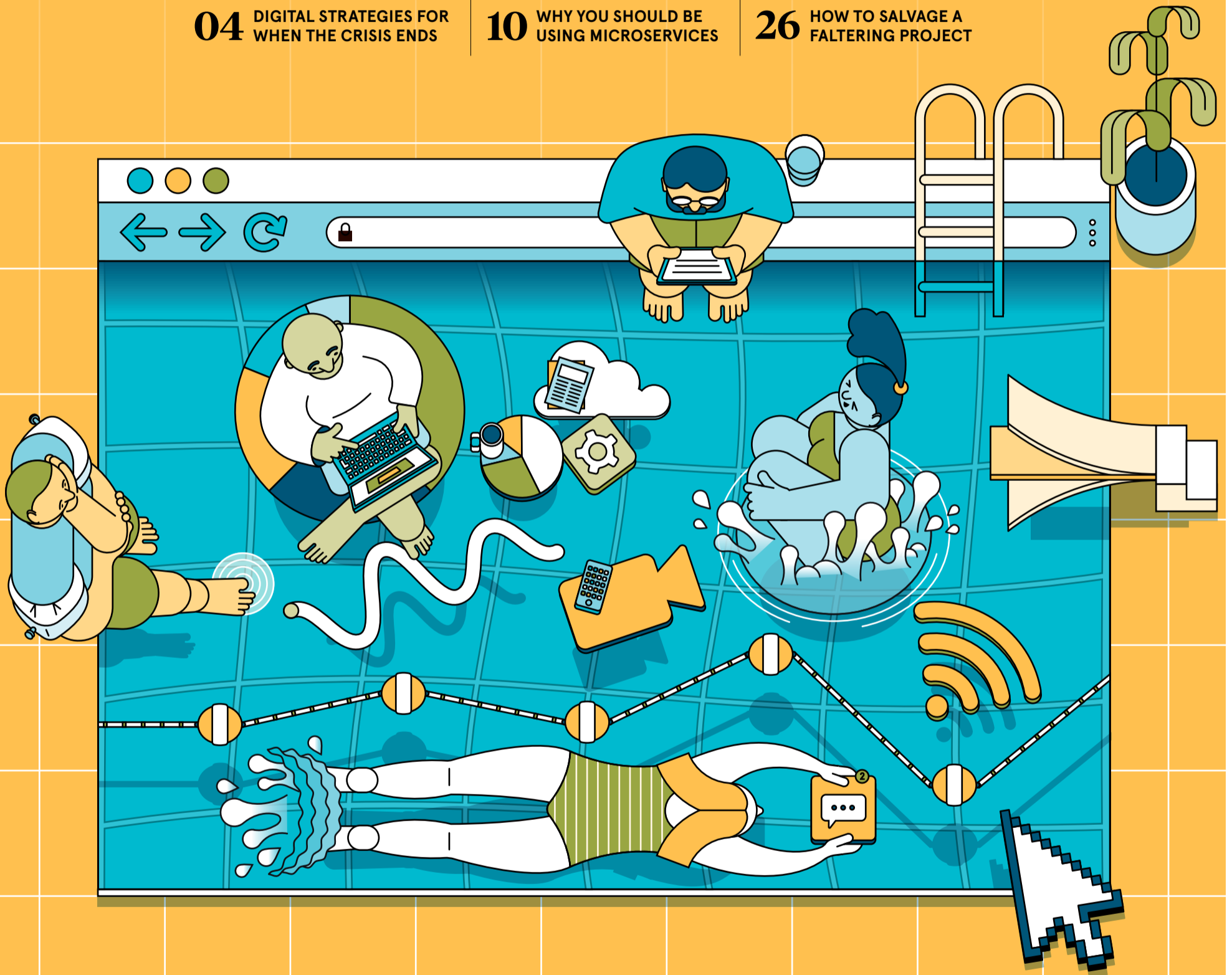


DIGITAL TRANSFORMATION

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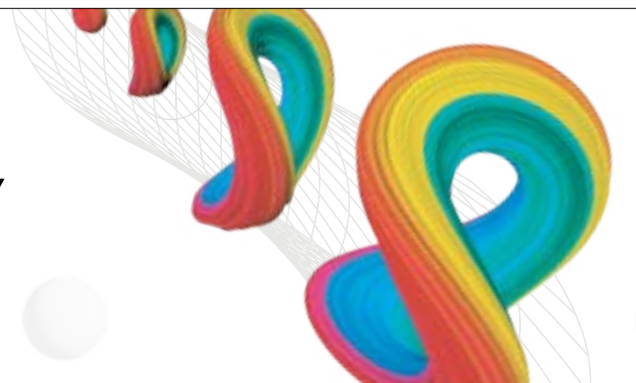
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DIGITAL TRANSFORMATION

Distributed in THE TIMES

Published in association with



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AMBITION

No limits: moving beyond utility and towards growth

A transformation is so much more than an efficiency tool. Why do so many companies stick to the slow lane when reimagining their digital pathways?

Andy Jones

Only 8% of companies have used a digital transformation to change their business models, according to a recent global survey of CIOs by law firm Baker McKenzie. It seems that the other 92% may have been missing a trick. Done right, it can serve as the rocket fuel for an enterprise with ambitious growth plans.

Take Babel, a language-learning app created in 2007, for instance. Only a year after starting the business, the founders decided to re-write the free product and change it into a premium service.

"The engineers had built a free vocabulary trainer and given it a user-friendly interface," recalls the firm's co-founder and chairman, Markus Witte. "But that interface taught us two things: that you would never learn a language from it and that we would never make money from it. Our offering looked great and was technically sound, but we soon realised that we needed to transform both the product and the culture of the business."

To truly bake language learning into the digital product, Babel embarked on a recruitment drive and hired more people with practical experience in learning languages who could help on the digital side.

Additionally, a bold change of management style helped to empower and motivate staff during and beyond the transformation.

"We banned the concept of 'asking your boss', because we found that this was stopping people from taking responsibility and hindering change," Witte explains.

These moves worked, with the new version helping Babel to sell more than 10 million subscriptions. Transformation is about more than applying willpower, of course. There are issues concerning time, money and staffing. A recent survey by Couchbase covering the US and Europe pointed to many of the hurdles ahead for IT chiefs seeking to transform their organisations. Well over half (61%) of those polled said that they'd found that past technology decisions had made their transformation efforts more onerous. In particular, they cited poor cloud infrastructure (48%); excessive complexity in implementing new technology (31%) and overreliance on legacy systems (28%).

Beyond that, the biggest obstacle to an ambitious digital transformation is cultural resistance. An



"That way, even if it doesn't go to plan, it will never be classed as a failure – merely a lesson for next time," she says. A company that takes this approach "almost doesn't recognise it as a digital transformation; just everyday entrepreneurial growth – and therein lies its success. It's when programmes are costly and never-ending that disappointment is inevitable."

Another cause of failure is when a firm isn't sure of what the outcome should look like. WalkMe, a digital adoption platform provider, polled 1,400 business decision-makers recently and found that their enterprises had wasted \$16.6m (£12.7m) on transformations in 2021 because people didn't use their new technology in the way they had envisaged.

An effective transformation for your company should unify three key components of the user journey, Rule says. These are the digital door (where users first encounter your offering); the information-gathering process (how you collect the most useful data); and the conductor (how you apply this data to enhance the user experience).

Businesses don't always have such clarity when they embark on a transformation. Many find it hard to articulate their vision and where to start, Ashton says. Nonetheless, a well-executed transformation can lead to huge wins.

"This shouldn't be about simply increasing efficiency and reducing cost," she says. "It can, more excitingly, be a key way to generate revenue by enhancing the customer experience and increasing engagement. It can also expose bottlenecks and show you what customers really want from your product."

Surprise wins could arise in areas such as customer experience, employee experience, cost control, product development and delivery speed. All of these things provide value to the business. In turn, such gains engender confidence and a culture of ownership, she says – a case in point being Babel's move to empower its staff.

"When we launched, we had fewer than 10 people. Now we have a staff of 750," Witte says. "The hard part was getting everyone to think one way and embrace it, but the model we created endures to this day."

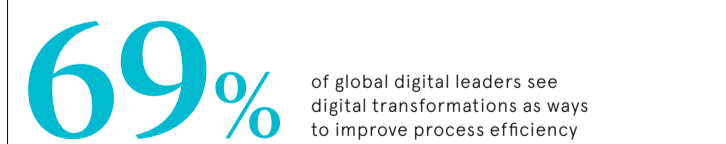
The success of Babel's transformation hinged on a democratic and transparent analysis of its product and systems, which proved vital to the firm's global growth. Many others will look to follow its example.

element of transformation that Babel got right – but which is often overlooked – was winning hearts and minds. So says Mat Rule, co-founder and CEO of software firm Toca, which works on complex enterprise development challenges for large corporate clients.

"Transformation projects fail because people are working with one hand tied behind their backs – being asked to deliver the impossible within very tight budgets while understaffed," he argues. "Added to these factors, your transition can

be hampered by data silos, a shortage of skills and legacy technologies. The initial vision is then compromised and delayed, and the return on investment is depleted."

Many companies prefer instead to approach their digital transformations in small, manageable steps that reduce cost and risk and shouldn't disrupt the business unduly. That's the view of Helen Ashton, CEO of consultancy Shape Beyond, who has overseen digital transformations at Asos and in private equity portfolio businesses.



STRATEGY

Transformation once the Covid crisis is over: what to keep and what to drop

The high-octane acceleration of technological change during the pandemic is without question, but now's the time to become more considered about digital strategy

Tamlin Magee

As days and nights were smudged into one and boundaries between home and work dissolved during the Covid lockdowns, it wasn't surprising that many of us felt unmoored. 'Temporal disintegration' is the term that experts have applied to the phenomenon in which many people became dislocated from time and lost their sense of continuity.

One facet of life where everything seemed to accelerate was in the digital realm. As our physical lives slowed to a halt, the only way businesses could continue to operate at all was by making a breakneck move online. If enterprises did not have remote working policies in place when the pandemic struck, they were certainly feeling the heat as they raced to build the kind of infrastructure that would enable them to keep trading.

Frequently, that led to slapdash solutions – strapping together a bit of Zoom here, a touch of collaboration software there. It's understandable that businesses may have chosen their tech in a hurry, but their hastily contrived new methods could prove costly to them in the long run.

Ad hoc approaches are rarely strategically sound or sustainable. As this period of temporal disintegration draws to a close, it's an appropriate time for businesses to reflect – retaining the best of their pandemic-era solutions, ditching what isn't effective and devising a plan to be more deliberate from here on out.

Tools such as digital whiteboards and collaboration platforms – for example, Microsoft Teams and Slack – make the cut. With more than 80% of companies expected to keep some hybrid working arrangements in place, according to the Chartered Management Institute, this kind of connectivity is here to stay – and with good reason.



Kelvin Murray via Getty Images

And, given the scale of the upheaval, cultural hangovers may be the trickiest problems to cure. One result of that temporal disintegration was a culture of long hours and presenteeism in which employees, knowing that they could be online at any time, felt compelled to show their faces for the sake of it.

"The pandemic has helped us start to challenge the principle of presenteeism," reports Ita Waller, group HR director at marketing agency Unlimited. "It's important that working hours are respected, especially by those at home, where it's easy to stay online."

Waller adds that maintaining a balance of genuine flexibility is vital because, according to recent Microsoft research, 67% of employees want to come into the office more, not less. So, as businesses move to hybrid working and reduce their office space, they need to be mindful of the needs of all staff.

"Making the office accessible for people to collaborate in person should be encouraged as much as respecting people's decisions to stay at home," she says, adding that this will require a careful balance of digital tech and physical space.

Digitisation is a process, so those businesses that have managed to turn the abnormal conditions of the pandemic era to their advantage should not rest on their laurels. Instead, they should try to build on the advantages they have gained.

For companies at any stage of the process, this requires a step back – going back to basics, planning and focusing on desired outcomes. Jeffery advises. "The times may have been strange, but rudimentary principles such as being mindful about things like procurement have never gone away."

"I have seen a lot of businesses buying software or hardware just because they'd heard that they needed it," he says. "But, when that tech failed, it became a big barrier to digital adoption."

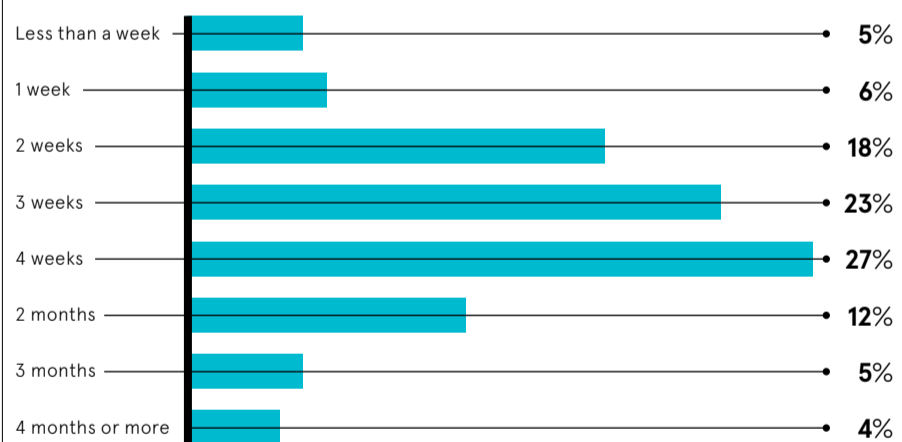
"Businesses should work out what they want to achieve with digital," he says. "Look at what it can do to change your vision. Can you attain faster, more encompassing change? And ensure that your systems and processes are efficient before you digitise them – you don't want to digitise a rubbish process."

Meanwhile, technologies such as robotic process automation should be adopted to mechanise routine daily tasks, according to Waller. This is about giving time back to employees to alleviate problems such as presenteeism, although the widespread move to hybrid working has been empowering for most people, she notes.

Maintaining an open approach to hybrid working, while constantly reviewing systems and practices, should ensure that businesses of all stripes get the best out of digital, whether they're facing further disruptions or (touch wood) returning one day to plain old normality. ●

HOW THE PANDEMIC HAS HASTENED DIGITAL TRANSFORMATIONS IN EUROPE

Percentage of European business decision-makers who say their firms began accelerating their digital transformations in the following periods after the initial Covid lockdowns in their respective countries



Twillio, 2021

"The pandemic has drastically altered ways of working for most businesses, so it's a matter of necessity that they maintain some of the changes to fit employees' needs." So says Ulla Riber, head of group workplace management at ISS Global, a Danish provider of facilities management services.

With the latest statistics from the US Department of Labor indicating that there's no end to the great resignation in sight, it's vital that employers take stock of employees' expectations about flexibility and their workplaces, Riber argues. Even as Covid restrictions lift, she notes that ISS's monitoring has found continued demand for technologies relating to the pandemic, such as systems for booking desks.

Collaboration tools are a clear way to ensure effective participation from a dispersed workforce.

As the workforce became more widely distributed at the start of the crisis, traditional perimeter protections such as cyber defences also faded. Businesses have had to wise up about the vast expansion of potential attack surfaces, as well as the importance of educating employees about data security.

Meanwhile, staff wellbeing should always have been a priority, but it became a more pressing concern during the depths of the crisis, as might be expected in a pandemic. Surveys have shown that HR automation increased drastically over this period, not only with performance management tools but as a

way to measure staff sentiment and wellbeing. Technologies that help people to stay healthy, be productive and remain secure offer employers a set of digital tools that will continue to be vital.

Although the pandemic has undoubtedly proved the value of digitisation, there may also be a tendency to view 'doing digital' as a solution to all kinds of problems. This attitude can place businesses in a tricky spot, with disappointing implementations often deterring organisations from digitisation in general, observes Richard Jeffery, national director at social enterprise The Growth Company.

"I have seen a lot of businesses buying software or hardware just because they'd heard that they needed it," he says. "But, when that tech failed, it became a big barrier to digital adoption."

Another problem that arose during the depths of the Covid crisis concerned accessibility, Jeffery adds. The most advanced digital technology in the world will be of little help if its intended users are hampered by a lack of training and poor local internet connectivity.



Ensure that your systems and processes are efficient before you digitise them – you don't want to digitise a rubbish process

Succeed with SPEED: the key capabilities for digital business transformation

Digital challengers have accelerated the pace that organisations need to adopt to remain competitive. Publicis Sapient CEO Nigel Vaz explains how a SPEED strategy connects the capabilities to bring about change



What do you do when 90% of your company's revenue stream disappears overnight? That was the grave situation facing one global organisation operating in the travel and hospitality industry – already one of the sectors most thoroughly disrupted by technology and new digital challengers – when the Covid pandemic swept in and effectively blew up everything the business thought it knew about its industry and customer behaviours.

Change, and the ability to respond to change, is something that business leaders wrestle with the most. There is exponential and constant change, brought about by a variety of connected forces that include customer



The ability to learn, unlearn and relearn to remain competitive is a shared characteristic among leading businesses

behaviours, societal expectations, technology and evolving business models. Then there is unforeseen change, such as a pandemic, that blindsides entire industries or even countries. In both cases, the qualities, capabilities and behaviours required of leaders and their organisations are strikingly similar.

Pre-pandemic, few business leaders were willing to acknowledge or address the fact that what made their company successful in the first place is not what will make it successful in the future. The misjudgement was understandable: for established business that may have decades or even centuries of commercial success built on well-established processes and ways

of working, breaking from the rigidity of what you know is a challenge.

Over the past few years – and particularly during the pandemic years – a shift has begun to take place in the way that established businesses meet external change. Where companies have the choice to defend, differentiate or disrupt, there is an impetus to create new business models, markets and ways of working that simultaneously meet new customer needs while leveraging the strong brands and unique assets at their disposal. In the case of the travel and hospitality company, it chose this moment of existential threat to create a new platform-based business in one of the most lucrative segments of the market – building a portfolio of premium rental homes on track to deliver more than \$1bn (£768m) in new revenue just as Covid fears were keeping travellers away from its hotels.

There are similar stories of this new imperative to transform across industry. At L'Oréal, supported by innovative digital experiences, the company saw ecommerce revenues leap by as much as 400% in some regions at the height of the pandemic. As its chief digital officer Lubomira Rochet observed at the time: "The crisis has profoundly accelerated the digital transformation of the beauty sector. In ecommerce, we achieved in eight weeks what it would have otherwise taken us three years to do."

