

A large, stylized blue chevron graphic pointing to the right, positioned behind the text.

High performance. Delivered.

A blurred background image of a city street with tall buildings and pedestrians in motion, suggesting a fast-paced, urban environment.

Entrepreneurial Innovation:

how to unleash a key
source of growth and jobs
in the G20 countries

Young Entrepreneurs' Alliance Summit 2013

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Introduction

Entrepreneurship is not only an important driver of economic growth, productivity, innovation and employment. It is also a key player in the "cycle of life" of businesses, giving rise to new firms to take the place of those whose influence and relevance are waning.

But as anyone who has started a business knows well, being an entrepreneur is not easy. Entrepreneurs often must fight an uphill battle to get their new ventures off the ground, and many never succeed.

For this reason, governments need to do all they can to support fledgling entrepreneurs and remove the barriers that unnecessarily constrain them and stifle innovation. One way they can do this is by making decisions that foster entrepreneurship and facilitate the dissemination of new technologies and their adoption by an increasing number of entrepreneurs. Indeed, we believe that the current wave of new technologies provides a favorable environment for entrepreneurs who aim to scale their business fast. Gaining access to and deploying those technologies easily and cost-effectively can mean the difference between a success story and a compelling new idea that never sees the light of day.

To help governments in their policy making efforts, Accenture teamed with the Young Entrepreneurs' Alliance on a comprehensive research effort on entrepreneurial innovation in the G20 countries, with an emphasis on new technologies. The goal of the research was to gain insights from entrepreneurs on the importance of innovation within their business, the drivers and inhibitors for innovation, and what the G20 governments should do to better support entrepreneurs.

Five key findings emerged from our research:

- Every entrepreneur is a digital entrepreneur
- Entrepreneurs are the catalyst for innovation and economic growth
- Emerging markets are challenging developed economies as the leading source of entrepreneurial innovation
- Entrepreneurs are ready to shift attitude toward more collaboration with large companies
- Technology clusters, inspired by Silicon Valley, can provide a vital ecosystem for entrepreneurial success

Young entrepreneurs demand active support from government to sustain their leadership in technology innovation.

Foreword



Victor Sedov
Chairman, G20 YEA
Summit, Moscow 2013,
and President, Center
for Entrepreneurship

This edition of the G20 Young Entrepreneurs' Alliance (G20 YEA) Summit takes place in a context of economic instability and structural changes. High unemployment, especially youth unemployment, is one of the major concerns of governments, while new technologies are reshaping value chains across the globe and fundamentally transforming the context in which entrepreneurs develop their activities. At the heart of innovation, and technological innovation, lies free will and creativity allied with the ability to exploit opportunities and find effective solutions. Entrepreneurship, especially youth entrepreneurship, demonstrates those qualities that play a crucial role in the development of economies and job creation.



Jean-Louis Grégoire
Committee Chair,
G20 YEA Thought Leaders

In the G20 Young Entrepreneurs' Alliance, we passionately believe that innovation, regardless of its forms, has a role to play in reinvigorating growth and job creation. To take full advantage of the benefits entrepreneurial innovation can bring, the G20 governments need to take some decisive action. In order to prepare concrete proposals, the G20 YEA commissioned this report to:

- Capture the role played by young entrepreneurs in adopting and developing technology innovation within the G20 countries
- Analyze the source of tomorrow's technology innovation

- Pinpoint the barriers entrepreneurs face
- Provide recommendations for consideration when forming policy and regulations at local levels to foster technology innovation driven by entrepreneurs

We are pleased to present you with the results of this study conducted by Accenture, and we hope that the ideas presented here will serve as a guide for policy makers and key opinion leaders to unleash this key source of growth and jobs and in the G20 countries.



Pierre Nanterme
Chairman & CEO,
Accenture

Young entrepreneurs from the G20 countries have become a unique force. Powered by their relentless efforts to innovate, develop new business models and sell new products and services, they expect to achieve strong growth and job creation in the next two years. This is a remarkable sign of optimism given the uncertain and volatile business environment in many G20 countries. At the same time, young entrepreneurs seek more support from governments and large businesses to help them sustain their contribution to economic growth and job creation.

These are among the conclusions of a new report, "Entrepreneurial Innovation: how to unleash a key source of growth and jobs in the G20 countries," published by Accenture for the G20 Young Entrepreneurs' Alliance. The report is based on a global survey of 1,000 entrepreneurs aged 40 or younger across all G20 countries.

Of those entrepreneurs surveyed, 76 percent believe they are a major source of technology innovation in their respective countries. In addition, 81 percent expect to create new jobs over the next two years, and 41 percent expect to grow their businesses by more than eight percent annually during that time.

The optimism shared by these young entrepreneurs can be explained largely by their enthusiastic embrace of technology. The report revealed that, today, every entrepreneur is a digital entrepreneur. Entrepreneurs are leveraging new technologies such as social media, mobile computing, analytics and the cloud to create innovative new products at speed and at scale—increasingly disrupting existing value chains.

Yet the research also found that young entrepreneurs are looking to collaborate

more with large companies. Although only 35 percent of the entrepreneurs we surveyed currently collaborate with large businesses on innovation, another 46 percent intend to do so within the next two years. These collaborations provide entrepreneurs with better access to new markets, specialist skills and more expensive technologies which help fuel their growth.

In turn, large companies are seeing the benefits of cooperative efforts with entrepreneurs to gain an early view of disruptive innovations as well as access to new sources of talent. Together, large companies and entrepreneurs have an opportunity to address the imbalances that challenge sustainable economic growth in communities around the world. Also, governments have a decisive role to play to strengthen entrepreneurial ecosystems and encourage the development of entrepreneurial innovation.

Time is of the essence for the G20 countries to embrace their young entrepreneurs and unleash a new wave of innovation, productivity, job creation and sustainable economic growth. We hope that all stakeholders of the innovation ecosystem will find this report relevant and actionable.



Bruno Berthon

Global Managing Director,
Strategy & Sustainability,
Accenture

There is no doubt that the past few years have been challenging for many economies. Europe has suffered greatly from the consequences of successive financial, monetary and budgetary crises, the US is only starting to show signs of slow recovery and even the growth engine of China is starting to cool down. The social impact has been particularly severe with high levels of unemployment in many regions, with critically high levels among the youth. The more successful economies in that context have been driven by export-led growth built on a strong manufacturing base. And, until now, much of the focus of governments has been on providing the support needed for large companies to invest in growth while tackling the social impact of the economic downturn.

However, this alone is insufficient and new paths to growth need to be invented. Young entrepreneurs are therefore an essential part of the business ecosystem when their importance to the global economy is often underappreciated.

Our report includes input from over 1,000 young entrepreneurs from across all G20 countries. We also explored in detail specific topics through eight 'lab' workshops including locations like Beijing, London, Moscow and New York. And we complemented this extensive approach with in-depth interviews from 12 experts in this field. And the results are telling.

Young entrepreneurs are a hotbed of innovation, especially technological innovation. Young entrepreneurs are a source of economic growth across all G20 countries. And young entrepreneurs are an important source of job creation—both direct and indirect. In short, we can confirm that they are an essential component of the business ecosystem for growth.

It is therefore important for governments and big business to understand the untapped potential of partnering more closely with young entrepreneurs by helping them to overcome the barriers

they face and providing them with the right conditions to grow and flourish in order to benefit from greater technological innovation, strong growth potential and the subsequent impact on new job creation.

Young entrepreneurs themselves must also continue to play their part. 'Every entrepreneur is a digital entrepreneur': they must continue to focus on innovation and exploiting new technologies. Entrepreneurs must learn to build their own virtual networks: they must become active members of the business ecosystem to access faster new innovations, technologies and resources on a global scale. In order to continue the drive for job creation, entrepreneurs must foster more and stronger collaborations with big business to scale their ideas and accelerate their growth.

This is why we are delighted to work with the G20 Young Entrepreneurs' Alliance and share their ambition for the voice of young entrepreneurs to be heard globally. We hope this research provides a constructive contribution to the dialogue and helps to facilitate meaningful discussions with G20 governments at local, regional and state levels for young entrepreneurs.

Executive summary

Entrepreneurship is not only an important driver of economic growth, productivity, innovation and employment. It also is a key player in the life cycle of businesses, giving rise to new firms to take the place of those whose influence and relevance are waning. But as anyone who has started a business knows well, being an entrepreneur is not easy. Entrepreneurs often must fight an uphill battle to get their new ventures off the ground, and many never succeed.

The Entrepreneurial Innovation research initiated by the G20 Young Entrepreneurs' Alliance (G20 YEA) and carried out by Accenture was designed to research the current state of technology-driven innovation by young entrepreneurs*, gain entrepreneurs' insights on potential solutions to unleash a key source of growth and job creation in the G20 countries, and contribute to the formulation of G20 policy recommendations by the G20 YEA. It is based on the hypothesis that technology innovation by entrepreneurs is critical to innovation's ecosystems and to G20 countries' competitiveness and job creation. The results of the research are presented in this report that was prepared for the G20 Young Entrepreneurs' Alliance 2013 Summit in Moscow.

