

A report from the Economist Intelligence Unit.



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The innovative company: How multinationals unleash their creative potential is an Economist Intelligence Unit report, sponsored by EF Education First. It explores the challenges companies face when trying to promote innovation across departmental and national boundaries. In particular, it looks at how companies might develop a corporate culture that promotes creative collaboration across borders, specifically to foster and encourage innovation.

The Economist Intelligence Unit bears sole responsibility for the contents of this report. The findings do not necessarily reflect the views of the sponsor.

This paper draws on two main sources for its research and findings:

• Two global online surveys, one with senior corporate executives and the other with government officials, carried out in October and November 2014.

The corporate survey sample totals 350 respondents, all of whom work for companies that operate in at least one other country outside their home markets. Over half (54%) are C-level or board-level executives, and 57% work for companies with annual revenues of US\$500m or above. About 43% describe their primary job function as either general management or strategy and business development. The majority of respondents work for growing companies: 72% say their company's EBITDA (earnings before interest, taxes, depreciation and amortisation) increased over the past 12 months. The respondents were based in a range of countries, with at least 30 respondents in each of the following: China, Brazil, Russia, France, Germany, Spain, the Nordic countries, the US, the UK and the Middle East.

The government officials sample totals 57 respondents, all of whom are involved in the design and implementation of

adult education and training policy. Respondents work at city (56%), regional (32%) and federal (12%) levels of public administration. Their organisations (82%) tend to have annual budgets of US\$100m or less. Nearly all (88%) work for departments responsible for education or skills development. Nearly two-thirds of respondents (63%) are heads of departments or directors of agencies. The sample is global, but with concentrations in western Europe and Asia-Pacific, and to a lesser extent North America.

- A series of in-depth interviews with independent experts and senior executives of major companies, as follows:
 - Jim Andrew, chief strategy and innovation officer, Philips
 - John Biggs, R&D director, Latin America, Dow Chemical
 - Martyn Clark, consultant, Gadfly
 - Jeff Dyer, Horace Beesley professor of strategy at the Marriott School of Management, Brigham Young University
 - Kathy Fish, chief technology officer with responsibility for innovation capabilities and global R&D, Procter & Gamble
 - Tammy Lowry, global head of learning and organisational effectiveness, Roche
 - Michelle Proctor, director of innovation, FedEx
 - Fabian Schlage, head of idea and innovation management, Nokia
 - Shrupti Shah, director, Deloitte GovLab

We would like to thank all interviewees and survey respondents for their time and insight.

This report was written by Neil Baker and edited by Aviva Freudmann.



In a world of fast-changing technologies, markets and consumer preferences, innovation is important to all companies, regardless of size, location and industry. Companies that cannot change their offerings or improve their functioning to respond to changes in their environments tend to fall by the wayside, surpassed by more nimble competitors. The strategic question for companies is how to foster a culture of creativity and innovate at all levels of the organisation. For many companies this task is closely allied with improving communication, which underpins better collaboration and idea sharing—both within and across departmental and geographical boundaries. This research looks at the ways leading companies have found to encourage collaborative innovation across organisational lines. The key findings are:

Firms around the world are staking their futures on their ability to innovate. Creating new products and services has become a top-three priority for 54% of our corporate survey respondents, more important than cutting costs or investing in talent. More than two-thirds (71%) have ramped up investment in innovation over the last three years, and one-quarter (25%) have done so significantly (defined as increasing investment by 20% or more). This trend shows no sign of abating. Over the next three years nearly one-third (31%) expect to increase their investment in innovation significantly.

Innovation is a key corporate discipline, in which there is significant room for improvement. While two-thirds (67%) of respondents rate their firms as "good" at innovating, only 20% think they are "excellent", while 13% admit they are "poor" or "very poor". When asked to identify the three main factors that describe an innovative business, survey respondents are clear: such a culture encourages ideas from everyone (cited by 53%), a high tolerance of failure (41%) and strong leadership (34%).

Many companies will fail to capitalise on these investments unless they rethink their approach to innovation. Employees' confidence in their ability to communicate with colleagues to develop innovative ideas falls steadily as they encounter various barriers. Confidence decreases from 96% of respondents who feel confident communicating with colleagues in their own departments to 72% who feel confident communicating with colleagues in different countries. There is also a hierarchical barrier: where idea-sharing processes exist, they are widely adopted by the C-suite, but engagement tails off down the management chain. There are also cultural barriers: while 87% say crosscultural collaboration produces innovative ideas, 50% say cross-cultural differences make it harder to share ideas with colleagues.

Firms aspire to create a culture of experimentation, but often fail to follow through. A creative culture is one in which each employee feels encouraged to suggest ideas, and in which there is a high tolerance of failure. But many companies do not take steps to ensure that those conditions are present. In our survey, 30% of respondents say their firms lack a culture that encourages new ideas from everyone; 30% say their companies lack a culture that allows for failure; and 34% say their companies do not allow time for employees to experiment on their own projects.

Companies need to build the skills base of employees in developing new ideas and communicating those ideas widely within the organisation. Investing in confidence-building and communication training could yield significant benefits, our survey shows. Four-fifths (81%) of respondents say that improving the communication skills of staff would significantly increase their firms' ability to innovate. Yet

nearly 30% of firms surveyed concede that their spending here is inadequate or non-existent. Significantly, almost one-quarter (23%) of CEOs never had training in creativity skills, rising to 47% for CFOs.

There is a gap between the skills that companies expect they will need and the skills that governments believe they have a responsibility to develop through adult training programmes. More than one-third (37%) of firms surveyed say that training provided in their countries is not adequate to improve the ability of the workforce to innovate. Yet many public officials seem reluctant to talk to firms about what kind of skills they need. Most officials surveyed (75%) say it is not their job to address the creativity gap in corporations. The study concludes that companies could do more to close this gap by enhancing employees' communication skills and encouraging them to share ideas across organisational lines.



Part I – Innovation as a strategic priority

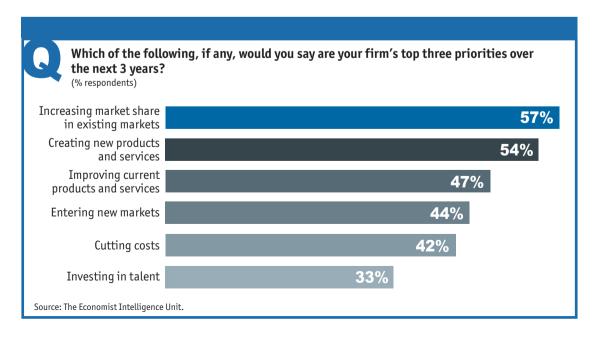
Companies have long known that engaged and creative employees are central to their ability to innovate and succeed. This key ability differentiates companies that can continue to satisfy existing customers while finding new ones from those that cannot. In recent years, as the pace of technological change has quickened, the ability to adapt rapidly and creatively to changing circumstances has become even more important to a company's success.

