

20 years inside the mind of the CEO in Central and Eastern Europe

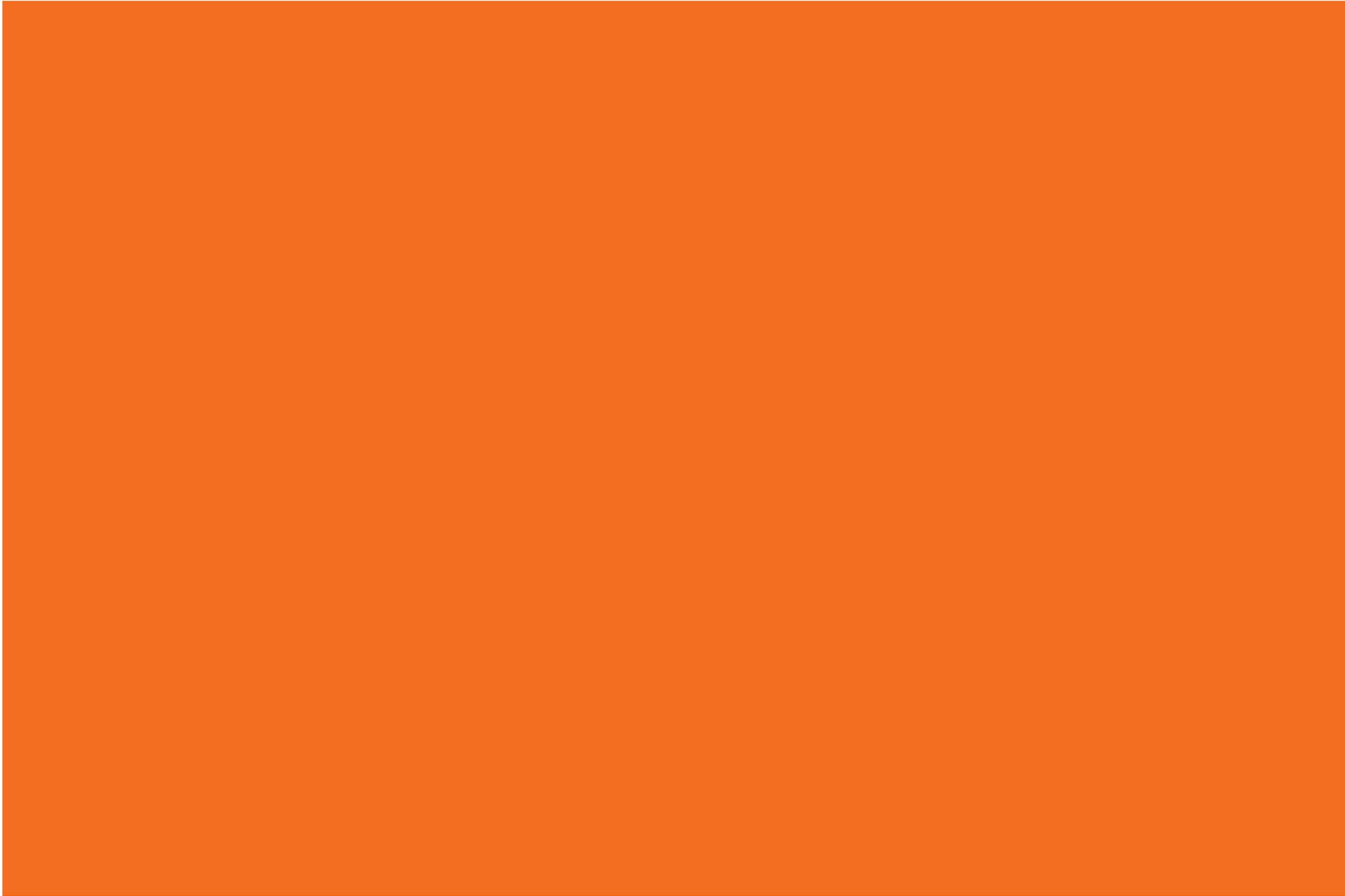


147
CEOs interviewed
in 11 countries in CEE

38%
of CEOs are very confident
of their company's revenue
growth in the next 12 months

76%
of CEOs think that shortage
of key skills is the top threat
to growth prospects





Introduction from Olga Grygier-Siddons

Trust will be key to making innovation the new driver of growth in the region, as its advantage of low labour costs continues to be eroded.



Olga Grygier-Siddons,
Chief Executive, PwC Central and Eastern Europe

Welcome to the Central and Eastern European edition of PwC's 20th CEO survey.

As I look back over the past two decades, I'm struck by how far the region has come since we first started asking business leaders for their opinions in this format. The energy, agility and sheer determination that people and companies in our part of the world have shown is simply remarkable.

And those skills will prove valuable in the years to come, as the process of globalisation slows and changes, and companies shift their footing to compete in a diverging world. While Central and Eastern Europe (CEE) faces all of the same challenges as other regions around the world, and some in even greater measure, business leaders here are just as confident as their global peers (38%) in their company's revenue growth prospects for the next 12 months.

Three challenges

Among the many challenges facing business around the region and around the globe in connection with globalisation and technological change, this year we've chosen to focus on three: the competition for talent, digital trust and inclusive development.

My conversations with clients show that in human resources, executives in our region are facing challenges of both supply and demand. Millennials are expressing radically different expectations from their predecessors; meanwhile, the skills that companies need to succeed are shifting quickly, with some professions disappearing seemingly overnight.

In the second area we look at, the rise of the digital economy and the new challenges it raises, including digital trust, CEE business leaders are seeking ways to use technology to build deeper, more profitable relationships with clients and other partners, while guaranteeing respect for boundaries in the handling of counterparty data. Trust will also be key to making innovation the new driver of growth in the region, as its advantage of low labour costs continues to be eroded.

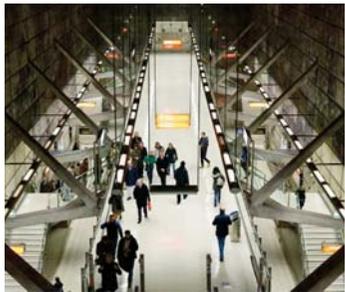
Finally, companies in the region, including PwC, are responding to the backlash against globalisation by seeking to ensure that the benefits of technology and interconnectedness are more evenly spread.

As we pause to look forward, the challenges we face are daunting. But if you'll also join me in looking back at how far we've come, I'm sure you'll agree that Central and Eastern Europe will once again prove that it's up to the task.

*20 years inside the mind of the CEO
in Central and Eastern Europe*



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Winning at globalisation



The 20th anniversary of the CEO survey provides an opportunity to look back over the past two decades of rapid change in Central and Eastern Europe. It also gives us a chance to draw lessons for how we can meet the challenges facing the region's business leaders in the coming years and decades, as the trajectory and pace of global integration shift. For this region, the key to meeting the challenges of a diverging world lies in the same skills of adaptability and willingness to embrace uncertainty that have allowed businesses from the region to thrive.

