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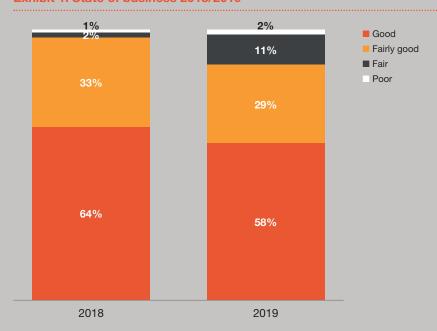


Time to act:
moving from
good to great in times
of uncertainty and
digital transformation

After several years of robust growth, leaders of private businesses in Europe are facing a potential economic slowdown.

In interviews we recently conducted with 2,443 key decision-makers in 31 countries (EU plus Switzerland, Norway and Turkey), it was clear that they expect revenue growth in the next 12 months. But their outlook is somewhat less rosy than when surveyed last year. Our data shows that profitability levels are already cooling off (see Exhibit 1).

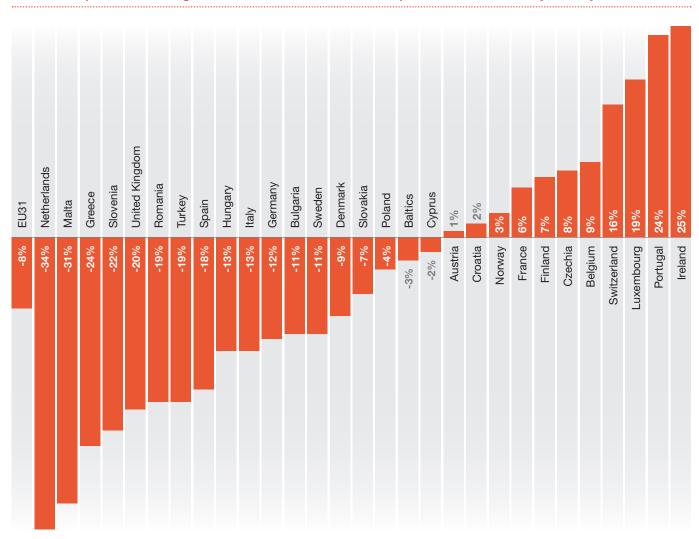
Exhibit 1: State of business 2018/2019



Source: PwC European Private Business Survey 2019, all respondents.



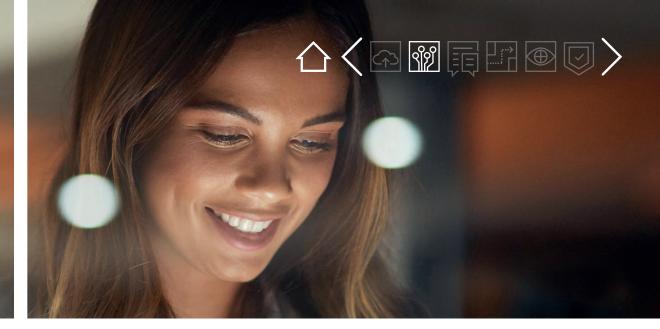
Exhibit 2: Expected revenue growth in the next 12 months net improvement 2019/2018 by country



In most of the countries we surveyed, the percentage of business leaders expecting their revenues to grow was lower than last year, as is shown in Exhibit 2. Across all of our sample, 8% fewer respondents believe business will improve compared to last year. Their cautious mood echoes global sentiment that storm clouds are looming. Many economists note evidence of an economic slowdown in 2019, which looks set to continue, driven largely by slowing growth in China and amid uncertainty caused by the US-China trade war.

At the same time, there are increasing concerns among business leaders over talent and skills shortages – and how this may hamper growth. There are also intensifying worries over the negative financial impact on private businesses of Brexit. Indeed, there has been a 14 percentage point rise in expectations of such a negative effect since we last asked this question in 2018.