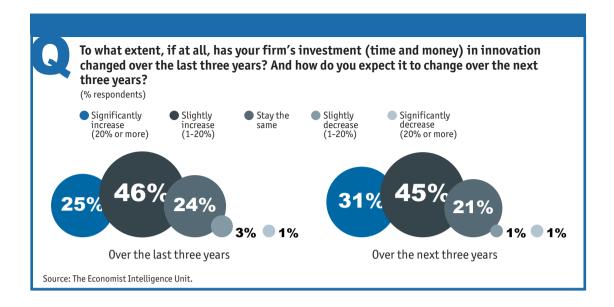
To some observers, such as Brigham Young University's Jeff Dyer, co-author with Nathan Furr of The Innovator's Method, the key for established companies is to learn to think like start-ups, continuously re-evaluating their markets, products or technologies. Our survey of 350 senior corporate executives tends to support this view: more than half (54%) say that

creating new products and services is one of their top three priorities over the next three years, more important than cutting costs (42%) and investing in talent (33%).

Accordingly, over the last three years 71% of firms surveyed have ramped up their investment in innovation, with 25% increasing it significantly—defined as boosting investment by 20% or more. And this trend shows no sign of relenting. Over three-quarters (76%) of firms plan to increase their investment in innovation further over the coming three years, with almost one-third (31%) set to increase it significantly.

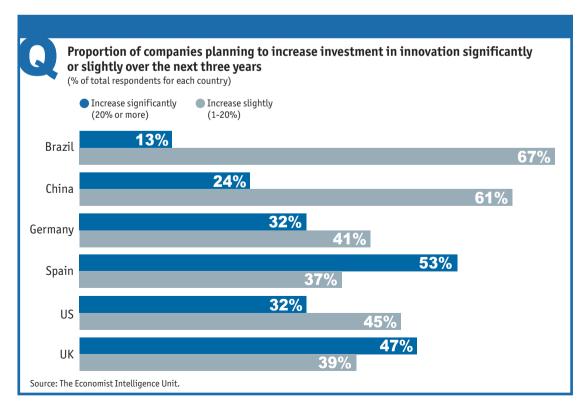
Respondents in Brazil, China, Finland, Spain, the US and the UK, among others, say their companies plan major increases in investment in innovation.

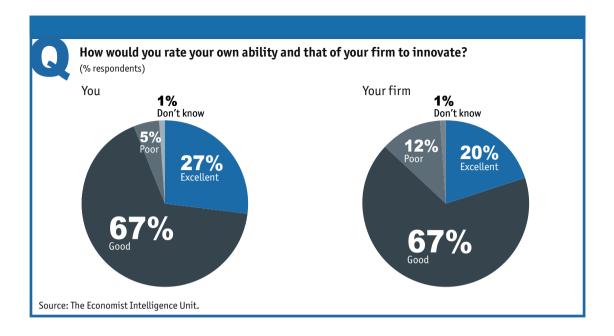




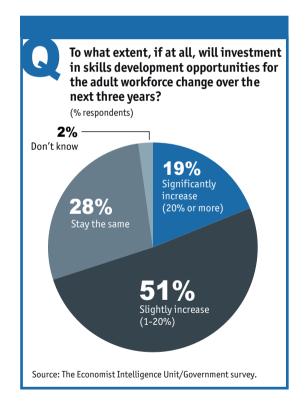
The public sector also shows enthusiasm for investment in skills development in the adult workforce, although to a lesser extent than companies. Compared with the 76% of corporate respondents who say their firms will ramp up investment over the next three years, 70% of public officials say their governments will do so.

To some extent, this investment trend is showing results. Two-thirds (67%) of respondents rate their firm's ability to innovate as "good", and another 20% rate it as "excellent". Still, some respondents believe there is significant room for improvement, with 13% rating their firm's ability to innovate as "poor" or "very poor". Moreover,

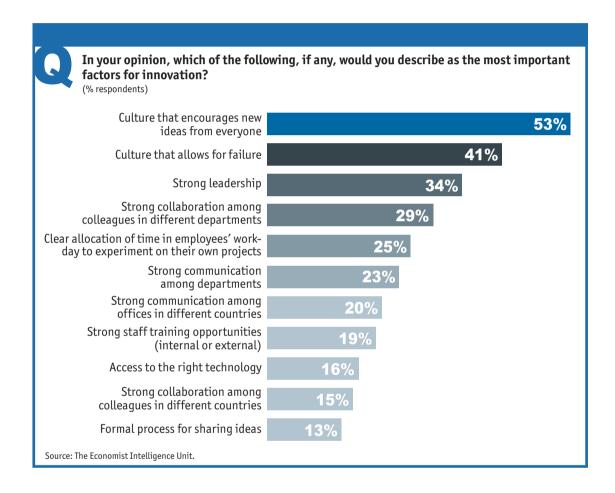




there is a dichotomy in perceptions of ability to innovate in the US compared with Europe, with the US—perhaps surprisingly—lagging behind. In our survey, 77% of US-based respondents rate their firm as good or excellent at innovation, compared with 84% in the UK, 82% in Germany and 93% in Spain. The relatively weaker US position could be attributable to greater fear of risk-taking and failure in a legal environment offering weak job security to employees.



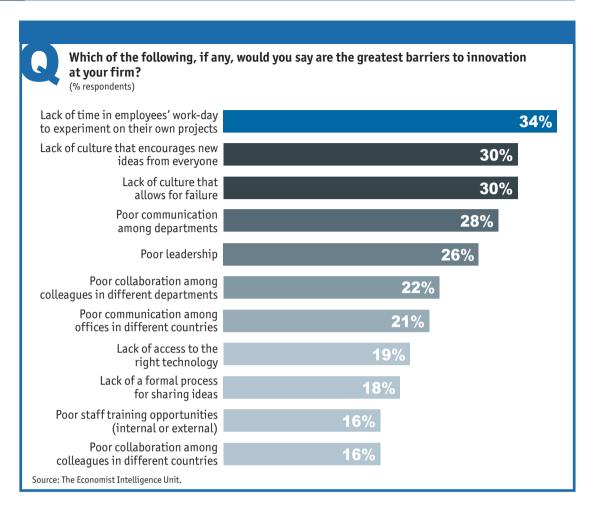
Part II – Reducing barriers to innovation



Innovation is most likely to occur in a culture that values creativity and new ways of thinking. Indeed, when asked to identify the three main factors that describe an innovative business, survey respondents are clear: such a culture encourages ideas from everyone (cited by 53%), a high tolerance of failure (41%) and strong leadership (34%).

Survey results point to organisational culture as a factor holding back companies' abilities

to innovate. Tellingly, respondents feel that their own ability to innovate exceeds that of their companies. While 94% of respondents rate their own ability to innovate as "good" or "excellent", only 87% say the same of their firms. Among board members, the discrepancy is wider: 95% rate their own innovative capabilities positively, compared with 84% who think the same applies to their firms. The discrepancy is significant because of what it indicates for the future: selected individuals may be prodigious



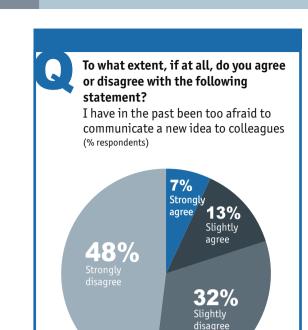
germinators of creative and useful ideas, but in a culture that fails to nurture innovation, their insights are likely to fall on barren soil.

Experts in developing innovative corporate cultures tend to agree. "Innovation starts with leadership from the top making it a priority for the business," says Tammy Lowry, global head of learning and organisational effectiveness at Roche, the pharmaceutical giant. "This means that a leader needs to create an environment and space where creativity is fostered to come up with new and exciting ideas."