Five key findings emerged from our research:

Today every entrepreneur is a digital entrepreneur. Innovation, and more precisely technology-driven innovation, is a strategic priority for 78 percent of the entrepreneurs interviewed as part of the survey that was conducted in the G20 countries**. Entrepreneurs extensively use new technologies—especially information and communication technologies such as social media, mobile technologies, data analytics, machine-to-machine connectivity, and cloud technologies—to create new innovative products and services and reach customers at scale and at speed. Scalability, flexibility, and reduced cost of access to new technologies offer entrepreneurs significant opportunities to experiment and develop new business models that can disrupt the value chains of all industries and impact the competitiveness of G20 economies.

Young entrepreneurs from the G20 countries see themselves as the most dynamic source of technology innovation and expect to achieve strong growth and job creation through their businesses in the next two years. More than three quarters (76 percent) believe they are the major source of technology innovation in their country. Forty-one percent expect to grow their businesses by more than eight percent annually over the next two years and 81 percent expect to create new jobs in that period, which demonstrates faith in the future at a time when global economic growth will reach less than four percent in 2013, according to the latest forecasts†, and many countries struggle to create jobs, especially for young people. The specific impact of the high-tech sector is particularly noteworthy, as, according to recent economic analysis, every new job in the high-tech industry triggers the development of more than four jobs in their local ecosystems.

* For a definition of young entrepreneurs, see the box "Definitions" on page 9. The definition used in this report is the definition developed by the Young Entrepreneurs' Alliance. The report is focused on this population, but, for the sake of convenience, "young entrepreneurs" are sometimes called simply "entrepreneurs" in the report.

** See the appendix on page 44 for details on the survey methodology.

† IMF Global Economic Outlook, April 2013 <http://www.imf.org/external/pubs/ft/weo/2013/01/pdf/text.pdf>

Although the United States is seen as the most innovative country in the next two years, China and India are considered the second and third most innovative, respectively, clearly on their way to become the technology powerhouses of the future. This assertion finds possible support in separate Accenture analysis revealing that of the world's five million science, technology engineering and mathematics (STEM) graduates, 86 percent came from China, Brazil and India in 2012 according to our estimates. The proportion of emerging market entrepreneurs applying mobile, social, data analytics and machine-to-machine technologies in their business is higher than in mature economies, according to the survey. This difference can be partly explained by local growth opportunities, availability of technology skilled workers and fewer constraints on innovation (i.e. fewer regulations).

Young entrepreneurs see their strong contribution to economic growth increasingly dependent on working with larger businesses. Thirty-five percent of respondents claim to collaborate with large businesses today and a further 46 percent intend to do so in the coming two years. They cite access to new markets, specialist skills and more expensive technologies as benefits of working with bigger organizations. Larger businesses appear less open, however, with 52 percent of a sample researched by Accenture stating they have either no collaboration with entrepreneurs at all or just one such initiative with at least a single small company. Among large companies which have developed collaborations with entrepreneurs,

multiple different ways have been tested: for example, corporate venturing (nearly half of 100 leading international companies we analyzed have developed a formal corporate venture policy), mentoring, joint innovation, support to access markets, training and coaching, and joint involvement in local community development or technology clusters. By collaborating in this way with entrepreneurs, large companies benefit from greater exposure to a wide range of innovation that may potentially disrupt their markets, gain access to a new talent pool, and indirectly stimulate internal entrepreneurship among their own employees. This budding collaboration in innovation between start-ups and large companies is no guarantee for systematic success; however, the mutual benefits are potentially significant enough to encourage both large companies and entrepreneurs to pursue it—especially in the pharmaceuticals sector, but also increasingly in financial services, communications, and energy. As collaboration increases, new models of cooperation will emerge, especially to facilitate connections, clarify the frameworks of engagement, and protect intellectual property on both sides. The implementation of formal innovation systems by large companies will be key to the success of these initiatives.

Entrepreneurs have a positive view of technology clusters. Such clusters, inspired by Silicon Valley, and adapted to different business and cultural environments, can provide a vital ecosystem for entrepreneurship development. Although Silicon Valley is unique, governments may stimulate the development of local clusters,

which leverage and expand the specific strengths of local economies, and their "smart specialization." Clusters also provide an answer to the growing aspiration for people to benefit from access to local supply chains and energy supply, and access to locally manufactured products through new technology solutions such as 3D printing. Specific measures that can aid the development of clusters include providing sustained and increased support for basic research, reducing restrictions that inhibit the ability of universities to collaborate with industry to create value, "de-risking" the future for entrepreneurs by promoting stability and consistency in regulations, increasing permeability across companies, being a source of high-risk capital for start-ups, and embracing diversity in all aspects. In parallel, digital entrepreneurs' connections with their stakeholders will increasingly extend beyond geographic boundaries and give rise to the creation of "virtual entrepreneurial ecosystems".

Our research also highlighted the general support entrepreneurs would like to receive from governments. Two thirds are not satisfied with actual government policies. Eighteen percent say that governments take no action to help entrepreneurs and a further 49 percent say that while they do, their efforts are not relevant or effective. Their primary demands are for changes to tax, the development of technology training and education to increase the talent pool of technology skilled workers, and public finance for entrepreneurs and small businesses.

Key recommendations for governments include:

- Stimulate demand through the development of digital infrastructures, export support schemes, the digitization and opening up of public procurement to small companies, and the digitalization of public services (including open data policies that encourage companies to create innovative services for the public sector).
- Support entrepreneurs through efficient tax incentives, access to broader sources of funding, greater investment in STEM education and training, and facilitating the creation of clusters and incubators.
- Develop business friendly environments for technology innovation through personalized and simplified online administrative processes, a higher tolerance for failure, standards for cloud technology that reduce fixed business costs, and an attractive environment for entrepreneurs to set up new businesses.

With a significant portion of the world still struggling to respond to today's volatile and uncertain economy, governments need to explore every promising opportunity to positively impact their business environment. By better understanding the challenges and needs of entrepreneurs, and putting in place policies that enable them to innovate and grow, governments can capitalize on a proven economic and job creation engine that can be a significant contributor to G20 countries' drive to restore growth to their economies.

Definitions

Innovation is defined in the Oslo Manual as including product innovation, process innovation, marketing innovation and organizational innovation. Innovation is interpreted by Accenture as "a new way of doing things that adds value" in the fields listed above.

Entrepreneurs are defined by the OECD-Eurostat Entrepreneurship Indicators Program as those persons (business owners) who seek to generate value, through the creation or expansion of economic activity, by identifying and exploiting new products, processes or markets. In this report, the focus is on "employer enterprises", which are more closely related to the notion of entrepreneurship as a driver of job creation and innovation than micro enterprises (those that provide some form of subsistence to the owner, usually self-employed and without employees).

"Young Entrepreneurs" are defined by the Young Entrepreneurs' Alliance as entrepreneurs aged 40 or younger, who are founders, owners, or co-owners of a private business.

New Technologies include technologies such as biotechnology, nanotechnology, advanced materials, photonics, micro- and nano-electronics, advanced manufacturing systems and information and communication technologies (e.g. social media, mobility, analytics or cloud). This report is primarily, but not exclusively, focussed on information and communication technologies.

Chapter 1:

Every entrepreneur is a digital entrepreneur

Technology-driven innovation is a strategic priority for entrepreneurs who were interviewed in the survey that was conducted in the G20 countries: seventy eight percent indicated that innovation is one of their top priorities, with about one-fourth reporting it is their number one priority (Figure 1). In today's business environment, innovation is an essential component of entrepreneurship, in most cases associated with new technologies to create new products and services. It also triggers disruptive changes to production processes, as illustrated by the fact that 85 percent of entrepreneurs surveyed indicated that new technologies are critical or important enablers of their business processes (Figure 2).

To a large extent, entrepreneurs are digital entrepreneurs, given their appetite for new technologies (Figure 3). A large majority of respondents are either currently leveraging these technologies or planning to use them in the next two years, with mobile and social technologies being the most popular, followed by data analytics, cloud technologies and machine-to-machine connectivity. Cognitive science and nanotechnology are also either being used or under consideration by a significant number of entrepreneurs who see them as the potential next big wave.

Beyond the preceding, simple economics are also making it easier for entrepreneurs to embrace technology. The continually decreasing costs of access to new technologies provide flexible ways to scale businesses more easily and quickly, which creates a highly favorable environment for new start-ups (Figure 4). Entrepreneurs can now use digital technologies to quickly create and launch new products, services, customer

experiences and business models, as well as to redefine end-to-end business processes through enhanced transparency, efficiency and effectiveness. Indeed, about four in ten entrepreneurs in our study said cost efficiency, creation of new products or services, and quality were the most common benefits that technology-driven innovation delivers to their business (Figure 5).

The extent to which a company can embrace digital technologies varies by industry, but all industries are affected. In the short term, companies in industries such as high-tech services or products, broadcast media, and financial services have a much greater opportunity to use digital technologies to transform their business than those in agriculture or construction. Companies in such industries as consumer products, automotive, media/entertainment, and airline industries have significant opportunities to use digital technologies to transform their internal processes.