What is it about these companies that has allowed them to pivot more easily at a time of need – to transform and create new business models and channels that will drive future success? There is an adage that 'culture is what is left after you've forgotten all you have

learned.' Certainly, the ability to learn, unlearn and relearn in order to remain competitive is a shared characteristic among leading businesses that have internalised the fact that there is no end to digital business transformation.

The role of culture in the context of transforming your business is critical. Culture is the driving force for a company – creating the context in which it operates and how it will evolve to keep pace with the change taking place around it. An inconvenient truth is that many companies are great at their core business, but not great at reimagining the future of their business. A successful organisation today needs a clear reason to exist, in line with customer needs, as well as the ability to adapt and transform to the rapid change brought about by digital. In this sense, established companies need to be able to evolve their cultures to be digital-first.

At LEGO, its mission to 'inspire and develop the builders of tomorrow' is underpinned by four promises around new people, play, partners and planet. From near bankruptcy in 2004, LEGO has turned itself around with renewed purpose and a radically revitalised business that today encompasses digital, content and entertainment.

Not all businesses get it right the first time. A common mistake that companies make around digital business transformation is that they make large technology investments but don't see the expected returns. Take the global banking group that had a compelling business strategy for a platform to connect its clients with their wider communities. The company had gone all-in with its transformation ambitions: in terms of the D3 model of defend, differentiate, disrupt, it had identified new adjacent markets where it could create value, yet it chose to pursue the transformation through a series of separate IT and customer initiatives. The siloed approach did not produce the outcomes that the company hoped for, and ultimately the transformation programme had to begin again – with a new approach based on connected capabilities rather than purely on technology-driven solutions.

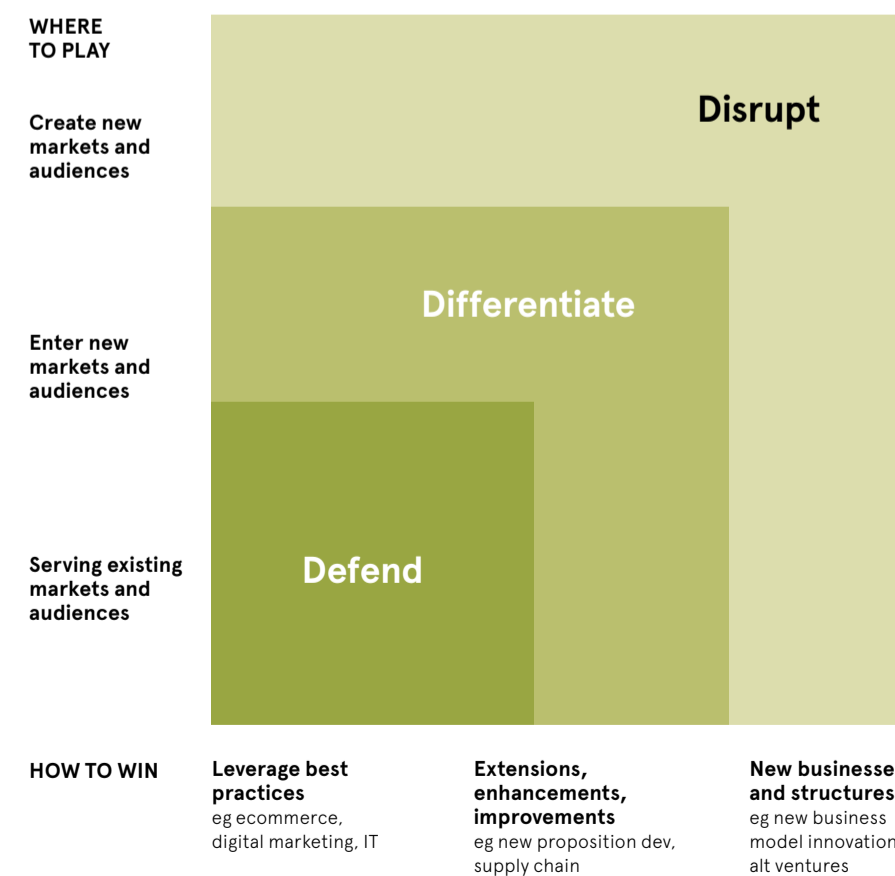
These connected capabilities are crucial to any successful digital business transformation. They are strategy, product, experience, engineering and data – together forming the fundamental SPEED capabilities on which companies can build and evolve to create powerful digital products and services that create value for customers and the business. Strategy is the capability that allows a company to develop and test a hypothesis on priority value pools. Product capability enables the organisation to evolve at pace and scale. Experience is the capability that allows it to create value for customers, while engineering enables it to deliver on that promise. Data, and with it AI, allow the business to validate its hypotheses while uncovering insights for constant improvement to its digital products and services.

The SPEED capabilities are also a defence against the uncertainty businesses face today – and whether there is a competitor that understands your customers' needs better than you do and can apply digital to disrupt how those needs are met. The greater the uncertainty, the more profound the need for transformation underpinned by SPEED capabilities. In a meeting with the chairman of one of the world's largest retailers, he began with only one item on the agenda: what to do about Amazon and the growth of the Amazon Prime service. He understood that for all its legacy, quality and customer trust, there was a need to reassess his company's capabilities and areas in which it could differentiate.

In every industry, in every market, there are digital challengers focused on identifying and addressing changing customer needs. Having the same digital-first culture, a learning mindset and the capabilities to identify and realise value through digital for your customers and your business is vital to the creation of competitive advantage in a world where change is always just around the corner.

THE D3 MODEL: DEFEND, DIFFERENTIATE OR DISRUPT

Faced by a world of change, more established companies are seizing the opportunity to disrupt markets and their own ways of working



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DEVELOPMENT

With new software tools, we can all be programmers



The emergence of low-code and no-code platforms has made it far easier to create new applications, offering benefits to amateurs and professionals alike

Adrian Bridgwater

Businesses always seem to need more software. Their requirements in this area are never-ending, driven by factors such as corporate reorganisations, regulatory shifts and the emergence of essential new hardware that supports only the latest applications. This state of affairs presents challenges. Software development can be costly, complex, labour-intensive and time-consuming. It's also traditionally been a one-sided process: programmers take 'requirements' from their user base, then happily disappear off to cut code according to their preferred and perceived vision of the solution needed.

This model of software creation is effective enough, but it risks cutting out the input of people who are best placed to solve the business problem at hand but might not know how to build the software required. This weakness has paved the way for so-called no-code and low-code software platforms and tools. There's a pronounced difference between the two approaches, with the clue quite definitely in their names. No-code suites offer users a visualisation layer that abstracts all of the lower-level coding mechanics and functionality into a drag-and-drop interface. Designed to be used by non-programmers to create

workflows and even quite sophisticated application functionality, no-code will corral a given set of software processes and offer them in a sort of intelligible Lego box that specifies how the pieces can be connected, potentially encouraging users in a certain direction. Low-code software works on a significantly higher plane. Designed to be used by trained developers with scientific knowledge of programming, it offers shortcuts, templated functions, componentised accelerators and reference architectures against which users can craft their next applications or data services. Whether it's low-code or no-code, any system of software shortcutting has to contain process controls to ensure that applications stay within the limits set by established governance and compliance regulations. So says Malcolm Ross, deputy CTO and vice-president of product strategy at Appian, which offers a low-code platform and corresponding software tools. "Organisations must verify that these platforms have controls and

standards baked into them," he warns. "Whether it is health data, financial records or other personal information in question, you need to ensure that your provider adheres to global regulatory standards. Otherwise, your staff could develop solutions that fail to comply with your IT governance rules."

By incorporating such controls into its low-code platform of choice, a company can avoid the spectre of dangerous 'shadow IT', where apps are built beyond the view of central IT management, Ross says. He stresses that platforms in this space should adhere to industry standards when it comes to regulations such as the Data Protection Act 2018 or the US Health Insurance Portability and Accountability Act 1996. "Teams across an organisation can then build the solutions they need, while IT leaders can rest easy knowing their standards are being met," he adds. "We know data can sometimes sit in silos. But, with low-code executed diligently, an enterprise has the option of gaining a unified view of its data in a single, accessible and compliant solution."

In the low-code software market, two main types of platforms are coming to the fore. First, there are dedicated low-code specialists that develop tools to accelerate programming, including Appian, Mendix and OutSystems. Second, there is a new breed of low-code platforms that are attached to cloud software companies: ServiceNow, Salesforce and Microsoft are clearly not pure-play low-code companies, but these firms' low-code tools offer customers an extra degree of freedom to innovate, customise and prototype as they go.

The wider benefit offered by technologies such as Salesforce's low-code offering, ServiceNow's Creator Workflows and Microsoft's Power Apps is that these vendors won't necessarily need to support every conceivable feature that users build. That helps the customers too, because they don't have to draw on the vendors for maintenance and support services.

Dr Holly Cummins is a senior principal software engineer at Red Hat, a developer founded on the principles of open source, which is now part of IBM. She says that no-code tools "can eliminate a lot of tedium from software development. They also make it far more accessible. With the right tools, anyone can create software and do it quickly. The catch is that these kinds of tools are most suited to certain kinds of basic tasks, such as filling in forms and simple approval workflows."

“With low-code executed diligently, an enterprise has the option of gaining a unified view of its data

While no-code tools make the easy things easier, they can also make hard things harder. Although they are accessible to people who aren't software engineers, Cummins notes that in some ways they're less accessible to software engineers, who may find their usual tools and practices don't work when they must dovetail with the no-code offering. "Most software developers will tell you that typing out code is only a small part of their skill set. Managing interactions with other software, making updates seamless and catching weird bugs is where the intellectual heavy lifting happens," Cummins explains.

But there are always potential weaknesses. All software is prone to becoming fragile over time, she adds. That's particularly true in the case of certain shortcut low-code and no-code systems, which are typically locked tightly to the parent platform.

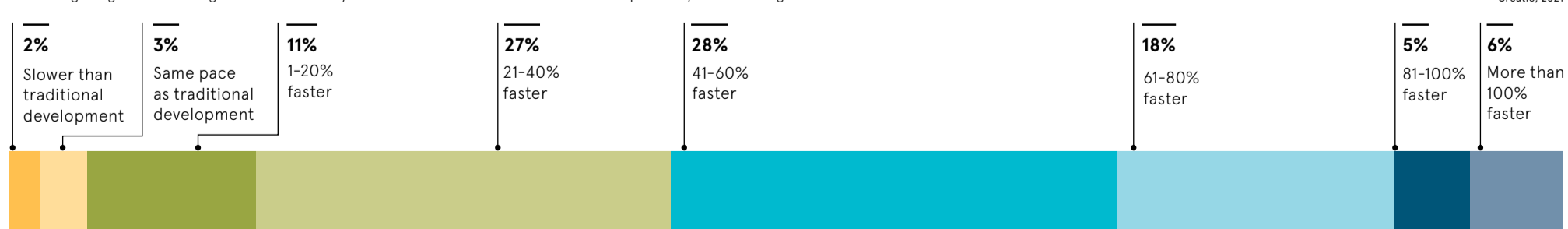
"This can make the resulting applications harder to maintain and harder to integrate with newer systems. It also makes them more difficult to understand and monitor. As it matures, the software industry is starting to feel the weight of its past," Cummins says.

The bottom line is that the value of no-code and low-code software will always come down to the trade-off between simplicity and performance. As we embrace the layers of abstraction in these development tools, it's important to remember that application flexibility itself is not a factor of software code. It depends on how well we can understand, interpret and manage the code blocks we create.

Working to the appropriate constraints, even novices can use no-code software to gain a competitive advantage for their firms. As for the hardcore programmers, they can focus on building even more complex structures, all of which they can ultimately compartmentalise further into abstracted tool sets. Order a bigger pizza, dear software team – you're going to need it. ●

HOW EFFICIENT IS LOW-CODE DEVELOPMENT?

Percentage of global IT and digital leaders who say low-code is faster than traditional development by the following amounts



How will customer experience in financial services evolve by 2030?

Banking in the metaverse might not be for everyone, and technology solutions are devoid of empathy – for now. But, according to our expert roundtable panel, financial services operators can build trust and loyalty by embracing data and staying committed to understanding and supporting customers

Oliver Pickup

Q What could customer experience (CX) look like for financial services operators in 2030?

AP Future forecasting is always risky, but key things point to the likely trajectory. The concept of every customer having their bank in their pocket will evolve, and that smartphone experience will become more fully featured, contextual and personalised. There is also a push to simplify financial services in general and banking in particular. The industry needs to draw on the best CX in other environments like the retail or automotive industries.

SA There has been such a significant shift to digital banking. We have gone from zero to over 10 million registered app users in just eight years. No technology can provide empathy and human touch, though. We still need to make it easier for people to access face-to-face services, either in-branch, over the phone, or through video calls. Technology is opening up channels and opportunities for banking to go into people's homes.

KR A lot of foundational work needs doing to curate cross-channel journeys – so someone can start something in-branch and complete it later at home. While digital channels will be more developed by 2030, face-to-face banking will remain important. Research shows that three in four Brits are comfortable using technology to manage their money – but what about the remaining 25%?

AS The banking sector has come a long way in its digital evolution, but others in the financial services industry lag behind from a CX perspective. For example, it's interesting to compare what's happening in the United States, where customers can use subscription-based models to bundle insurance products from various providers. Insurtechs here are busy playing catch up, but the regulators need to play a part and not stifle innovation.

SR There is a massive drive to make financial services more accessible and integrate them into our lives. Twilio works with customers worldwide, and in some regions, we are seeing the rise of WhatsApp banking. And in the US, it's possible to complete an insurance claim from start to finish over SMS. Over in Asia, data-driven super-apps enable customers to purchase goods wherever it's most convenient.

Q What are the biggest current CX challenges and opportunities for financial services operators?

AP The role of the brand experience is underestimated in many organisations, not just in financial services. There should be a continuity of experience across every channel, across our products and services. If there isn't, you'll lose the customer's trust. Marketing and CX design teams need to collaborate more. Additionally, we are implementing the latest cybersecurity technology and authentication as we want our customers to feel secure in an environment where fraud and scamming are accelerating.

AH One of the main challenges is that the cost of technology implementation will increase, especially for financial services with complex legacy systems. Operators want to meet rising customer expectations but at a reasonable expense. As we advance, this is the most significant practical implementation concern and could limit digital transformation. Similarly, cyber risk needs to be managed and mitigated, but organisations don't want to get too bogged down. It's a tricky balance to strike, as customers need to have that protection.

KR There is a technological arms race between the banks, and smaller challenger banks, like Metro, don't have the deepest pockets. It's easy to fall into the copycatting trap. You have to be clear about your customer base's wants and needs and



develop products and services that will improve their experience. I'm not sure our customers will be banking in the metaverse in 2030.

SA There's ample opportunity for banks to simplify digital functions and use data and artificial intelligence to personalise what customers see in their bank in their pocket. There is so much functionality in apps today, but the average person only needs to access about three things. We want to make the digital app experience more relevant to our users.

SR One exciting thing we are seeing is the change in the way some legacy financial services companies are operating in terms of CX. They are collaborating more, recruiting developers, but sitting them next to the customer service team to learn from that first-hand experience, and there is genuine integration. That way, they can respond to create a human, customer-centric experience. Also, considering about 45 million scam

text messages were sent in the UK last summer alone, security mechanisms need to be effective.

Q How can financial services operators ensure trust remains at the heart of their CX solutions?

KR We are trying to be more imaginative as a bank and thinking beyond money. We have started running in-person and virtual network events and workshops and have a financial education programme that, for example, explains how to spot scams and online fraud. We also run a school programme that culminates in a branch visit to show that they are not intimidating places. These services, which don't cost a lot to provide, are designed to understand, engage and support our customers better, to build trust.

SA Even now, going into a bank branch can be daunting for many people. We want to take banking to our customers and go deeper into the communities we serve. We are trialling different formats to see where people need us most – in libraries and shopping centres, for instance. There is a big demand for financial education and help from banks. Recently, we offered 400 video appointments and had to close the lines within two hours, with over 1,000 people on the waiting list. Enabling more people to feel in control of their money is critically important.

AP At HSBC, the customer research team is part of the experiences group. That collaboration is growing in importance and helps engender trust. We need to be more sophisticated in how we contact our customers and how we garner insights. Research needs to be done across the entire continuum to drive the kind of propositions that we develop and right to the other end in terms of customer lifetime value and enhancing services.

AS If financial services get the CX wrong, people are now quicker to complain online, especially on social media platforms. So operators need to be vigilant and respond fast to bad press and negative comments. It's an opportunity to understand why the customer is unhappy and fix something that is broken, but it also allows you to ensure the customer that you are there for them and listening.

SR Building excellent CX on top of banking is easier than building banking onto great CX. Those that commit to human-centred banking and show a genuine drive to meet and care for customers in their preferred channels will win trust and custom in the coming years.