First, a look back. Over the past 20 years, in addition to the region's wholesale internal transformation as it moved away from the legacy of communism, two external macro-forces have also been at work: globalisation, and the spread of new technologies.

It's worth remembering that despite the recent backlash in developed economies and the trend toward divergence, both globalisation and technological progress have been clear net positives for the region. By any objective standard, there's really no question: We in Central and Eastern Europe are among the world's biggest winners from globalisation and new technologies. If we pause for a moment to think back to what our businesses and our daily lives were like in 1996, the difference is clear. How did you get to work every day? How did you communicate with distant colleagues? When you took your earnings to the bank, what was that experience like?

To what extent has globalisation helped with the following areas?

Respondents who stated 'To a large extent'

%	Global	CEE
Closing the gap between rich and poor	13%	12%
Creating a skilled and educated labour force	37%	42%
Managing geopolitical risks	23%	29%
Harmonising regulations	23%	33%
Improving the ease of moving capital, people, goods and information	60%	76%
Averting systemic failure	16%	18%
Enabling universal connectivity	62%	69%
Averting climate change and resource scarcity	15%	20%
Upholding standards for the protections and ethical use of data	20%	32%
Upholding access to infrastructure and basic services	34%	51%
Full and meaningful employment	21%	24%
Fairness and integrity of global tax systems	14%	16%

*CEE results include Russia

CEOs around the region recognise this: The survey asked how much globalisation has helped in various areas; the percentage of business leaders responding "to a large extent" was higher than the global average in 11 of the 12 areas. (On the 12th, "closing the gap between rich and poor", our region was just one point lower, at 12% versus 13%.)

The biggest differences from the global perception were in the view of globalisation as a force for good in upholding access to infrastructure and basic services (51% in CEE versus 34% globally), improving the ease of moving capital, people, goods and information (76% to 60%) and harmonising regulations (33% compared with 23%). Among CEE CEOs, 69% believe globalisation has helped enable universal connectivity, compared to 62% globally.



The EU as a driver of globalisation

Not coincidentally, those are some of the areas where the impact of the European Union has been the greatest. The single market has been by far the biggest force for globalisation in Central and Eastern Europe; even for the countries that haven't joined, the expansion of the bloc into a powerful neighbour, and the reordering of alliances on the continent, has created a new geopolitical reality.

The region has also experienced a positive impact from global companies' training and development programmes: CEE countries' competitiveness is driven in part by their openness to learn from, develop and build trust with international businesses. Employees flow from multinationals to local firms, bringing with them skills and, more importantly, a new mind-set.

And the flows of globalisation are not all inward: Businesses from the region are moving out into the world to compete internationally, with notable examples including Hungarian airline Wizzair, Croatian food processor Podravka and Polish cosmetics producer Inglot. Intriguingly, several brands that started out in the region have been taken international by Western investors: In automotive, Skoda of the Czech

Republic and Romania's Dacia; in financial services, Poland's Millennium, now the brand name for its Portuguese parent.

New technologies have allowed the countries of the region and their businesses to "leapfrog" ahead of Western rivals, often skipping an entire generation of technologies. Telecoms networks and banking systems are more advanced in many countries of the region than in some of their Western counterparts; less obviously to the ordinary consumer, CEE manufacturers often have newer equipment than their legacy competitors in the West.

Responding to the anti-globalisation backlash

So with all of these benefits, why is it that the backlash against globalisation, once mostly seen in more developed economies, is now appearing in our region as well?

The answer, of course is that people don't look back 20 years and see how far they've come; instead, they look to their more developed neighbours and see how far they have left to go. (And somewhat perversely, globalisation and the spread of technology make such comparisons all the easier.) Within business, the backlash is also partly driven by smaller local companies' resentment that they're forced to compete

CEOs in the region seem confident in their ability to compete in this new, diverging world: 38% are very confident of their company's revenue growth over the next 12 months.

with global giants, who have a lower cost of capital and thus can afford to invest more in those new technologies.

In response, it will be helpful for CEOs in the region to be vocal about the benefits of globalisation, consistently presenting to a wider audience the beliefs they presented in the survey. Of course, they must also do all they can to ensure that the benefits of globalisation are shared fairly throughout societies, while managing expectations of how fast progress can be made.

Some slowdown and reorientation of the globalisation process is inevitable, but as the region begins to re-examine the trends that have brought its companies prosperity over the past two decades, CEOs in the region seem confident in their ability to compete in this new, diverging world: 38% are very confident of their company's revenue growth over the next 12 months, exactly matching the global average (38%), and one point higher than last year (37%). In a similar alignment with their global peers, 28% anticipate an improvement in the global economy, one point below the global average of 29%. Eighteen percent think it will decline, compared with 17% globally, and 52% think it will stay the same, compared to 53% globally.

Companies are betting on innovation

Like their global peers, CEOs here are looking inside their companies for growth, rather than seeking acquisitions or joint ventures. To meet the new challenges, CEE business leaders are betting on innovation even more enthusiastically than their global peers; it was the first choice for both groups when asked which element of their business they most wanted to strengthen (25% in the region and 23% globally) in order to capitalise on new opportunities. CEOs are also looking at digital and technology capabilities (16% versus 15% globally) and human capital (also 16% versus 15% globally), and even fewer are banking on M&A and partnerships (4% compared with 7%) as the main source of growth.

