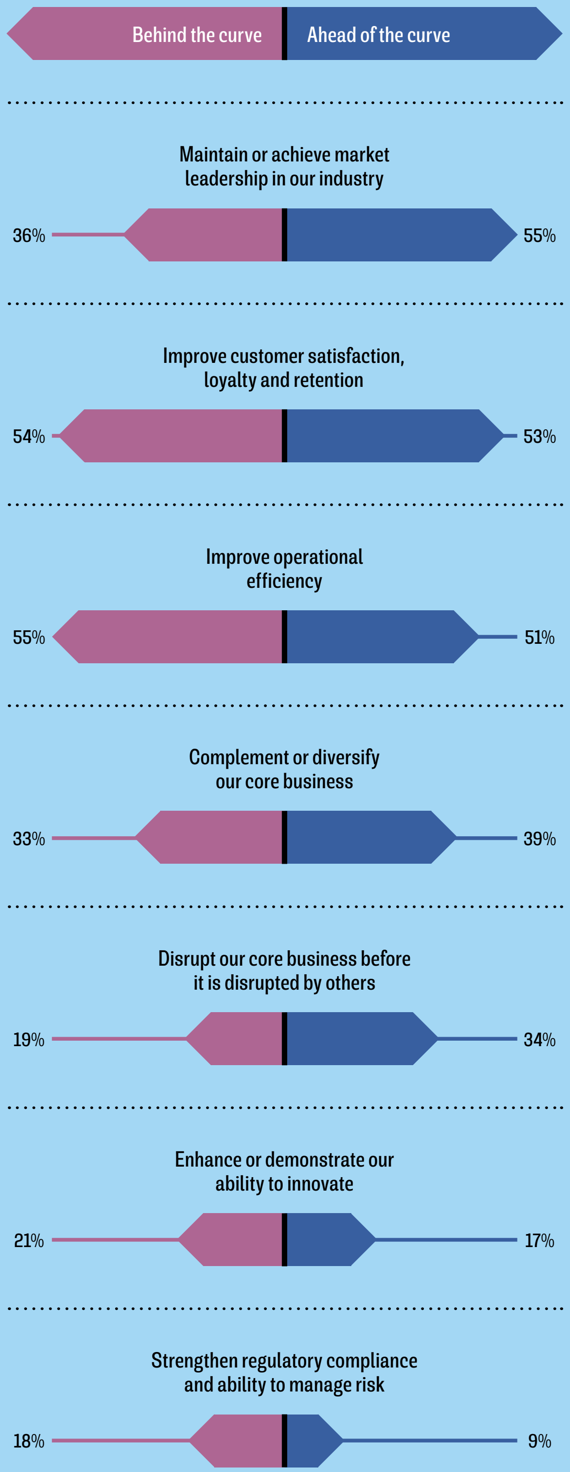
"There will be organ rejection," says Ms Johnston, who describes the optimum CDO candidate as someone with multichannel experience, across digital and traditional.

The new digital economy

Visualising the trends reshaping the business landscape

WHAT IS THE PRIMARY GOAL FOR YOUR ORGANISATION'S DIGITAL TRANSFORMATION?