Figure 1: Innovation is a strategic priority for entrepreneurs (%)

Is innovation considered as a strategic priority of your company?

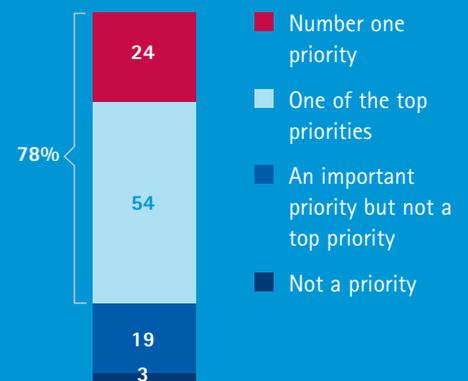


Figure 2: New technologies are important enablers of entrepreneurs' business processes (%)

What is the importance of new technologies to support and enable innovation in your business processes?

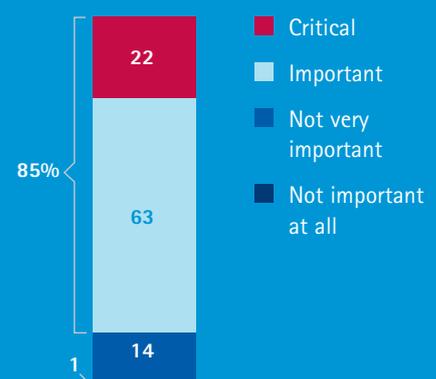


Figure 3: Entrepreneurs are de facto digital entrepreneurs (%)

Do you currently leverage any of the following new technologies?
Do you expect to leverage any in the next two years?

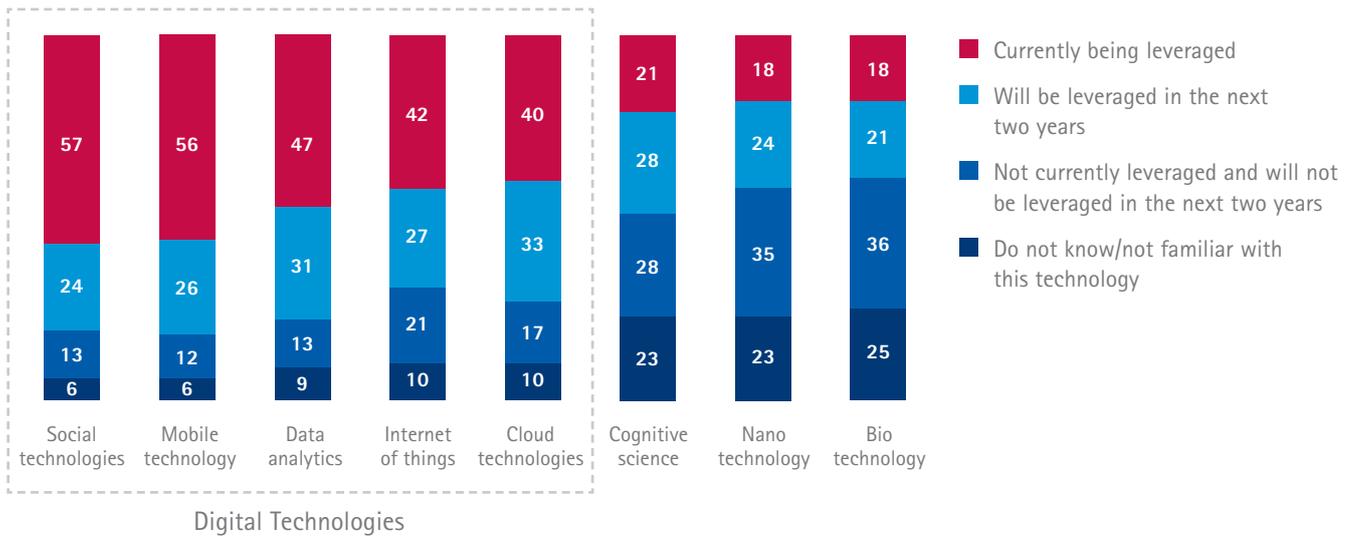
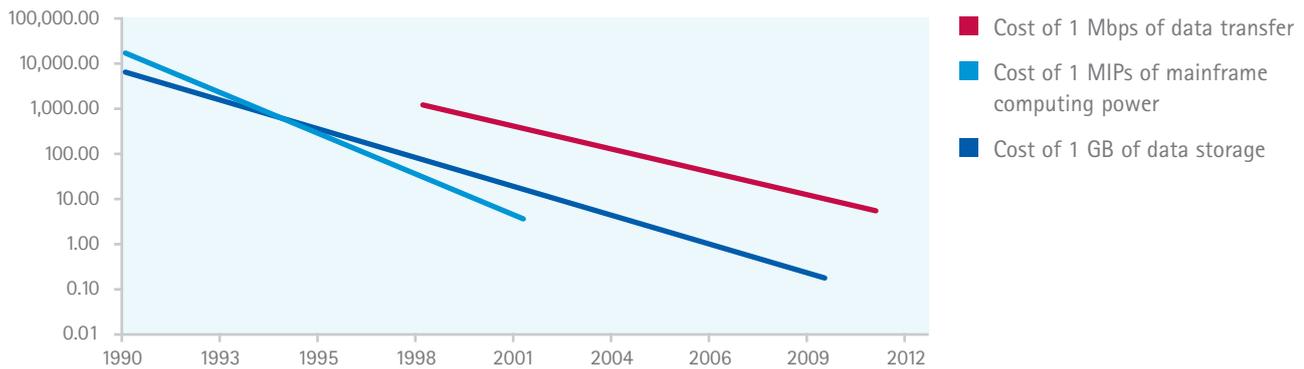


Figure 4: Technology costs are declining logarithmically (USD)



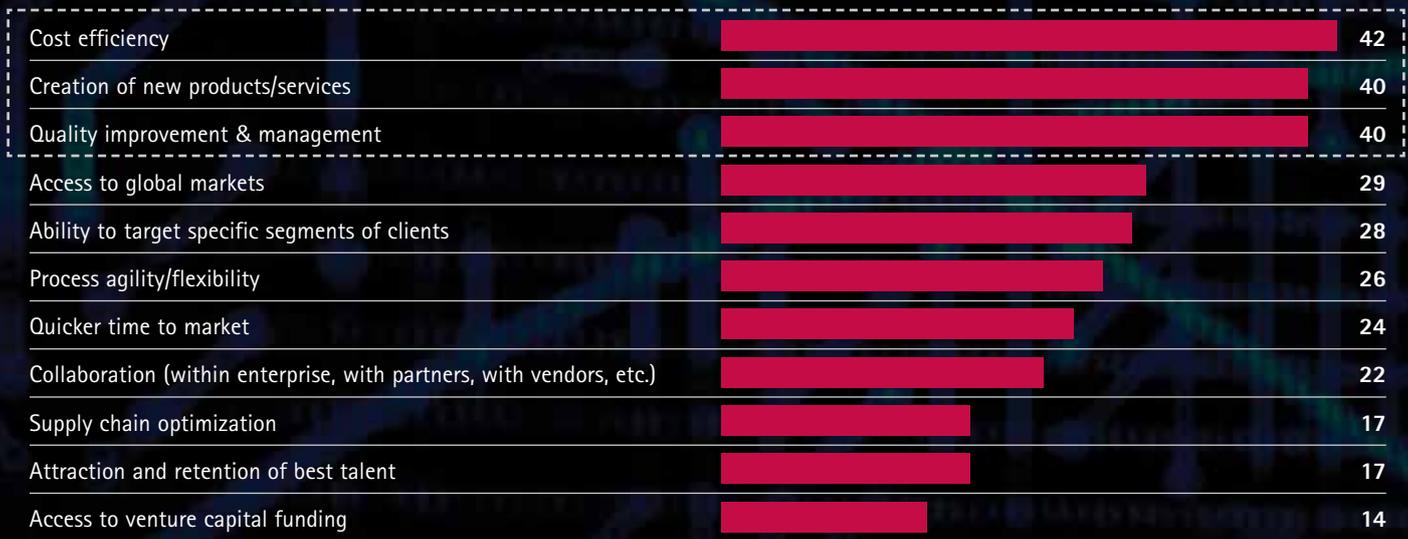
85%

believe technology is critical or important to support innovation in business processes.

78%

believe innovation is one of the top strategic priorities for entrepreneurs.

Figure 5: Technology innovation will benefit entrepreneurs both in revenue generation and productivity gains (%)
 What are the main benefits that technology-driven innovation delivers for your business?



--- Ranked within top 3

Cloud technologies are especially important to entrepreneurs' business, as several entrepreneurs in our study singled out the cloud as vital to their success. "Today, we face an unprecedented amount of innovation, and the nature of it has changed as well, noted Cris Conde, executive chairman at True Risk. "In the 1980s, it took a long time and a lot of money to get an idea off the ground. With technologies such as cloud computing, and SaaS models, technologies barriers have eroded, and entrepreneurs can launch their companies very quickly without the help of venture capital at the very beginning."