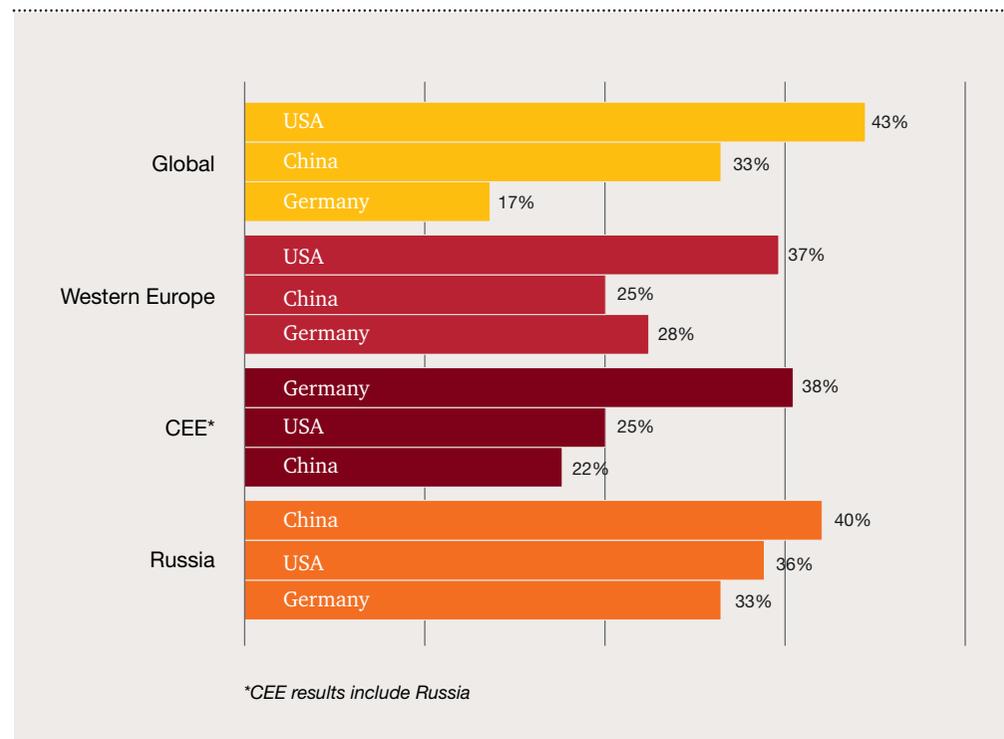
When asked which element of their businesses they most want to strengthen, CEE business leaders ranked innovation highest, at 25% (23% globally). The top three countries considered most important for growth – Germany, the US and China – are also in line with the global choices, though the order is different.

Meanwhile, an older challenge for business is also making itself felt once again. The geopolitical realignment of the early 1990s was the key that unlocked dormant economic potential in the region, and a lack of political tensions was largely responsible for the past two decades' worth of growth. But our survey indicates that geopolitical concerns, having been previously laid to rest, have returned: 82% of CEOs in the region are concerned with geopolitical uncertainty and the risks it poses to their companies, eight points higher than the global average of 74%.

The next sections of our report focus on three major challenges that technology and globalisation are throwing up for CEOs around the globe, and around the region. First, as technological change drives changes in the way companies work, automating old processes and creating demand for new skills, the war for talent is intensifying. Technology also creates

a new need for digital trust among companies, customers, regulators and other players. Finally, the backlash against globalisation requires that today's business leaders sharpen their focus on issues of inclusiveness: making sure the costs and benefits of development are shared equally throughout their societies.

Which three countries, excluding the one in which you are based, do you consider most important for your overall growth prospects over the next 12 months?



Talent: new supply, new demands



Like their global peers, CEOs in the region cite availability of key skills as the top threat to their organisation's growth prospects (76% of CEE respondents, compared with 77% globally). Similarly, when asked to identify a single area they'd like to strengthen in order to capitalise on new opportunities, 16% named human capital – tied for second place and just above the 15% ranking assigned globally).

Still, the percentage of respondents who said they had changed their people strategies to reflect the skills and employment structures they need for the future was nine points lower than the global average (69% for the region, and 56% in Russia, compared with 78% globally). In terms of automation, just 27% said they were considering the impact of artificial intelligence on future skills needs, compared with 39% globally. And 45% of CEE CEOs plan to increase headcount, compared with 52% globally: regionally, only Latin American CEOs (42%) are more pessimistic on this measure.

In the area of human resources, business leaders face challenges of both demand and supply: what they need, and what they have to work with. Technological change is automating certain tasks, while also making new ones necessary by altering the information landscape and the way companies interact with customers. In addition to these challenges that are reshaping the demand for talent, business leaders also face a challenge that's human, not technical: the need to address the different motivations and ways of working embraced by employees from the Millennial generation.

CEOs around the world are working hard to find ways of attracting and retaining Millennials, and the CEE region is no different. In fact, data from an AIESEC survey found that in most categories, CEE Millennials don't deviate much from the global average in terms of their priorities and expectations for education and workⁱ.

But while the region's youth may be similar to those everywhere else, the regional business culture and leaders have some important differences. In CEE, traditional businesses can be marked by low trust between employers and employees, and an old-school mentality: managers want to see their employees in the office.



Bosses tend to use retention strategies centred on increased compensation rather than greater flexibility or opportunities for professional development.

The logic goes like this: Being in the office means you're working, and if the bosses can't see you, how do they know you're working? Bosses also tend to use retention strategies centred on increased compensation rather than greater flexibility or opportunities for professional development. CEE managers, accustomed to top-down corporate cultures and clearly defined organisational lines, have a harder time than their counterparts in other regions when it comes to working with individuals they don't employ and control. CEOs recognise the region's leadership deficit: 86% reported it was "somewhat difficult" or "very difficult" to recruit people with leadership qualities – well ahead of 75% globally and 67% in Western Europe.

How offices compete for employees' time

And companies in the region are also finding innovative ways of addressing the issue. Faced with demands from Millennials for more flexibility, one Russian company decided to let them work from home – but also created incentives for them to come into the office, such as a free canteen and gym.

This CEO speaks of the office as a place that's competing for the time of workers who can do their jobs from anywhere.

Corporate leaders must also be attentive to shifts in the skill sets they need as technological advances automate certain tasks while creating demand for new ones. And CEOs need to bear in mind that while technology speeds up and improves the gathering and analysis of data, judgment about what to do with the results of that analysis is a function that can only be provided by humans.

Both of these principles can be seen in the world of drone-powered solutions, a brand-new practice area for PwC that's based in the Warsaw office. Remotely piloted vehicles can be used to gather geographical data, monitor construction work and perform inspections of equipment in difficult-to-reach locations. That's pushing down the value of the ability to strap on a safety harness, climb up an antenna and inspect equipment. But it's also creating new positions for people who are capable of operating (and maintaining) drones, and interpreting what the vehicles' cameras tell them.

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The growing demographic deficit

As the war for talent plays out, the region also faces a looming challenge from demography: Populations are aging, and CEOs around the region and across a variety of sectors complain about a lack of qualified staff. To seek to address the demographic challenge, Hungary and Poland have implemented some of the EU's most generous child-benefit programmes – ranked second and fourth in the bloc respectively by benefits as a percentage of average family incomeⁱⁱ.

Still, it seems clear that in the coming decades the region will need to invest heavily in robotics and other forms of automation; in the Czech Republic, 91% of CEOs named reduced dependence on human labour as an investment priority for 2017. Another solution would be for the region to become a destination for migrants, though this would require changes to deep-seated social attitudes. Meanwhile, in Hungary, the country's most famous startup is taking a decidedly long-term view on ensuring a supply of workers: presentation software maker Prezi has launched an elementary school in Budapest.



As the war for talent plays out, the region also faces a looming challenge from demography.