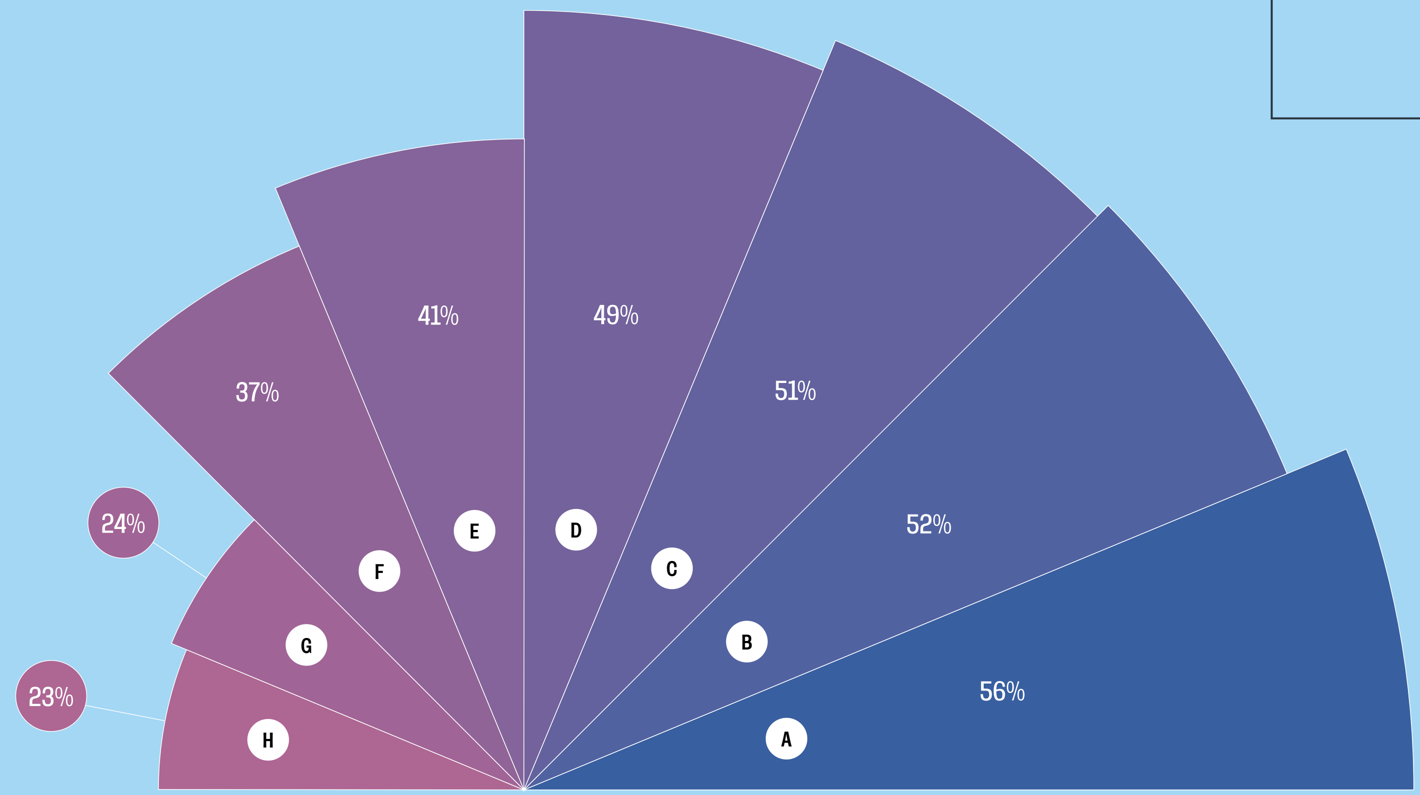
Source: Economist Intelligence Unit survey