Echoing Conde's sentiments is Frank Collins, CEO of DangerDynamite! Multimedia in Canada. "The decrease of technology costs is huge, especially in my industry," said Collins. "I was able to start my business with next to no overhead costs and immediately compete with companies that have been around ten or 15 years. Without cloud technologies, I wouldn't have been able to start my company and move as quickly as I did in the market."

However, it is important to note that while the cloud is helpful in quickly and cost-effectively scaling a business, companies in many industries will still need access to substantial capital to cover the purchase of physical equipment and non-recurring costs, such as engineering costs related to the development and launch of a new product.

The sidebar on page 14 discusses the technology environment in more detail, exploring seven key technology trends that are impacting businesses and entrepreneurs everywhere.

Entrepreneurs' extensive use of technology is driven by many factors (Figure 6). The most prevalent of these factors are clients' demands (which drive the need to innovate in a particular area to attract and retain clients); availability of technology-skilled workers (which makes it possible to drive innovation); and an entrepreneurial culture created by other successful entrepreneurs (which boosts entrepreneurs' confidence and appetite for risk, as well as provides them with examples to emulate and spurs friendly competition to succeed).

Figure 6: Clients' demands, availability of skilled workers and entrepreneurial culture boost use of technology innovation (%)
 Do you consider each of the following to be a technology innovation enabler in your country?



Seven key technology trends that are impacting businesses

Entrepreneurs looking to capitalize on technology innovation should consider seven key technology trends¹ that Accenture expects to have a significant impact on technologies and businesses in the coming years:

1. Relationships at scale:

Businesses today have new ways to learn about consumers—all based on richer digital interactions. Whether through e-mail, social media, the Web, online chat, or location-based services, or on the many mobile devices consumers use today, building relationships at scale is about creating meaningful interactions with consumers wherever they are and whenever they need it. But it's not just about deeper insights. New technology means enterprises must shift from a focus on cost and channels, to a focus on using the channels and the data derived from them to build longer-term and productive relationships.

2. Design for analytics:

Organizations are no longer suffering from a lack of data; instead they're suffering from a lack of the right data. Winning companies are those that truly make data their strategic asset to drive business outcomes. This means starting with the outcome they desire, understanding the data required, and then using newer technology to get the right data—from inside and outside the enterprise. These companies will treat data less as a warehouse and more as a "data supply chain." They will manipulate it, add to it, update it, and analyze it in various ways, transforming the data into new products and business insights.

3. Data velocity:

This trend focuses on matching the speed of data to the speed of decisions. Today, thanks to unstructured data from social media, mobile devices, sensors and applications, the volume of data and data sources available to business leaders is greater than ever. But large amounts of data are not helpful unless companies can make sense of it. New technologies across the ecosystem are enabling companies to scan tens of billions of records a second or query one to two terabytes in less than a second. In the process, they are helping accelerate the whole data cycle from insight to meaningful action.

4. Seamless collaboration:

Advances in technology make it easier than ever for people to work together. But entrepreneurs don't necessarily need to become more social for collaboration to work. It's the work and the process that need to be social. When that happens, it will transform the nature of work. The new face of collaboration will involve embedding social-driven, collaborative tools into business processes. Organizations will be more productive, more efficient, and more innovative as a result.

5. Software-defined networking:

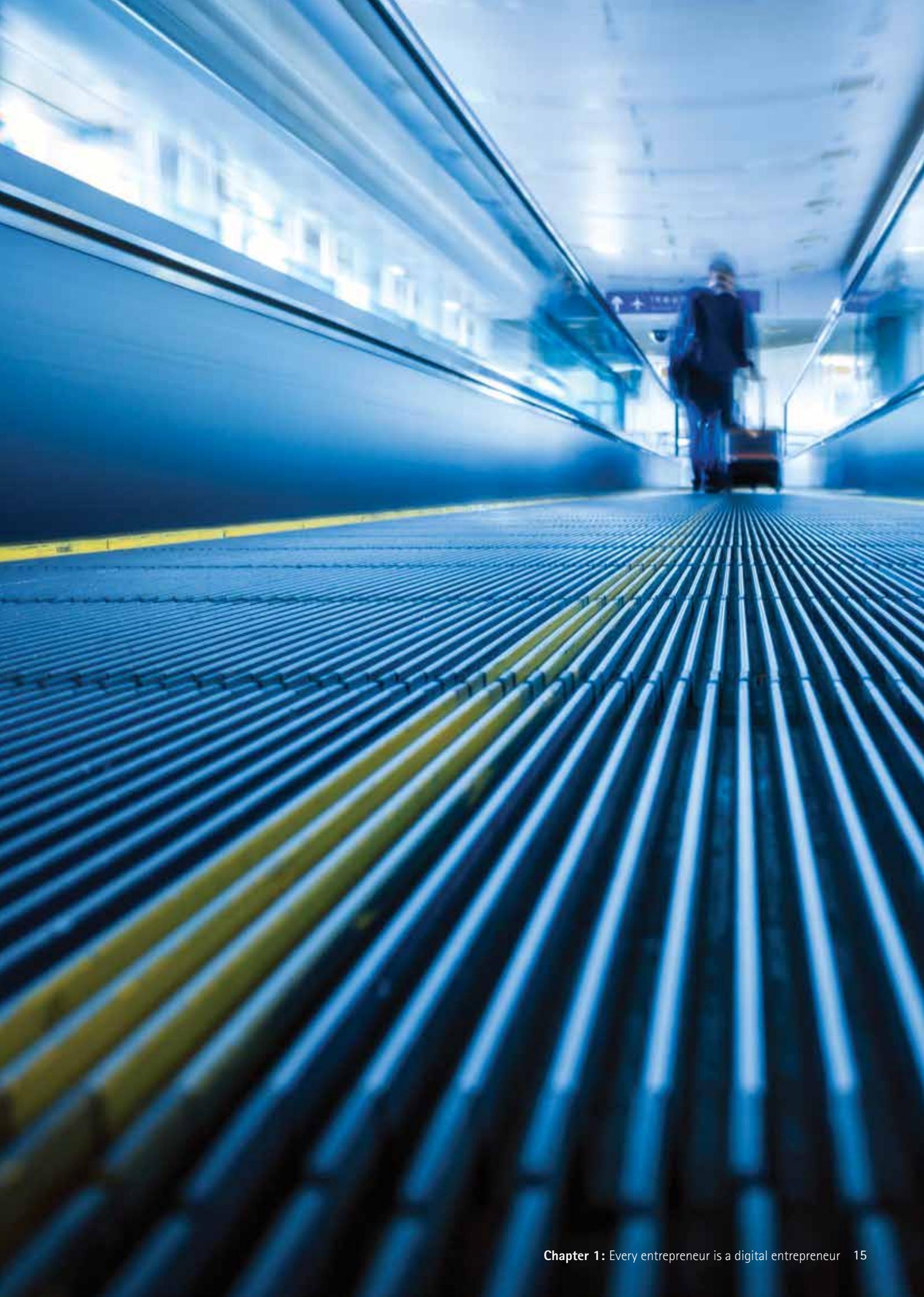
Software-defined networking, or SDN, involves managing the network through software instead of through hardware, and it is a giant leap forward in enterprise flexibility. SDN addresses a significant need: it makes it easier for businesses to manage change, integrate cloud services and get more return from their network investments. SDN allows companies to remove the complexity and reduce the cost of network reconfiguration, and turn the network into a truly dynamic and flexible asset.

6. Active defense:

Companies are recognizing that protecting their digital assets from threats must go further than prevention. Protection policies must acknowledge that attackers will get through, so companies need to stay one step ahead of them. Active defense technologies are emerging to help companies know, and hide from, their enemies. Sophisticated data and analytics-driven information security are shifting the security emphasis from monitoring to understanding to taking preemptive action. And approaches such as turning computer systems into a "moving target" are making it harder for hackers to find and exploit vulnerabilities.

7. Beyond the cloud:

Companies should no longer be asking why they must use the cloud or which cloud technologies they should use. Rather, the key question is how to use the cloud to deliver value to the enterprise. Whether it's infrastructure, platforms or applications in the cloud, there is much more organizations can do to use the cloud to enable their business. And as organizations embed the cloud into the fabric of their IT systems, they will need to manage a mix of on-premise and off-premise technology—legacy systems and traditional software mixed with cloud-based technology—as well as a mix of public and private clouds.



Chapter 2:

Entrepreneurs are the catalyst for job creation

Entrepreneurs are valuable to the business community for many reasons. One of the biggest is that they are often responsible for bringing new ideas to life that can create entirely new markets or revitalize existing ones—and, in the process, spur economic growth.

Across the G20 countries we studied, three-quarters of entrepreneurs believe they are a major source of innovation (Figure 7). This belief is common in all of those countries, and it is particularly true in Australia, the United States, Mexico, France, India, China and Italy. Furthermore, respondents expect innovation to continue in the near future: 84 percent said they are optimistic entrepreneurial innovation will rise in the next two years.