Leaders should demonstrate and reward the right kind of behaviour, says Michelle Proctor, director of innovation at FedEx. "If a company's executives are saying they support innovation but are not really backing that up with action, employees will see it as just lip service," she says.

Jim Andrew, chief strategy and innovation officer at Philips, agrees. "People are pretty smart, and they know what really matters to their organisation," he says. "So we put a huge amount of time and effort into making it clear to everyone that wherever they are in our business, their ability to innovate is critical to our success." For companies in general, though, there is often a lack of strong leadership in this area. More than one-quarter (26%) of respondents cite "poor leadership" as one of the three biggest barriers to innovation in their firms.

Such leadership failures notwithstanding, companies typically say that new ideas are welcome. In our survey, nearly two-thirds (64%) of respondents say they are actively encouraged to come up with new ideas. However, being encouraged to put forward ideas and actually doing so are of course not the same thing. In



our survey, even senior-level employees often hold back innovative ideas. One-fifth (20%) of all respondents—and, tellingly, an equal percentage of CEOs—say that at some point they have been too afraid to communicate an idea to colleagues. This suggests that in many companies key elements of a culture of innovation—credibly encouraging new ideas and making allowances for failure—are neither universally present nor particularly prominent.

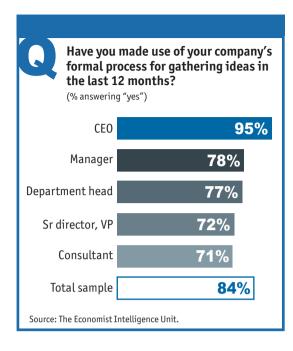
Source: The Economist Intelligence Unit.

Moreover, the 64% of all respondents who are actively encouraged to put forward new ideas represent an average that masks some significant national differences. Some 80% of respondents in Germany and 81% in the US say that they are actively encouraged to put forward new ideas (although, as noted in Part I, this encouragement does not always produce results, as a smaller proportion of US than European respondents consider their firms to be good or excellent at innovation). The proportion of firms where employees feel actively encouraged to put forward new ideas falls to 59% in Russia and 48% in Brazil.

How can companies close such gaps and ensure that a culture of innovation pervades their entire organisation? One approach is to create a formal process for suggesting ideas, although this, too, has its pitfalls. More than half (58%) of firms surveyed have a formal process to gather suggestions from staff. But not everyone is convinced that investment in general processes delivers value.

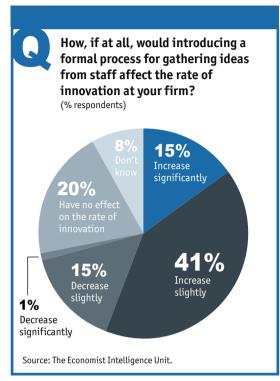
Nokia, for example, has resisted this process and favours a more targeted approach, according to Fabian Schlage, head of idea and innovation management. "We have no 'please submit ideas' channel," he says. Instead, Mr Schlage creates what he calls "honey traps"—time-limited offers of funding that reward staff for solving particular problems. These encourage innovative employees to step forward.

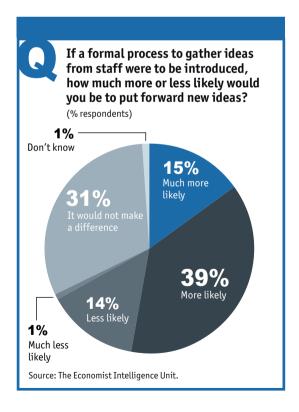


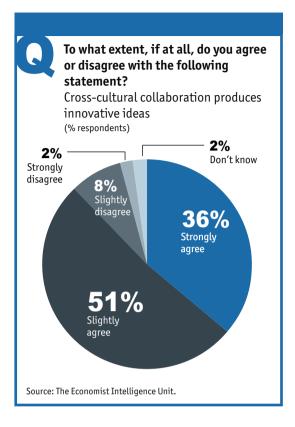


Where idea-gathering processes do exist, they are widely used, although not evenly throughout organisations. Overall, 84% of respondents who had access to such a process used it in the last 12 months. A breakdown of the data by job title shows that CEOs use them a lot (95%), but engagement tails off outside the C-suite, with managers (78%) and department heads (77%) less likely to use them. This dichotomy casts doubt on whether such formal processes can involve everyone in innovation.

The effectiveness of idea-gathering processes in generating responses also varies by country. While 82% of all respondents say the process at their firm is effective in generating ideas, that approval level falls to just 53% in the US, compared with 88% in the UK, 79% in Germany and 78% in France. The reasons for these differences are not clear, but the data suggest that US-based employees and managers are less confident than their European counterparts when it comes to suggesting new ways of doing business, possibly because job protection for employees is weaker in the US than in Europe.







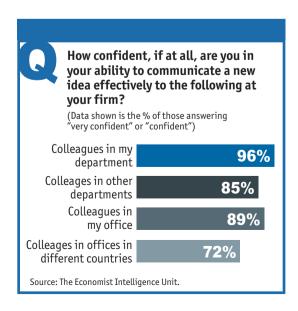
Views of the impact of idea-gathering processes on boosting a company's rate of innovation are also decidedly mixed. While more than half of respondents (56%) say that such a process would increase the rate of innovation at their firms and would increase the likelihood that they themselves would suggest new ideas (53%), significant minorities disagree. One-fifth (20%) say that a formal process would have no effect on the rate of innovation. And almost one-third (31%) say that introducing such a process would have no impact on the likelihood that they, as individuals, would suggest new ideas. Given this mixed assessment, it's no surprise that many of the firms that lack an idea-gathering process are not rushing to create one.

Despite such reservations, the need to get ideas flowing freely is an acute one for large organisations that operate across cultures, regardless of whether the dividing borders are national or organisational. A large majority (87%) of firms agree that cross-cultural collaboration produces innovative ideas. This is true even if a diversity of cultures and approaches can make it harder to critique and implement those ideas.

"We are convinced that innovation takes place at interfaces," says Ms Lowry. Roche runs two independent research organisations, as this helps to create a diversity of ideas. But generally, research and development (R&D) silos can create their own challenges when trying to solve complex issues that span many functions. "Here, simplicity and a common global approach are important and can sometimes even create space for innovation in other areas," she says. "What is required is the openness to ask questions and to challenge the status quo, a willingness to listen and an appreciation of differences."

Yet if innovation depends in part on the extent to which people feel confident in expressing their ideas, it is notable that this confidence tends to fall steadily when individuals encounter organisational boundary lines. The survey shows that respondents feel confident about communicating ideas within their own teams and departments—that is, on safe ground, where "everyone speaks the same language".

Similarly, 50% of respondents say that crosscultural differences make it harder for employees to share ideas with colleagues. That proportion climbs to 61% in Brazil, 66% in China and 67% in Germany. The lesson for companies is that

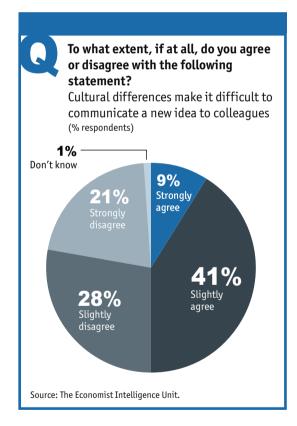


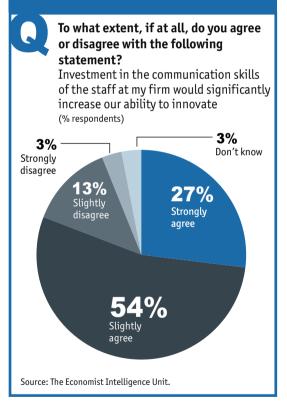
confidence to communicate a new idea falls when people move outside their comfort zone; to promote collaboration with colleagues in other departments or other countries, this barrier should be addressed.