Digital trust: ensuring security in an interconnected world



Within CEE, 66% of CEOs say they personally have strong digital skills (percentage of respondents saying “agree” or “agree strongly”), well above the global rate of 55% and Western Europe’s 53%. But fewer of them are active on social media than their international peers (35%, versus 43% globally and 45% in Western Europe).

Like their counterparts around the globe, CEOs in Central and Eastern Europe need to be attuned to issues of digital trust as the world becomes more interconnected and ever larger quantities of customers’ and counterparties’ data end up in companies’ hands.

And businesses are putting more effort into leveraging that data to improve their performance. In our conversations with clients in the region, we have been noticing a shift in priorities in the way they use technology. In the past, companies mostly asked what technology could do to make them more efficient, while today they’re focusing their efforts on how it can help them acquire new clients and sell more to current ones. That shift is helping to place issues of digital trust at the top of the CEO agenda.

Fortunately, the region’s rapid technological advance over the past 20 years – the process of “leapfrogging” over older technologies that constitute legacy systems in more advanced economies – may be bolstering digital trust. Take banking as an example. While consumers in the West have decades of experience with brick-and-mortar branches and need to be persuaded to trust online access, many of their CEE counterparts don’t need any convincing: online is the only kind of banking they’ve ever known. In a region where face-to-face trust is often in short supply, CEOs need to explore how they can leverage their online credibility with customers.

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The challenge for CEE policymakers and business leaders is to create a truly integrated ecosystem for tech development.

Facing up to growing cyber threats

Meanwhile, business leaders in the region seem remarkably sanguine about the danger from cyber threats. Just 46% of CEOs said they were “somewhat concerned” or “extremely concerned” about this issue – the lowest percentage on a list of 10 threats. We believe this number is set to grow in the coming years, moving closer to the global figure of 61%. For now, the low number may be a function of company size: Since hackers can attack companies anywhere in the world, it makes economic sense for them to go after the biggest, richest targets. As companies in the region grow, they will become increasingly attractive targets.

Trust between companies and regulators is also crucial, and the case of LinkedIn in Russia illustrates how countries are becoming more focused on developing and enforcing local rules on data storage and data protection. A Moscow court ordered that the business-oriented social networking site be blocked throughout Russia, after finding it violated a requirement to store the personal data of Russian citizens on servers inside the country, and had collected the data of unregistered users without legitimate groundsⁱⁱⁱ. As governments step into the area of digital trust in an attempt to protect their citizens and the interests of the state, further such cases are bound to arise, making it crucial for CEOs to understand developments in this area and monitor compliance.

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Building a startup ecosystem

Trust and cooperation among various spheres will also be key to unlocking the region’s potential for innovation. Central and Eastern Europe has a long, proud tradition of technical education, and CEE is a popular destination for multinationals to outsource research and development. Where the region still needs to improve is in converting all that knowledge into homegrown companies. The ability to innovate will become key for the region as its advantage on labour costs is steadily eroded by rising wages. This was reflected in the survey: CEOs selected innovation as the top area to strengthen in order to capitalise on new opportunities, followed by digital and technological capabilities and human capital, as stated above

The challenge for CEE policymakers and business leaders is to create a truly integrated ecosystem for tech development. At the moment, the region has all the pieces of the puzzle: academia, research, a vibrant startup scene and established businesses. What’s missing is the integration of all of these elements. Smart CEOs (and other leaders) will look for ways to break down the silo mentality that keeps different elements of the ecosystem from working together effectively.

Inclusive growth: the case for globalisation



Our survey clearly shows that CEE business leaders view globalisation as a force for good. CEOs in the region value globalisation for effects including upholding access to infrastructure and basic services, with 51% of them saying it has helped “to a large extent” in this area, compared with 34% globally; in Russia the figure was 61%. They also appreciate globalisation for enabling universal connectivity (69% versus 62% globally; 83% in Russia) and making it easier to move capital, people, goods and information (76% to 60%, and 71% in Russia). These results were repeated across the board: in 11 of 12 areas, CEE business leaders were more positive about the effects of globalisation than their global peers.

Like their counterparts elsewhere, CEOs in Central and Eastern Europe must address the anti-globalisation backlash by helping to ensure that the benefits of the process are distributed fairly within their societies. Now more than ever, CEOs have to make evaluating social impact a part of every decision.

As technology and automation spread through the economy, governments and businesses around the world are beginning to think about the consequences of a world where there is much less work. Projects like the pilot universal basic income scheme in Finland will become more common in the years to come, and CEOs globally, including in CEE, need to make sure they're part of the conversation on how tomorrow's societies will deal with the results of radically lower demand for human labour.

For the moment though, the shift to emphasising broad stakeholder value rather than pure profit, which has swept the globe over the past two decades and more, seems to have more shallow roots in this region. To defend and extend the benefits of globalisation, CEE business leaders need to continue broadening their focus outside the walls of their own companies. Fortunately, there are signs that they're beginning to do so.

CEOs globally, including in CEE, need to make sure they're part of the conversation on how tomorrow's societies will deal with the results of radically lower demand for human labour.





Looking more broadly at stakeholder expectations

Within the region, 79% of CEOs responded “agree” or “agree strongly” to the statement that it’s more important to run their businesses in a way that accounts for wider stakeholder expectations. While that was slightly below the 85% global figure, it’s up from a 75% response to a similar question last year.

In the Czech Republic, data from our survey indicate that business leaders have recognised this need and are taking steps to improve their relationships with the state, with 65% expressing a willingness to participate in expert groups and 42% willing to share knowledge with the government.

Companies also need to be conscious of technology’s role in smoothing out inequalities within societies. Data from Poland show how mobile technology has played a levelling role by bringing broadband access to previously under-served regions. CEOs should be mindful – and vocal – about the ways their companies’ actions improve the lives of disadvantaged communities.



Centres of excellence and regional cooperation

Throughout the region, we have seen how shared services centres are providing jobs to young people, allowing them to stay at home and contribute to their communities, putting their skills to work, rather than migrating to Western Europe for unskilled but often better-paid jobs. And the perception of such centres as being hubs of low-skilled customer service positions is badly outdated. At PwC we are proud of our Centre of Excellence in Gdansk, Poland, where 180 professional staff provide support in anti-money-laundering and other regulatory compliance functions, in 24 languages, for clients around the globe. The centre has developed and deployed innovative, world-class recruitment, training and security solutions. And this story is not just about PwC, or Poland; it’s being repeated by companies throughout the region. Another story, this one from Georgia, shows how business and government can work together to harness the forces of globalisation and technology in the service of more balanced development. City authorities in the capital Tbilisi were concerned about chaotic, irregular development around the Tbilisi Sea, the city’s main reservoir for drinking water.

Warsaw-based consultants worked across borders with colleagues in Georgia to design a master plan for the area around Tbilisi Sea.