Even more compelling is the impact that entrepreneurs believe innovation will have on their business and the overall economy (Figure 8). Forty-one percent of entrepreneurs are confident their business will grow more than eight percent per year in the next two years, which is an extraordinary statistic in a business environment where global economic growth will reach less than four percent in 2013, according to the latest forecasts¹. Even more impressive,

81 percent of them are confident they will create new jobs in the next two years, which is striking given so many countries struggle to create jobs, especially for young people.

Figure 7: Three quarters of entrepreneurs consider they are a major source of technology innovation in their country (%)
Do you think entrepreneurs are currently the major source of technology innovation in your country?

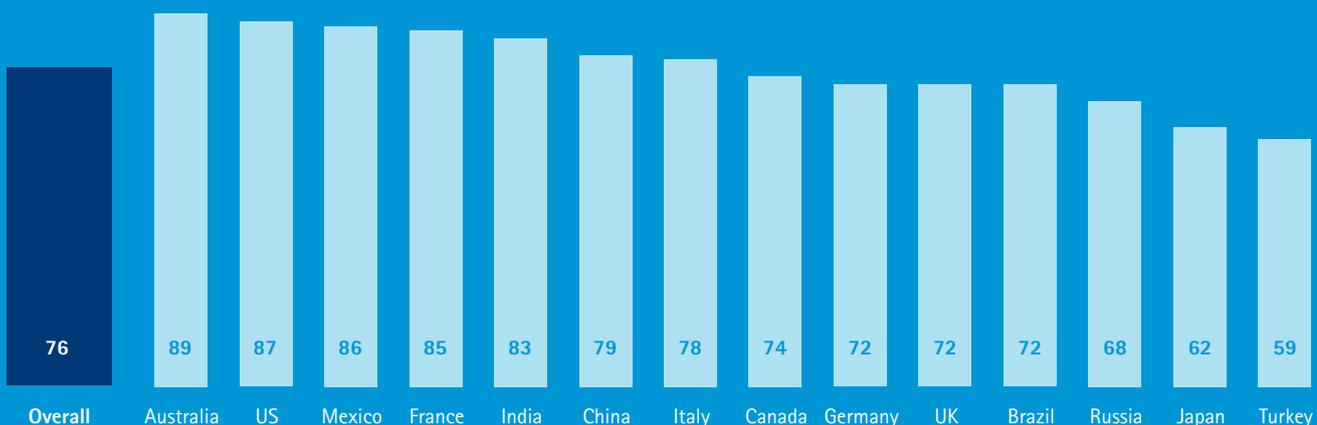
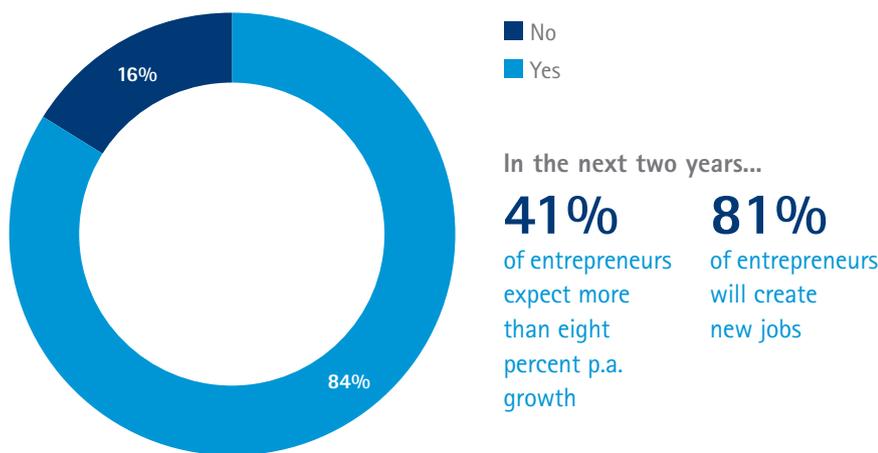


Figure 8: 81 percent of Entrepreneurs will create new jobs in the next two years

Would you agree with this statement:

"I am optimistic about the rise of entrepreneurial innovation in G20 countries in the next two years and its impact on job creation?"



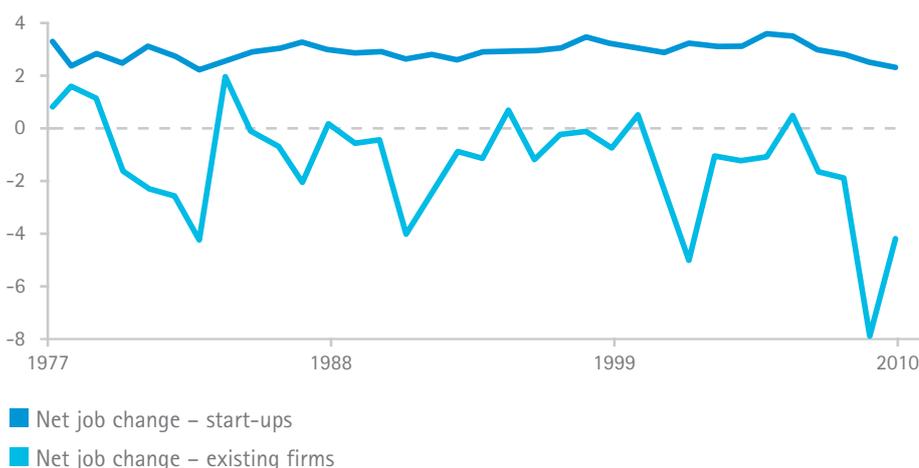
What is the impact of entrepreneurs on job creation?

The role of start-ups is vital for job creation, particularly in the United States, where start-ups create most new net jobs. According to a Kauffman Foundation study², firms in their first year of existence create an average of three million jobs annually, whereas net job gain in existing firms was negative for most years during 1976-2010. Without start-ups, no net job growth would have occurred in the United States in certain years during that period. Moreover, during the lower end of the business cycles, job creation at start-ups remains high, while net job losses at existing firms are highly sensitive to the business cycle (Figure 9).

In the European Union the situation is comparable to a large extent: according to the European Commission, "new companies, especially SMEs, represent the most important source of new employment"³, as they create more than four million new jobs in Europe each year. And according to data released by the European Commission, 85 percent of net employment growth during 2002-2010 is attributable to SMEs.

Figure 9: Entrepreneurs are the primary source of job creation in the US (Millions)

Start-up and job creation in US – 1977-2012



Note: Data calculation from 1976-2005 are taken from Kauffman Foundation estimates based on US Census Bureau, data from 2005-2010 are taken from US Census Bureau Database.

Source: Kauffman Foundation based on Business Dynamics Statistics, Tim Kane, US Census Bureau

The impact of job creation by entrepreneurs goes beyond those figures, as employment in the high-tech sector has an especially high multiplier effect.

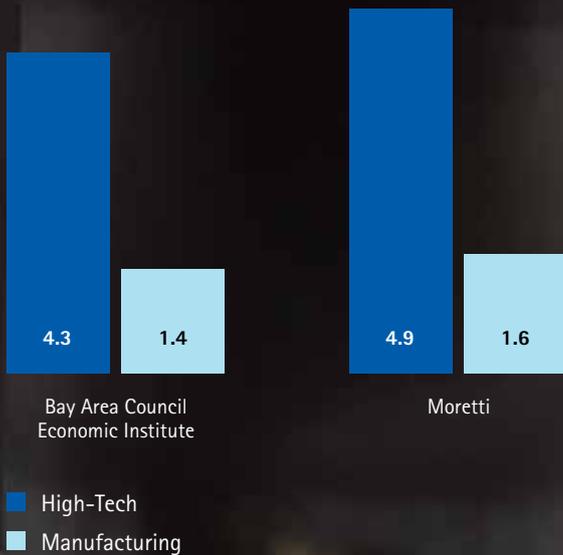
According to research by Enrico Moretti⁴ and a Bay Area Economic Council study⁵, every new high technology job in the United States creates 4.3 to 4.9 additional local jobs in the non-tradable sectors (Figure 10).

The multiplier effect is particularly large for high-tech jobs compared with other sectors of the economy such as

manufacturing. One additional job in manufacturing creates an estimated 1.4 to 1.6 additional jobs, about one-third as many as created by high-tech. High-tech sector large multipliers in the United States reflect the fact that high-tech companies tend to cluster around one another, which attracts additional high-tech firms and the local service providers that support their business activities. It illustrates the impact of the high-tech sector development, mainly through start-ups, on job creation at the local level.