“There is a massive drive to make financial services more accessible and integrate them into our lives

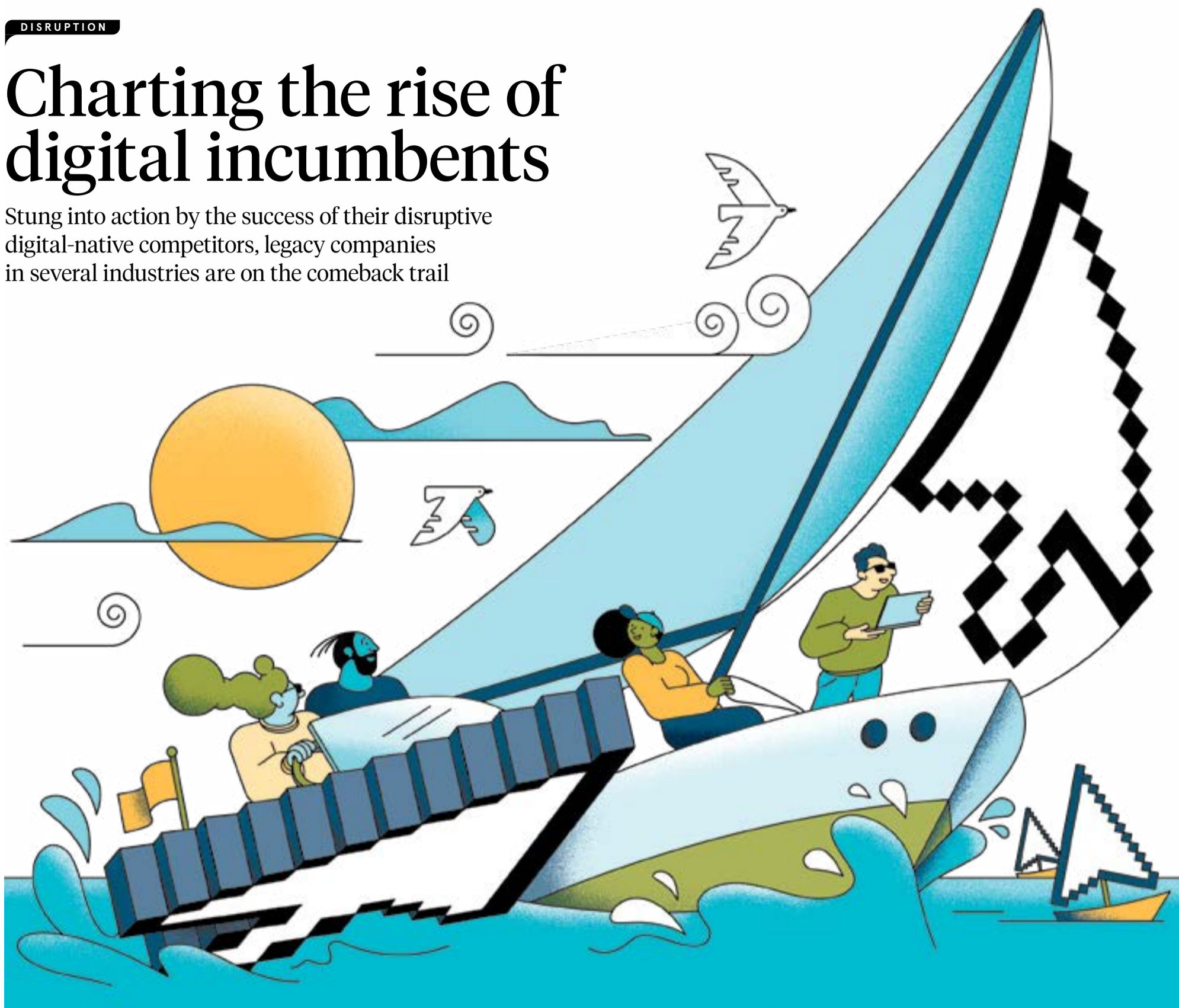
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DISRUPTION

Charting the rise of digital incumbents

Stung into action by the success of their disruptive digital-native competitors, legacy companies in several industries are on the comeback trail



Christine Horton

There's a new type of player in the digital landscape – or, rather, a new type of old player.

An influx of digital-native companies has disrupted numerous industries in recent years, turning traditional business models on their head. Among the best known of these firms are Uber, Netflix and Airbnb. They have overtaken their established rivals in the technological innovation stakes and forced rapid changes in how products and services are consumed.

Nonetheless, legacy companies with strong digital capabilities are starting to catch up. They are investing heavily to become more agile and innovative, enabling them to compete with their digital-native rivals. These firms have been termed 'digital incumbents'.

A recent report by the Boston Consulting Group (BCG) describes digital incumbents as traditional businesses that have successfully executed a digital transformation and are making progress in systematically building digital capabilities. They include companies such as Adidas, Diageo, ING, John Deere, KLM and L'Oréal. In many cases, their capabilities already overlap those of digital natives.

They are "indeed building the same digital capabilities as digital natives and can participate in value-creating growth from disruptive innovation", BCG notes. "They start by putting their digital houses in good working order – and a successful digital transformation is the critical first step."

Take the automotive industry, for instance, where legacy companies

are going head to head with a new wave of digital disruptors. In recent years traditional manufacturers have been forced to respond to the arrival of new rivals – often transplants from the tech sector – looking to capitalise on the industry's move to electric vehicles.

Research published in November 2021 by Hexagon Manufacturing Intelligence indicates that the incumbents are prevailing against the odds. It reveals that only 8% of international automotive leaders view digital natives as a threat, even though Tesla, Foxconn and Lucid are gaining ground. Instead, these traditional manufacturers say they're more concerned about achieving economies of scale and winning supply chain problems.

The report suggests that the disruptors are experiencing similar

problems, suffering through the endless semiconductor shortage. Meanwhile, the incumbents are devising new and creative ways of overcoming them, equipped with experience and heritage.

For example, by using a new type of robotic programming and control software, Škoda has cut the

time required to program robotic inspections from several days to four hours. This has also reduced the effects of skills shortages on the factory floor.

Meanwhile, French automotive supplier Valeo has been using virtual prototyping to design new electric drive units, reducing the Citroën Ami One's time to market from two years to 18 months.

Many companies' digital transformation plans were fast-tracked at the start of the pandemic, which could be attributed to the revival of the digital incumbent. But just as important has been the greater focus on the customer experience, especially in the digital world.

According to research published in February 2021 by MullenLowe Profero, poor digital experiences could cost British firms up to £12bn

“There's an innovation race going on... Incumbents are trying to work out how to serve their customers in unexpected new ways

“Being open-minded and building a culture of experimentation is the way to innovate

in lost UK online sales annually. It found that 24% of consumers were frustrated with a brand that didn't seem to understand them.

“We need to give customers reasons to keep coming back to us,” says Kevin Lee, chief digital officer for BT's consumer digital products and services. “In a very real sense, for a growing proportion of these customers, such loyalty will be rooted in their having an amazing digital experience with us, whether they're considering a new service or seeking out support when they encounter an issue.”

BT recognised that it had to be more agile in the way it developed these customer experiences (see panel, top right). Lee reports that the company has drawn on a wide range of data and used artificial intelligence systems to inform and instil change.

Over the past year, the firm has brought online an automated AI-based chat service called Aimee. This draws on millions of customer chat logs, Lee says, and is already answering customers' queries first time in 60% of cases. This is just the beginning, he says.

“To build and trial new services like this, we need to [apply a holistic approach] to design that incorporates the needs of customers, with our underpinning data and technology platforms. Everything needs to work together.”

Digital incumbents are breaking away from both their digital-native rivals and their traditional competitors by building the capabilities that can drive growth from disruptive innovation.

In doing so, they need to remember that they're not only positioning themselves against the latest wave of disruptors; they're also setting themselves apart from those legacy firms that are yet to achieve any significant digital transformation. It is these organisations that are under the most pressure from the digital natives.

“We can see that there's an innovation race going on. To stay relevant, digital incumbents are trying to work out how to serve their customers in unexpected new ways,” reports Sarita Runeberg, business development director at Reaktor, a Finnish tech consultancy that has worked with Adidas on its digital transformation (see panel, right). “Being open-minded and building a culture of experimentation is the way to innovate. Don't be afraid to test new things and be ready to invest in new ideas.”

Now that the digital experience is a key battleground in the fight for customers, her advice should serve any digital incumbent well. ●



Boden reaps the rewards of modernisation

Four years ago, clothing retailer Boden embarked on a digital transformation. The company, which has more than 1.5 million customers worldwide, had launched boden.com back in 1999, but it realised that the legacy tech it had relied on for several years was no longer sufficient to enable the level of responsiveness needed in modern retail. The systems in place for catalogue-driven sales were struggling to keep up with the company's growth and new omnichannel, digital-first approach.

With these factors in mind, Boden sought to create a new IT architecture based on microservices and data in motion. This enabled the company to update, rather than replace, essential systems. It also facilitated the shift from catalogue to online sales. It meant moving away from the traditional approach of running reports overnight to instead be able to see what was happening while it was happening.

Having connected all its data footprints with event streaming via Confluent's data platform, Boden reports that it is benefiting from modernised infrastructure, real-time analytics, enhanced customer experience, improved efficiency and reduced costs, as well as improved click-through rates and revenue.

Thames Water customers tap digital dividends

Thames Water is the UK's largest water and wastewater company, providing services to 15 million people across London and the Thames Valley. The firm has undertaken a wholesale digital transformation, which includes a move from legacy on-premises infrastructure to modern cloud platforms.

The main problem with the company's previous customer contact system was its inability to manage peak traffic during times of crisis, such as when the so-called Beast from the East storm struck the UK in February 2018. The risk was that callers would be left unsupported or unable to be diverted to the correct help systems just when they were most in need of assistance.

Mike Potter was group CIO and executive director for digital transformation at Thames Water throughout the project. “Historically, severe weather events prove particularly difficult for Thames Water, with

BT focuses on the customer experience

BT is undergoing “a dramatic transformation behind the scenes” as it seeks to modernise its underpinning technology and platform, according to the company.

This includes rethinking how teams collaborate to build and ship products. BT has reorganised its product, engineering and design teams into a “product squad” model, where smaller, more flexible teams are accountable for their products at all stages.

While this encouraged a more collaborative approach, it also highlighted workflow problems. These included an excess of tools, inefficient processes and communication hurdles, which meant more time was spent on version control – tracking and managing changes to software code – than on tackling the problems it needed to solve.

BT reacted quickly, deploying a collaborative design platform called Figma for designing and shipping products. It says that it has replaced siloed working and handovers with continual collaboration that can be done from anywhere, boosting teams' agility, speed,

efficiency and transparency. It can also go from wireframes – a blueprint of a concept – to clickable prototypes more rapidly, allowing BT to rapidly iterate its product delivery.

“We've saved 50% of our design costs and elevated the importance of design in the organisation,” reports Kevin Lee, chief digital officer at BT. “This means that a greater focus on the customer experience is coming through in our products and services. It's something we know will go a long way in ensuring that we keep our customers' needs front and centre of everything we do.”



Adidas: a box-fresh transformation

In 2017, the CEO of Adidas, Kasper Rørsted, declared that the company's “single most important store in the world is our dot-com store – there is no comparison”.

The firm set an ambitious goal to quadruple its online sales to €4bn (£3.3bn) by 2020. This became a lifeline when 70% of its physical stores were forced to stop trading

the sheer amount of customer enquiries meaning that it's almost impossible to manage,” he recalls. “These experiences caused us to realise the need to invest in a digital transformation to ensure that such difficulties would never arise again.”

The company worked with consultancy Tecknuovo to turn around a rapid digital transformation project, with the first three application programming interfaces designed, built and deployed into a live environment – a first for Thames Water. This took place within weeks during the second national lockdown in late 2020. Since the initial go-live date in February 2021, the team designed a further 18 integrations less than 10 weeks after requirements were agreed.

The contact centre now has the potential to process more than 1,500 concurrent calls – three times more than its original capacity. The transformation led to a 52% year-on-year reduction in the number of customer complaints referred to the Consumer Council for Water between March and October 2021.

Successful transformation projects often rely on peer recognition and proving the value of the project early on to internal stakeholders, according to Potter.

“Any business looking to embark on such a project should take advantage of the power of storytelling as a vehicle to showcase early successes in a way that engages everyone, whether they're technically minded or more concerned about the bottom line,” he says. “The stronger the success story, the quicker internal confidence grows.”



ARCHITECTURE

Divide and conquer

When you split your code into manageable chunks, life gets a whole lot easier. It's one reason why microservices are key to the future of applications

Charles Orton-Jones

Tolstoy began *Anna Karenina* with the immortal observation that "happy families are all alike; every unhappy family is unhappy in its own way". It's also true of tech companies.

Each of the hapless ones is unique, producing its own particular hotchpotch of back-end horrors, whereas the successful firms look spookily similar when you open the bonnet. Take Amazon, eBay, Etsy, Facebook, Google and Spotify, for instance. They all run on a parallel set of tools and ideas. An engineer could move from Amazon to Spotify, say, and know their way around on day one.

One of the key attributes that these giants have in common is their use of microservices. The concept has become so important that any company failing to rebuild itself around microservices could be considered obsolescent.

A survey of CIOs and CTOs in March by US software company Kong found that 86% considered

“As the old saying goes: the easiest way to eat an elephant is one bite at a time

microservices to be the future of applications. Moreover, 84% agreed that any firm that can't ensure the reliability of the application programming interfaces (APIs) that link microservices-based apps is likely to lose market share to rivals that can.

Microservices seem to be crucial, then, but what do they actually do? In the simplest terms, they are the alternative to monolithic codebases. In the old days, software would be composed as a single block, which would be a nightmare to update. Teams would squabble over how and when to commit new code. Any error meant that debugging teams needed to scour the whole codebase to find the culprit.

In essence, microservices divide an application into autonomous chunks that work independently. The separate parts sit in the cloud and communicate with each other via APIs. This set-up has numerous advantages, but one of the most important ones is that it enables one team to update a microservice in its own time without having to bother any other party. Errors are easier to pinpoint and fix.

WealthKernel, a provider of financial software, is a strong advocate of microservices. Chris Wright, its CTO, explains: "In software terms, the decomposition of large systems into microservices means that they can be worked on and deployed independently. As the old saying goes: the easiest way to eat an elephant is one bite at a time. This allows for increased team autonomy, faster release cycles and improved isolation of faults."

He reveals that WealthKernel's production platform consists of 51 microservices, but adds that "this number will grow every time we incorporate new functionality. We expect to have about 70 by the end of this year."

The usual practice is to grant each function in an application its own microservice. Suresh Chintada, CTO of Subex, an Indian firm specialising in software for telcos, explains that "each microservice does one thing really well. This underlying concept allows us to set the bounded context and focus on delivering that single capability with high quality."

Gone are the days when teams had to coordinate their activities



Richard Drury via Gettyimages

for every upgrade. Now that each activity has been rendered autonomous, teams can intervene whenever they see fit, he adds.

"Development teams can work independently to build or enhance a product by focusing on the services they own. This allows them to operate in parallel, as it's only the interfaces that they care about to interact with services being built by other teams," Chintada says.

Ease of deployment is another feature. It is possible for a microservice to be hosted in a different

environment – a public cloud platform such as Microsoft Azure, for instance – and work with related microservices hosted on Amazon Web Services or Google Cloud.

"Microservices offer high scalability," Chintada says. "As each service is a separate component, we can scale it up or down without having to do the same thing with the entire application."

Naturally, there are disadvantages to this highly modular architecture. With scores or even hundreds of microservices needing to com-

municate with each other in some cases, there is a greater exposure to cyber risks. Conversations about data security are never far away.

Governance can be trickier too: in situations where dozens of teams are operating independently with different agendas, it can be hard to coordinate large-scale changes. The costs of implementation and ongoing staffing also tend to be relatively high for microservices.

Such downsides encourage smaller software firms to continue with their traditional monolithic codebases. A compromise approach, known as service-oriented architecture (SOA), may be a better bet for some of these companies. SOA is a design principle under which software components are loosely coupled but mimic independence.

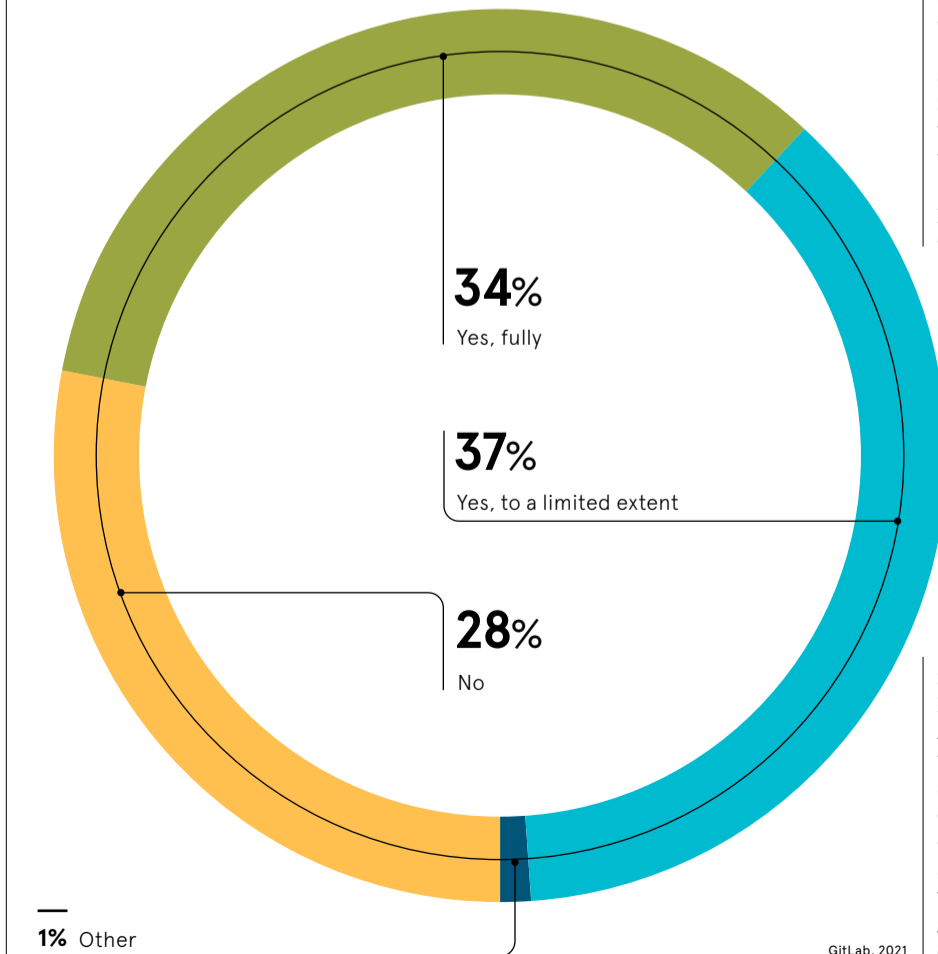
Justin Biddle, head of UK strategy and business development at e-commerce platform Shopware, believes that there may be merit in taking the SOA route.

"While microservices have their place, I'm against the idea that everyone should be using them," he argues. "Especially for mid-market businesses, the best way to strike a balance between microservices and monoliths is generally to find the middle ground: the SOA architecture. This provides broader applications, with the ability to align best-of-breed services with a decent out-of-the-box solution. This way, developers have enough flexibility to extend a platform as required, without excessive complexity."

Nonetheless, microservices look set to become the default option in digital transformations. The human factor alone may decide it. After all, engineers want to apply the latest tools and principles – and, right now, that means microservices. Who knows when an eBay or an Etsy might come calling with a six-figure salary for an engineer versed in their ways? When the big guns declare themselves in favour of an idea, it's hard to disagree. ●

HOW MANY ORGANISATIONS ARE MAKING THE MOST OF MICROSERVICES?

Responses of global developers, operations and security professionals when asked whether their organisations had adopted microservices



GitLab, 2021

Becoming a digital enterprise might be painful, but it's non-negotiable

How can businesses change their ways of working to accommodate the accelerating pace of change? It's a tough ask but a composable commerce approach is showing impressive results and helping businesses make the move

The pace of change in business is accelerating. To keep up, organisations must adopt new approaches like direct-to-consumer (D2C) strategies and composable commerce. What these have in common is an emphasis on customer- and data-first thinking, and an ingrained openness to fundamental change, across both mindset and organisational structures.