This is confirmed by the finding that four-fifths (81%) of respondents say that increased investment in improving the communication skills of staff would significantly increase the firm's ability to innovate.

In sum, developing a culture that promotes innovation depends on a variety of factors.

Prominent among these is fostering a sense that all ideas are welcome, and an acceptance that not all ideas proposed are destined to succeed. Since innovation tends to occur at interfaces between departments and national cultures, companies that work diligently to promote open communication across such dividing lines have the best chances of increasing their innovative capacity. Similarly, companies that build systems for sharing knowledge consistently across a variety of internal frontiers are most likely to succeed in building creative, innovation-oriented cultures.





Nokia: Calling all innovators

Since announcing the sale of its once market-leading mobile phone business to Microsoft in September 2013, Nokia has been reinventing itself. The Finnish multinational communications and information technology company is now focusing on becoming a major player in the networking technologies that will enable the "Internet of Things". To make that happen, it is changing the way it manages innovation in its far-flung operations, which encompass 90,000 employees in 120 countries.

In the past, the company guided ideas through a tightly controlled "funnel". Potential innovations were formally defined, designed, developed and brought to market. Failing ideas were pruned along the way. That approach delivered some profitable innovations, but not enough, according to Fabian Schlage, the company's head of idea and innovation management. "The process we had was more about innovation management as risk management," he says. The aim was to develop new ideas while controlling the risk of resources being wasted on projects that fail to deliver.

Mr Schlage and his worldwide team of 50 innovation managers have been moving Nokia to a different model. "Our ambition is to create the future, and that requires a fuller set of innovation capabilities," he says. It also requires a change of mindset, he believes. "Our new paradigm puts innovation management within a bigger scope—one where it's all about culture and change." A key element of that cultural change is encouraging everyone to come forward with ideas and to share them with their colleagues. To encourage collaboration, Mr Schlage tries to foster flexibility, trust, easy access to information, good leadership, open communication and employee autonomy.

"There is no sense having a little 'disruption department' somewhere in the company; you need to establish innovation everywhere," he says. But to encourage everyone in the business to get involved, "you have to recognise the reality of how innovation actually works."

Technological change means that "innovation happens in a network now", explains Mr Schlage, with a high potential for people to develop profitable ideas by sharing ideas and working together online, across departments and countries. "But those interactions will not happen automatically," he says. "You have to look at how you can connect people and how you can orchestrate those interactions. You have to give people reasons to participate. It must be attractive enough for people to get involved."

For example, Nokia runs regular internal competitions to solicit new ideas from staff. To be effective, these must be focused on business goals and offer some kind of reward, says Mr Schlage. For example, a recent request for suggestions offered a free Apple laptop for the best idea that improved online security for Nokia customers.

Alongside those focused calls for suggestions Nokia runs competitions for what Mr Schlage refers to as "crazy ideas". These are evaluated by teams comprising staff from each of Nokia's different business functions. They look for a high "wow" factor—a game-changing breakthrough—as well as whether the idea is technically feasible and what it might cost to realise. The last such competition generated 250 ideas; 20 of them are now in development.

Staff members who regularly respond to these challenges with good ideas—whether focused

or "crazy"—are publicly identified as innovation "champions" in the business. They may receive bonuses and/or training in techniques to generate, capture and share ideas.

A major part of the innovation effort focuses on encouraging communication company-wide. To this end Nokia publishes staff-proposed ideas on its Global Innovation Mall, a collaborative intranet portal. The site allows staff to view ideas, post their own and leave comments. By tracking data on how many ideas are posted and what level of interaction they generate, Mr Schlage can see which suggestions are gaining traction and allocate a budget to their development.

While Nokia wants all its staff to suggest and develop ideas, it also runs a number of dedicated innovation hubs around the world. Their role is to develop ideas by encouraging collaboration within their local ecosystem, which includes start-up incubators, universities and technology centres.

Mr Schlage encourages these hubs to compete with each other by awarding them "points"

for every successful idea they develop and publicising their accumulated point scores internally. "Nobody wants to lag behind; everyone wants to be the best hub," he says. This approach has encouraged the different hubs to develop their strengths organically. The one in Budapest, for example, is very good at innovating around security. Some are excellent at finding incremental gains; others are best at finding completely fresh ideas.

The shift to a more collaborative culture has delivered measurable results, says Mr Schlage. Nokia has roughly doubled to 20% the proportion of new suggestions that become profitable products, services or process improvements. "There is no scheme or framework that makes innovation happen, and there is no 'magic tool'," he says. "There are many, so you have to know them all, and make sure you apply the right one to the right problem. That is why my approach is so generic: I want to allow flexibility. But I measure everything, so I know what is in the pipeline, what our successes and results are."



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Part III – Empowering employees to innovate

Just as the effort to create a more innovationfriendly culture should start at the top of the organisation, so does the drive to empower individuals to generate and share ideas. This effort typically requires a reorientation in the way senior managers think, according to Professor Dyer at Brigham Young University. In particular, the execution-focused skills that form the core of MBA programmes and tend to be highly valued in senior executives are not well suited to the "messy and unpredictable" realm of innovation, he argues. Instead, C-suite executives should recognise that promoting innovation changes their role. Instead of guiding the business in what they think is the right way forward, their job should include identifying the assumptions that underpin decisions and finding ways to test them. "They need to go from being chief decision-makers to chief experimenters," he says.

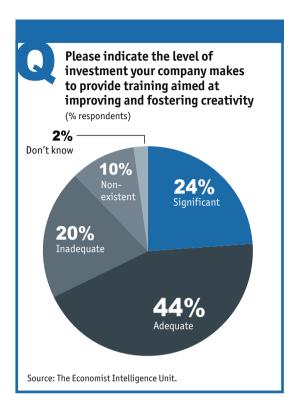
One set of assumptions ripe for challenge are those concerning how innovation works—or should work—in companies. It is often too easy for leaders to say: "Oh, we're not good at innovating," when what they really mean is that innovation is not a competency of the leadership team, says Professor Dyer. "They should acknowledge that and show a real desire to learn." With a better understanding of conditions giving rise to innovation, leaders can create a set of processes and a culture that suit their firm's circumstances—and then find ways to empower staff to excel at whatever skills are needed.

Leaders also need to show that they are open to being challenged, says Shrupti Shah,

director of Deloitte GovLab, part of the Deloitte consulting firm that helps public bodies in the US to innovate. "They must give people room to suggest changes and improvements to the way things are done," This means leaders need to focus more on the desired outcomes and be less controlling about how those outcomes are achieved.

Part of the process of encouraging innovation is recognising the different types of innovation, according to several executives. Quite often this involves introducing a two-pronged approach, with a centralised department focusing on developing major changes in products and services and the rest of the organisation encouraged to suggest incremental improvements. The senior management at FedEx, for example, offers incentives, in the form of employee recognition awards, to staff members who identify product and service improvements, and at the same time runs specialist teams focused on finding disruptive, or game-changing, innovations. "They are a highly trained and disciplined group that knows our business and focuses on what things we should be doing in the future, such as exploring emerging technologies and ideas for creating more value for our customers," says Ms Proctor. "They work collaboratively across countries, teams and projects to drive value by challenging traditional thinking and bringing fresh perspectives and knowledge of trends to identify the opportunities."