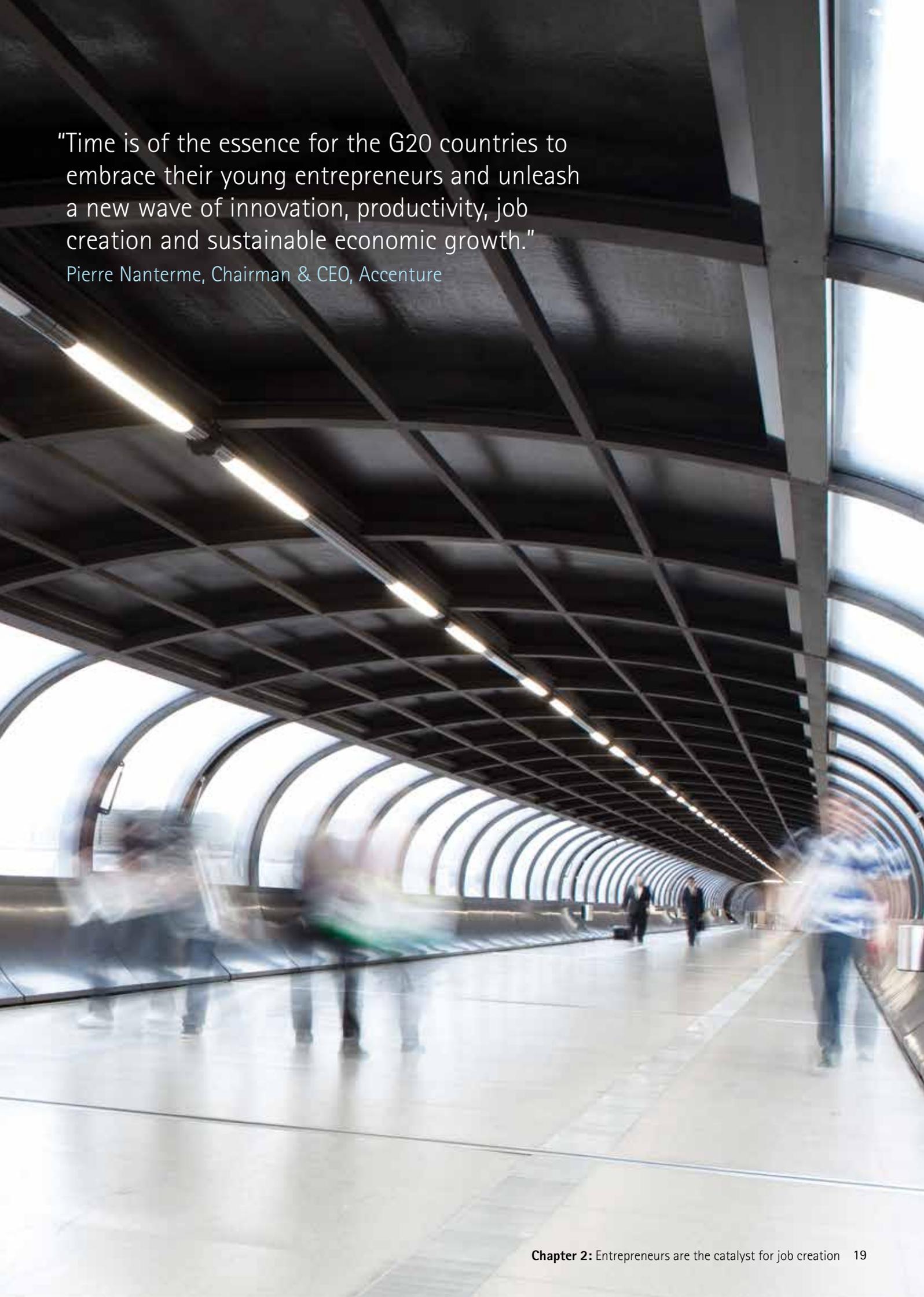
Figure 10: Each new high-tech job generates more than four additional jobs in the local economy

Local multiplier effect, US



Source: "Local Multipliers, American Economic Review, Enrico Moretti, May 2010, and "High tech employment and wages in the United States," Bay Area Economic Institute Report, December 2012.

"Time is of the essence for the G20 countries to embrace their young entrepreneurs and unleash a new wave of innovation, productivity, job creation and sustainable economic growth."
Pierre Nanterme, Chairman & CEO, Accenture



Chapter 3:

Emerging markets are increasingly challenging developed economies as a major source of entrepreneurial innovation

Historically, developed markets were the drivers of innovation. However, in the past decade, there has been a strong and sustained shift in the primary locus of innovation—from mature markets to emerging markets. That is especially true in the technology arena.

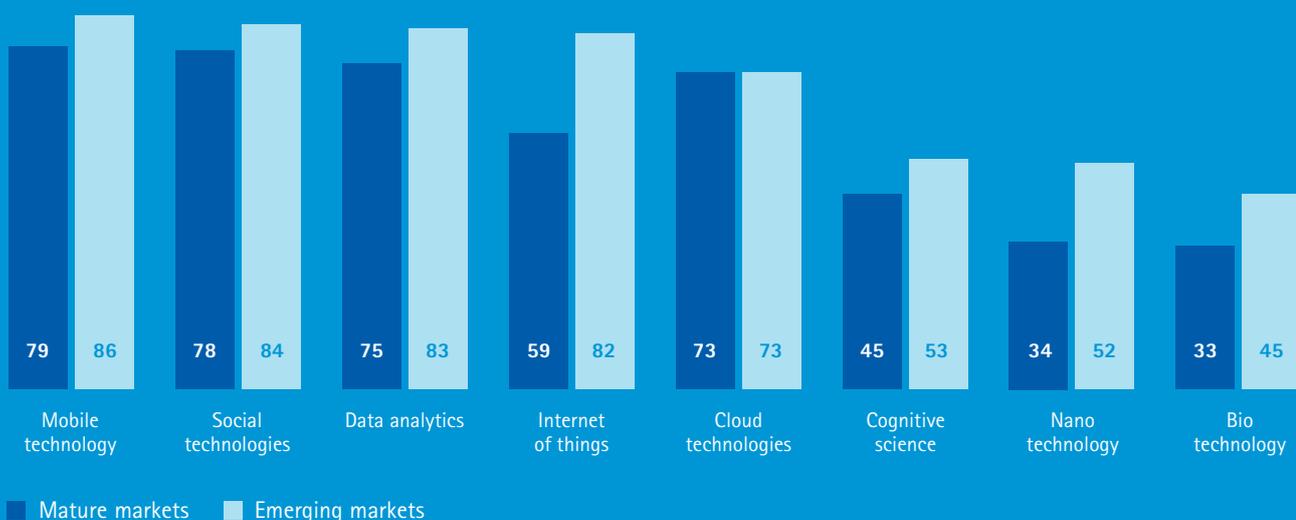
Entrepreneurs in emerging markets are embracing new digital technologies more extensively than their counterparts in mature markets (Figure 11). This disparity may be explained by several factors, including greater local growth opportunities available, increasing availability of technology-skilled workers, and fewer constraints on innovation (i.e. fewer regulations) in emerging markets.

For these reasons, emerging markets are seen by many as an important source of tomorrow's innovation as well. One-third of entrepreneurs overall, and 45 percent of those with headquarters in an emerging market, expect the next wave of innovation to come primarily from emerging markets (Figure 12).

A large pool of engineering talent is a key driver of technology innovation. China, India, and Brazil already produce more STEM (science, technology, engineering, and mathematics) talent than the United States, United Kingdom and Japan combined (86 percent versus 14 percent in 2012). The gap is increasing: in China, 41 percent of all new university degrees awarded are in science and engineering (Figure 14).⁶ Comparable figures are 13 percent in the United States, and 22 percent in the United Kingdom.⁷

Figure 11: Entrepreneurs in emerging markets are embracing new digital technologies extensively (%)

Do you currently leverage any of the following new technologies?
Do you expect to leverage any in the next two years?



Of course, debates persist about how many STEM graduates from universities in developing countries are actually qualified for employment with domestic firms, let alone global multinationals.⁹ Even if just one in five STEM graduates in China will be suitable for global employment (that is, approximately 720,000 would be candidates to work for multinationals), China is still producing more qualified STEM talent than the United States, which will award 460,000 science, technology, engineering, and mathematics degrees in 2015.¹⁰

For its part, India has led the way in “frugal innovation,” driven by the need to bring new offerings to a huge, but relatively poor, consumer market still beset with serious social issues. The results of such frugal innovation are now being exported from the home base in India to customers in mature markets around the world (see sidebar on page 22).

However, that’s not to say that mature markets are about to cede their innovation crown. Two-thirds of entrepreneurs overall think mature markets will still drive most of the world’s innovation in the next two years, with the preponderance of that innovation being centered in the United States and, to a lesser extent, Germany, the United Kingdom, and Japan.

Last but not least, old boundaries are getting blurred, as a growing number of entrepreneurs contribute to the “brain circulation”¹¹ and intend to innovate and operate in both mature markets and emerging markets, as they have increasing choices as to where they locate and do business. Young entrepreneurs are digital entrepreneurs who know that technology goes beyond geographic and sectorial boundaries. For them, all markets are de facto ‘emerging’ markets.

Figure 12: Nearly half of the entrepreneurs located in emerging markets are confident that they will challenge mature markets’ entrepreneurs on innovation (%)

In your industry, where do you expect the next wave of technology innovation to come from?