Sadly, most traditional businesses find these difficult to truly embrace, despite being necessary. According to Gartner: "Composable application architecture empowers such adaptability, and those that have adopted a composable approach will outpace competition by 80% in the speed of new feature implementation." Those enterprises that can successfully adapt to the changing demands of digital business will thrive – those that can't, risk falling behind. In an age of exponential growth, failing to keep up likely means failure.

If that sounds unnecessarily harsh, remember that as a species, we just

aren't well prepared for the sorts of digital behavioural change that we've seen in recent decades. The problem isn't recognising change, but the speed of that change. Exponential curves make sense in maths class but when applied to the real world, they leave us baffled. Even the previous beneficiaries of such exponential growth, like the Amazons and Alibabas of the world, face disruptions as more companies bypass generic marketplaces, instead making the most of social media, gig-economy logistics and micro-finance marketplaces such as Klarna. So if TikTok caught you off-guard, imagine what might be coming a year from now – especially if you take the exponential pace of change into account.

Agility and customer focus provides the competitive edge

In the 20th century, if a company had a product worth selling it was heavily dependent on retailers taking care of the distribution. Today, customers have a huge amount of choice,

“Composable commerce provides unrivalled flexibility and clarity. If your business is run by the more static technology suites, it will be like discovering Lego after only ever being able to play with Playmobil

little brand loyalty and can buy anything, anywhere. To be able to provide experiences that stand out from the increasing competition, brands must engage directly with their customers and capture data about their changing

preferences. This is the principle behind D2C. According to global business transformation agency Valtech, going D2C can be an essential move but will only be a success when combined with a digital-first mindset.

"Your D2C strategy will fail if it's not backed by a real dedication to become a digital enterprise. Power it with the right technology and enable it to connect with the constantly evolving new channels and you will get far. But to truly succeed, it's essential to consolidate it with the right data strategy and customer-service functions. This allows you to leverage your input for a competitive advantage and create an organisational structure that supports your customer interactions," says Joacim Jeppesen, global chief growth officer at Valtech.

"You must continuously use these insights to position, optimise and differentiate your product or service. All these changes require more than just new digital infrastructure or ways of working. It's about adopting a digital-first mindset."

Switching to a digital-first, flexible mindset across an entire business is not a straightforward process of shredding paper and letting automation rule the roost. The shift is painful because it is mindset-driven. "It will, and must, shake the core of your business," says Jeppesen. "Outside help and perspectives on strategy and technology are needed, but the drive and motivation have to come from within."

The power of composable technology

Fortunately, while this shift might take a lot of effort new technology allows businesses to adopt a D2C strategy while protecting themselves against shocks. This is the notion behind composable commerce. For Mandhir Gidda, EMEA CTO of Valtech, this represents "the realisation of a movement that began many years ago with service-orientation. It's a paradigm shift, reflecting digital thinking at every level of an organisation. It's the ultimate expression of being able to accommodate change."

Composable commerce allows businesses to act quickly, efficiently and proactively to pursue direct relations with their consumers and customers – both through their own and third-party channels. In adopting composable commerce, a business's mindset will not only shift from focusing on projects to focusing on digital products, but it will also enable information

technology to deliver services instead of systems. Spearheaded by global leaders like Valtech, who co-founded the MACH Alliance, it's the technological innovating element, providing a new way of adapting the digital landscape to the needs of a particular business and bringing all its data into one place.

"Composable commerce provides unrivalled flexibility and clarity. If your business is run by the more static technology suites, it will be like discovering Lego after only ever being able to play with Playmobil," says Gidda. "With composable commerce's flexible technical architecture, you can replace and improve the individual building blocks of your business. This allows each element to serve the purpose they're supposed to in a better, more efficient way, all while providing you with the essential insight you need from all channels to make more strategic decisions."

Composable commerce will help drive a successful D2C strategy and be a key enabler of modernising digital enterprise. With a composable foundation, businesses will naturally transition towards a digital-first mindset, as silos are deconstructed and customer data collected into a single source of truth.

There is indeed an increasing urgency to shift to digital across all aspects of a major company. Consumers aren't waiting around. Jeppesen says: "Businesses that delay shifting to a more adaptable, consumer-obsessed approach will only fall further behind with every moment that they hesitate. Brands embracing the approach of composable commerce will be more able to execute digital commerce and differentiation strategies, and we predict they will leave the competition behind."

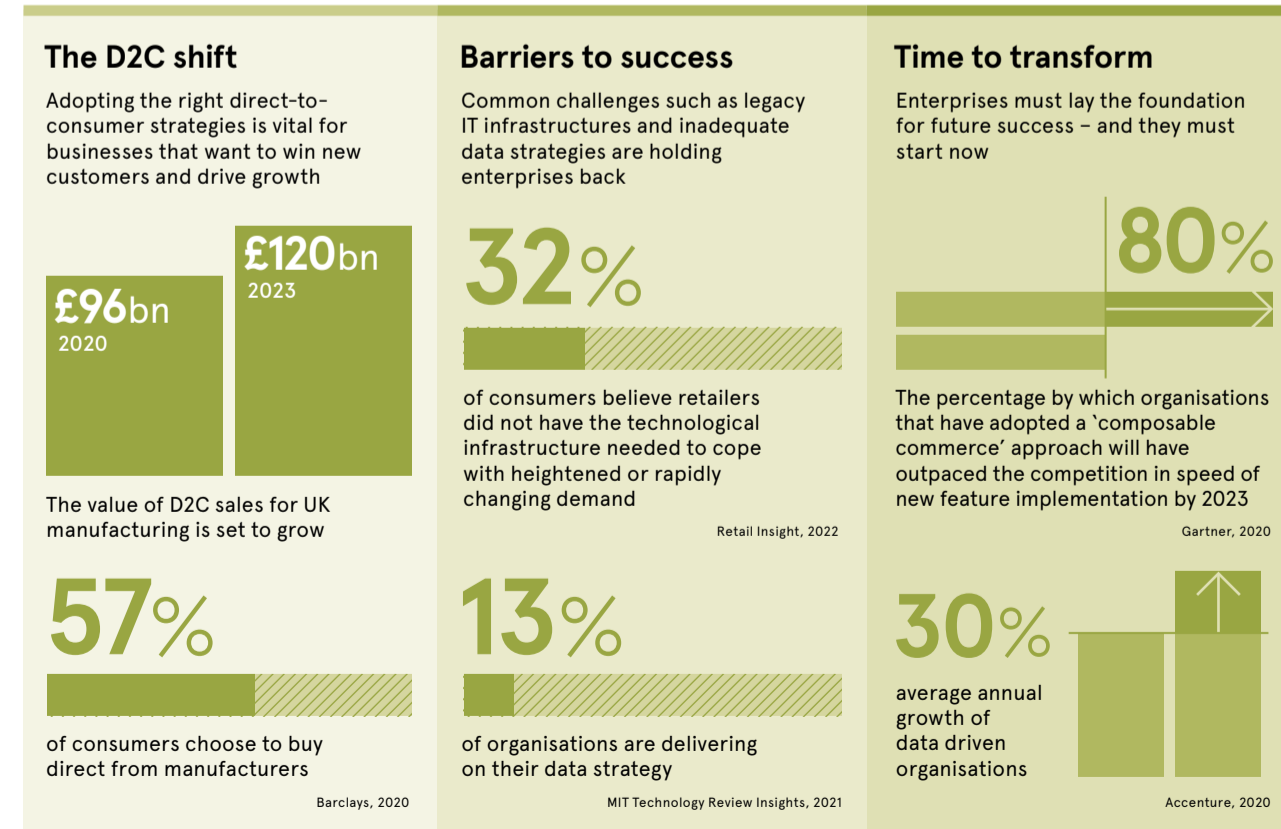
Traditionally organised businesses might have missed the chance to be first-movers in this space but no one will want to come last.

Unlock the potential of your D2C strategy with the global digital experts at Valtech. Contact us to find out more at valtech.com

valtech.

BECOMING THE DIGITAL ENTERPRISE OF THE FUTURE

The pace of change isn't slowing down. With competition growing and consumer habits continuing to evolve, enterprises must adapt to survive.





CFOs take the reins of game-changing transformation

Unprecedented business model shifts post-Covid have prompted a comprehensive reassessment of the role of chief financial officers, with a sharp focus on being facilitative, fair and building for the future

As small and medium-sized businesses (SMBs) lead the way through digital transformation, accelerated by the Covid-19 pandemic, organisations have demanded new leadership styles. Executives must deliver purpose-driven strategies with enough flexibility to embrace the digitalisation needed today and the ways of working powering tomorrow's success.

CFOs are at the forefront of these changes and are increasingly nurturing non-traditional skills at a time of intense competition for talent. As a result, new variations - or personas - of the traditional CFO role are emerging, each incorporating unique skills.

According to new research by Sage, which offers accounting, financial, HR

and payroll technology for SMBs, three distinct types of CFO are emerging: chief facilitative officers, chief fairness officers and chief future officers. To thrive in the post-Covid environment, finance leaders must blend the attributes of each to meet the challenges their businesses face.

Chief facilitative officers

The research, based on interviews with 1,900 financial heads globally, highlights the rise of chief facilitative officers - those who ensure goals happen.

Chief facilitative officers are particularly prevalent in the UK, where six in 10 respondents said this role most closely defines them. Many are leaders of technological change, with 81% having ultimate responsibility for digital transformation and 78% in charge of IT purchases - more so than for the other two categories of CFO. Such chief facilitators feel primed to evolve their roles towards fairness and a future focus.

"The growth of chief facilitative officers is notable. CFOs are typically viewed as keepers of the purse, but the reality is much more nuanced," says Jonathan Howell, Sage Group's CFO. "Today, most CFOs actively empower business functions such as HR, IT, operations, sales and marketing using financial data to influence operational decision-making."

Many finance leaders who would not yet categorise themselves as chief facilitative officers are looking to take on the mantle. Some 69% of them highlighted that over the past year they have taken charge of projects outside their core remit, moving further towards creating strategic value.

Chief fairness officers

Empathy and understanding are of increasing importance to CFOs, the Sage research reveals, and this is particularly the case among chief fairness officers. "These CFOs recognise that finding a balance between purpose and profits is key," Howell explains. "They connect the numbers to sustainable business models, to foster a business that takes its colleagues and customers on a meaningful journey."

Chief fairness officers are expected to grow significantly in number: while only one in four UK CFOs say they are currently most akin to a chief fairness officer, some 44% aspire to be one. The value of fairness is reflected also by the nearly four in 10 CFOs who view it as the most needed leadership quality. Finance leaders are increasingly "expected to meet the demands of a growing number of stakeholders," notes a recent report by EY, "who are interested in social responsibility,

of the future. CFOs are increasingly being expected to manage risk by planning for technological change, market shifts and the impact of volatile world events. A recent report by McKinsey notes that finance leaders "are deeply involved in determining how businesses adapt to significant changes in how work gets done", adding that their deep economic understanding of business models positions them well to drive long-term value from transformation.

The Sage research found that 14% of CFOs have the traits of a chief future officer, showing they are only part of the way on the journey to truly having the future in mind when planning for today. This represents an alarming disparity with the needs of their industry, with nearly four in 10 saying their sector's success is dependent on businesses having CFOs focused on integrating new technologies, empowering seamless remote work environments and attracting diverse talent.

"Chief future officers are integral to the success of a business in the long term," Howell says. "They are highly active in driving a strong environmental, social and governance strategy, which in turn improves customer satisfaction and is essential in retaining diverse, excellent talent."

Nevertheless, there is a need even among such forward-thinking CFOs to adapt further to change, with UK finance leaders typically behind their American counterparts in using cryptocurrencies, for example. This is partly the result of perceptions, with almost half (44%) of UK CFOs believing crypto will become mainstream, compared to six in 10 in the US. A lack of relevant talent and concerns about related environmental impacts are also hampering this evolution.

Stepping into the change

Sage's research shows that the CFO role is changing largely because of the enormous economic and societal shifts prompted by the pandemic. The further digitalisation of tax - resulting from government initiatives and businesses' need to ramp up effectiveness - is also transforming the role. The economic fallout of the Ukraine conflict is expected to catalyse further deep transformation and squeeze an already tight talent pool.

"CFOs increasingly see themselves as chief facilitative officers and there's also a rise in the prevalence of chief future officers. Young CFOs, meanwhile, are particularly likely to be the chief fairness officers that see what lies ahead and begin preparing their businesses for massive change," Howell concludes. "Whichever of these personas they most naturally align to, they must balance the qualities of all three to influence strategy and drive success for their business."

To find out about technology that empowers the CFOs of today and tomorrow, visit [sage.com/uk/intacct](https://www.sage.com/uk/intacct)



Sage, 2022

sustainability, short-term financial performance and long-term value".

Younger CFOs most aspire to become chief fairness officers, the Sage research shows, with more than two-thirds of 25- to 34-year-old finance leaders aiming to take on these characteristics. This compares to just under a third of 35- to 44-year-olds and almost half (44%) of 45- to 54-year-olds.

Chief fairness officers are having clear impacts on their businesses already: nearly half have removed location-based differences in compensation. They are also frequently responsible for diversity, equity and inclusion (DEI) initiatives, with 40% committing dedicated budgets accordingly.

Chief future officers

Business leaders' primary purpose is to prepare their organisation for the needs

81%

of CFOs have ultimate responsibility for digital transformation

44%

of UK CFOs believe cryptocurrencies will become mainstream

40%

of CFOs are committing budget to diversity, equity and inclusion initiatives

“Business leaders' primary purpose is to prepare their organisation for the needs of the future**”**

SKILLS

How can digital transformation serve the government's levelling-up agenda?

Experts suggest that an increase in institutional investment, a better distribution of successful tech companies and the adoption of open source and low-code will break down regional barriers across the country

Jonathan Weinberg

Explaining the government's mission to spread prosperity to all parts of the UK, the *Levelling Up* white paper includes much talk of how technology and digital transformation can help.

For example, it wants most of the country to have access to nationwide gigabit-capable broadband and 5G mobile networks by 2030, suggesting that communities must be digitally connected in order to thrive.

The paper also stresses the importance of new digital skills and infrastructure to power jobs and industry in the future, with Boris Johnson describing it as the most comprehensive and ambitious plan of its kind. Michael Gove, the secretary of state for levelling up, housing and communities said that success would mean "where you live will no longer determine how far you can go".



Michael Gove, secretary of state for levelling up, housing and communities, said that success with the agenda would mean that "where you live will no longer determine how far you can go"

But experts suggest that a lot of coordinated digital thinking will be required if the plan is to succeed, accompanied by a huge investment, swaths of new legislation and genuine efforts to encourage the brightest digital companies to move to the UK and partner with the government.

Dr Tanya Filer, founder and CEO of public-purpose tech-intelligence firm StateUp, believes that it will be crucial to reduce the huge gap between public sector organisations and tech startups.

"Around the world, thousands of public-purpose technology startups are developing high-quality, contextually sensitive offerings to help address pressing challenges that towns and cities face. This suggests that the problem is not often about supply," says Filer, who also leads the digital state project for the

Bennett Institute for Public Policy at the University of Cambridge. "We are living in an age of networks, yet innovative technology companies and local decision-makers are often siloed from one another and from the researchers and investors needed to shape the public-purpose tech ecosystem around levelling up."

Filer argues that innovative public procurement is also key to achieving more digital innovation. Research suggests that it can be "a powerful vehicle for supporting wide-ranging policy objectives relating to levelling up", she says.

Sunderland provides a good example of a public-private partnership with levelling up at its heart. BAI Communications is working with the council's Our Smart City scheme to ensure that Sunderland benefits from 5G and wireless infrastructure.

The project has supported trials of self-driving vehicles; remote learning across schools; and social care improvements using assistive technologies that enable vulnerable people to live independently.

Yet the UK could be falling behind other nations in the transformation stakes. Research in September 2021 for the European Center for Digital Competitiveness by ESCP Europe Business School ranked the UK 15th in its analysis of how the digital competitiveness of 140 countries had developed since 2018.

And in March 2022, when it was announced that the UK's tech sector had surpassed a total valuation of \$1tn (£770bn), Chris Philp, minister for tech and the digital economy, called on British institutional investors to back more homegrown tech firms, suggesting that foreign investors were stealing a march on them.

Matthew Scullion, the founder and CEO of Matillion, a tech unicorn based in Manchester, believes that the UK must produce far more consequential high-growth technology companies outside the South East.

Scullion, who sits on the prime minister's Business Council, says: "The steps the government can take are quite simple. We need to open eyes to the possibility of building these businesses anywhere. Running courses on high growth across the UK, especially at computer science faculties at universities outside London, will help to spawn a new generation of digital entrepreneurs whose ventures can power the UK's transition to a digital economy and ensure that it delivers for all."

He argues that entrepreneurs outside the South East bubble have not been given enough encouragement to "wake up one morning and think: 'I'm going to change the world and build a multibillion-pound business as a by-product'. We can fix that. We

need to show them the playbook of how to do it and help them to run it. Sometimes it will work and sometimes it won't. When it does, it will encourage a more equitable distribution of capital across the regions, which will promote regional technology talent and skills too."

One way for the government to achieve its levelling-up mission, according to two experts, is by harnessing open source and low-code. The former is software that can be shared and edited by anyone for any purpose, while the latter offers a more straightforward approach to software development (see p6).

Alex Case, senior director and public sector industry principal at software developer Pegasystems, has worked at No 10 and led large-scale public sector reform initiatives in Canada. He suggests that the government should increase the uptake of low-code platforms to spread IT jobs more equally around the UK.

"This enables many civil servants in operational non-IT jobs to upskill and become a key part of digital transformation projects," he says, adding that it could also transform the relationship the government has with the public, giving citizens the chance to participate in service development and improvement.

This chimes with the findings of a recent survey from data analytics company KX, which indicated that nearly half of students in the UK believed that software coding skills were at least as valuable as the ability to speak foreign languages.

But there is no short-term fix if research from edtech firm Emeritus is anything to go by. This indicates that levelling up digital skills across England could take decades, with London at least 15 years ahead of the rest of the country and the North East 30 years behind the capital.

Amanda Brock is CEO of OpenUK, a not-for-profit industry body promoting the use of open technology. She thinks that the government has to improve its understanding of open technology and collaboration to underpin digital transformation and "make the economy tick".