Dow Chemical is also trying to foster a culture of innovation by combining specialised R&D with a



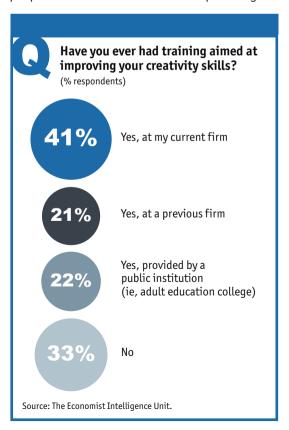
networked approach that extends throughout the organisation. "We've had a big discussion here about who owns innovation, and we've resisted having a director of innovation or any innovation managers," says John Biggs, Dow Chemical's director of R&D in Latin America. Although the company has vast innovation laboratories in the US, "we created a network structure that includes people from every business function, because we didn't want people to think innovation is only an R&D responsibility."

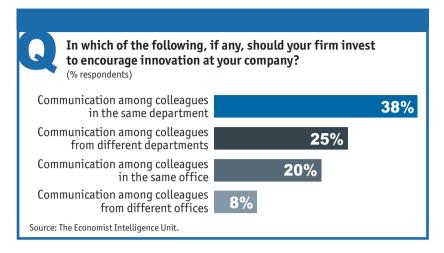
Mr Biggs says this creates a different kind of innovation culture, which is more suited to Dow's business in Latin America, where it employs fewer people than in the US and deals more with family-owned businesses. One measure Dow uses to track the effectiveness of its innovation management is the percentage of sales in each territory from new products, defined as those less than five years old. "My goal in Latin America is to sell more new products than any other geography," says Mr Biggs. "The percentage is growing; I think we're generally more innovative, and we bring products to market faster."

Inside an innovation lab a firm needs to have three different sets of skills present, according to Professor Dyer. It requires people who can evaluate the desirability of an idea from a customer standpoint, test whether it is technically feasible, and ascertain whether it is commercially viable. This is likely to require a mix of specialists from across the business—everyone from engineers to accountants to marketers.

Beyond reconsidering their approach to innovation and ensuring that the required skills are present, companies should invest more widely in training staff to be more creative about their work. The challenge for companies is to foster in individual employees "the conviction that you can achieve what you set out to do," says Stanford professor David Kelley in his book Creative Confidence, co-authored with his brother Tom Kelley. "We think this self-assurance, this belief in your creative capacity, lies at the heart of innovation."

Indeed, it is not so much a question of training people to be more creative but of empowering





them to express their innate creativity, believes Martyn Clark, a creativity consultant at Gadfly, a consultancy specialising in fostering creativity in organisations. "Every five-year-old is creative; somewhere, they lose that sense of freedom. I try to recreate the emotional conditions they experience as children—it's OK to fail, OK to play and OK for what you are doing to look different to what everyone else is doing," he says.

This is also the approach Mr Schlage takes at Nokia: "Children explore the world by trying things out, not thinking about what happens

CORPORATE VIEW For each of the following areas, please indicate how you would rate the adult education available in your country? (% respondents) Excellent Good Very poor Poor 20% 15% Creativity skills Communication skills **60%** 23% 20% 2% 3% Commercial skills Management skills Source: The Economist Intelligence Unit.

next. They learn by making decisions and negotiating situations. I can't change people, but I can make it easier for them to play, I can motivate them to take small steps they can be proud of."

Companies receive mixed grades on how well they have absorbed and implemented these lessons to date. On the plus side, as noted above, firms in our survey say they are committed to investing in improving their employees' creativity skills. In addition, 67% of respondents say the level of investment by their companies in training to improve creativity is adequate, and 62% say they have personally received training aimed at improving their creativity skills, either at their current firm or at a previous one. On the minus side, 30% say the level of investment their companies make in training to improve creativity is inadequate or non-existent, and almost oneguarter (23%) of CEOs have never had training in creativity skills, a proportion that rises to 47% for CFOs.

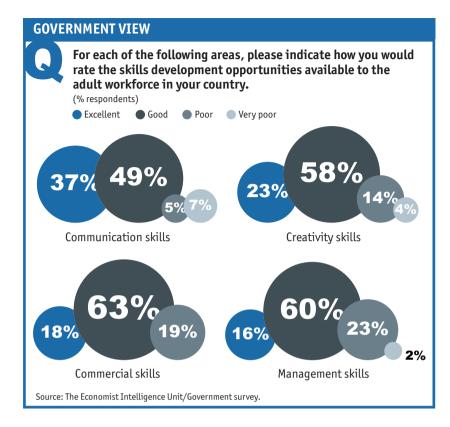
In the same vein, respondents suggest that their companies invest more in improving communication across departmental and national lines. Nearly four-tenths (38%) say such investment is needed to promote communication between colleagues in different departments, compared with 20% who favour more investment in improving communication within departments. And 25% say investment is needed to promote communication among colleagues from different offices, compared with 8% favouring investment to promote communication among colleagues in the same office.

Can adult education help to improve this picture? The survey points to a gap in the provision of creativity-oriented training when compared with other types of adult education. In particular, respondents say that the training available to them to boost communication and creativity skills is not as good as it is for commercial and management skills. For example, adult education in management and in commercial skills is rated

Intelligence Unit

positively by 83% and 81% of respondents, respectively, whereas adult education in communication and creativity skills receives positive ratings from 74% and 69%, respectively. These results suggest an area that companies can address when choosing among adult-education programmes to subsidise for their employees.

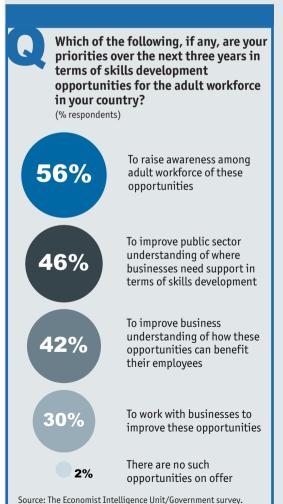
Interestingly, government officials surveyed for this study have the opposite view of adult education programmes. When asked to rate the skills development opportunities available to the adult workforce in their countries, 86% and 81% of public officials gave a positive rating to training for communication and creativity skills, respectively, whereas lower proportions—81% and 75%, respectively—gave positive ratings to existing training for commercial and management skills.

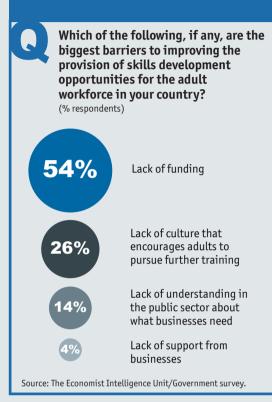


Back to school: Teaching adults to be creative

If an innovative workforce is a powerful driver of economic growth, should governments be doing more to help adults develop the required skills? Most companies respond with a resounding "yes". In our survey, 37% of corporate respondents say that skills development opportunities in their countries are not adequate to improve the ability of the workforce to innovate. Moreover, 44% say it is not solely an employer's responsibility to provide further training to improve innovation, suggesting a strong current of opinion in favour of government involvement.