Yet downturns often bring opportunities, and companies that prepare early – and advance rather than retreat – can benefit enormously during difficult times and beyond. We believe that technology can help companies cope with the coming challenges. Private businesses that see digital transformation as the key to unlocking the next stage of growth – and get the implementation right – have a fighting chance of growing faster when the next upturn comes.





Getting digitalisation right

Encouragingly, 65% of business leaders surveyed recognise that digitalisation will have a high impact on the long-term viability of their businesses. This mirrors findings from a recent PwC CEO Survey in which 64% of top executives in more than 85 countries and territories said they believed technology would disrupt how they do business in the next five years.



Yet many private businesses in Europe are just at the initial stages of digitalisation.

Perhaps the biggest challenge for European private businesses is their approach to digitalisation. Our findings suggest that many company leaders see digitalisation as a technical fix to solve specific issues in areas such as supply chains, when there are benefits to viewing it as a holistic strategy to transform an entire company - especially at a time when the economic cycle demands reinvention and renewal in preparation for the next era of growth.

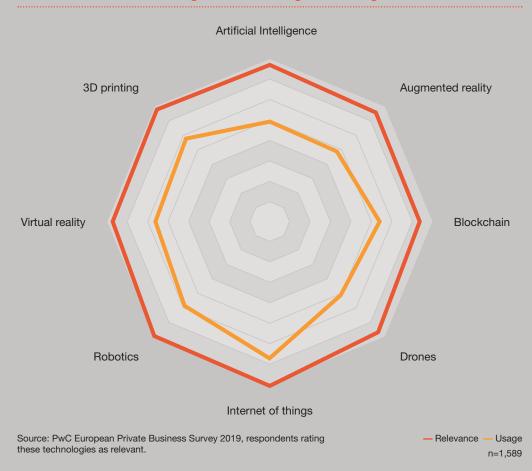
Some business owners may also misunderstand the scale of change required and how to fund and staff for digital transformation. Being sure that private business boards are properly equipped to provide the necessary executive oversight for the next stage of digitalisation is also a key issue.

We found that only 22% (roughly one in five) private companies in the 28 EU countries plus Norway, Switzerland and Turkey allocate more than 5% of their investments to digitalisation, compared with 35% in more technologically advanced parts of Europe such as Scandinavia.

Even those who told us that particular technological investments were required, aren't investing enough. That's clearly seen in Exhibit 3, which shows the gap between the professed relevance by business leaders rating each of the "Essential Eight" technologies highly (Artificial Intelligence, augmented reality, blockchain, drones, Internet of things, robotics, virtual reality, and 3D printing, see p. 7 for a definition and their use in practice) and their actual use of them.



Exhibit 3: Relevance and usage of Essential Eight technologies















Essential Eight technologies

Technology is evolving at breakneck speed and is already defining what's next for companies, industries and consumers. Business leaders understand this. They get that emerging technologies must be a key part of corporate strategy. But they seem hesitant to act. To help companies focus their emerging tech efforts, we analysed the business impact and commercial viability of more than 250 emerging technologies to zero in on the "Essential Eight." These are the core technologies that matter most for businesses, across every industry, over the next three to five years. The Essential Eight are the technology building blocks that every organisation must consider. But their real value is unlocked when they converge. While each company's strategy for how to best exploit and combine them with other technologies will vary, it is these essential eight technologies that will transform an organisation. "They are the buildings blocks of today that will get you to tomorrow," says Dan Eckert, Managing Director for PwC's Emerging Technology capabilities, which focuses on the impact of disruptive technologies on organisations.

What are the Essential Eight?

- 3D printing is the process of creating a threedimensional object by successively printing layers of materials on one another until an object is formed. It is used in practice to construct spare parts, architectural models, complex manufacturing and rapid prototyping.
- Artificial Intelligence (AI) is an umbrella term for "smart" technologies that are aware of and can learn from their environments to assist or augment human decision making. Machine learning, recommendation engines, chatbots and image recognition are only a few of the areas where AI is applied.
- Augmented reality (AR) is a data or information "overlay" on the physical world that uses contextualised digital information to augment the user's real-world view. It is used for data visualisation, transportation safety, customer experience and manufacturing operations.
- Blockchain technology is a distributed shared ledger where transactions are recorded and confirmed without the need for a central authority. It is used for supply chain traceability, financial processes, identity verification and digital currencies.