Brock, who has been working with the Department for Digital, Culture, Media and Sport, highlights the strength of open source for the public good. A successful piece of development can be adapted and reused, saving time and money, for instance.

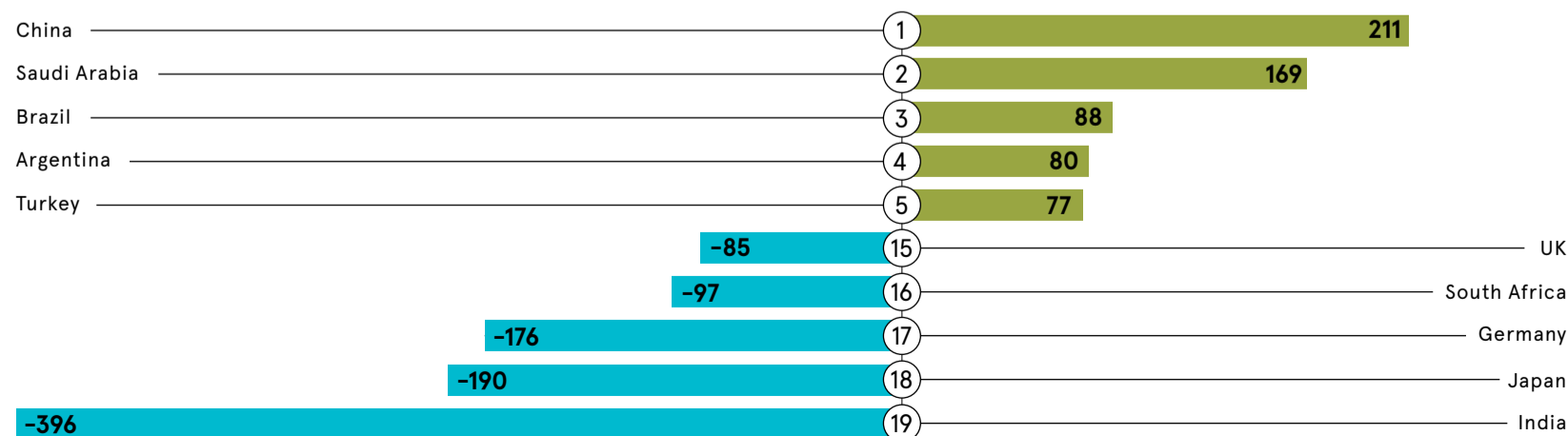
"If we get this right, we'll provide the building blocks for our national digital infrastructure," she argues. "Such assets can be used by other governments for their digital transformation projects. This would support more companies in developing their products and services around British outputs and enable our UK-based talent to service the world." ●

WHERE THE UK STANDS IN THE TRANSFORMATION LEAGUE TABLE

European Center for Digital Competitiveness, 2021

Selected G20 countries ranked by the European Center for Digital Competitiveness, which defines a nation's digital competitiveness according to its "ecosystem and mindset".

Change in ranking since 2018

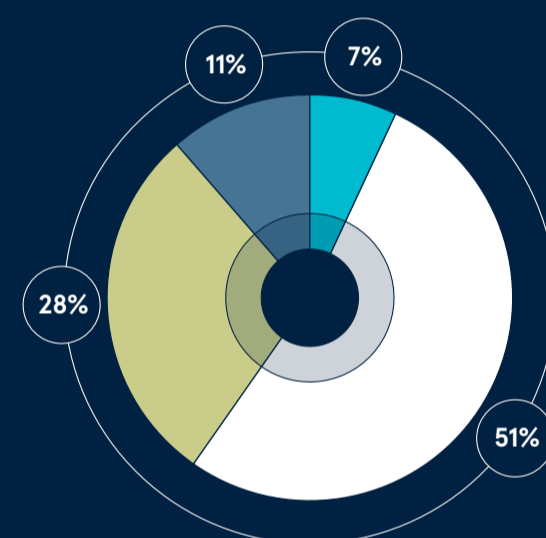


THE FUTURE DIGITAL TRANSFORMATION ROADMAP

WHY DIGITAL TRANSFORMATION STILL MATTERS

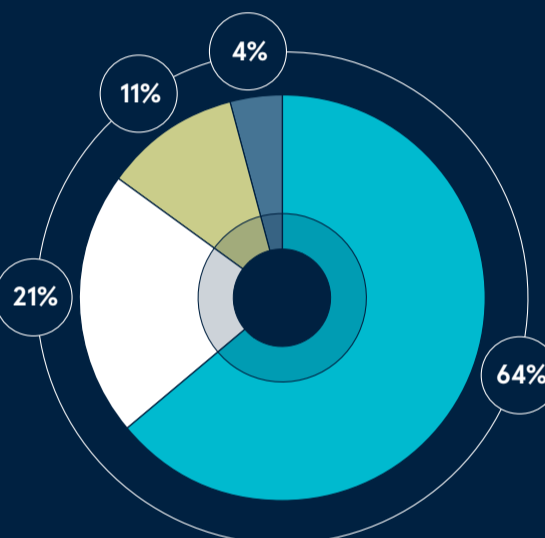
Percentage of C-level executives worldwide who are planning transformations for the following reasons (numbers may not total 100 owing to rounding)

- To become a tech company
- To differentiate ourselves from our rivals
- To keep up with our industry
- To maintain current infrastructure and capabilities



Percentage of C-level executives worldwide who say their firms need to transform in the following ways to stay economically viable by 2023

- We need to build a new digital business
- We need to embed digital tech in our business model
- Our business model will remain economically viable without changes
- We have already made fundamental changes to our business model

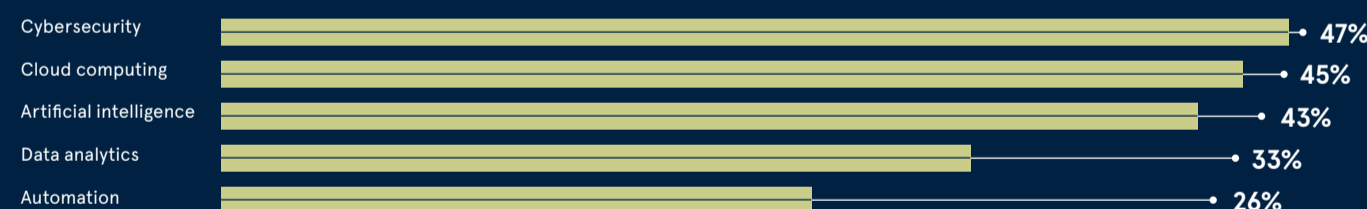


McKinsey, 2021

WHICH TECHNOLOGIES ARE COMPANIES INVESTING IN?

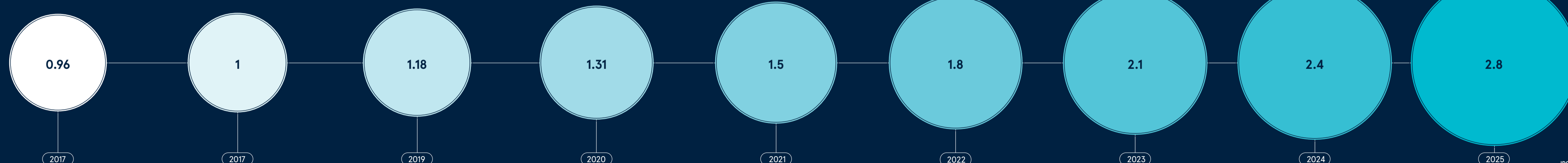
Baker McKenzie, 2021

Percentage of global digital leaders who consider the following to be among the top strategic technologies for digital transformation



COMPANIES ARE SPENDING MORE ON TRANSFORMATIVE TECH

Actual and projected expenditure on digital transformation technologies and services worldwide from 2017 to 2025 (\$tn)



IDC, 2021



54%

of IT executives said digital transformation was a priority for their enterprises in 2020

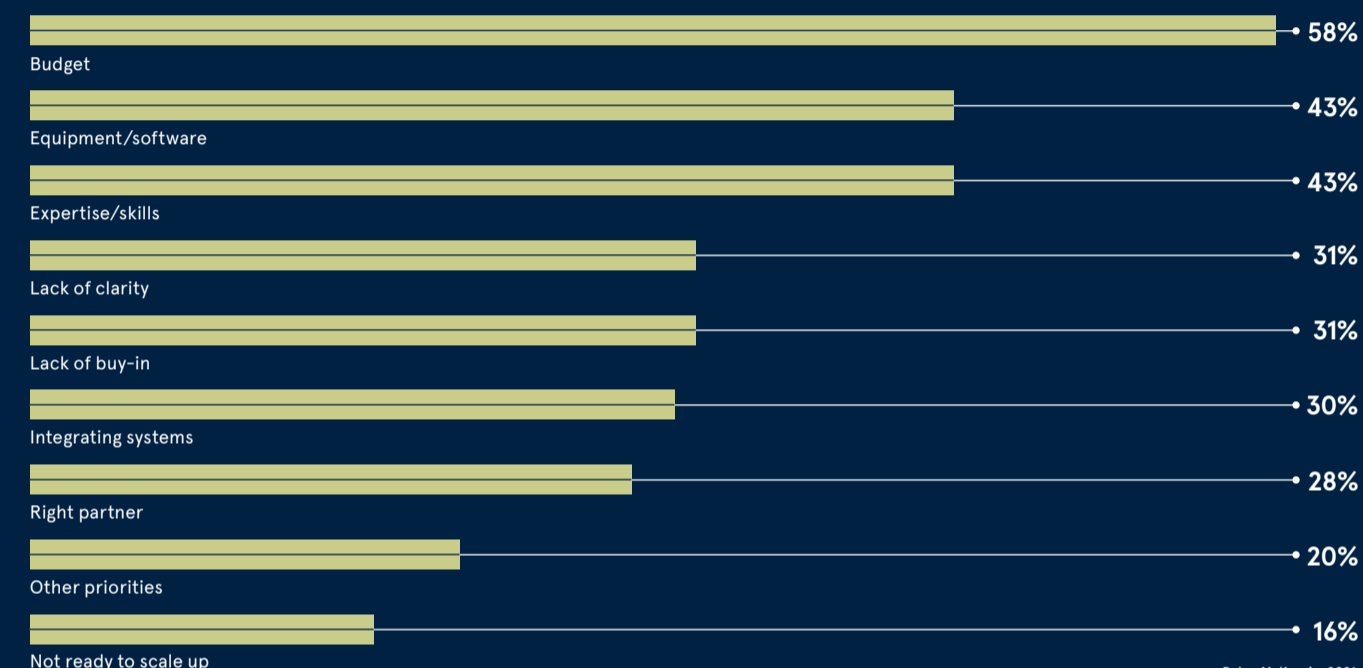
Flexera, 2021

56%

said the same in 2021, making it their top priority

WHAT CHALLENGES ARE COMPANIES FACING?

Percentage of global digital leaders who say the following will be the main barriers to scaling up and accelerating digital transformation

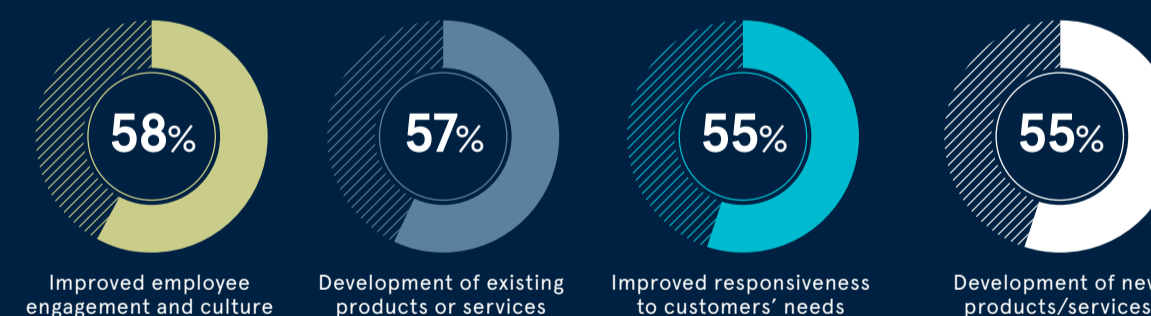


Baker McKenzie, 2021

WHAT BENEFITS DO THEY EXPECT TO SEE?

Baker McKenzie, 2021

Percentage of global digital leaders who consider the following to be the top expected benefits of digital transformation for the next 12 months



INTERVIEW

‘Trust is the main currency of the future of commerce’



Personalised customer experiences are so last year, according to Shimona Mehta, managing director of Shopify in EMEA. She explains why the retail sector must focus on building ‘brand communities’ instead

Oliver Pickup

Spring, the period of fresh starts, is a fitting time to ask Shopify’s Shimona Mehta how retailers can give themselves the best chance to flourish amid upheaval. She is well placed to offer guidance, especially as the commerce platform, of which she became MD for EMEA in November 2020, is itself blossoming. The technology provided by this Ottawa-based multinational powers “millions of businesses in 175 countries”, she says. According to recent research by W3Techs, 440,000 of the 10 million highest-ranking websites in the world use Shopify’s content management system, placing it second behind only WordPress in the popularity league.

Retailers and direct-to-consumer brands would therefore be well advised to take careful note of any insights arising from Shopify’s vast bank of data.

Mehta predicts that non-fungible tokens (NFTs), augmented reality (AR) shopping experiences and social commerce – buying and selling directly across social networks – will play significant roles over the coming years for online merchants. Retailers need to accelerate their

digital transformations to take full advantage of these trends, she says. Data to support her forecasts can be found in *The Future of Commerce in 2022*, a research report that Shopify published in January. This reveals one particularly seismic finding. Personalising the customer experience has been the holy grail for many marketers in recent years, yet 80% are likely to stop doing this by as soon as 2025.

The main reasons for the decline of personalisation are that tightening regulations are making data-tracking harder; innovating with first-party data is unlikely to produce many lasting customer relationships; and the most prominent web browsers are phasing out support for third-party cookies.

“The biggest challenge for firms is building long-term relationships with their customers when it’s possible to shop across several channels from a multitude of brands,” Mehta says. “New internet privacy regulations and the changes affecting third-party cookies are pushing up the costs of customer acquisition. This represents a sea change in how brands have been thinking about connecting with consumers.”

Mehta, who joined Shopify in January 2017 as head of sales enablement in her native Canada, argues that improving customer retention using “brand communities” will become key. This is where retailers – and business leaders operating in other industries – should focus their digital transformation efforts. In much the same way that a clunky retail experience will lead consumers to abandon their shopping carts, any organisation will lose potential customers if it offers them an unsatisfactory digital journey.

“There have never been as many opportunities in this space, but there has also never been as much competition. Creating a seamless customer experience is key for organisations wishing to emerge from the crowd,” she says. “The most successful brands are transparent, authentic and readily available to their customers, wherever they may be. Trust is the main currency of the future of commerce. Retailers that stand out online and retain their customers build bidirectional, meaningful relationships with them.”

But establishing and maintaining that sort of relationship is neither simple nor cheap. At the heart of the process, though, is a digital transformation featuring the adoption of tools with the capacity to empower merchants and make consumers feel comfortable using any channel they choose.

Mehta, who relocated to London, England (rather than Ontario), when she became head of Shopify Plus for EMEA in March 2019, emphasises the importance of investing in digital transformation

to ensure that online and offline customer experiences are not disjointed. Powerful technologies including artificial intelligence and big data analytics can predict likely spikes in demand, enabling greater efficiency in supply chain management. All data points ought to inform strategy.

“There are more contact channels than ever, be they websites, mobile apps, social platforms or the point of sale in a physical store,” she says. “An omnichannel approach is about aggregating these varied touchpoints. Operating an omnichannel business requires a lot of long-term planning and future-proofing strategies to absorb new technologies and avoid offering disjointed customer experiences.”

It all comes back to engaging with consumers and learning from them to better serve customers and enrich the brand community, argues Mehta, who adds: “The emergence of social commerce represents a particular opportunity for businesses to regain control of their brands in digital channels.”

She points to Lounge Underwear’s “hybrid approach” to influencer marketing as a good example. “To



There have never been as many opportunities in this space, but there has also never been as much competition

spread awareness, the brand has used both big names and micro-influencers. It believes that the latter have a better conversion rate, as consumers find them more authentic and relatable.”

Shoppers are increasingly using social channels to discover brands, connect with them and make purchases, Mehta reports. “More of our merchants are unlocking the power of social commerce through our integrations with Facebook, Instagram, Pinterest and TikTok. This is not about advertising or performance marketing – consumers are engaging with brands and increasingly completing checkouts directly through social channels.”

Linked to this, livestream selling – interactive videos through which viewers can buy the goods being demonstrated – has exploded in popularity. Shopify merchant data covering August, September and October 2021 indicates that the number of downloads of livestream selling apps was 40% up on the total for the preceding three months.

Also on the rise are AR-enabled mobile apps. Clothing brand Allbirds, for instance, has found success by using Shopify’s custom storefront tool to create a more immersive shopping experience through a virtual try-on feature.

“AR can make a big difference for the customer experience, although it isn’t for every brand,” Mehta says. “If merchants want to experiment with it, we offer a plug-in that enables them to test things cost-

effectively. If they don’t work, they haven’t wasted a ton of investment.”

When retailers – and businesses in other industries – embarked on their digital transformations, they would not have considered NFTs. And here is where the benefit of partnering to boost digital capabilities can prove truly useful, according to Mehta.