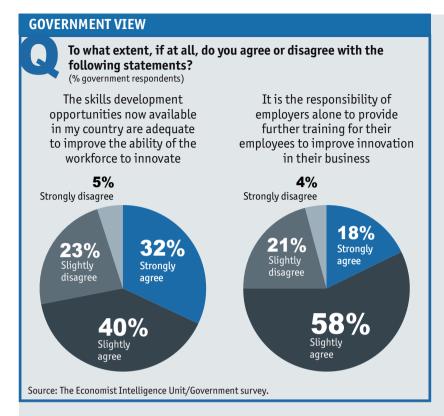
"We think the education system for children and adults needs to be shaped in a way that





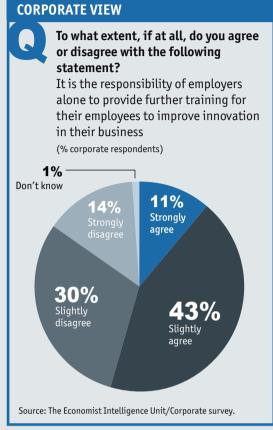
is experiential and more solution-oriented, moving away from industrial-age requirements and towards an open and safe think-tank," says Tammy Lowry, global head of learning and organisational effectiveness at Roche. "Unfortunately, much training focuses on making ideas 'right and wrong' through testing, so that individuals may lose that sense of confidence even as their knowledge increases."

Executives participating in our survey agree that public education needs a clearer focus on creativity. Yet government officials—who would be the ones to carry out such a change—do not necessarily perceive a problem in the existing educational offering. While two-thirds (63%) of corporate respondents say the skills development opportunities in their countries are adequate when it comes to improving the ability of the workforce to innovate, 72% of respondents to the government survey say the

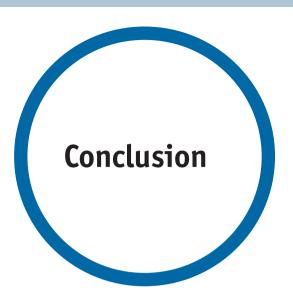


same. Public officials see the main problem as making adults more aware of the training that is already on offer. More than half (56%) of public officials in the survey say this is their main priority, compared with 30% of officials who say they make it a priority to work with businesses to improve adult education.

More than half (54%) of government officials say lack of funding is by far the biggest obstacle to improving the training they offer. Another 26% cite a lack of a culture that encourages adults to pursue further training, while 14% admit to a lack of understanding in the public sector about what businesses need.



Yet at the same time government officials say that improving training aimed at fostering corporate innovation is not actually their job. Three quarters (75%) of government officials surveyed say this is the sole responsibility of the employer, compared with 55% of corporate executives who share that view. Whether caused by budget limitations or by a sense that training for creativity is not their mission, governments are clearly leaving the field of creativity training to the private sector.



Staying competitive through innovation

Many global firms strive to react quickly and flexibly to market and technology changes through nurturing a culture of innovation. They do this in a variety of ways: incentivising employees to generate ideas, creating systems for sharing ideas and information, demonstrating that occasional failures are acceptable, and seeking to close the communication gaps that can develop internally.

To do this successfully, businesses must first be aware of the main barriers to building a culture of innovation. As this report shows, these are: absence of a strong leadership focus on innovation; weak skills in generating ideas; insufficient communication and collaboration across departmental and national lines; and low confidence among individuals in sharing ideas company-wide. All of these factors need to be addressed when building a strong culture of innovation.

While corporate culture is itself the product of a complex blend of factors, including an organisation's values, aims, key personalities and business sector, this research points to key actions that companies of all descriptions can take to boost their innovation capabilities. These are:

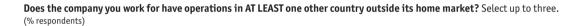
 Fostering an atmosphere in which experimentation is valued and allowance is made for the eventual failure of some of the experiments

- Ensuring that creativity is valued and developed in all parts of the organisation, so that innovation is not restricted to game-changing "big ideas" and instead includes a steady stream of smaller improvements to products, services and business processes
- Increasing internal awareness of the importance of collaboration across departmental and national lines, so that the organisation benefits from differences in approaches to problems
- Investing in improved communication skills, particularly those required for understanding colleagues with a different cultural frame of reference or a different professional discipline
- Building an infrastructure and processes for sharing knowledge and ideas across departmental and national lines
- Adjusting concepts of risk management to allow for new ventures with uncertain returns

Ultimately, it is the willingness to imagine and to try something new that fuels creativity and innovation. As firms focus more on innovation, they should practice what they preach—or, as Nokia's Mr Schlage puts it, learn to be innovative about how they innovate. Indeed, efforts to improve a firm's ability to innovate are themselves an exercise in experimentation and continual learning.



Appendix I: Corporate Survey





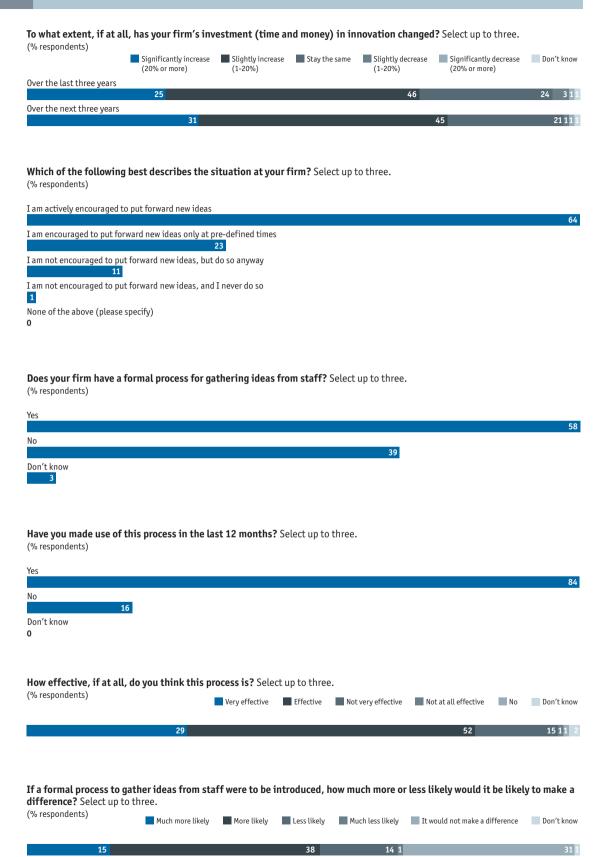
Which of the following, if any, would you say are your firm's top three priorities over the next 3 years. Select up to three. (% respondents)

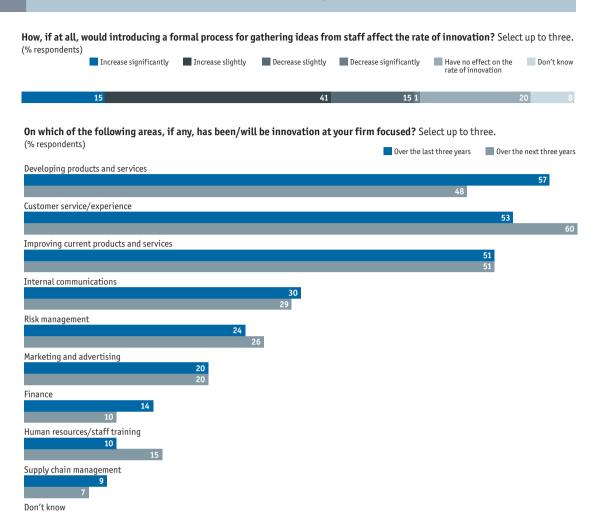


How would you rate your own ability and that of your firm to innovate? Select up to three.