- Drones are devices that fly or move without the presence of a pilot and can be used to collect a wide range of data or execute tasks remotely, i.e., remote delivery, infrastructure maintenance, security provision or video capture.
- The Internet of things (IoT) extends network connectivity and enables a diverse range of devices to collect, process, and send back data. It is used in asset tracking, smart metering, fleet management and predictive maintenance.
- Robotics is the combination of engineering and computer science to create, design, and operate mechanical devices, i.e., robots. It is used in industrial manufacturing, medical procedures, transportation operations and product fulfilment.
- Virtual reality (VR) is a simulation of a 3D image or complete environment where a user can interact in a seemingly realistic way. Marketing makes use of it. It's also used for training, virtual tours, prototyping and design.















of private businesses surveyed in the 31 European countries plan to allocate less than 3% of overall investments to digitalisation over the next five years.

Most companies surveyed in the 31 European countries (58%) plan to allocate less than 3% of overall investments to digitalisation over the next five years.

Meanwhile, many are relying on their current teams - staff who have made companies successful so far - to address digitalisation issues, even though a new profile of worker may be required.

Staffing strategies are at odds with a crucial finding of our report: cost constraints, staff workload and lack of relevant know-how, as well as cultural resistance to change were the most prominent factors impacting the implementation of new technologies, according to these same companies.



Digital transformation is disrupting every corner of the economy and private businesses are no exception. The time to act is now to ensure they can minimise the risks and capitalise on the opportunities of digitalisation."

Peter Englisch, PwC EMEA Entrepreneurial and Private Business Leader

Exhibit 4: Main internal concerns impacting the implementation of new technologies

Cost restraints	47%
Staff workload	400/
Stall Workload	40%
Lack of relevant know-how/	36%
expert knowledge	
Culture/resistance	33%
to change	
Risks associated with technology/cyber	31%
Lack of corporate vision	15%
VIOLOTT	





Our survey also suggests that some European private business leaders underestimate the effect key digital technologies might have on their businesses.

In other PwC research, we found that AI has the potential to boost gross domestic product in certain economies by up to 26% by 2030. Al can help companies to enhance products and stimulate consumer demand by driving greater product variety, with increased personalisation, attractiveness and affordability over time. And the impact isn't just on product companies - service industries are benefiting too. And yet, when asked about the potential impact of AI on their companies, 77% said they didn't find it very relevant. Meanwhile, 80% found VR not very relevant, and 79% felt the same about 3D printing.

These technologies affect a broad range of industries, and are coming together to create the next wave of innovation. Private businesses shouldn't be left behind.

of private businesses said they didn't find the impact of Al very relevant.

Exhibit 5: Relevance of Essential Eight

Internet of things	46%	
internet or tilings	40 /0	
Robotics	33%	
Artificial Intelligence	23%	
3D printing	21%	
Virtual reality	20%	
Augmented reality	16%	
raginiontod rodiny	1070	
Blockchain	15%	
		1
Drones	9%	

Source: PwC European Private Business Survey 2019, all respondents.

n=2,443

Exhibit 6: Top countries using Essential Eight

Artificial Intelligence		Augmented reality		
Country	Usage in %	Country	Usage in %	
United Kingdom	45%	United Kingdom	33%	
Norway	38%	Spain	31%	
Spain	35%	Portugal	30%	
Italy	35%	Sweden	30%	
Portugal	33%	Norway	26%	

Blockchain	
Country	Usage in %
Portugal	32%
Cyprus	30%
United Kingdom	28%
Greece	27%
France	26%

Drones	
Country	Usage in %
Portugal	20%
Denmark	20%
Belgium	18%
Norway	16%
Turkey	16%

Internet of things			
Country	Usage in %		
United Kingdom	81%		
Portugal	80%		
Bulgaria	76%		
Malta	70%		
Spain	68%		