Using our competency in geographical information systems, Warsaw-based consultants worked across borders with colleagues in Georgia to design a master plan for the area, including financial models of proposed initiatives and with interactive 3D visualizations. The project used complex data analysis to determine optimal locations for public and commercial facilities, integrating the area with the rest of the city while leaving much of it untouched as a recreation space for both locals and tourists.

In the coming years, successful companies will be those who can develop similar innovative partnerships with governments, NGOs and other actors.



Conclusion: Leveraging 20 years of adaptability

If nothing else, the turbulence and change throughout Central and Eastern Europe over the past quarter-century has proven one thing: The region's people and companies are able and willing to change. After being forced to rebuild their economies overnight, they've proven beyond a doubt that they can be agile, and find ways to benefit from change.

The challenge for CEOs today is to keep that agility alive in the face of new challenges

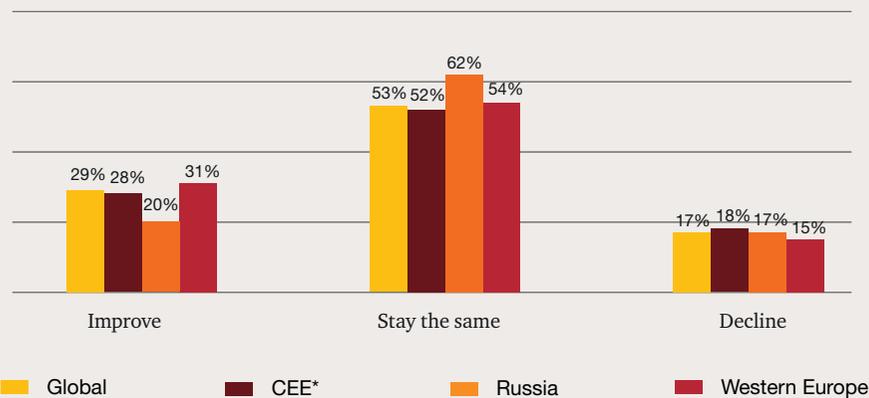
To accommodate new technologies and a new breed of workers, companies need to embrace new ways of working and of monitoring and rewarding performance, and preparing for the looming demographic shortfall. To continue benefitting from technology, business leaders must take conscious steps to nurture and maintain digital trust with customers, regulators and other actors, and develop an ecosystem in which the region's native technological talent can thrive. Finally, in the face of rising populism, CEOs need to ensure that they build alliances throughout their societies to ensure the growth they deliver is inclusive and sustainable.

This world of new threats can appear overwhelming. But once again, a look backward can help gain perspective. When we stop and remember the immense problems that Central and Eastern European business faced in the 1990s, it becomes clear that the region's people and its business leaders have the resources they need to meet today's challenges.

Looking for more data?

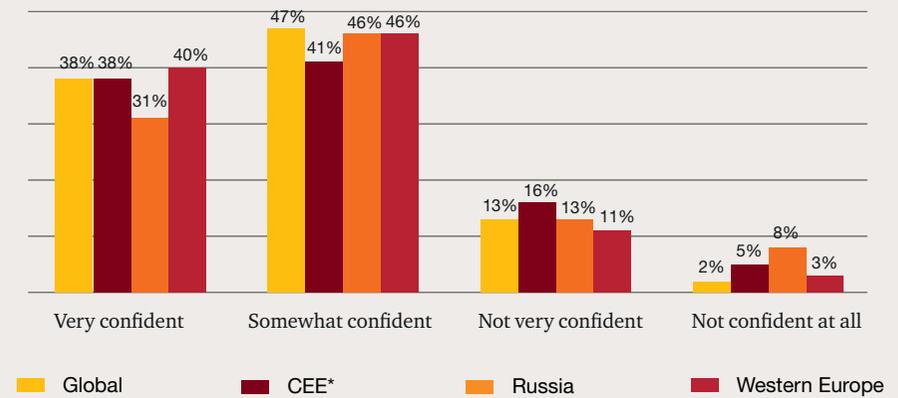
Section 1. Growth

Do you believe global economic growth will improve, stay the same, or decline over the **next 12 months**?



*CEE results include Russia

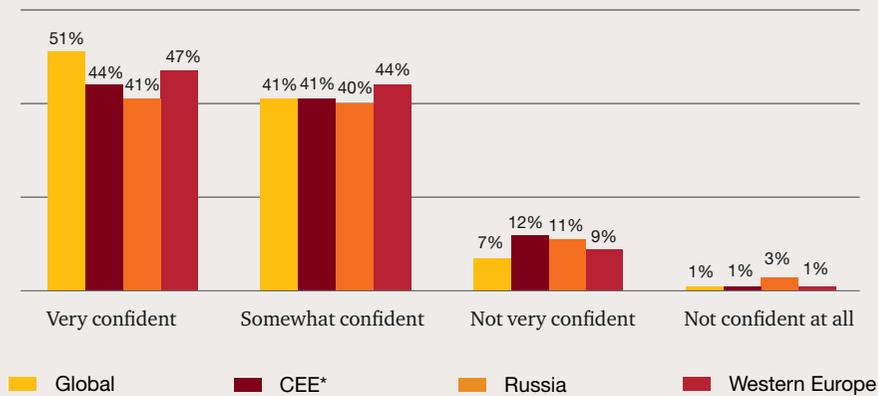
How confident are you about your company's prospects for revenue growth over the **next 12 months**?



*CEE results include Russia

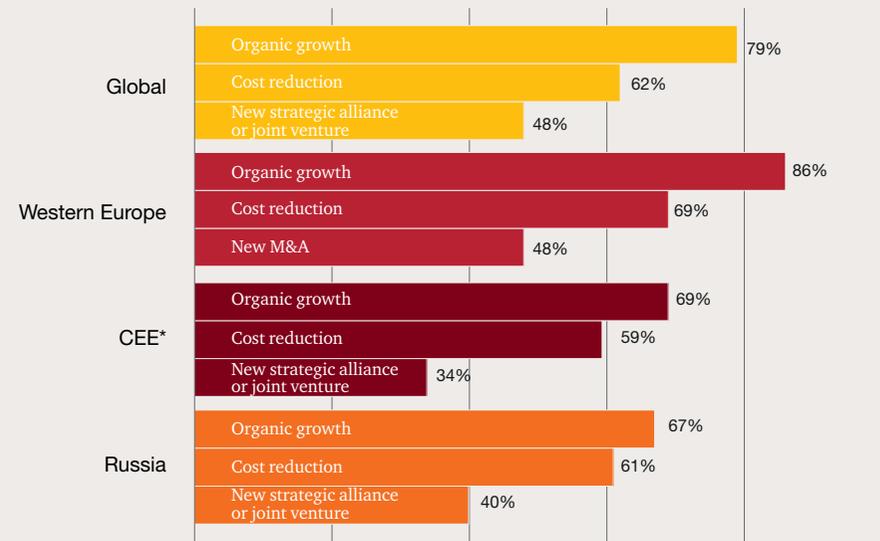
Section 1.