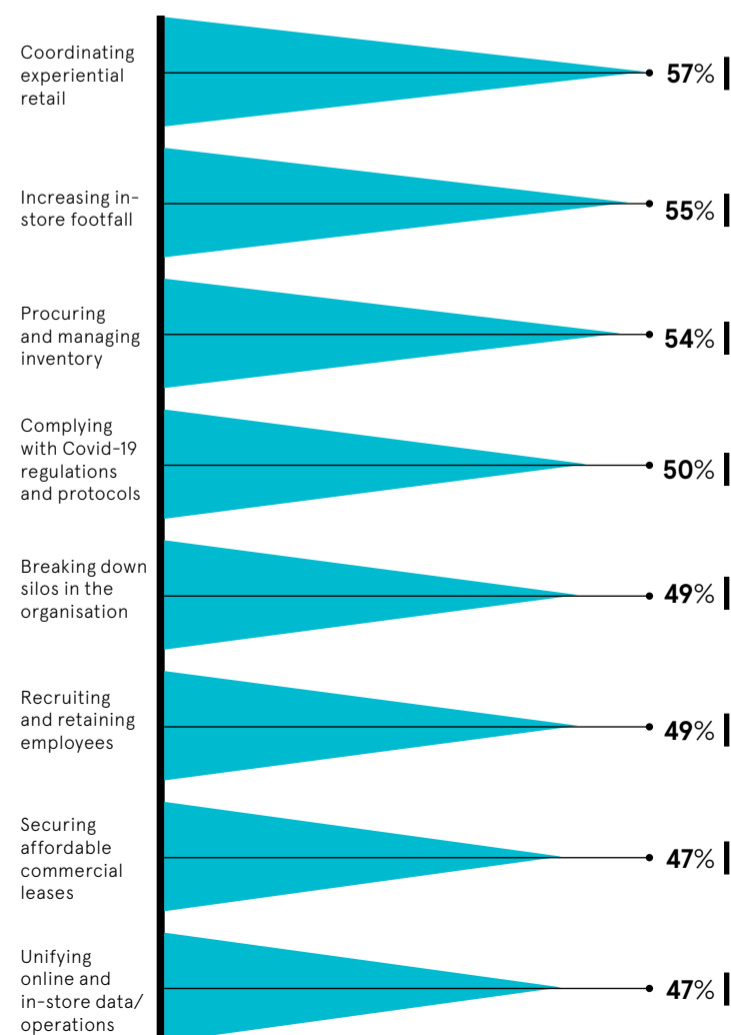
“NFTs are certainly an interesting way for firms to stand out and build relationships with consumers,” she says. “As more merchants build fun, engaging experiences for their communities, I believe that interest and excitement from their fans will continue to grow.”

Overhyped or not, it could be a gamble worth taking, given that brands as varied as the Chicago Bulls, Martha Stewart Living Omnimedia and Superplastic have completed successful NFT ‘drops’ through Shopify. After all, it’ll be a winning punt if it builds that all-important brand community and improves the customer experience.

Mehta concludes by offering advice on how retailers can thrive by accelerating their transformation. “My main tip is to start now; don’t wait for the ideal moment. Brands without a strong multichannel presence will miss out on a huge opportunity,” she says. “For retailers at the start of this journey, focus on building for the long term. Choose tools that enable you to develop your own ecosystem for commerce – and meet your customers where they are.” ●

ARE RETAILERS REALLY THINKING ABOUT DIGITAL TRANSFORMATION?

Share of global retailers who say that the following are the biggest challenges facing their businesses this year



Shopify, 2022

Commercial feature

YOUR COMPETITION IS UNDERGOING A DIGITAL TRANSFORMATION. ARE YOU?

Percentage of manufacturers

50%

anticipate that more than half of their current business processes will be automated by 2025

85%

plan to increase investment in business process automation

81%

agree that data-driven management is essential to stay competitive

Deloitte, 2021

Three reasons to adopt a digital transformation

The challenges of the future are upon us and only digital-ready companies will be primed to survive

The world is changing fast – but there’s a risk of being left behind for companies that don’t adapt to the digital future. Since 2000, more than 50% of Fortune 500 companies have been acquired, merged or declared bankrupt, being outcompeted by more innovative firms. The causal factor is digital transformation, according to Tom Siebel of McKinsey Quarterly.

“Digital transformation offers an opportunity for businesses to tackle three primary business priorities that exist across the globe,” says Dave McDermaid, director of business consulting at aPriori. Through his work with aPriori, McDermaid talks to scores of customers at different steps in their digital transformation journey, understanding their problems. His analysis in this article covers different industries, different manufacturers, and the issues they face.

Whatever stage a company is at in their digital journey, aPriori can help. The company automatically generates manufacturing intelligence that helps manufacturers collaborate across the product development process to make better design, sourcing and manufacturing decisions – yielding lower cost and more sustainable products delivered in less time.

“The journey of digital transformation creates a framework of valuable digital data we can analyse” he says. “We run simulations of future design, manufacturing and procurement scenarios that support critical decision-making much earlier than before.”

By doing that, aPriori helps manufacturers and suppliers tackle what McDermaid calls the “three enormous challenges” they face today and in the very near future.

Sustainability

“Companies have to think today about how they are going to address sustainability in the very near term,” says McDermaid. That transition can be eased by creating a digital model of the future, which will help proffer solutions and a path to follow, heading off issues that will soon come down the line. “As far as product sustainability is concerned, two of the key elements to consider are one: what is the product made of? and two: how does it get made?” says McDermaid. Companies can and should start roadmapping strategies for sustainability today.

Volatility and resilience

Resilience is the number one priority for businesses post-pandemic, according to Deloitte’s 2021 Insights Survey. McDermaid points to the pandemic’s butterfly effect, using the following example to illustrate this priority. “Shifting supply chains over the past two years resulted in the inability for a handful of nuts and bolts to be shipped to the production line of an engine plant. Because of this, the automotive OEM could not build their vehicle. Fleets of cars can’t be built if we can’t get enough bolts, wire harnesses, silicone,” he says. “The problem is huge, and supply chain volatility and resilience is now a guaranteed concern for the future.”

Adopting a digital transformation within your company allows you to utilise data to strategise around different future scenarios – and plan for how you will overcome them when they happen. Could I design to reduce supply chain risk and complexity? What happens if material prices rise? At what price point do company profits disappear? “Exploiting

digitalisation today allows us not just to predict the future impact, but to find indicators that allow us to plan better now,” says McDermaid.

Labour shortages

Whether it’s losing your best talent or not getting the right people into the workforce in the first place, a lack of brain power can hinder a company’s development – specifically in engineering. That said, it’s an issue for every company in every sector, and one that will become more prevalent as more work is automated, and collective knowledge becomes more limited. According to that same Deloitte survey, 50% of businesses anticipate more than half their current processes will be automated by 2025. Digital transformation ensures your company will never lose that institutional memory, capturing years of intelligence in manufacturing while also making the process more efficient. “To prepare for this, aPriori can help companies to maintain a digital thread of manufacturing processes and design knowledge,” says McDermaid.

Digital transformation provides organisations with the added speed and agility they need to remain competitive. By tying product design and manufacturing operations together, key phases of the product development lifecycle are propelling new products to market 20% to 40% faster.

To start your digital transformation today, visit apriori.com/contact or call +44 (0)78517 91322 to arrange a demo

aPriori

INTERVIEW

Take it from the top

They've been there, done that and got the T-shirt. Having led a range of organisations through successful transformations, three seasoned veterans share the key lessons they've learnt

Sam Forsdick



Juliet Bauer, senior vice-president and UK managing director, Livi

Bauer has overseen numerous transformations, from the introduction of digital subscriptions at The Times to the launch of the NHS App. Now at Swedish online healthcare provider Kry, she is looking to scale up Livi, the company's UK business

In any organisation, the first challenge is establishing what you'd like to achieve. The clarity of that vision can be the biggest difference between success and failure. As a digital leader, you need to be able to stand up and passionately articulate why the organisation is trying to transform, so that you can bring people with you.

A key challenge at some of the bigger organisations I have worked with has been dealing with legacy issues. It's not that everyone does not see the value in transforming; it's more that different parts of an enterprise will simply be at different points on that journey. When I worked at *The Times*, for instance, some people on the print side of the business might not have been fully

up to speed on some of the digital elements at the start, but it became obvious that change was needed, as print circulations were declining and advertisers were spending more online. The key idea around which we decided to organise the company's digital transformation was that good content is valuable.

You should be able to explain why you're undertaking a digital transformation in a way that's simple enough for everyone to understand, wherever they're working in the organisation, and in a way that brings that story to life. That entails taking the time to understand your various stakeholders and their needs. At Livi, for example, we have formed a great understanding of our patients, clinicians and partners, as

well as a good overall grasp of the healthcare system.

One problem is that firms sometimes don't set the bar high enough. It's important to work to high standards – there's a real difference between transforming in a mediocre way and doing it well. When you do it well, your stakeholders will actually want to use the new technology.

By contrast, when companies try to digitalise services for the wrong reasons, it becomes irritating for users, as they feel they're being forced to do something they didn't want to do. You need to create experiences that offer more value than before. Yet there have been cases in all industries where digital transformations have made it harder for people to access services.

Peter Weckesser, chief digital officer, Schneider Electric

In previous roles, Weckesser oversaw the digital transformation of the defence and space division at Airbus and led the creation of an industrial internet-of-things platform for Siemens.

The key to a success in a transformation is understanding that it's a journey, not a destination. At Schneider Electric, we start with a vision, which is usually based on a time horizon of about four years. Then we work in sprints, so that we deliver value for the company and its customers in relatively short cycles.

If you approach it purely from a technical angle, you're likely to fail. This is not about introducing a few more tools. Instead, it should be based on the question: how can we utilise all these capabilities to improve our efficiency and gain a competitive edge? Such projects should be seen as a means of transforming the whole business.

Digital transformations are therefore really business transformations, which is why they can be so hard to get right. There is usually cultural resistance to such change. The most successful organisations are those that embrace change.

This means that you must be willing to impose it to some degree. For example, when we saw an opportunity at Schneider Electric to get into ecommerce, some people thought it was a stupid idea. It's since become our fastest-growing channel. If you

listen to all the sceptical voices, change might never happen.

To overcome inertia, an enterprise requires a visionary CEO who's willing to break the status quo and convince the rest of the organisation to support that process.

I am convinced that any transformation in an organisation, digital or otherwise, requires a permanent disposition to lean into the wind – to do things differently from how you've done them before. The most important capability in this respect, therefore, is not technical skill; it's the willingness to change.



Siim Sikkut, partner, Digital Nation

Until February 2022, Sikkut was CIO of Estonia's government – widely seen as an exemplar of how to digitise public services. Now he's helping other countries to build digital societies.

We have a decentralised government in Estonia, which means that every department has its own digital agency. The services these were providing for the public were of varying quality when I started in my role at the Ministry of Economic Affairs and Communications. Our task since then has been to lift all of them to the same level.

An effective leader in the public sector must have a grasp of the basics of technology and emerging IT trends; be data-literate, so that they know what they can get out of this material; be user-centric; understand information security and risk management; and know how to work with a digital team.

Slightly different qualities are required of someone leading a digital transformation in the public sector. You need the five fundamentals

and changing how we work is fundamentally what a digital transformation is. The technology itself is not enough; it must be put to good use. To achieve that, you have to understand the tech. But, even more, you have to understand the business of government.

You also need to build places to bring people together socially. In Estonia, that might mean organising a nature retreat, say, whereas some other governments might hold a big party. Such gatherings create team cohesion – it's a relationships game. Recruiting the right people to your team will make a whole lot of difference too. ●

I've mentioned, but you must also have good coordinating skills, so that you can get different parts of government moving in the same direction. You and your team will never be able to build everything on your own, so you must be able to collaborate with others and know how to incentivise them.

You do not need to be a techie yourself to lead in government work. I'm not a technologist, but, as an Estonian, I've always had an enthusiasm for technology. I'd like to think that the strength in people like me is that we can translate between the two worlds. We understand what technology enables and we also know what it takes to use technology to change how government works.

Any data flowing between connected devices in Manchester, say, would have to go via London. The extra time involved in this round trip made it impossible to use a network for high-speed processes such as controlling drones.

In 2008, I co-founded the first internet exchange outside London, called IXLeeds. These exchanges are now in most big cities, silently providing the underlying infrastructure upon which we can build smart networks.

The exchanges don't just connect things such as cars, sensors and

'As technologists, we must architect our services to be useful to society, not a hidden burden'

Professor Adam Beaumont, a member of the Digital Leaders advisory board, discusses how organisations can use technology for good

Q When it comes to digital transformation, are companies suffering from a lack of ambition?

A It starts with the language surrounding our ambitions. Take becoming carbon-neutral by 2030. This ambition turns into language such as 'reducing energy consumption'. What we've done is embark upon becoming 'less bad'. To be ambitious, we need to think about how we can be 'more good'.

The less-bad approach looks at how we use technology more efficiently. The more-good approach looks at how we use technology to transform our operations to become zero impact and positive impact. Humans are the only creatures on this planet who create waste that cannot be consumed by other parts of the food chain. Technology that allows us to eradicate this must be the highest priority.

Magic happens when two or more rapidly advancing technologies combine in a synergistic way to create a transformational technology. Advances in materials science and 3D printing are enabling human organs to be printed, for instance, while 5G networks and robotics are enabling remote surgery.

Q How is digital transformation aiding the government's levelling-up agenda?

A A smart city is one that has been empowered with the mechanisms and data to operate more efficiently and provide a better quality of life for its citizens. But data flows rely heavily on good internet engineering.

We take this engineering for granted. In the early days of the internet, all connectivity came from a hub in London called an internet exchange. Any data flowing between connected devices in Manchester, say, would have to go via London. The extra time involved in this round trip made it impossible to use a network for high-speed processes such as controlling drones.

In 2008, I co-founded the first internet exchange outside London, called IXLeeds. These exchanges are now in most big cities, silently providing the underlying infrastructure upon which we can build smart networks.

The exchanges don't just connect things such as cars, sensors and

drones. They also connect people to content. Much of the regional internet service providers' connectivity comes through these exchanges, meaning that, when a person in a city uses YouTube, for instance, the content has to travel only a couple of miles. This reduces the load on national networks and also the cost of delivering the content.

Q How can we ensure that our digital transformations are as green as possible?

A As technologists, we must architect our services to be useful to society, not a hidden burden. Bitcoin, for example, is useful, but it uses more energy than Argentina. Successful smart cities must embrace the circular economy.

My company's data centres house the technology that supports much of this smarter future, from mobile network equipment to digital patient records to the connectivity for transport systems. All of this consumes energy. In Leeds alone, we consume about 5MW of electricity consistently. Energy cannot be created or destroyed, so the output of a data centre is heat.

Smart starts with smart policy. The UK Investment Bank is looking to fund circular schemes that will lay the foundations for smarter ecosystems. The challenge is to ensure that industrial strategy dovetails with planning, creating incentives for new developments, such as taking advantage of waste heat. The UK is 13% 'fuel-poor'. Our 5MW would heat a lot of homes.

More and more tech is moving to 'the edge', meaning that more data centres will crop up in cities. One of the early smart opportunities is to design them into a holistic scheme that can help all citizens. ●



Professor Adam Beaumont
Advisory board member, Digital Leaders

The need for speed in the new age of digital

To keep up with rapidly evolving customer expectations, organisations must tackle the underlying barriers to digital transformation and ensure low latency in their applications

Digital transformation has come a long way over the past decade. When the need first emerged to meet demands from customers for a more digital experience, most organisations took the simplest and least disruptive approach: deploying a series of new, greenfield digital applications.

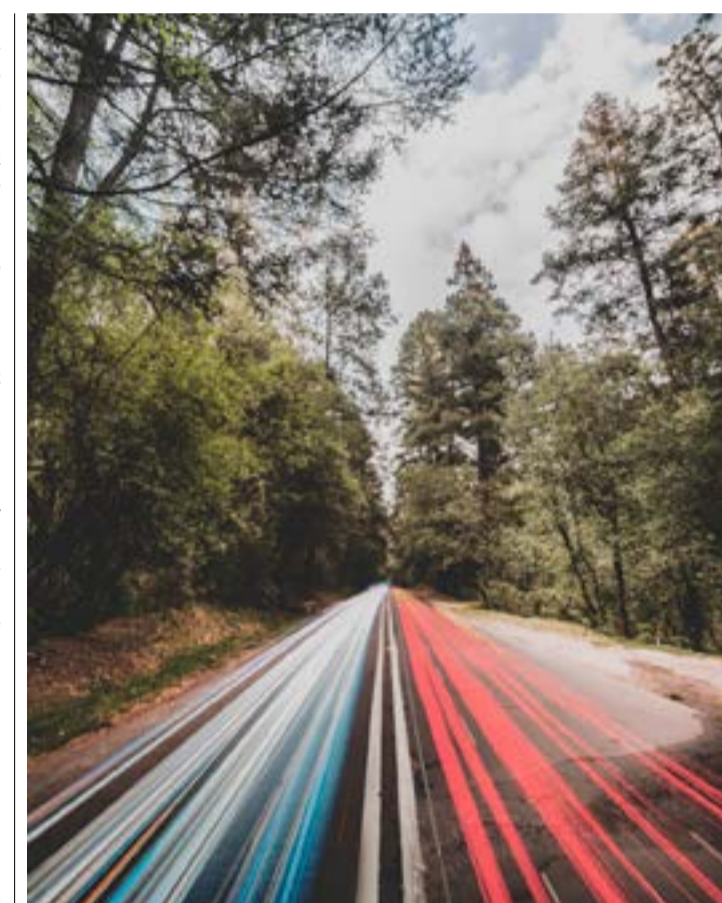
While many companies might have called this digital transformation, in reality it wasn't. Real transformation requires replatforming of the underlying infrastructure, but the significant costs and complexities of doing this were, for a long time, a major deterrent. That is until cloud-native businesses started outpacing and out-innovating incumbents by offering better customer experiences.

The realisation of the importance of cloud infrastructure to core business agility came about at the same time as Covid-19 upended the world, accelerating the urgency for real digital transformation. Suddenly, the life-and-shift model was no longer feasible: businesses had to start thinking about application modernisation – and fast.

"The pandemic has driven transformation at an unprecedented magnitude and changed how businesses interact with their customers," says Udi Gotlieb, vice-president of product marketing at Redis. "When you look at how cloud-driven companies use DevOps practices, agile development technology and microservices to break the silos between operations and development, legacy organisations can't achieve that kind of agility on their existing models and infrastructure."

Amid the acceleration of digital services, amplified by the Covid-19 crisis, it is now business critical to not only build new services quickly, but also to make sure they are delivering the best possible user experience. Latency is the new outage – it is costing businesses while their cloud-native competitors are delivering rapid speed for digital consumers.

Consumer expectations are higher than ever and they are increasingly correlated to how quickly applications can respond to customer demands. If they can't do this in less than 100 milliseconds, consumers won't waste time and will look for alternatives, making latency a crucial consideration in application modernisation. Technology is just one part of the equation, however. "Any business can bring in new technology but if people don't know how to use it and companies don't acclimate the process around it, they won't be able to innovate."



says Allen Terleto, field CTO at real-time data platform Redis. "To break through the complicated barriers to genuine digital transformation, companies have got to tackle people, process and technology."

From a people perspective, developers want to use the technology they like using, yet the mainstay databases over the past five or six decades tend to be ranked at the bottom of user surveys. Redis, on the other hand, has consistently been named the most loved in-memory database. By giving talented developers a tool that is simple, powerful and fast, they'll be empowered to be more innovative.