Robotics	
Country	Usage in %
Denmark	50%
Romania	48%
Turkey	46%
Portugal	45%
Spain	43%

Virtual reality	
Country	Usage in %
United Kingdom	40%
Norway	38%
Spain	32%
Netherlands	31%
Portugal	30%

3D printing	
Country	Usage in %
United Kingdom	45%
Turkey	45%
Spain	32%
Portugal	32%
France	29%

Source: PwC European Private Business Survey 2019, all respondents.

n=2.443

45% of entrepreneurs in the United Kingdom are more advanced in the use of Al than their peers in some other countries on Europe's periphery.

We asked business owners about the extent to which their companies were making use of Essential Eight technologies. Here are highlights from those results:

Entrepreneurs in the United Kingdom (45%) and Norway (38%) are more advanced in the use of AI than their peers in some other countries on the European periphery. This reflects the strong AI ecosystem already in place in the UK and suggests that initiatives to promote AI in Norway – like the Norwegian Open AI Lab (NOAIL), a cooperation between government and industry – may be starting to take hold. Generally speaking, the use of new technologies and convergence is heavily influenced by incentives and regulations, defined by governments at a national level.

IoT was by far the most popular technology in use by private businesses, with especially strong usage in the UK, Portugal and Bulgaria, and blockchain and drones were the most popular in Portugal. The Portugal Blockchain Alliance is actively promoting blockchain through challenges in a range of industries, from insurance to energy, aimed at developing practical applications.

Entrepreneurs in Denmark, followed by Romania and Turkey are the highest users of robotics, while the UK, Turkey, Portugal and Spain lead in 3D printing. Researchers in Turkey are making breakthroughs: Istanbul Technical University recently opened a 3D production hub designed to support entrepreneurs looking to make use of its potential.

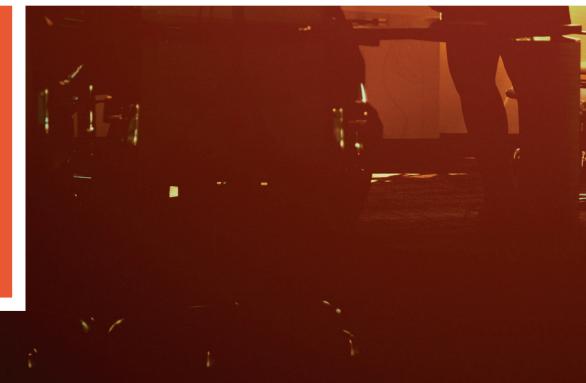






Call to action

An economic downturn will put Europe's private businesses to the test. A cooling business climate and potentially reduced growth rates, or even falling revenues - will likely force leaders to review costs. But private business leaders need to consider the long-term, and carefully balance potential cost savings with digital investment needs.



of private businesses in the EU say their board is suitably composed to advance digitalisation.

To thrive during disruptive times, private businesses should employ a digital strategy that addresses every area of a company to meet present and future needs. If owners and managers don't think strategically now about how to transform their companies (and manage the trade-off between rising cost constraints and investment needs), they risk being unprepared for whatever future lies ahead, one marked by digitalisation, Brexit, a full-blown recession - or all three. The time to act is now.

To prepare for digital transformation, owners and managers should think fresh about three key areas.

Board composition: transformation starts at the top

Many European private businesses are experiencing all time economic highs, and current board members are partly responsible for that success. However, what helped bring companies to where they are now might not be sufficient to overcome future challenges.

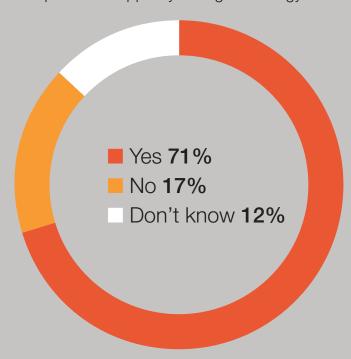
The primary role of a board is to act as a critical and controlling party, providing expert knowledge and advice. We asked company leaders whether their supervisory boards were suitably composed to support their digital strategies. Seventy-one percent said they were.