How confident are you about your company's prospects for revenue growth over the **next 3 years**?



*CEE results include Russia

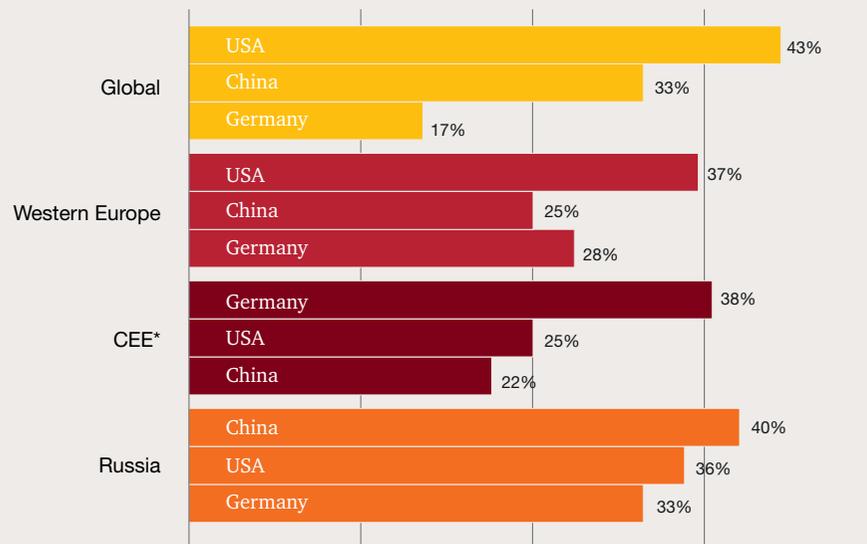
Which of the following activities, if any, are you planning in the coming twelve months in order to drive **corporate growth or profitability**?



*CEE results include Russia

Section 1.

Which three countries, excluding the one in which you are based, do you consider most important for your overall growth prospects over the **next 12 months**?



*CEE results include Russia

How concerned are you about the following **economic, policy, social and environmental threats** to your organisation's growth prospects?

Respondents who stated 'Somewhat Concerned' or 'Extremely Concerned'



*CEE results include Russia

Section 1.

How concerned are you about the following **business threats** to your organisation's growth prospects?

Respondents who stated 'Somewhat Concerned' or 'Extremely Concerned'



*CEE results include Russia

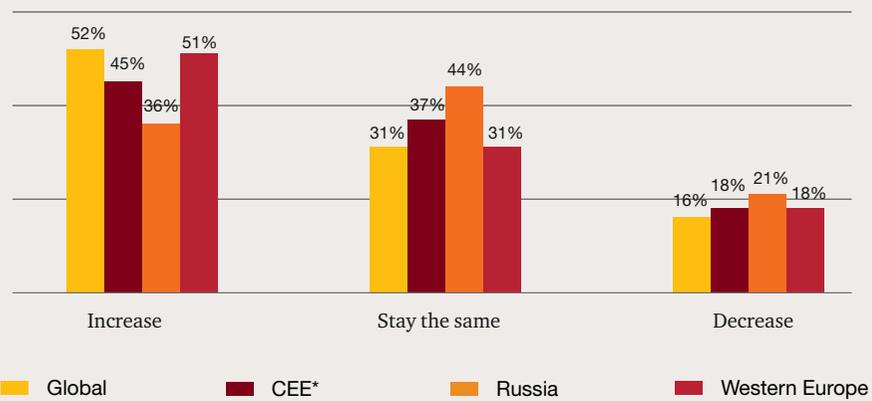
Given the business environment you're in, which **one** of the following do you most want to strengthen in order to capitalise on new opportunities?

%	Global	Western Europe	CEE	Russia
Innovation	23%	23%	25%	13%
Trust and transparency	5%	6%	5%	7%
Digital and technological capabilities	15%	21%	16%	20%
Funding growth	4%	1%	3%	8%
Human capital	15%	14%	16%	7%
Cost containment	3%	2%	4%	6%
Customer experience	10%	15%	8%	15%
Navigating risk and regulation	2%	1%	2%	1%
Cybersecurity	0%	0%	0%	0%
M&A and partnerships	7%	5%	4%	5%
Big data and analytics	3%	4%	1%	2%
Competitive advantage	10%	4%	13%	13%

*CEE results include Russia

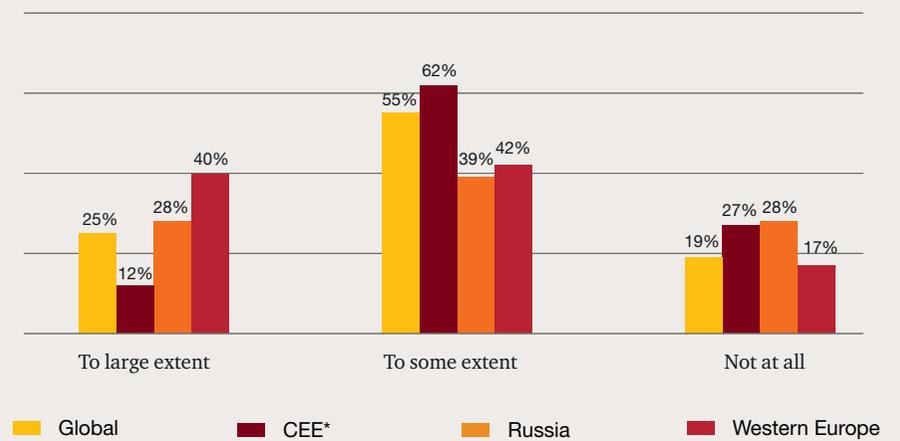
Section 2. Talent

Do you expect headcount at your company to **increase**, **decrease** or **stay the same** over the next 12 months?



*CEE results include Russia

To what extent will the **decrease** in headcount be the result of automation and other technologies?



*CEE results include Russia

Section 2.

To what extent do you agree or disagree with the following statements about your organisation's talent activities?

Respondents who stated 'Agree' or 'Agree Strongly'

%	Global	Western Europe	CEE	Russia
We move talent to where we need it	76%	71%	74%	76%
We rely more on contractors, freelancers and outsourcing	28%	26%	38%	69%
We use technology to improve our people's wellbeing	63%	62%	61%	60%
We use data analytics to find, develop and keep people	50%	44%	56%	61%
We have added digital training to our learning programmes	65%	69%	58%	44%
We're exploring the benefits of humans and machines working together	52%	51%	54%	56%
We promote talent diversity and inclusiveness	87%	86%	75%	64%
We've changed our people strategy to reflect the skills and employment structures we need for the future	78%	78%	69%	56%
We're rethinking our HR function	60%	63%	56%	48%
We seek out the best talent regardless of demographics or geography	74%	75%	72%	71%
We're considering the impact of artificial intelligence on future skills needs	39%	39%	27%	24%

*CEE results include Russia

In addition to technical business expertise, how important are the following skills to your organisation?