ACTIONS YOUR BUSINESS IS TAKING TO ADDRESS THE IMPACT OF DIGITAL DISRUPTION IN THE COMING YEAR

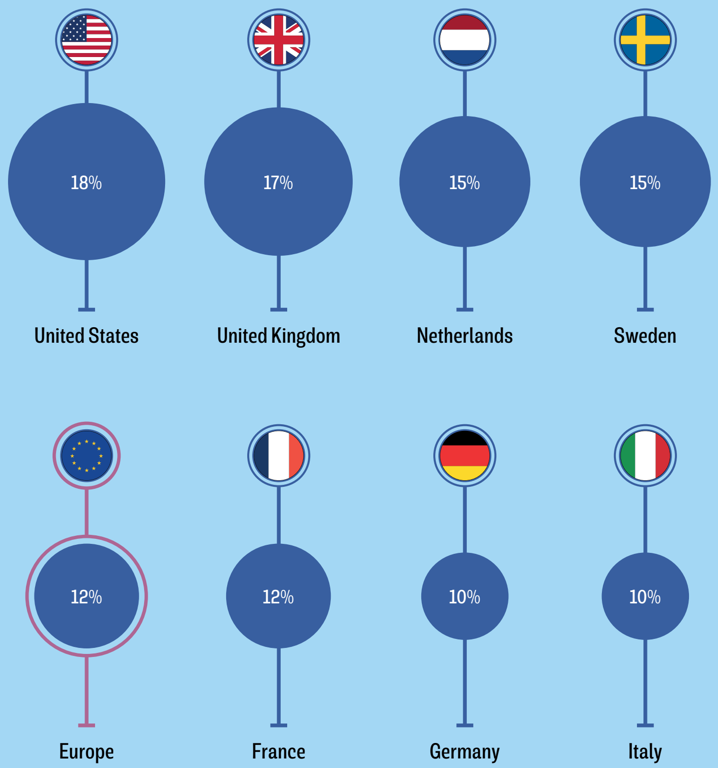
Source: Forrester

- A Assess the impact of digital as it related to customer experience
- B Establish new digital governance and transformation management
- C Clearly define digital ownership, funding and operations
- D Create digital-oriented collaboration/joint ventures with new or existing business partners
- E Transform our IT systems to make them more agile for the digital world
- F Create a skunkworks or a group separate from the main company to experiment with digital initiatives
- G Create "smarter" and more digitally aware connected products or services
- H Hire a C-level executive who is focused on digital