Still, it is probably the right time to ask whether the composition of the current board is right for a coming storm. Can it help business switch gears during a downturn? And is it well suited to addressing the next level of digital change?



Exhibit 7: Board composition

Is your advisory/supervisory board suitably composed to support your digital strategy?



Source: PwC European Private Business Survey 2019, all respondents. n=2.443



Here are some questions to ask now given the current climate:

Are your board members knowledgeable about technologies that are crucial to the business? If not, is there a local entrepreneur with that kind of technical knowledge who would trade expertise for insight into running a more mature company such as yours?

Is there a "Next Gen" on the board, one who is digitally native? Indeed, if yours is a family business, now may be a good time to bring in the next generation.

The point here is that the future is uncertain and supervisory boards are a great place to bring in much needed expertise and vision. It's also a good way to engage with the next generation – some of whom may not be interested in managerial responsibilities.







Staffing: the right skills

Skills shortages are holding companies back in realising their full potential. The problem is costing revenue and is significantly impacting the European economy. Losses due to skills shortages have increased dramatically across Europe compared to previous years.

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What this means for private business is highlighted by our survey, which shows that losses due to skills shortages rose nearly 30% from 2018 to about €414 billion. This loss represents an estimated 2.6% of European gross domestic product (GDP), and is roughly equal to the combined GDP of Greece and Portugal.

Nearly half of the leaders surveyed in the EU, on average, felt they lacked the right in-house talent to realise the full benefits of digital efforts. Some countries appear harder hit than others. In Spain, Italy and Portugal, skill shortages have dramatically increased compared to last year. While the situation appears to have improved in the United Kingdom, Denmark and Belgium - though not substantially.

Recruitment and staff management is crucial to the future success of any company. But given the current environment, it's more important than ever to find people with the right skills, or at least the right potential to learn new skills.

There's often a misconception about which skills are required to succeed, however. Conversations with owners and managers of private businesses in Europe suggest that some companies may not know exactly what they need to transform digitally and future-proof their

rise in unrealised revenues due to skills shortages since 2018. This resulted in losses of €414 billion among private businesses alone.

Exhibit 8: Economic losses/unrealised revenues as a result of skills shortage

Country	Losses in € bn 2018	Losses in € bn 2019	Changes in € bn	Changes in %	% of GDP
Austria	10.8	10.5	-0.3	-3%	2.7%
Baltics	1.9	4.9	3	158%	4.9%
Belgium	3.1	1.9	-1.2	-39%	0.4%
Bulgaria	6.2	8.7	2.5	40%	15.8%
Croatia	1.5	3.3	1.8	120%	6.4%
Cyprus	0.4	0.9	0.5	125%	4.3%
Czech Republic	5.4	9	3.6	67%	4.4%
Denmark	4.1	1.3	-2.8	-68%	0.4%
Finland	2.2	1.6	-0.6	-27%	0.7%
France	30.4	40.2	9.8	32%	1.7%
Germany	64.6	64.1	-0.5	-1%	1.9%
Greece	2	1.4	-0.6	-30%	0.8%
Hungary	5.8	6.1	0.3	5%	4.6%
Ireland	2.2	1.4	-0.8	-36%	0.4%
Italy	15.1	32.1	17	113%	1.8%
Luxembourg	0.9	0.2	-0.7	-78%	0.3%
Malta	0.5	0.7	0.2	40%	5.7%
Netherlands	7.6	7.3	-0.3	-4%	0.9%
Norway	2.1	2.7	0.6	29%	0.7%
Poland	23.8	39.1	15.3	64%	7.9%
Portugal	5.4	9.4	4	74%	4.7%
Romania	10.1	13	2.9	29%	6.4%
Slovakia	1.5	5.1	3.6	240%	5.7%
Slovenia	1.4	3	1.6	114%	6.5%
Spain	14.5	45.1	30.6	211%	3.7%
Sweden	8.1	10.3	2.2	27%	2.2%
Switzerland	5.2	5	-0.2	-4%	0.8%
Turkey	47.5	52.6	5.1	11%	7.0%
United Kingdom	39.3	32.8	-6.5	-17%	1.4%
EU28	268.8	353.4	84.6	31%	2.2%
EU31	323.6	413.7	90.1	28%	2.6%

Source: PwC European Private Business Survey 2019, all respondents.

businesses. Often they are relying on internal staff to solve new issues. But like with boards, the people responsible for today's success may not be the same people best suited for the future.