When it comes to processes, Redis Enterprise simplifies and automates processes that site reliability engineers (SREs) and DevOps people will need to otherwise manage manually. That includes deploying multi-tenant and geo-distributed services. Developers and engineers do not need to write their own conflict resolution logic or patch every different application to meet their enterprise SLAs. They can simply choose the right model and deploy uniformly with operational excellence.

Finally, Redis's technology is built for the digital age. Because legacy relational databases were created 50 years ago, when the cost of RAM was very high, they had to focus on reducing infrastructure costs as a first principle of their design, instead of simplifying data access and optimising for performance. Redis was built for multi-model data access and in-memory speed as a first principle, leveraging RAM that is now viable due to exponentially reduced costs. Companies get the speed and access they need without the complexity. "Our customers are empowered for successful digital transformation across all three dimensions," Terleto says. "Redis's simplicity and community gives people confidence to move fast, experiment and drive innovation. Our cloud-native real-time data platform meets customers where they are today and where they are going tomorrow as we progress towards a digital-first economy."

For more information, visit redis.com



STRATEGY

Why there is no such thing as one size fits all

The term 'digital transformation' can mean widely differing things to different organisations. Here, three disparate enterprises explain the contrasting processes they have been through

Morag Cuddeford-Jones

The startup's story: a cheeky approach to digital-first

The Cheeky Panda may be a mere six years old, but it's already flourishing. The producer of bamboo-based paper products was recently valued at £75m, thanks to its focus on the double zeitgeist of hygiene and sustainability, along with its future-ready digital set-up.

The enterprise was founded by couple Chris Forbes and Julie Chen. It has always been keen on adopting software as a service, an off-the-shelf product, and automating the back office as much as possible, enabling it to scale up efficiently, Forbes says.

"We started off as most new businesses do, using accounting systems such as Xero or Sage. But in 2019, which was still very early for us, we adopted an enterprise resource planning system with a view that all of our other systems would hang off it. We can run a

complicated order capture and order fulfilment process with one click of a button," Forbes explains.

He points to The Cheeky Panda's tech stack, where each element is 'plug and play', whether it's an ecommerce platform or a customer relationship management system. "We have got a component-based architecture: you can add things and take them away. It means that, if you become outsized in one area, you don't have to completely transform the whole stack. You just take that piece off and put another on top of it."

In fact, The Cheeky Panda has not really undergone a process of digital transformation in the same sense that larger, longer-established companies might. Rather, it started out as a digital-first business. But the organisation's tech make-up means that it's more than a match

for the demands of future digital transformation trends.

Forbes may have a head-start in understanding how to build a digitally future-proofed business from scratch, having helped to build PwC's consultancy business in a former life. "I've met thousands of architects, so I've used the knowledge of what world-class architecture looks like – and that's shaped the foundation of what we've got."

The Cheeky Panda's architecture may be neat and highly customisable, but Forbes believes that vision, not tech, lies at the heart of a successful transformation.

"Technology might be cool, but what is it going to deliver for your business?" he says. "As long as you understand the fundamentals of the tech you're using and the end goal of the business, this should give you a mid- to long-term view."



Cheeky Panda



Striding into transformation: the medium-sized enterprise

Walk the Walk Worldwide, a charity focused on breast cancer care, has raised £100m since it was established in 1996, with about 500,000 people taking part in its challenges.

Having started out by posting all sponsorship forms to fundraisers,

“Social media is helpful, but picking up the telephone and talking to our fundraisers is even more important to us

the charity now has a sophisticated website that also supports activities such as event registration, email marketing and social media activity.

Guy Aubertin, director of fundraising and operations, describes how its digital transformation evolved from hiring seasonal workers – usually students – to key in data from the paper forms. "We had 20 temporary staff, like a typing pool," he says. "Now there are two."

Perhaps the most significant contribution of the digital transformation, aside from enhancing the customer experience, has come in improving efficiency and flexibility, according to Aubertin.

"It's been a great cost-saver. We work with contractors who no longer have to come into the office.

We can work much more effectively using tools such as Slack," he says. "When there are fewer of you, there is greater pressure, so you need to offset that by giving people the opportunity to work remotely."

While the pandemic may have forced people into a somewhat unnatural existence lived almost entirely online, Aubertin believes that true digital transformation for Walk the Walk is managing a more hybrid arrangement. He says that the charity is holding both a physical and virtual event this year.

"People want human interaction. There's an expectation with digital that you're always going to be new. How do I cut through all that other digital noise? Constant reinvention is very difficult and expensive, so physical events are where we're at," he says.

Aubertin notes that the speed of Walk the Walk's transformation was influenced by wider user habits, such as "the increase in the use of the internet, email becoming more than just a business tool and social media pushing things along". But he adds that the fundraising tea party is just as important as a round-robin email or YouTube video.

Aubertin is also at pains to point out that for his enterprise, social media is very much a sharing tool for donors. For an organisation of Walk the Walk's size, the cost of engaging fully with social media is too high.

"It's incredibly expensive," he says. "It sucked a lot of businesses in by being free but now they turn the supply off unless you pay for it – and there's no certainty that you'll get results. Social media is helpful, but picking up the telephone and talking to our fundraisers is even more important to us."

Big business transformation: delivering the 'fourth emergency service'

The arrival of Covid-19 fuelled a massive acceleration for Boots UK "in terms of what we needed to do from a digital perspective", says its ecommerce director, Paula Bobbett.

Boots UK is one of the few high-street retailers in the country that has been allowed to keep its stores open throughout the pandemic. Nonetheless, the lockdowns forced a dramatic rethink of how it managed its digital and physical estate. "One lucky thing about being a huge business is that you have lots of stores, effectively turning them into micro-fulfilment centres. That drove us to have a real rethink about their role," Bobbett says.

The Covid crisis has accelerated plans that were already in place. But it has also revealed new ways of approaching not only digital but omnichannel retail. During surge events such as Black Friday, the click-and-collect facility became an essential tool to the company, enabling it to "flex up capacity".

It also transformed the firm's status as an online business. "It's fair to say online was underinvested, so the first year of the pandemic was about both tripling supply chain capacity and really rethinking how we trade our website," Bobbett says.

In its previous incarnation, the online store had followed physical stores' merchandising plans, such as promotions lasting eight weeks. But "that just doesn't work in the

digital world, because digital businesses are about using the fear of missing out, timed offers and driving calls to action", she adds.

As a result, initiatives such as a delivery trial in partnership with Deliveroo meant that the online operation could ape the convenience of the physical store, delivering healthcare basics such as painkillers within 20 minutes.

"That has proved really powerful because suddenly we're more convenient than some of our digital competitors. We couldn't do that without the strength of our stores."

For Boots UK, digital transformation is less about ecommerce and more about "how you bring the two together and use the strength of technology both online and in store," Bobbett says. "The next big thing for us is to measure your store in the same way as you measure your digital business."

If this sounds like a 'click your fingers and it's done' moment, she is quick to admit that becoming an agile, responsive omnichannel business is a work in progress.

"It's harder to transform as a big business, as you're working with a lot of legacy technology, you're not buying off the shelf and you're having to adapt old systems that aren't necessarily fit for digital," Bobbett says. "But, once you get the baseline right, you can really accelerate and become a lot more agile." ●

“It's harder to transform as a big business, as you're working with a lot of legacy technology



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CUSTOMER EXPERIENCE

Humans or machines – which way for CX success?

Digital tech has enabled brands to engage with consumers in innovative ways during the Covid crisis, even removing the need for personal input in some cases. What innovations will stick once the pandemic is over?

Alice Broster

When it comes to selecting the brands you support as a consumer, many factors can come into play. Sustainability and ethical consumption might be high on your list of priorities, for instance. Alternatively, low costs and short delivery times might be the winning factors for you.

However you feel, the pandemic has changed how we interact with brands, as we had no choice but to go online for most things during the lockdowns. As companies have necessarily responded to the influx of online shoppers over the past two years, consumers' relationships with brands and the retail experience have also evolved.

"Most brands realise that the customer experience is part of the competitive landscape, so they need to adapt constantly to customers' changing expectations." So says Philip Graves, founder of the Shift consultancy and author of *Consumerology: the truth about consumers and the psychology of shopping*.

"Tech has played a major role in the changes we've seen in customer

behaviour," he adds. "Shoppers don't want technological change but they are drawn to it for the psychological rewards if it brings a better experience."

His view is backed by the findings of a 2020 research report by Acquia, *Digital Experiences in Disruptive Times*. This revealed that 77% of UK consumers thought that their digital experience with brands had changed, with 43% of respondents shopping more online than they did before the pandemic.

The fact that 48% of organisations in the research said that they had created more content for customer engagement is revealing. According to a survey by the McKinsey Institute, the pandemic has accelerated digitalisation in customer and supply chain communications by three to four years.

But what does a digitally transformed customer experience actually look like? Once you've found the item you've been looking for, clicked the 'Pay' button and received your order confirmation, what do brands want you to feel?



Marika Gaber via Getty Images

“Shoppers don't want technological change, but they are drawn to it for the psychological rewards if it brings a better experience”

"Perhaps the best answer would be 'nothing'," Graves suggests. People return to a brand not necessarily because they like it, but because the purchasing process is quick and easy. He argues that, rather than developing a customer experience that people will actively enjoy, brands want digital solutions that enable shoppers to move through their websites without too much thought. One-click ordering, saved payment details and retailer apps are key to making the customer journey as smooth as possible.

"Its familiar, frictionless nature requires little conscious effort from shoppers," Graves says.

Yet it takes a lot of effort and digital innovation to make users feel that their shopping experience is effortless. And, while most (if not all) brands focus on making it as easy as possible for customers to complete a purchase, that doesn't look the same for everyone.

Andy Hunter is the founder and CEO of Bookshop.org, an online bookstore that links thousands of independent book retailers with readers around the globe. Soon after starting up in the US in early 2020, the company was forced to adapt quickly to customers' changing expectations when the pandemic struck. The company has since expanded, with the launches of Bookshop UK and Bookshop Spain.

"Many of the stores we service had to lay off staff in April and May 2020. So, rather than outsourcing, we hired a team of these newly available booksellers," Hunter says. "We've had to pay them more, but they offer book recommendations, contribute to social media and have a real dialogue with customers because they are also book-lovers."

The community-based model that Bookshop.org has come to rely on has created a much better customer experience than the business would offer if it used algorithms for recommendations and an outsourced third party to handle customer complaints, he argues.

"We call this the human touch," Hunter says. "We try to be as generous as possible with our customers even if that isn't always the most

cost-effective route. In the long run, we're building loyalty."

Creating a customer experience where shoppers can feel they're having as personable experience as they would if visiting a shop might be why they return. In a 2020 survey by Zendesk, 57% of consumers agreed that good customer service was key to winning their loyalty. The ability to resolve complaints swiftly is another big win for a brand. An ongoing poll by Khoros reveals that, for 83% of consumers, quality of service heavily influences their purchasing decisions.

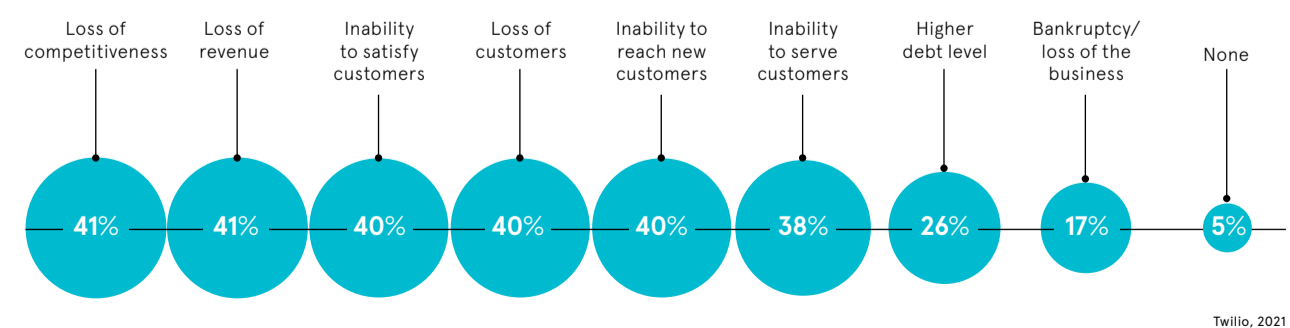
This raises the question of whether people expect more from brands than they did. "The best thing a brand can do is give a customer the sense that you're reflecting their identity and that their identity is aligned with your brand's values," Hunter advises. "If you can tap into customers' aspirations and offer them an authentic experience, I think you're in really good shape."

The desire to connect brands with consumers through aspirations is not new. But technology and social media have made it easier for companies to start conversations with potential shoppers, communicate their aims and outline how easy it is to use their products and services.

"Social media is about driving awareness and saliency," Graves says. "Brands need to go wherever people are, which is getting harder because the media landscape has fragmented. Increased familiarity may generate a small element of trust. People generally prefer the familiar, even if they don't consciously process that familiarity."

THE RISKS OF NOT DIGITISING YOUR CUSTOMER EXPERIENCE

Percentage of European enterprise decision-makers who believe that not digitising their organisations' customer engagement during the pandemic would have had the following effects



Twillio, 2021

How 5G and fibre are transforming the digital ecosystem

The latest in connectivity technology offers more than just a bigger pipe, it's the power partner to digital transformation

Morag Cuddeford-Jones

The future of connectivity is complex. Essential to powering the next stage of digital transformation, it will nevertheless require extensive collaboration and a fundamental rethink of the role connectivity providers play in the digital ecosystem. A recent roundtable assembled five experts in the connectivity space to share their thoughts on the challenge ahead.

David Tomalin, group CTO, CityFibre, explains that the only thing certain about the future is uncertainty. "Networks need to be based on quality, provide far higher reliability and have a level of intelligence that gives service providers and mobile operators insights to empower the customer experience. The experience that results from this can then be used to shape how we further develop our fibre networks and systems, enabling us to continue to evolve and improve end customer experience over the next 15 to 20 years."

Belinda Finch, CIO, Three UK doesn't mince her words. "I don't think people know exactly what 5G really means. With the right use cases, 5G could absolutely revolutionise where we are as a society. As long as we partner with the right people."

The telecommunications industry has not been noted for its spirit of collaboration and sharing to date. However, as Chris Holmes, director of telecommunications, ServiceNow, notes, the times they are a-changing: "The common theme at Mobile World Congress this year was ecosystems and how you bring relevant solutions. That's through partnerships and ecosystems but also through open standards. It used to be a very closed

industry but the shift to openness and partnerships is the key to unlocking the value across 5G and fibre."

This is also the opportunity for network businesses to act as trusted advisors. "If we're not able to anticipate our customers' requirements, we are going to be left out. The reason we have to work proactively with these customers is because sometimes they don't know what they need," suggests Azfar Aslam, CTO, Europe, Nokia. "We can be most useful towards customers to help them be more productive."

It is acknowledged that the largest opportunity is in the B2B space, but Aslam does note that the hybrid workforce, brought mainstream by the pandemic, will be the next emerging segment that networks and mobile operators "need to solve for pretty quickly".

Of course, the more complex the digital technologies that customers – again, primarily enterprises – wish to engage with, the more critical 5G and fibre will become. Mirko Voltolini, VP innovation, Colt, refers to mobile 5G and the fixed network as "the glue". "Some enterprises are looking at leveraging technologies like artificial intelligence, cloud, internet of things, augmented and virtual reality. A bigger pipe has to be an on-demand, real-time pipe that you can control, that not just humans but machines can initiate and control that connectivity," he adds.

The challenge is, of course, that organisations cannot simply wake up tomorrow and forge a unified, brave new world together with a click of their fingers. "Once we decided that we were going to make a commitment that would make a really big impact with some partners, it changed people's mentality – this is not a short term thing," Aslam warns. "Let's go and learn what their objectives are, what we have to offer today – and what we don't. The gaps lead to new product development."

The process of changing the approach of a whole sector, or indeed multiple sectors as partners join the new, intelligent connectivity ecosystem, may be a longer play. However, deploying those ecosystems on the ground has to become a much faster, more agile process, warns Finch. "We need to make sure we have all reached the stage in our digital transformation where we can work with these partners quickly. We can't be



in a position where it takes months to onboard and where the way of working are completely different."

"How we make this pervasive across organisations is going to take time. Organisations [may] have thousands of employees, and this type of partnership approach needs to be tried across the whole business. We find it easier to work with partners that have shared values, are the same size and have complementary capabilities," Voltolini warns.

So, while we may be looking at the technology as the way to accelerate business transformation, in reality, it is a much more human challenge – being able to work together effectively – that will be the litmus test for success.

"Particularly in our engagements with the industrial sector, trust comes into the discussion very

quickly," Aslam adds. "In some industrial automation cases, there are over 100 solutions that need to come together and no one party is likely to be an expert in all 100."

Tomalin reveals that the wide ecosystem CityFibre has already established relies on transparency from the top. "To build trust with our partners, we share data about network-related events via our ecosystem of APIs – empowering them while demonstrating best in class principles."

Voltolini points out that not every ecosystem will involve 100 entities, some may only have two. "Working with cloud providers has been a relatively easy way to bring together mostly just two parties together, driven by customer requirements." Providers need to be ready for almost anything.

Holmes claims service integrators (SIs) could come to play a vital role in building these ecosystems. An SI could be the one to make sure that no partner loses their essential engagement with the process. Holmes notes that mobile operators, in particular, could be at risk, currently leading in only around a fifth of the current engagements where an ecosystem is in play.

Critically, Finch notes that the SI has a vital role to play in facilitating a collaborative mindset. "You may not trust your competitor but having a trusted SI partner can bring that whole idea of collaboration together. They're a really important partner."

With an ecosystem tailored to the end customer's needs, and all partners working together, it creates the best conditions for success for both provider and end user. Ultimately, this is where the battle will be won and lost. Tomalin insists: "We are so reliant on each other, we have to realise that service quality is a shared differentiator. To deliver exceptional service, we need to understand the different expectations of our partners and their customers."

Holmes adds: "The best customer experience [comes from] providing the best employee experience – giving them the best tools to do their job." But, he warns: "With inaccurate data, incomplete inventory or a lack of transparency, we're just tying their hands behind their backs."

Finch concludes: "We all need to trust each other that we've got the customer at the heart of what we're doing. It's about all of us working together to grow the value chain, as opposed to just looking after number one."