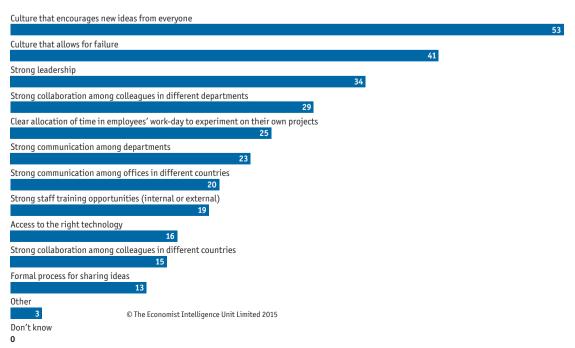




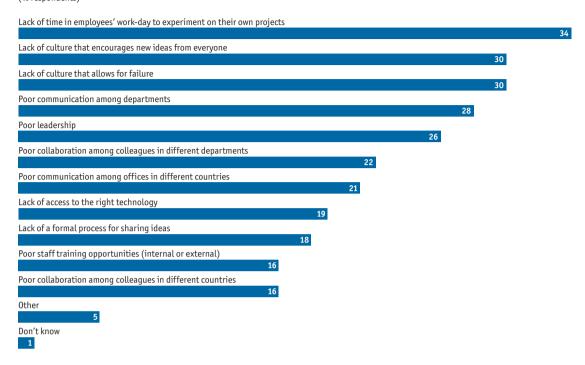
In your opinion, which of the following, if any, would you describe as the most important factor for innovation? Select up to three.

(% respondents)

1



Which of the following, if any, would you say are the greatest barriers to innovation at your company? Select up to three. (% respondents)



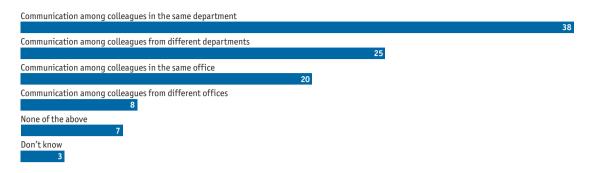


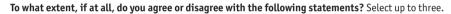


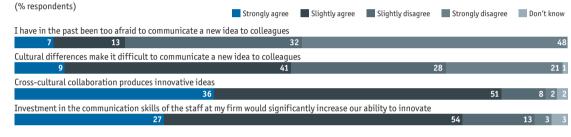
How would you rate the training on offer to you at your firm to improve the following? Select up to three.



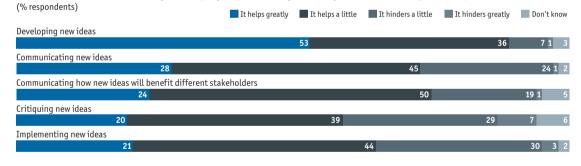
In which of the following, if any, should your firm invest to encourage innovation at your company? Select up to three. (% respondents)







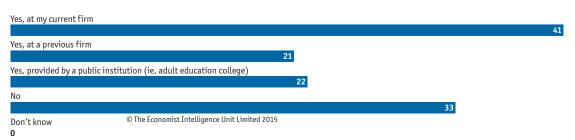
Does the international nature of your company help or hinder your ability to do the following? Select up to three.



Please indicate the level of investment your company makes to provide training aimed at improving your creativity skills. Select up to three.



Have you ever had training aimed at improving your creativity skills? Select all that apply.



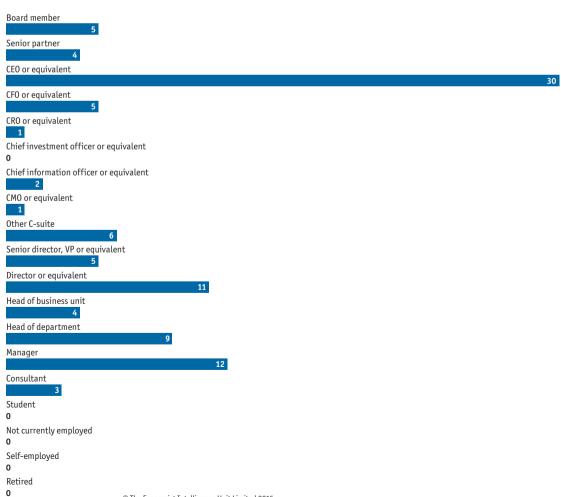
To what extent, if at all, do you agree with the following statements? Select up to three.



For each of the following areas, please indicate how you would rate the adult education available. Select up to three.

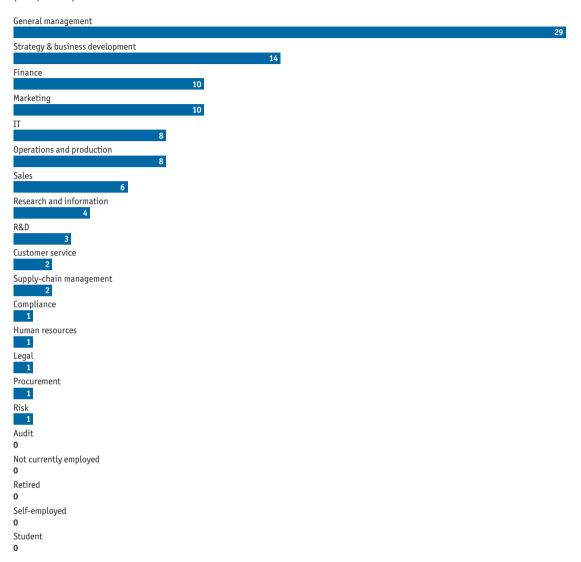


How would you describe your current job level?



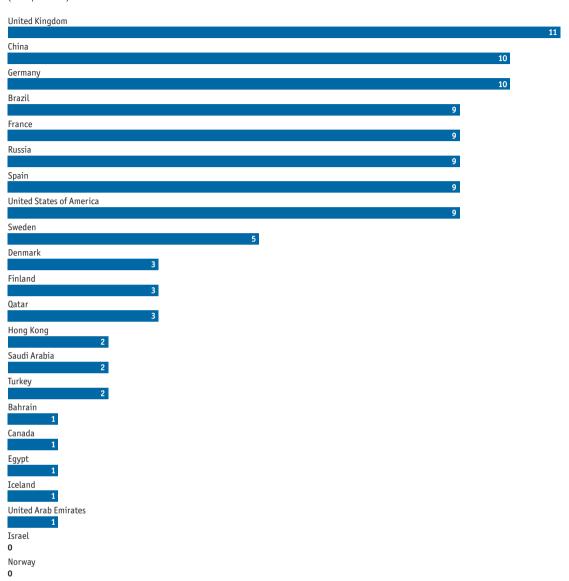


What is your primary job function?





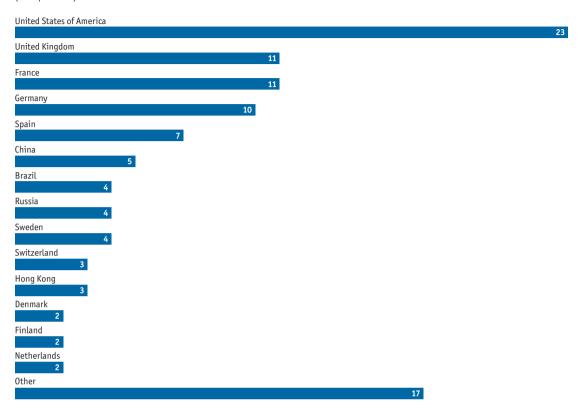
In which country are you personally located?