Asked how important each of the following measures are for their businesses to build up or get access to skills to advance digitalisation, implement and apply digital technologies, leaders in Europe rated internal trainings as most important, followed by targeted recruiting of skilled experts. These were followed by the use of external training and recruitment of graduates.

It is worth noting here that the skills required may not be available in your home country. Indeed, our survey suggests that this is often the case. We asked private businesses to be specific about the types of employees they required. "Technicians", perhaps not surprisingly, topped the list, but this was followed by support staff and engineers. Trainees were also ranked nearly as highly.

It would appear that private businesses are taking matters into their own hands, and finding trainees to educate according to their needs.

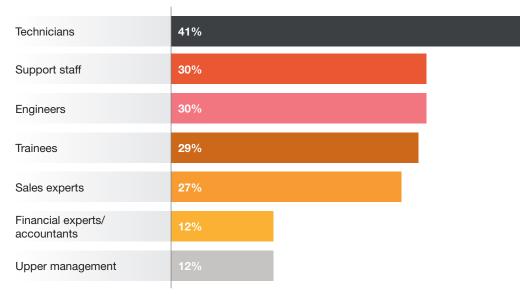
For some companies, attracting technically skilled workers may require them to step outside their comfort zones. We have often noted that private businesses in Europe tend to avoid the spotlight. Given growing competition for the best talent, being a "hidden champion" may no longer be a viable option. Companies should step out of the shadows to be visible and attractive to recruits.

Employer branding is crucial here and it starts with having a corporate culture that reinforces the brand - and that also supports change. We mentioned in PwC's latest Family Business Survey that great company cultures are built around clear and codified values. This notion is highly relevant when it comes to attracting and retaining talent to take your company to the next level.



of private businesses said that technicians topped the list of most required employees.

Exhibit 9: Demand for skills



Source: PwC European Private Business Survey 2019, all respondents.



Our last point here: private business leaders should clearly distinguish between short-term and long-term hiring needs. It may be worth thinking afresh about how to satisfy short-term transformation needs. One option for quickly finding technical expertise may be to collaborate with start-ups to fill the gaps, much like larger companies do.

Financing: funding the transformation

Most private businesses in Europe – 76% in our survey – will fund digital efforts internally from cash flow. But there is a risk that this might change in a downturn as cash is diverted to other uses.

Another 29% said they would turn to bank loans. If traditional loans are a company's first choice, they should understand how banks conduct credit assessments and prepare themselves to be attractive to lenders. The last financial crisis showed that credit lines can disappear quickly and with a downturn potentially around the corner, entrepreneurs can expect low interest loans to become much harder to obtain.

They should probably also explore alternative ways of funding digital investments. A downturn would likely lead to cost cutting on other fronts, leaving less cash to invest in digital overhaul. Interestingly, only 5% of those surveyed mentioned funding digitalisation via the capital markets. Another 8% said they would consider private equity or venture capital.

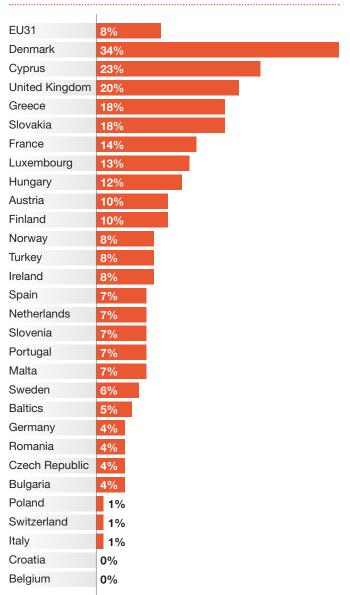
Turning to private equity could kill two birds with one stone: providing funding, as well as management support and expertise. Indeed, private businesses in Europe have shown an increased willingness in recent years to embrace alternative financing.