Respondents who stated 'Somewhat important' or 'Very important'

%	Global	Western Europe	CEE	Russia
Adaptability	96%	94%	95%	98%
Problem-solving	98%	97%	96%	98%
Creativity and innovation	92%	93%	86%	85%
STEM skills (Science, technology, engineering and maths)	71%	69%	66%	67%
Risk management	83%	74%	77%	80%
Leadership	95%	95%	90%	93%
Digital skills	79%	83%	72%	85%
Emotional intelligence	88%	90%	76%	68%
Collaboration	96%	98%	97%	95%

*CEE results include Russia

Section 2.

How difficult, if at all, is it for your organisation to recruit people with these skills or characteristics?

Respondents who stated 'Very Difficult' or 'Somewhat Difficult'

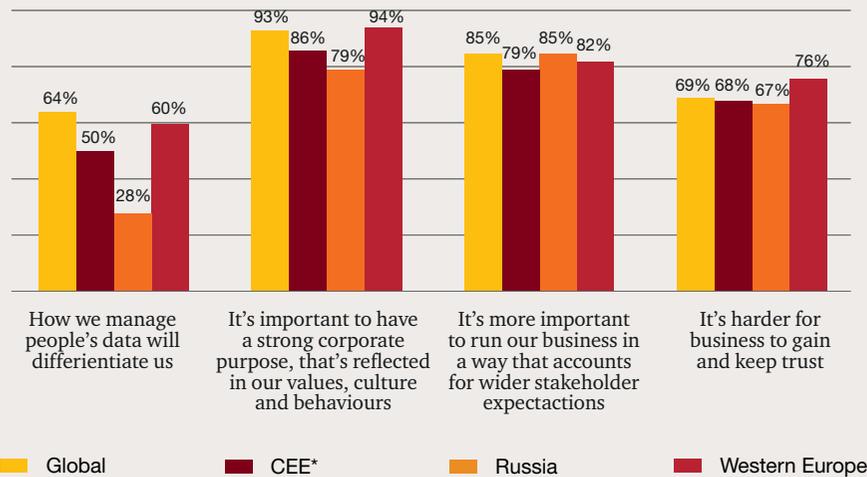
%	Global	Western Europe	CEE	Russia
Adaptability	61%	53%	66%	60%
Problem-solving	61%	51%	78%	81%
Creativity and innovation	77%	71%	78%	91%
STEM skills (Science, technology, engineering and maths)	51%	41%	58%	60%
Risk management	57%	45%	69%	70%
Leadership	75%	67%	86%	80%
Digital skills	52%	55%	56%	54%
Emotional intelligence	64%	52%	67%	64%
Collaboration	48%	39%	53%	53%

**CEE results include Russia*

Section 3. Trust

In the context of an increasingly digitised world, to what extent do you agree or disagree with the following statements?

Respondents who stated 'Agree' or 'Agree strongly'



*CEE results include Russia

To what extent do you think the following areas will impact negatively on stakeholder trust levels in your industry in the next five years?

Respondents who stated 'To a large extent'

%	Global	Western Europe	CEE	Russia
Breaches of data privacy and ethics	55%	55%	47%	38%
Artificial intelligence and automation (including blockchain)	20%	25%	19%	17%
Cyber security breaches affecting business information or critical systems	53%	50%	45%	40%
IT outages and disruptions	47%	45%	50%	49%
Confusion around who owns digital assets	20%	19%	25%	26%
Uncertainty about how tax laws apply to digital assets	17%	15%	22%	21%
Risks from use of social media	38%	38%	35%	23%
Gene technologies (e.g. genetically modified crops, synthetic biology)	13%	15%	18%	18%

*CEE results include Russia

Section 3.

To what extent is your organisation addressing these issues **today**?

Respondents who stated 'To a large extent'

%	Global	Western Europe	CEE	Russia
Breaches of data privacy and ethics	53%	59%	56%	49%
Artificial intelligence and automation (including blockchain)	13%	19%	12%	10%
Cyber security breaches affecting business information or critical systems	52%	59%	43%	34%
IT outages and disruptions	55%	62%	56%	54%
Confusion around who owns digital assets	13%	12%	18%	18%
Uncertainty about how tax laws apply to digital assets	12%	9%	18%	16%
Risks from use of social media	26%	27%	20%	16%
Gene technologies (e.g. genetically modified crops, synthetic biology)	6%	7%	7%	10%

*CEE results include Russia

Section 4. Globalisation

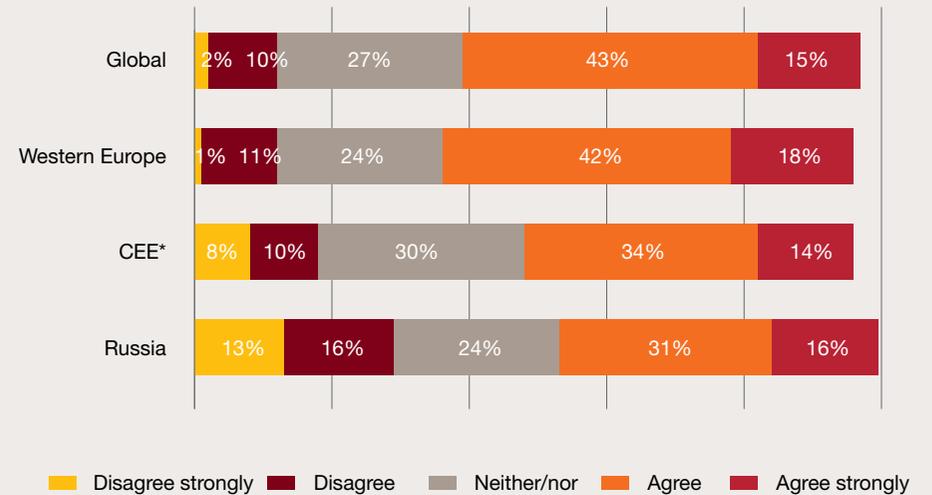
To what extent has **globalisation** helped with the following areas?