“I don't think people know exactly what 5G really means. With the right use cases, 5G could absolutely revolutionise where we are as a society”

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TECHNOLOGY ADOPTION

How to cut through the technology hype

Nearly all businesses like to think they're abreast of the latest developments in IT. But, as innovations proliferate at breakneck speed, it can be hard to make the right choices

Virginia Matthews

From cloud computing and blockchain to the metaverse and machine learning, sifting through shiny new tech is a time-consuming business. How do you decide if an emerging technology is a must for your organisation – and are there enough benefits to being an early adopter?

Migrating to the cloud took centre stage in the pandemic. For Sue Daley, director of technology and innovation at trade association techUK, the cloud's potential in offering scalability and agility makes it the building block of any digital transformation.

"Cloud computing is the digital foundation that allows all other techs to converge. In our view, moving your valuable assets over to the internet should be your top priority, whatever the size and nature of your business," she says.

When it comes to investigating the plethora of new digital innovations to use in the cloud, it's important that you don't allow clever new gizmos to become a distraction.

"However appealing a product or service appears, make sure that you know how it will achieve your objectives and fit with your existing tech infrastructure, because you may be wasting your money otherwise," Daley advises.

How to use data and analytics software better is a key concern in all industries. It could be well worth investigating edge computing: the ability to capture, store, process and analyse data locally or at the 'edge' of the network, rather than at a remote data centre.

It's likely that 5G, biometrics, machine learning and all the other emerging tech under development will eventually be highly relevant for businesses. But, in the short term, investing in a system such as the internet of things – the term used for physical devices that connect via the web – may not offer any specific commercial advantages, unless it can be combined with something a business already uses, such as 3D printing.

The much-hyped metaverse, which enables businesses to digital equivalents of their physical products, offers a tantalising glimpse of our tech future. For now, though, many businesses are hampered by barriers as fundamental as poor mobile connectivity.

For these organisations, simply getting the basics right is far more important than investing in advanced fingerprint mapping or augmented reality, according to Martin McTague, national chair of the Federation of Small Businesses.

"One in every three small businesses receives download speeds of less than 10Mbps, while close to half are affected by poor mobile connectivity," he says. "With the cost of doing business soaring, they should look closely at where new technology can add meaningful value, rather than trying to stay ahead of the curve for the sake of it. There's no use trying to run before you can walk."

When it comes to tech such as blockchains – digital ledger systems initially used for cryptocurrency transactions – businesses should look closely at the potential benefits and costs to determine whether any investment in them would add value in the short term.

With most SMEs viewing cybercrime as a constant threat to their businesses, data security should always be a high priority. "When widening their use of tech, it's vital that small firms ensure that their staff can work safely from home without the threat of network breaches, while ensuring that customers can receive their services remotely without being compromised," McTague says.

With adequate preparation and repeated testing, organisations that decide to trial an emerging tech at a nascent stage can gain a

competitive edge as and when the tech matures. But it is important to review the organisation's existing processes and skills before doing so. Where possible, the business should identify an individual or team with sufficient IT knowledge to guide the initiative.

Ensuring that the new solution will be welcomed by your staff and not resented is another vital part of the preparation stage.

"If you are satisfied that you possess the resources to steer it successfully through a trial, it's probably worth going ahead, as being an early adopter can give you knowledge and understanding," Daley says. "In order to give the technology a fair chance, though, you need to have your data in an appropriate format and a digital framework that can support the tech and demonstrate its ability to increase efficiency and improve the lives of your staff."

As world-class innovators such as Tesla founder Elon Musk have amply demonstrated, an early presence in a market attracts the loyalty of customers and employees and garners great publicity. But the risks of being an early adopter are equally clear. As technologies become ever more complex, the

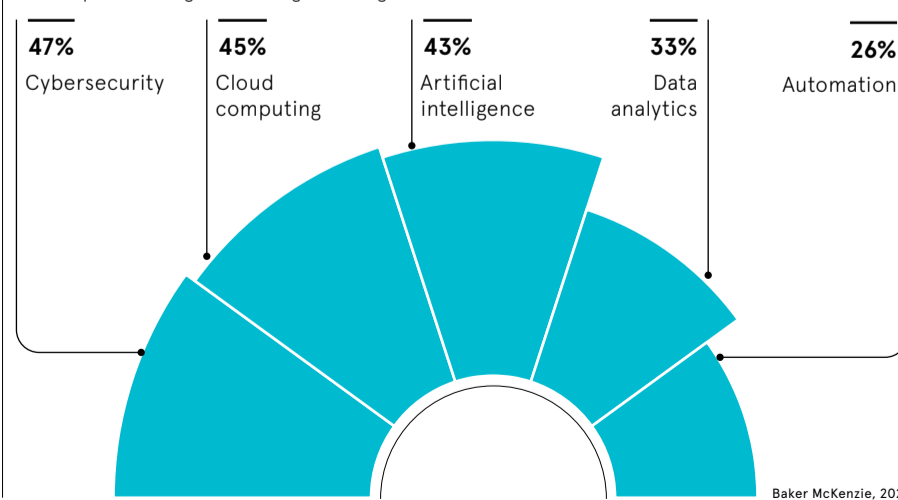
likelihood of reputational damage caused by gremlins in the machine increases. The good PR enjoyed by a pioneer can turn sour quickly if early users of its new offering have a negative experience.

Stephan Hartgers, vice-president of digital strategy at tech consultancy Mobiquity Europe, underlines the risks that early adopters are taking on. "With more users, data and connections, the threat of cyber attacks increases. And, as technologies develop, the early-mover advantage can quickly become a disadvantage when later movers produce new and improved versions of the original product."

Firms that come later to a technology also tend to benefit from lower prices once its teething problems have been solved, usually at great cost to the early movers. An organisation's overall appetite for risk and digital maturity should help it to decide whether being an early adopter is a smart move. Another key factor to consider is the likelihood that there will be strong internal resistance to change. For Hartgers, converting a technophobic culture into a more positive and pioneering one may be the most vital step of all in a digital transformation. ●

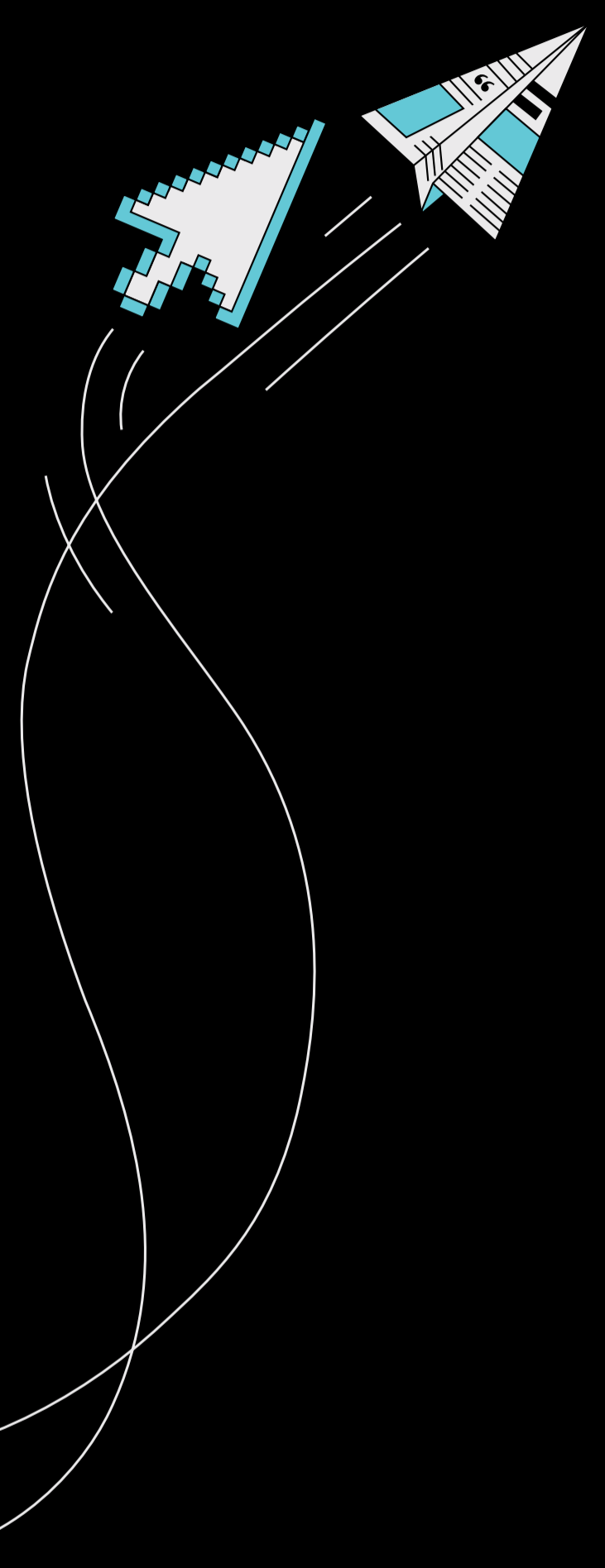
WHICH TECH WILL ACTUALLY MAKE A DIFFERENCE?

Percentage of global digital leaders who class the following among their top five strategic technologies for digital transformation



Baker McKenzie, 2021

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PROJECT MANAGEMENT

Turning divergence into digital allegiance

Is it time for leaders to treat failure as an opportunity to learn and factor it into change programmes so that success is assured more quickly?

Michelle Perry

Global spending on digital transformations is set to spend trillions of pounds on digital transformation over the next few years, how to get it right first time is at the forefront of many business leaders' minds. It has been widely observed that most such projects to date have fallen short of their goals. Global spending on digital transformations is on track to exceed £2.1tn in 2025, according to the International Data Corporation's *Worldwide Digital Transformation Spending Guide*. Yet research by McKinsey suggests that most projects to digitally remodel businesses end in failure. Why are companies failing to learn lessons? One of the first reasons could be that all organisations had to accelerate, or in many cases start, their

digital transformation projects in uncomfortable haste as much of the world was forced by the pandemic to adopt remote working in early 2020. Any change attempted in a rush is inevitably a higher-risk undertaking. And digital transformation projects have potentially even higher risks because of the dazzling array of new technologies available, the urgent commercial need to reconfigure amid the pandemic and the changing expectations of employees and customers. The myriad technologies that have become available to transform processes can bamboozle executives with their promises of revolutionary change. A common error is investing in technology for technology's sake without understanding

its alignment with the overall strategy. But experts in the field agree that digital transformation is rarely about the technology. It's far more about people and business models. "People focus on the tools, not the business model that sits behind them. This can be a distraction," observes Matt Spry, founder of tech consultancy Emergent. "The bigger questions concern how to use a tool valuably, whether it will add value and whether customers will gain from it."

Take a seemingly simple example of a planned outcome of a larger digital transformation that will affect employees every working day: hot-desking. The fundamentals of the concept are clear – new tech unchains people from a sedentary working life and can cut the costs of office space. But evidence shows that, unless leaders engage the people it affects and understand their behaviour, hot-desking will fail – as it has repeatedly done – and waste a lot of money.

"The leadership team should be anticipating resistance, because it will happen," says Laurence Parkes, CEO of digital experience agency Rufus Leonard. "Leaders must listen to, and empathise with, both vocal detractors and insidious detractors, who are more of a danger." The reasons for failure are varied and multifaceted but abundantly

“People focus on the tools, not the business model that sits behind them. This can be a distraction

clear, experts say. The typical causes of failure in digital transformations include a weakly formulated vision and/or strategy; a lack of experience at senior leadership level; inadequate cross-functional collaboration; lacklustre communication; poor employee engagement; and weak implementation.

"A lack of engagement and adoption by employees and other key stakeholders is arguably the single biggest reason for the failure of technology transformations," says Nadim Ahmad, founder of transformation consultancy Clyde Moray.

When the prospect of missing the goal arises, instead of ploughing on and fudging problems, leadership teams should pause the project and take stock, he advises. "My starting point as a leader would be to consider the accuracy of my assessment of where the organisation has got on its journey," Ahmad suggests. "Review status

reports and governance meeting notes to highlight some of the failure points."

A review of schedules, budgets, contingency funds, the original business case and its scope should all be conducted at this point, experts say. Scope creep, for instance, can scupper the best-laid plans.

At this point, commissioning an assessment by a third party may be a way to avoid internal politicking. But this could also raise the issue of whether the leadership team failed to appoint the right people at the start – and it's often difficult to acknowledge mistakes, especially if failure is not an option.

"The other thing that I would look at to get back on track is to ensure that the project reporting and frequency is accurate," Ahmad says. "Make sure that you are continuously reporting – and continuously intervene when you start to see problems arising."

The project's governance framework is also critical to correcting errors. If the steering committee doesn't feature senior decision-makers who can help solve some of the problems that a delivery team tends to face, the project managers may struggle to get back on track.

Other experts suggest that 'a space to fail' should be factored into any change programme.

Jenny Burns, CEO of innovation consultancy Fluxx, says: "A lot of organisations try to tackle the whole thing in one go and make commitments to investors about milestones on a quarterly basis. The best way is to test and iterate and then scale up. Quite often, we see businesses without the mindset to be able to make mistakes, learn from them and move on."

A better starting point, Burns says, is to talk about a sequence of events, indicating how the budget will be drawn down at specific times to manage risks and investments based on evidence rather than assumptions.

"People are not learning from their organisations' own mistakes. On top of that, they've yet to gain the strength and confidence to learn from other players in the same industry, or even outside the industry," she says.

Another option to correct the course of action is to revamp the communication strategy. Weekly email updates might not be the best communication channel nowadays, given that there are so many different channels available.

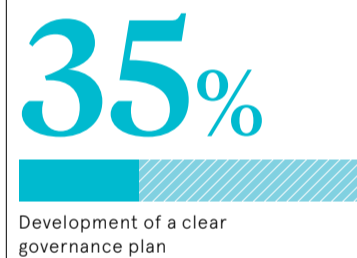
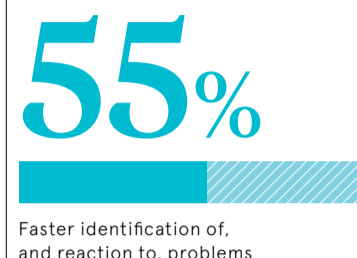
"If employees and customers feel that change is being forced upon them, they may struggle to embrace it," Spry warns.

Some good old-fashioned analogue communication methods still work, though. Weekly 'town hall' meetings, where the whole project team, rather than just a single executive, can field questions from the workforce can be highly effective, for instance.

"Communication is essential," Parkes stresses. "Reflecting on the progress you've collectively made, praising people who have enabled change and preparing everyone for the next wave of possibilities will also help get things back on track."

LEARNING LESSONS FOR THE FUTURE

Percentage of global digital leaders who say who said that the following interventions would have made their firms' digital transformations more effective



Baker McKenzie, 2021

Short videos instead of multi-page documents can also help people to visualise and understand the changes. Alternative storytelling methods will also showcase a company's approach to inclusivity, because not everyone absorbs information the same way.

"A pitfall we've noticed a lot is a lack of storytelling in businesses," Burns says. "The test-learn-iterate approach means that you can talk about what you've learnt as you go, about what you're going to move forward with or what you've 'parked'. Leaders often tell that story once and think that this is enough, whereas the process needs to be repeated."

Change inevitably takes longer than expected. Budget overruns are common and people are generally resistant to change. Unless business leaders start to learn from others' mistakes and provide space to fail, the coming decade of digital transformation may prove a tumultuous and expensive one.

Acknowledging failure as part of the learning process is something that we drill into our children to build their resilience. Isn't it time that the grown-ups learnt this lesson too? Small steps, done well, can lead to big changes. ●

Defining the next decade of digital transformation

It is 10 years since digital transformation went mainstream, but with the term still creating confusion Palladium COO **Mark Lewis** explores what companies need to know to benefit over the next decade



The term digital transformation is now a decade old, with many experts acknowledging 2012 as the year it entered the mainstream technology lexicon. Since then, millions of global businesses have begun their digital transformation journey but, even 10 years on, much misunderstanding remains over what it means. To clear up that confusion, we explore what digital transformation signifies in 2022 and where it goes next.

Digital and technology are now pervasive, touching both our personal and working lives in ways – and through tools – that didn't exist a decade ago.

This means digital transformation can only succeed if it is designed with a foundational acceptance that it exists within a sphere of constant change.

Done right, it brings benefits, whether through increasing automation or adding greater levels of data and insights for critical decision-making.

However, too many still attempt digital transformation for short-term pain relief or boardroom 'theatre'. Too much money is wasted on siloed projects, to tick a box, and these make little impact as a result.

Digital transformation must be embedded at the core of a company's

culture, becoming a habit that's part of the DNA and personality, rather than a point in time to solve immediate issues.

Everyone from the CEO to the shop floor needs to be comfortable with change; what some call VUCA (volatility, uncertainty, complexity and ambiguity).

To keep pace with the market, companies must work constantly and consistently to identify their next transformation and where their next change is coming from.

It's not about how much money you spend or how many experts you have. It starts and ends with accepting we must live with constant change. Now that we are all aware of the importance of the user experience, and the amount of technology used at home and in the workplace, digital transformation has to meet a higher benchmark of standards.

Many companies start a transformation only to watch it stall. Sometimes they become scared and uncomfortable with change internally, or, at other times, find it was poorly planned and delivered.

I recently read a good example of this in *Digital Darwinism* by Tom Goodwin. Many airlines continue to upgrade tiny screens in their seat-backs when instead they could provide strong in-flight WiFi for passengers to stream on their own tablets and computers.

That would be a more focused, sharper and smarter way to digitally transform and would be based on user experience, rather than legacy thinking.

If you don't have the right digital transformation plans, mindset and culture, it will prevent you from attracting the best talent. Today's digital natives will demand this; it is often more important to them than higher pay.

And digital transformation is just as important for retention.

As part of due diligence, Palladium identifies red flags within companies. One of those flags is toil, which is the level at which employees begin to be disinterested. This can be avoided by automating repetitive tasks internally, in turn increasing productivity and profit.

Adopting ideals such as low-code can also upskill existing talent by democratising the best technological tools.

Whatever stage of maturity a company is at with digital transformation, all that matters is staying focused on a mindset that accepts and celebrates constant change and knows how and when to respond to it.

This means not jumping on every craze, bandwagon or app that comes along, while dismissing old-style cognitive biases such as loss aversion and the sunk-cost fallacy.

This is not a one and done investment or project. Agile thinking must instead harness constant evaluation, shorter feedback loops and faster course correction – delivering on two-week horizons, rather than two months.

Yes, you might have sweated time, effort, and money to transform, only to learn that next week you've got to do it again. But unless you're a company that sees this as a benefit of constant change, you will not succeed in the longer term.

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