Exhibit 10: Sources to fund digitalisation

Which of the following sources will you use to help fund digitalisation?



Exhibit 11: Use of private equity/venture capital to fund digitalisation





Conclusior

European private business leaders need to understand the far-reaching significance of digitalisation for the future of their companies. While we recognise the challenges of embarking on transformation in turbulent times, the time is now for European private businesses to capitalise on the opportunities digitalisation offers. Doing so will be critical in order to avoid falling behind in an ever-more competitive global landscape.

For governments, too, it is time to take a more active stance on encouraging investors to finance innovation, as well as supporting the use of new technologies across private business sectors. One way they can do this is by creating regulations that promote, rather than stifle, digital uptake.

Maintaining a competitive advantage in an age of digitalisation requires more than just technical fixes. Although this is an important component of future successful business activities, leaders need first to define an encompassing, holistic digital strategy. Equally important is to focus on people and skills, processes and organisation. It's essential for private business leaders to determine their own "digital ambition" level and to thoroughly assess their organisation's status quo before defining concrete strategic measures to reach that ambition level. Alongside the technological component, these measures should include sustainable workforce decisions, an impactful investment strategy and a thoughtful approach to cultural change.

On that note, one aspect of a truly digital culture is building an environment where employees have the courage to constantly question the status quo. New revenue opportunities can emerge when existing business models are constantly challenged, and all staff are encouraged to rapidly develop and test new ideas. Encourage the Next Gen to play an essential role here.

Whichever strategies are employed, using digitalisation to drive growth is especially important now as uncertainty grows. The time to act is now.



Methodology

Between February and April 2019, PwC conducted interviews with key decision makers from 2,993 private businesses with a turnover of at least €10m in 53 countries in Europe, the Middle East and Africa. Of these, 2,443 private businesses from 31 countries (EU 28 plus Switzerland, Norway and Turkey) were surveyed, the results of which form the basis of this report. **Further insights on Central & Eastern Europe, the Middle East and Africa are** summarised in separate reports. The findings were analysed and evaluated by digital, strategy and private business experts at PwC.







Thanks and acknowledgements

First of all, we would like to thank the 2,443 Private Businesses across 31 countries in Europe who generously gave their time to participate in the survey.

We highly appreciate the insights and contributions of the following PwC experts:

Arne Linnemüller, Germany

Daniel Eckert, US

Daniella Goudswaard, Netherlands

Federico Mussi, Italy

Giuseppina Floris, Italy

Hannah Harris, UK

Malene Billund, Denmark

Martin Esven, Denmark

Maximilian Wackerbeck, Germany

Michael Pachmajer, Germany

Paul Terrington, UK

Peter Englisch, Germany

Piotr Wyszogrodzki, Poland

Rachel Kelly, UK

Renate de Lange, Netherlands

Saskia Leurdijk, Netherlands

Scott Likens, US

Stephanie van Weerdenburg, Netherlands

Ulrik Ræbild, Denmark

Uwe Rittmann, Germany

We'd like to thank those within the PwC network who provided invaluable support and contribution:

Alexandra Firnges, EMEA Marketing & Communications Aysegul Akciner, EMEA Marketing & Communications Dr. Christina Müller, Family Business Germany Elizabeth Montgomery, Clients & Markets Germany Jeremy Grant, International Editor, strategy+business Johannes Rettig, EMEA Clients & Markets Julia Kirilyuk, Family Business Germany Lidia Benvie, Global Marketing Organization

And, obviously this survey would not have been possible without the commitment and dedication of our external writers, research and design agencies:

Court Three Graphic Design Consultants Limited Rosenthal Research (Jan Flechsig and his team) Stephanie Gruner Buckley, report and case study writer

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