Respondents who stated 'To a large extent'

%	Global	Western Europe	CEE	Russia
Closing the gap between rich and poor	13%	18%	12%	9%
Creating a skilled and educated labour force	37%	36%	42%	44%
Managing geopolitical risks	23%	28%	29%	31%
Harmonising regulations	23%	21%	33%	23%
Improving the ease of moving capital, people, goods and information	60%	62%	76%	71%
Averting systemic failure	16%	13%	18%	18%
Enabling universal connectivity	62%	61%	69%	83%
Averting climate change and resource scarcity	15%	15%	20%	16%
Upholding standards for the protections and ethical use of data	20%	18%	32%	29%
Upholding access to infrastructure and basic services	34%	44%	51%	61%
Full and meaningful employment	21%	18%	24%	26%
Fairness and integrity of global tax systems	14%	11%	16%	17%

*CEE results include Russia

To what extent do you agree or disagree that it is becoming harder for CEOs to balance competing in an open global marketplace with trends toward more closed national policies?



*CEE results include Russia

Section 4.

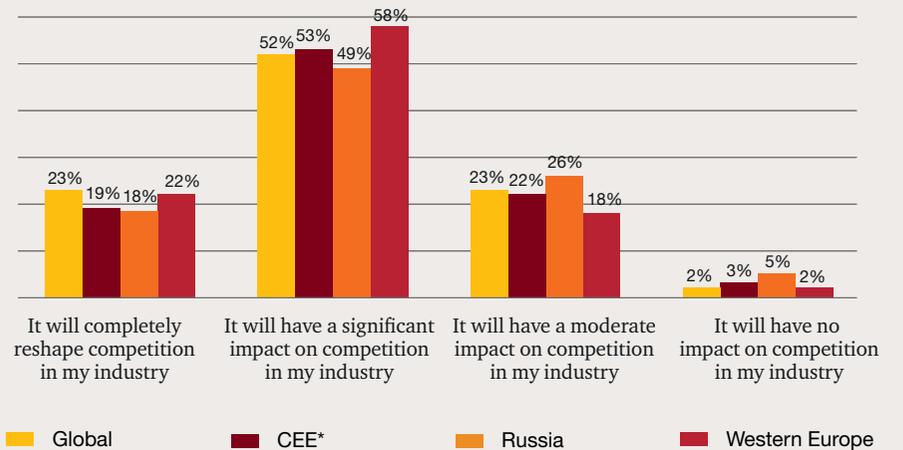
To what extent do you agree or disagree with the following statements about your personal use of technology?

Respondents who stated 'Agree' or 'Agree Strongly'

%	Global	Western Europe	CEE	Russia
I have strong digital skills	55%	53%	66%	69%
I'm active on social media	43%	45%	35%	32%
I personally make most of my purchases online	40%	44%	37%	45%
I consume digital media more than print media	69%	72%	79%	89%
I use home automation systems	46%	51%	46%	52%
I am an active gamer	11%	10%	6%	5%
I use robotics in my home (e.g. vacuum, mower)	32%	38%	38%	25%

*CEE results include Russia

To what extent do you think technology will change competition in your industry over the next 5 years?



*CEE results include Russia

Section 4.

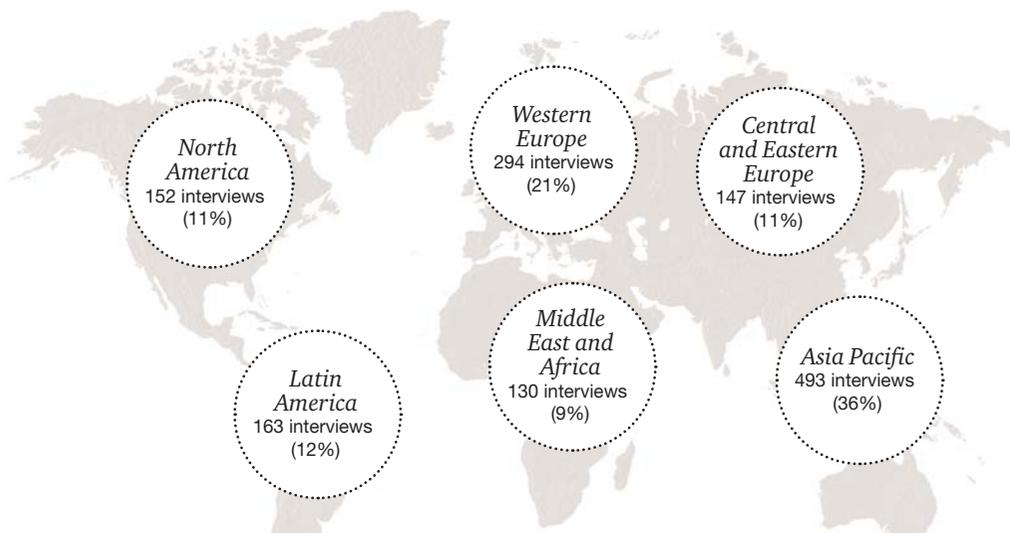
To what extent has technology changed competition in your industry over the **past 20 years**?



*CEE results include Russia

Research methodology and contacts

For the global edition of our 20th CEO Survey we've conducted 1,379 interviews with CEOs in 79 countries. Our sample is weighted by national GDP, to ensure CEOs' views are fairly represented across all major countries. The interviews were also spread across a range of industries. Further details, by region and industry, are available on request. Twenty-eight percent of the interviews were conducted by telephone, 63% online and 9% by post or face-to-face. All quantitative interviews were conducted on a confidential basis.



1,379

interviews completed in 2016 across

79

countries between 26 Sept and 5 Dec 2016

2,900

members of the PwC's Global CEO Panel were invited to participate via the online

The lower threshold for all companies included in the top ten countries (by GDP) was 500 employees or revenues of more than US \$50 million. The threshold for companies included in the next 20 countries was companies with more than 100 employees or revenues of more than \$10 million.

- 36% of companies had revenues of \$1 billion or more
- 38% of companies had revenues of over \$100 million up to \$1 billion
- 21% of companies had revenues of up to \$100 million
- 57% of companies were privately owned

Notes:

- Not all figures add up to 100%, due to rounding of percentages and exclusion of 'neither/nor' and 'don't know' responses.
- The base for figures is 1,379 (all respondents) unless otherwise stated.

The CEE report of our 20th CEO Survey is based on a sample of 147 CEOs from 11 countries across Central and Eastern Europe.

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Endnotes

- ⁱ <http://www.aiesec.or.ke/youthspeak/preliminary-findings/index.html>
– retrieved 11 January 2017.
- ⁱⁱ <http://www.pwc.pl/pl/pdf/ulgi-prorodzinne-prezentacja.pdf> (in Polish).
For an English-language article discussing the findings, please see
<https://www.bloomberg.com/news/articles/2016-11-09/poland-s-taking-a-stand-against-europe-s-demographic-decline>
(retrieved 11 January 2017)
- ⁱⁱⁱ <http://www.pwc.ru/en/legal-services/news/block-access-to-linkedin.html>



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