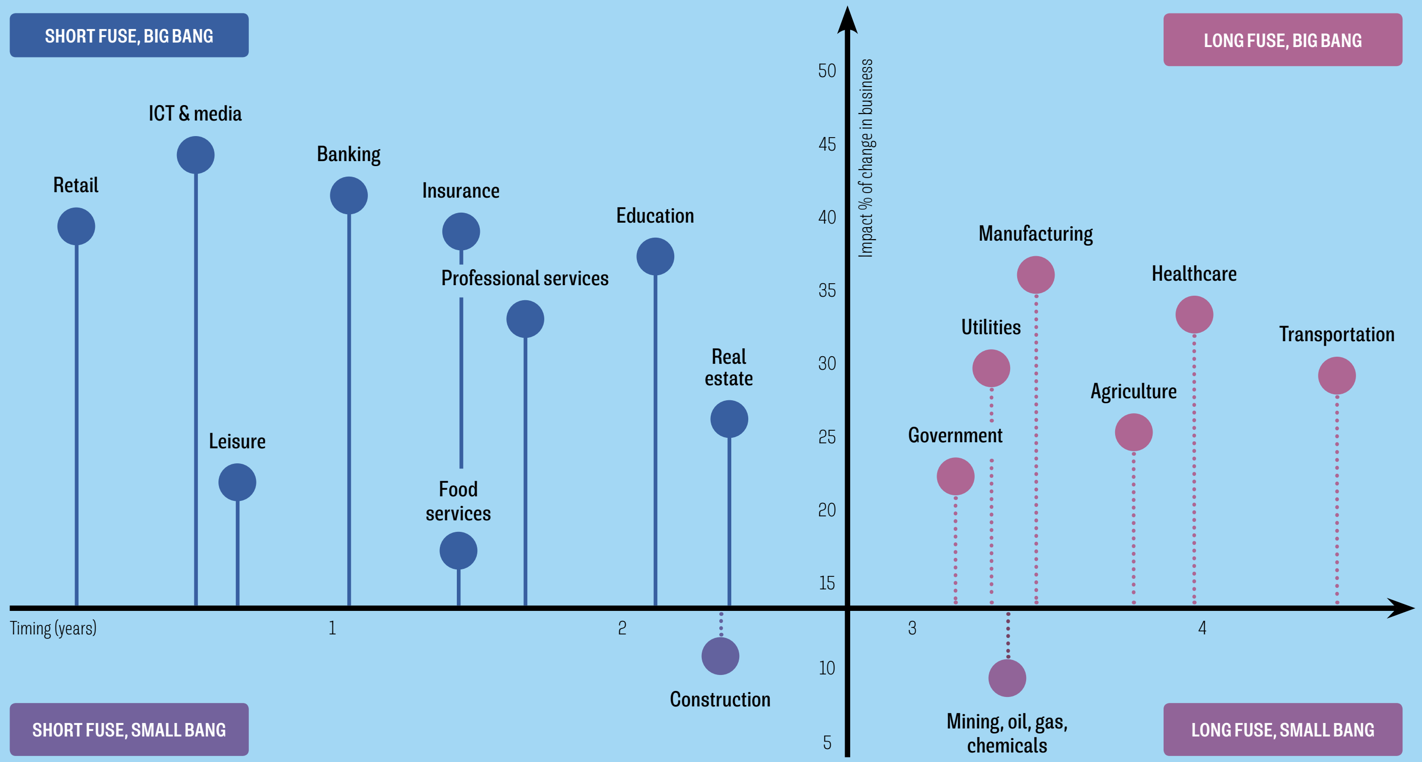
CAPTURED DIGITISATION POTENTIAL

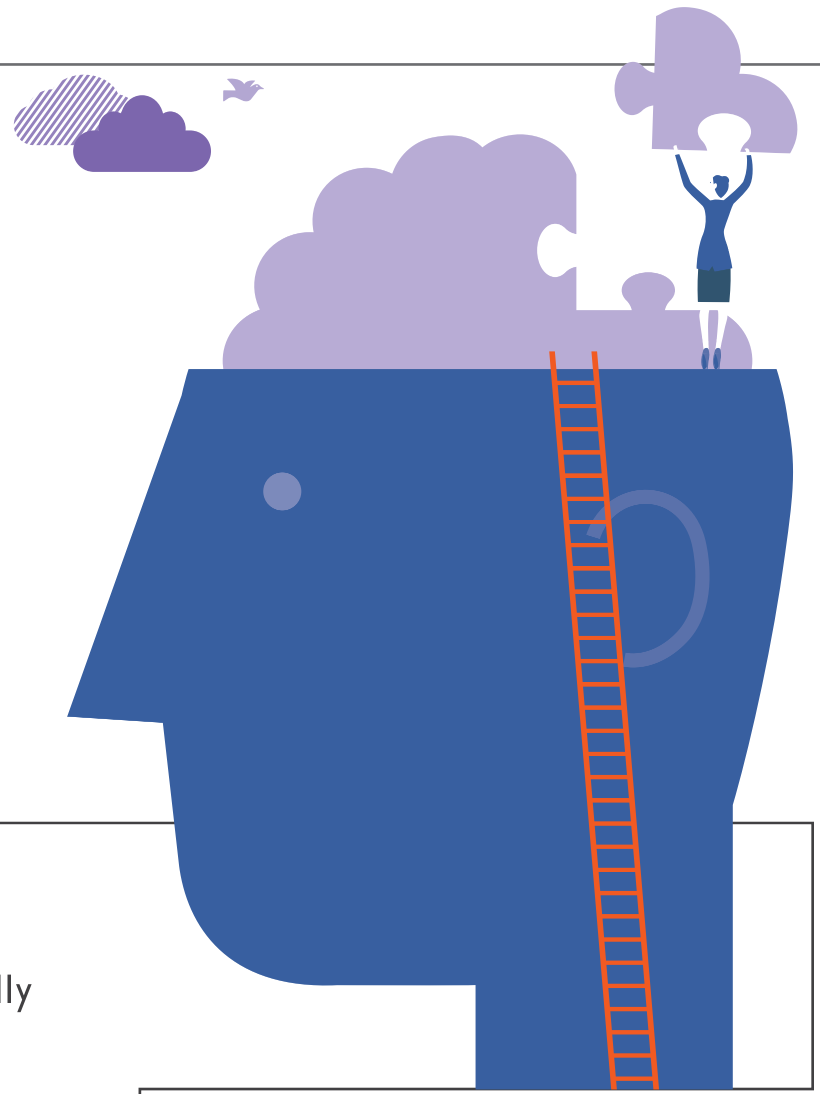
Source: Forrester



DIGITAL TRANSFORMATION AND INDUSTRY MATURITY

Source: Heads' and Deloitte





Making better decisions

From manufacturing to the high street, data analytics is radically altering business strategy

Today's data-driven world sees us generate 2.5 quintillion bytes every day, with IBM estimating that 90 per cent of the world's data was created in the past two years.