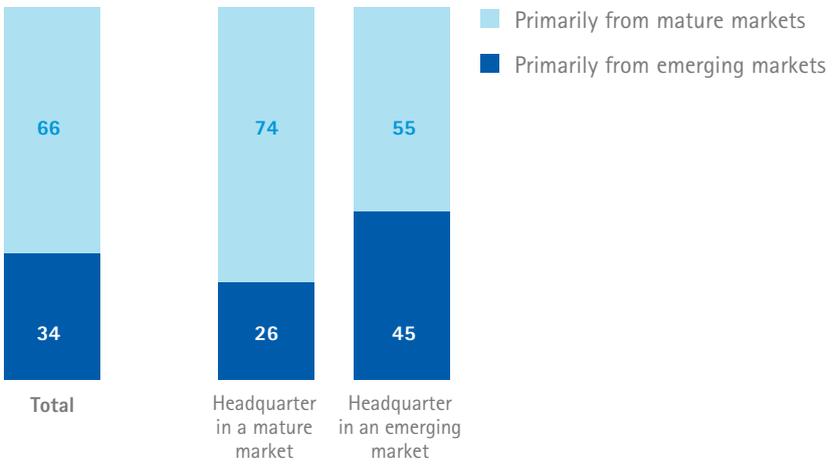
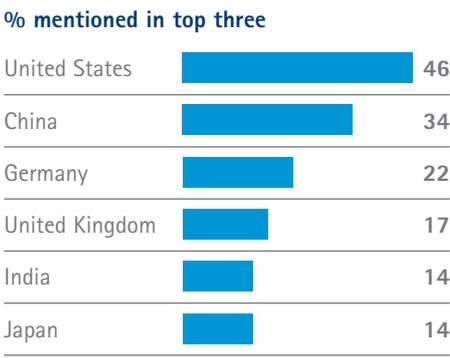


Figure 13: Technology innovation expectations shift to China, India

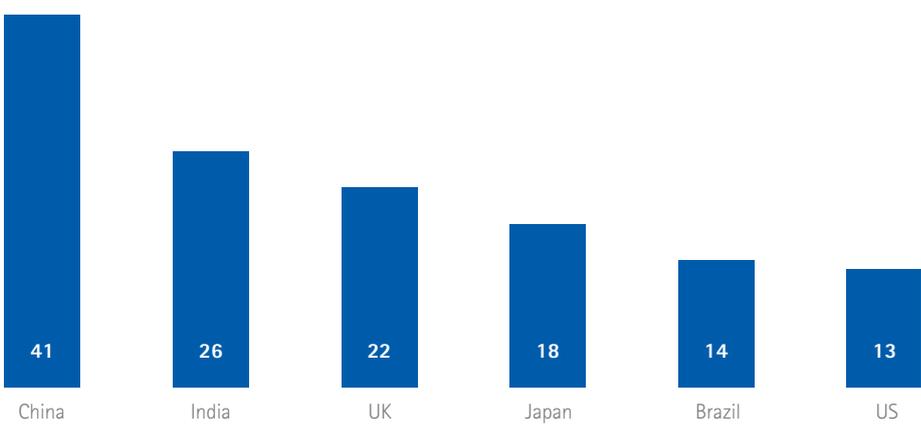
In your industry, what will be the three most innovative countries in two years’ time?



- China**
- In 2011 China poster more IPs than the US
 - Beijing Techno Park saw VC investments rise by 70% since 2012 (\$57bn)
 - R&D expenditure to rise to 2.5% of GDP by 2020
- India**
- Frugal Innovation is inherent to the innovation for India entrepreneurs in order to reach a mass market with low income and facing large social issues

Figure 14: China, India and Brazil produce more STEM graduates than the US, the UK and Japan combined

In China, more than 40 percent of all degrees awarded are STEM degrees. In the US, just one in eight is a STEM degree.



Source: Accenture Institute for High Performance analysis

Is frugal innovation really different?

Frugal innovation is all about innovation tailored to the needs of countries where a majority of consumers have low income per capita, many still require basic needs to be fulfilled and, in some cases, the population is widely dispersed across a massive geographic area, including in isolated rural areas.

India has been at the forefront of frugal innovation. It is home to 18 percent of the world's population, much of which is poor and rural: India's per capita income is just \$103 per month and 70 percent of its people live far outside the major cities.¹² Furthermore, much of the country still lacks the basic services many people take for granted, including access to safe and clean drinking water, effective sanitation, healthcare, and electricity.

In such an environment, where low cost and high value cannot be mutually exclusive, India's businesses and entrepreneurs have been challenged to think creatively about how a product is designed, built and brought to market so the item meets consumers' needs but does so at a price they can afford.

A combination of several structural changes has triggered the rise of frugal innovation in India and some other emerging markets in the past two decades: competition has been stimulated by governments that have become more market oriented; the rise of a large local middle class has created a new demand for goods and services; local large companies have become major players

with capacity to innovate much more; local universities have developed their programs to produce STEM graduates; and new local opportunities have slowed the brain drain these countries faced before. The economics of innovation have changed, paving the way to increased opportunities for entrepreneurs and SMEs that can develop frugal innovation adapted to their local markets.¹³

Two companies illustrate how entrepreneurs in India have embraced frugal innovation as a core tenet of their business model and, in the process, have created successful new products that are helping to meet consumers' needs.

Forushealth, based in Bangalore, describes its mission as "addressing the health care delivery crisis in the developing world through innovative and inclusive product design and service deployment."¹⁴ The company developed a diagnostic device that detects glaucoma and diabetic retinopathy—a critical capability given the fact that India has the greatest prevalence of blindness—much of which is preventable—among its population. Unlike existing devices, Forushealth's new device is highly portable, so it can be brought to people in rural areas who live far from the nearest medical facility, and it costs much less than traditional alternatives. Furthermore, the device can be operated by a paramedic instead of a doctor, the latter of which are in short supply, especially in remote areas. And because the data collected by the device is transmitted and stored in a central database via the cloud, a patient's condition can be evaluated by a doctor anywhere in the country.

The second company, Reindeer Technologies, has developed a "smart plug" to help consumers manage their energy consumption more effectively. The smart plug addresses a pressing need among consumers in India, where energy conservation is vital due to ongoing power shortages, and its innovative design enables consumers to remotely control their appliances and other devices as one would do in "smart home." Yet the plug is extremely affordable, costing much less than "smart appliances" while delivering the same functionality.

Importantly, frugal innovation is not confined to its "home" markets. A growing number of companies that have created products initially for emerging markets via frugal innovation have been able to export those products to customers in developed markets. One prominent example is the portable ultrasound scanner that General Electric created for rural clinics in India and China. The product was a major success in those countries, but also proved to be a perfect fit for ambulances in Western countries. Successes such as this are one of the reasons why emerging markets are increasingly being seen as challenging the historic innovation supremacy of mature markets.



"With technologies such as cloud computing, technology barriers have eroded and entrepreneurs can launch their companies very quickly without the help of venture capital at the very beginning."

Cris Conde, Executive Chairman, True Risk

Chapter 4:

Entrepreneurs are ready to shift attitude toward more collaboration with large companies

The relationship between entrepreneurs and large companies is often marked by caution, if not outright suspicion. Entrepreneurs often complain that dealing with large companies is too challenging because of the latter's complex and arduous processes, fear of losing competitive advantage, their focus primarily on large contracts and large volumes of sales and purchasing, and resistance to change and innovation.

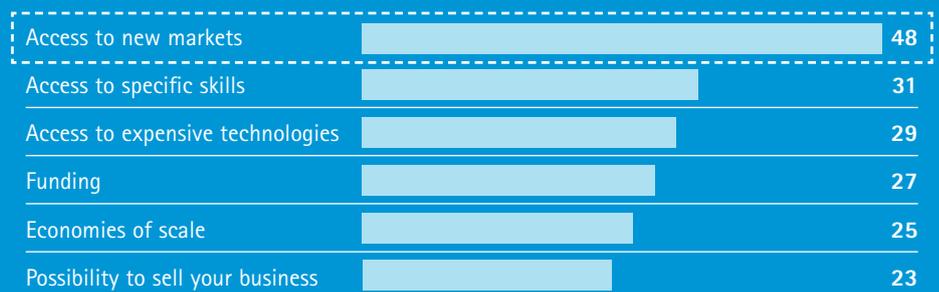
Some entrepreneurs are also hesitant to team with established companies because they harbor ambitions to actually render those companies irrelevant and effectively drive them out of business.¹⁵ For their part, large companies are often tempted to favor in-house innovation that is easier to control despite internal organizational challenges, and less costly to fund, or they simply buy start-ups that have products and services with proven marketplace value (although the collaborative "open innovation" approach has been gaining ground in the last decade).

Figure 15: A large majority of entrepreneurs either collaborate or intend to collaborate with large companies (%)

Do you currently collaborate or do you plan to collaborate in the next two years with large companies on technology innovation topics?



What are the key benefits of collaborating with large companies? (%)



The results of our study illustrates entrepreneurs' current attitude and intent. One-third of entrepreneurs we surveyed currently collaborate with large companies on technology innovation. Nearly half of respondents who said that they don't currently collaborate with large companies intend to do so within two years (Figure 15). This shift in mindset appears to be driven by increasing recognition among entrepreneurs of the benefits collaboration can provide, with access to new markets being the predominant benefit cited by respondents. Access to specific skills, access to expensive technologies, funding, economies of scale, and the possibility to eventually sell the entrepreneur's business to a collaboration partner also were seen as potential benefits of collaboration.