Country of company HQ

(% respondents)



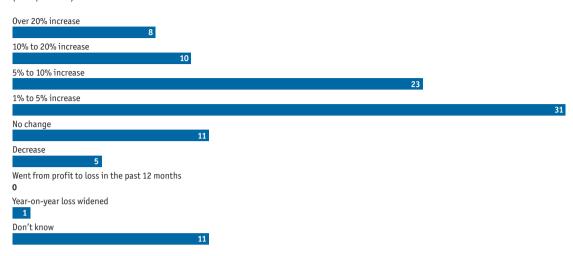
What are your organisation's global annual revenues in US dollars?



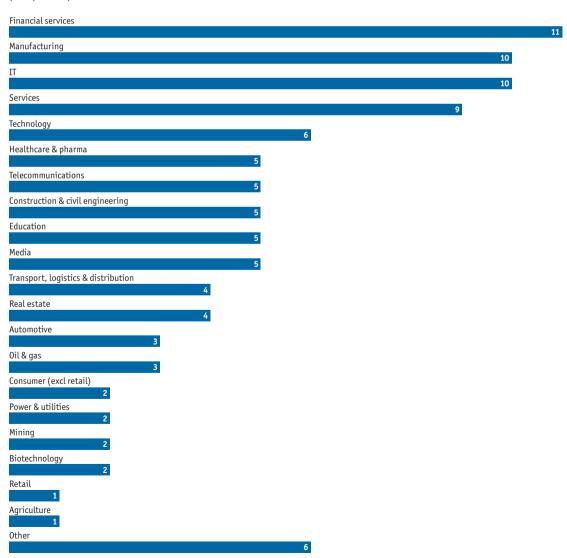


How has your company's EBITDA changed over the past 12 months?

(% respondents)



In which of the following sectors do you work?



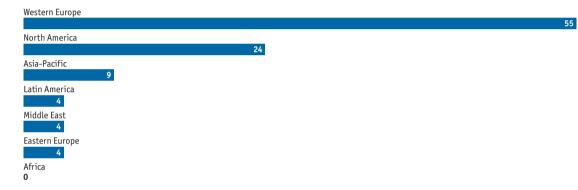


Embedded Data Field: Region

(% respondents)



Embedded Data Field: HQ Region





Appendix II: Government Survey

Do you have responsibility for or involvement in the design and implementation of adult education? (% respondents) Yes No 0 To what extent, if at all, will investment in skills development opportunities for the adult workforce change over the next three years? (% respondents) Significantly increase (20% or more) Slightly increase (1-20%) Stay the same Slightly decrease (1-20%) Significantly decrease (20% or more) There is no such investment in my country Don't know Which of the following, if any, are your priorities over the next three years in terms of skills development opportunities for the adult workforce in your country? Please select up to two. (% respondents) To raise awareness among adult workforce of these opportunities To improve public sector understanding of where businesses need support in terms of skills development To improve business understanding of how these opportunities can benefit their employees To work with businesses to improve these opportunities Other (please specify) Don't know There are no such opportunities on offer

Which of the following, if any, are the biggest barriers to improving the provision of skills development opportunities for the adult workforce in your country?

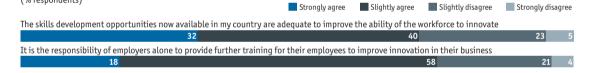
(% respondents)



For each of the following areas, please indicate how you would rate the skills development opportunities available to the adult workforce in your country.



To what extent, if at all, do you agree or disagree with the following statements? (% respondents)



What is your organisation's annual budget/expenditure in US dollars?

(% respondents)

\$5bn or more 0

\$1bn to \$5bn

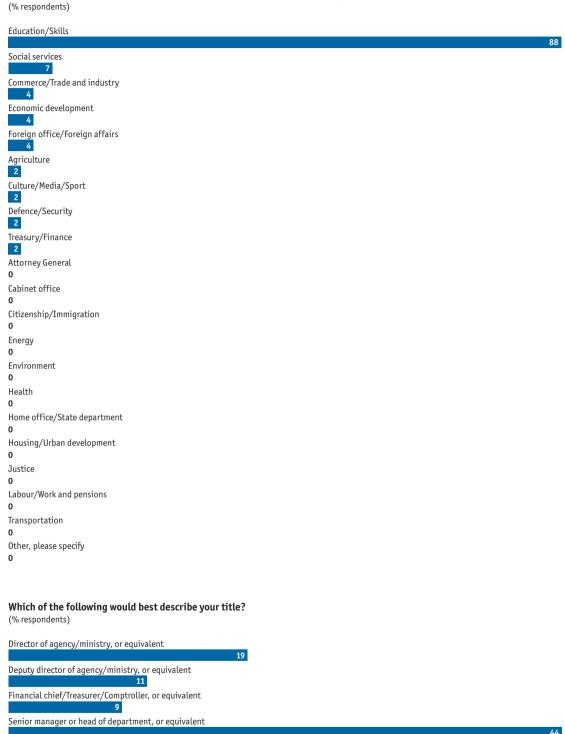
\$500m to 1bn

5

\$100m to \$500m

\$100m or less

Which of the following most closely resembles the government department you work for? Please choose up to three.



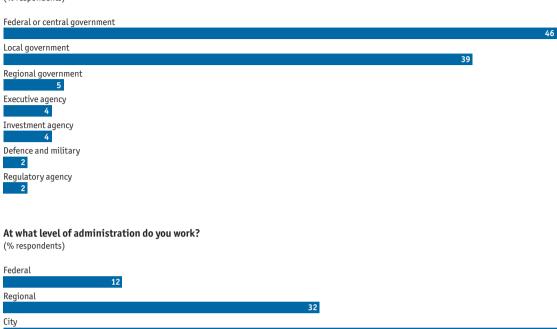
Manager

Other, please specify

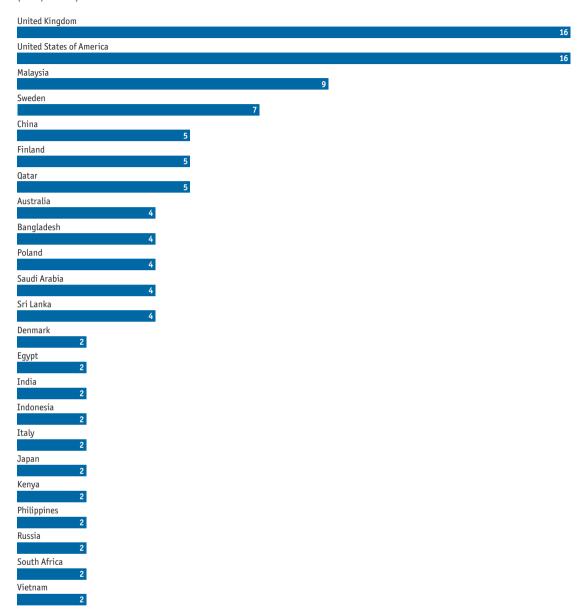
Project officer/Programme manager



Which of the following best describes the organisation you work for?



In which country are you personally located?



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