What does the daily onslaught of social media content, increasingly intuitive and connected devices, artificial intelligence and cloud-based software mean for businesses, and how does it translate to a company's bottom line?

International Data Corporation predicts that by 2020 organisations able to analyse effectively all their relevant data and deliver "actionable" information from it will achieve an extra $430 billion in productivity benefits. So the financial potential is clearly huge.

For Andrea Peyracchia, digital partner at McKinsey, the greatest opportunity lies in the business-to-business space. Here, he says, it is no longer about the raw data, but about harnessing and internalising its use to ensure improved efficiencies across production and manufacturing, logistics and distribution, and ultimately the end-customer experience, be that industry, wholesale, retail or end-user.

"By working with partners and integrating the supply chain you can use data to cut lead times and stock levels aggressively or even launch new business models. You can use predictive maintenance data to reduce machinery downtime or hedge the cost of fuel, buying when oil is low and vice versa to maximise margins," he says.

In the consumer sphere, the opportunity is equally vast. Our desire for continuous connectivity has brought major changes to the way we work and play. When shopping, consumers are using both digital and physical channels when they buy. Google estimates that more than 85 per cent of UK and US shoppers research online before making an offline purchase. This means it is ever-more important for consumer-facing companies to understand how various devices, channels and media influence buying decisions.

Location location location

Mobile devices continue to grow in importance for retail. While people do purchase from mobile devices, they are currently used more for price comparison, reading reviews, sharing or cross-referencing on social media. According to Google, searches on mobiles that included "near me" increased threefold in 2015 and this trend is showing no signs of slowing.

Tom Salmon, partner in 3i's private equity team, sees mobile usage permeating the whole retail experience, such as through "stickers" on garment tags to help retailers understand their customers' engagement with their merchandise. Rather than just relying on sales data, this can help inventory management, and enable more effective store planning.

"At the moment, customer journeys around a store are largely based on anecdotal evidence from retail staff. What we are starting to see is that process becoming much more data-driven, enabling retailers to become more sophisticated in how they merchandise stores," Salmon suggests.

This can lead to significant changes. For example, Honest Café, a UK coffee shop chain, is using cognitive analytics from IBM to explore vending machine transactions, payments and weather data, find correlations and suggest previously unseen patterns in customer behaviour. As a result, Honest Café is now transforming its store layouts to encourage longer visits and upselling.

Omnichannel

The digital journey for many retailers is increasingly about offering an omnichannel experience. In making the customer central to the strategy, the channel itself becomes less relevant, while the customer's convenience and enriched personalised experience take priority. John Lewis believes omnichannel customers are three to four times as valuable as a single-channel customer.

Both showrooming, where customers browse in-store and then buy online, and webrooming, where customers research online and then buy in-store, are increasingly popular. According to Forrester, webrooming will result in $1.8 trillion in sales by 2017 compared with an estimated total e-commerce sales figure of $370 billion.

Harnessing data

Capturing the data is one thing, but how it is used and by whom often presents the bigger challenge. 3i's Mr Salmon believes it is crucial that data sits in the hands of the people owning the business decisions, rather than the hands of the most technically competent.

"The IT team might craft the best software solution, but they won't necessarily think about the business decision they're trying to solve. So there's a big piece around leadership," he says.

Mr Salmon gives an example of how 3i is exploring this with its portfolio companies. "We recently held a customer analytics workshop here in London," he says. "We brought together chief marketing officers from across our consumer portfolio companies, as well as network contacts from leading technology companies, including Google, Facebook and Instagram, to debate how companies can ensure they are addressing the customer analytics agenda effectively."

Key takeaways? Start small, focus on your minimum viable product (MVP) and getting new ideas out, then learn and move on. An MVP is a product with just enough features to gather validated learning; it won't be perfect, but can be less expensive and less risky than developing a product with more features, and a good way to become a little less wrong every day.

As Vince Darley, chief scientist at King.com, points out, data is meaningless on its own. "It must be coupled with a customer-centric focus and used to understand customer behaviours and needs. There is a wealth of data out there, so focusing on the relevant data, together with the underlying story, is paramount if you are going to improve the customer journey in a meaningful way," he says.

"You need to experiment, you need to understand the results and then move quickly to respond. It is this innovation, failing fast, constant evolution and fast turnaround that are key in discovering great things."

£430bn

forecast productivity benefits by 2020 from effectively analysing data

source: International Data Corporation

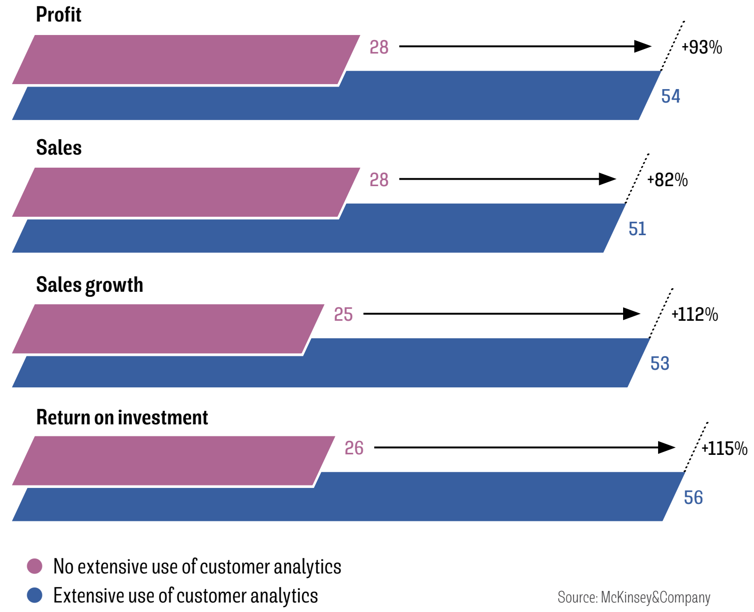
85%+

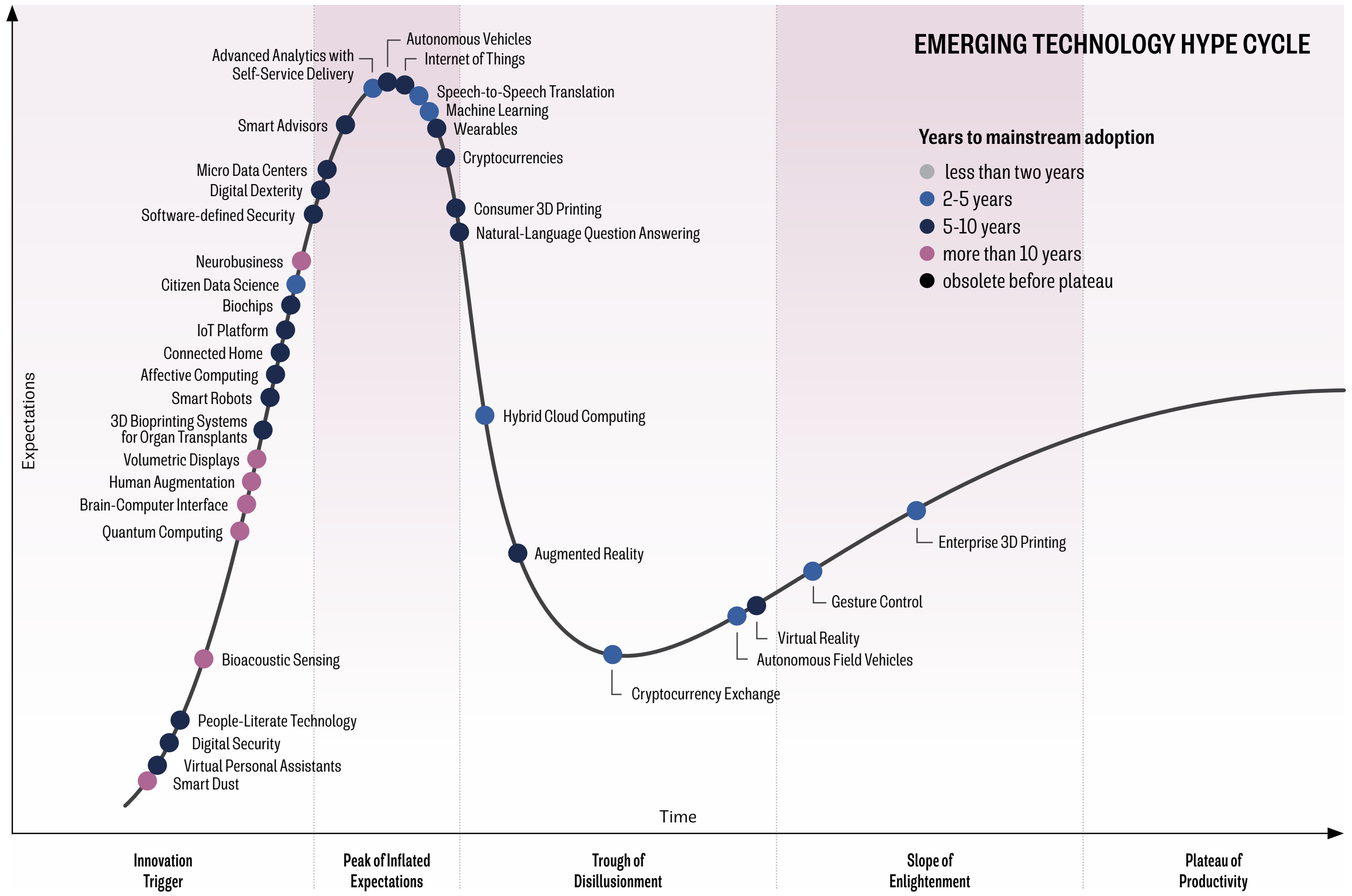
of UK and US shoppers research online before making an offline purchase

source: Google

EXTENSIVE USE OF CUSTOMER ANALYTICS DRIVES CORPORATE PERFORMANCE HEAVILY

Percentage of companies above competition





Source: Gartner

Technology is changing the game

Gi Fernando, founder of digital transformation company, Freeformers, explores how artificial intelligence and robots are changing our world and our jobs

"Amy, can you find a slot in my diary for a meeting with Barclays?"

"Sure, Gi, would you prefer morning or afternoon?"

"Mornings are best. Other than that I'm flexible..."

A normal e-mail conversation between PA and executive, you presume. Or is it?

Amy, in this case, doesn't exist. She's the brainchild of Dennis Mortensen, whose company x.ai claims to "magically schedule meetings" by bringing together artificial intelligence and human empathy.

Empathy, I firmly believe, is one of the final challenges for automation and robotics to take over from humans alongside, perhaps, creativity.

There have been examples of predictive text generators that have tried to masquerade as creative writing, but even the least observant of eyes can usually spot the imposter a mile off.

Whether using virtual assistants or driverless Ubers, the rules are changing. As widespread automation, network-based businesses and data-centric models infiltrate all sectors, and as artificial intelligence (AI) becomes cheaper, this will only move in one direction.

Who's at risk?

Categorised into four main skills – machine-learning, natural language processing (NLP), vision and speech – AI is not just about tackling the mundane tasks that "grease the wheels" of the more interesting aspects of day-to-day jobs; the robots are entering the professions.

For example, because there are rules and patterns applied, the legal system is actually quite easy for a computer to tackle.

AI Ross is IBM's evolution of its earlier cognitive computer, Watson, and is an AI attorney designed to help lawyers with legal research.

As 80 per cent of Americans can't afford a lawyer, through machine-learning and NLP, the efficiencies and benefits of Ross are obvious.

It can handle contract reviews, case research and drafting of legal documents, among other tasks. It can be used for crafting and rehearsing oral arguments ahead of court appearances, including scanning legal publications for up-to-the-minute court decisions that could prove relevant to a case.

The impact of new technology is already having a devastating impact on employment as organisations are forced to adapt. In 2000, the financial services industry employed 150,000 people in New York. By 2013, that number had dropped to 100,000. Over the same period, Wall Street's profits have soared. Up to 70 per cent of all equity trades are now executed by algorithms.

Any job that is in some way routine or predictable will soon be in danger. Why employ a human when a robot can do your job quicker, and potentially better than you, for no pay?

> Why employ a human when a robot can do your job quicker, and potentially better than you, for no pay?

So what's next?

Game-changing technology is being introduced at a rapid pace across all industry sectors. Ideas previously thought of as science fiction will soon become reality as businesses are digitally transformed. A recent example is GlaxoSmithKline's creation of a new company to research, develop and commercialise bioelectronic medicines, which will see bioelectronic implants replacing traditional drugs for chronic conditions such as diabetes. Further examples include cryptocurrencies and quantum computing.

Chief executives face a stark choice – adapt to this new digital reality or risk their business no longer being relevant to tomorrow's consumer.

With Euro-Diesel's clients ranging from data centres to hospitals, the importance of a constant power supply is clear

The power of power

Why 3i's portfolio company, Euro-Diesel, is set to benefit from data growth

With the surge in data generation taking place, the need for data management will only rise, so more data centres will be required and the co-location sector will continue to grow. A co-location centre is a data facility in which a business can rent space for servers and other computing hardware.

An increase in outsourcing followed the global financial crisis as enterprises, particularly smaller ones, struggled to support their own data centres for cost reasons and cost is still largely the driver for growth in the sector today. In addition, the exponential rise of big data, combined with a closer focus on the environmental impact, has seen the co-location sector booming and the trend looks only to be moving in one direction.

One beneficiary of this trend is Euro-Diesel, a leading provider of Diesel Rotary Uninterruptable Power Supply (DRUPS) systems, and a 3i portfolio company.

While co-location is its key growth driver, Euro-Diesel is also benefiting from the increasing unreliability of the grid, not only in developing markets, but in developed markets, such as the United States, where some infrastructure is ageing. In parts of Europe, the rise of renewables, such as wind energy, is creating more fluctuation in the grid.

With Euro-Diesel's clients ranging from data centres to hospitals, from security trading floors to air traffic control, the importance of a constant power supply is clear.

Euro-Diesel's proprietary DRUPS system is designed to kick in if the main power grid cuts out, providing kinetic energy via a flywheel for a short period, and enabling the diesel engine to start and provide continuous power, if necessary.

In some cases, such a blip might only last for a microsecond, yet its impact can be huge, as Robert van Goethem, Partner and Head of Consumer in 3i's private equity team, based in the Benelux region, points out.

"Take an air traffic control system, for example. It is absolutely vital that it receives constant power. Euro-Diesel, as a provider of alternative constant power in the event that the grid fails, is responsible for that continuity," he says.

He recalls how several years ago, even a momentary power outage could cause havoc, costing millions, or in a worst-case scenario, lives.

He highlights three key criteria clients consider when evaluating an uninterrupted power system solution: reliability, efficiency and the environment.

These days, the proprietary software behind Euro-Diesel's DRUPS system has been significantly improved and can rapidly assess whether an outage is just a blip or whether the grid is expected to be out for longer. Historically, a diesel engine was started for most outages. However, now, thanks to improved software, many short outages can be covered by kinetic energy from the flywheel, avoiding the need to start the diesel engine. This clearly has significant benefits in terms of improved cost efficiency and environmental impact.

The mind may boggle at the enormity of today's data generation, its pace of growth and the challenges that brings, yet where we cannot afford to lose our heads is over guarantees of power. As Euro-Diesel stands today, it recognises a fairly recent challenge. For the data centre and therefore the co-location provider of tomorrow, power guarantees underpin their entire business model. For all parties involved, such assurance is paramount.

To learn more about 3i please visit www.3i.com
or follow us on Twitter @3iplc