Attitudes appear to be changing among large companies as well. According to Accenture analysis of 100 leading companies,¹⁶ large enterprises increasingly are engaging in a wide variety of

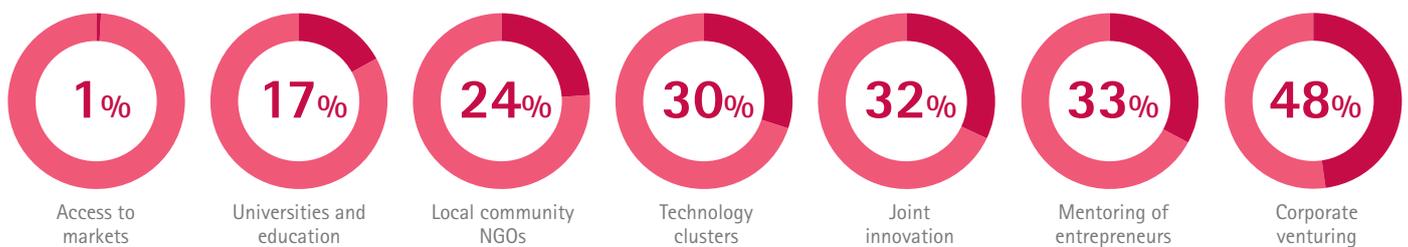
collaboration initiatives with entrepreneurs (Figure 16). The environment is especially ripe for collaboration in financial services (see the Fintech case study on page 27) and communication and high tech, two industries that are largely impacted by the digitalization of processes and services. Numerous examples show that mutually beneficial combinations can be developed across a large "wheel of collaboration" that includes corporate venturing, mentoring, joint innovation, access to markets, education and training, local community development, and technology clusters. There is numerous examples in mature markets but also in emerging markets of large corporations filling "institutional voids" and playing a key role in local ecosystems development. However, few companies studied have embraced more than a few such initiatives (Figure 17) and few claim to have found "the best" way to proceed.

Collaboration can materially benefit both parties in many ways—as Isansys Lifecare illustrates. Through its Technology Lab India, Accenture has teamed with Isansys to develop the iDOC physiological wireless monitoring system for health care purposes. The device monitors a patient's ECG readings and transmits them wirelessly through a mobile device to a doctor or hospital, where the real-time data can be analyzed to assess the risks to the patient.

The solution is at the same time frugal (it costs 1/100th of the price of current devices), global (it can be applied to both emerging and mature markets), and socially responsive (it helps address a critical aspect of the health care crisis in India). Through this collaboration, Isansys developed new markets, increased its products credibility, and gained access to coaching to fine tune and align its products with market needs.

Figure 16: Large companies are engaged in a wide variety of collaboration initiatives with entrepreneurs

Type of collaborative initiatives communicated by leading 100 companies*

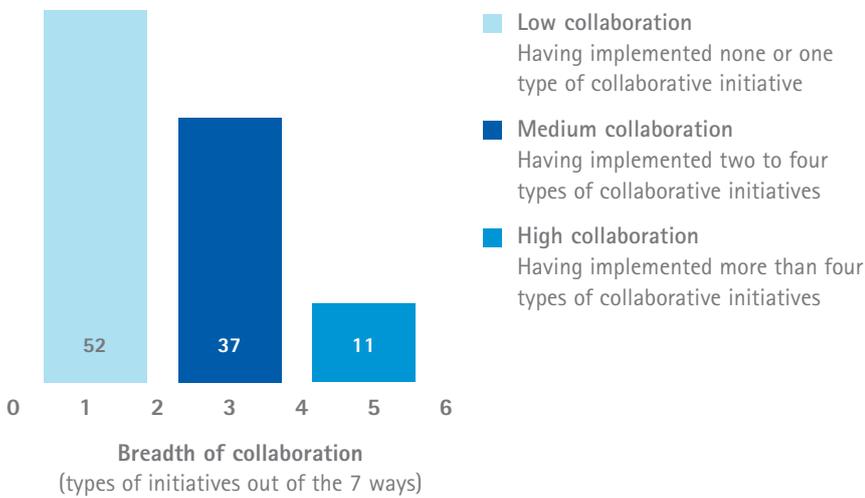


* Accenture Research analysis based on public information for the Top 100 companies



Figure 17: Only a few large companies have launched a broad set of coherent collaborative initiatives with entrepreneurs (0%)

Number of innovation initiatives with entrepreneurs by large companies*



* Accenture Research analysis based on public information for the Top 100 companies in mature and emerging markets – 50/50 split

“Larger organizations have a number of benefits in place, like marketing systems, back-end support systems, financial systems and so on. This means that the pace of innovation is often greatly accelerated through partnerships between small, faster-moving entrepreneurial businesses and larger organizations.”

Keith Errey, CEO and co-founder of Isansys

However as more large companies move toward open innovation or collaborative innovation¹⁷, it is crucial they manage the relationships with partners to enable successful and preferably long-lasting collaborations. Large companies must be able to identify the right partners as well as learn how to collaborate with different partners. Understanding and respecting partners' practices and constraints may be difficult to achieve, particularly when there are significant size or cultural and organizational discrepancies between partners.

Fast-moving consumer goods companies differ significantly in their level of openness, mainly reflecting their specific culture and maturity level. Finished-product manufacturers have often led the way in open innovation for the whole supply chain and specifically upstream partners, i.e. raw materials and packaging suppliers. For more on how Procter & Gamble has used open innovation to identify entrepreneurial and other partners, see the sidebar on page 27.

Our conversations with entrepreneurs around the world showed that setting a clear framework of agreement for collaboration with large companies is key to successful collaboration. While some flexibility is needed, especially in the long term, some rules are expected to be set, for example in terms of end client access, intellectual property (IP) sharing, or rewards. A leading US company in the communications industry, for instance, has implemented a specific IP agreement framework to ensure clarity in its relationships with entrepreneurs. The three principles are simple:

- “What is yours is yours”: Participants keep pre-existing IP but must be willing to license what they contribute to the project
- “What is mine is mine”: The large company keeps pre-existing IP but is willing to license what it contributes to the project
- “What is ours is ours”: IP created in the project is jointly owned by participants and can be used independently

Our conversations also revealed that something as simple as identifying the right contacts within large companies was also key to further development of collaboration. Large companies' organizational structures are often highly complex and difficult to grasp for entrepreneurs. Some entrepreneurs noted that mentoring provided by their large-company partners helped them overcome this barrier. Other approaches to facilitating access and relationships employed by large companies include appointing a Chief Alliance Officer with a specific focus on start-ups and SMEs and having entrepreneurs in residence to facilitate the communication between large groups and start-ups.

As collaboration increases, new models of cooperation will emerge to respond to the current challenges faced by entrepreneurs, especially to facilitate connections, clarify the frameworks of engagement, and protect IP. The implementation of formal innovation systems by large companies will be key to the success of these initiatives.

FinTech helps entrepreneurs get off the ground

In New York, the FinTech Innovation Lab is an annual program run by the Partnership Fund for New York City for early- and growth-stage companies that have developed cutting-edge technology products targeted at financial services customers. Winners will have the chance to refine and beta test their financial technology products in New York City in partnership with the lab's participating financial firms. Winners will also participate in a Leadership Program, where they will have the opportunity to meet senior business leaders, leading financial technology entrepreneurs, and investors in the New York City community. They will also participate in panel discussions on relevant topics as well as mentoring sessions with the lab's Entrepreneurs Network. At the end of the 12-week program, winners have the opportunity to present at a Demo Day in front of investors, senior executives of financial services firms, and the press.

Having already successfully run for two years in New York, the FinTech Innovation Lab was then launched in London in 2012. The London Lab is run in collaboration with a group of the United Kingdom's leading financial service institutions, angel investors and venture capital firms. It is supported by the Mayor of London, the City of London Corporation, and the Technology Strategy Board. Based on a similar model as used

in New York, the London program invites a handful of aspiring entrepreneurs with promising ideas to refine and test their financial technologies with program partners at the London lab. At the end of the 12-week program, winners have the opportunity to present their concepts to chief technology officers and senior technology executives from participating firms and potential investors.

The FinTech Innovation Lab was developed in New York and London to strengthen the local innovation ecosystem. Participants noted that the lab is not an incubator, but more of a "facilitator" or an "accelerator." As one entrepreneur puts it, "You are breaking bread here. It really changes the dynamic of how companies are seen and how the banks are seen." Entrepreneurs gain access to expertise and business relationships with top executives at potential clients, which helps them to move at speed to proof of concept and implementation. The peer-to-peer relationship is also highly appreciated as a way to test ideas in a safe environment, develop collaboration, or simply strengthen emotional confidence. For leading companies, participation in the program is a way to "filter through the noise and identify what's worth spending time and energy on and what's not." Participating large companies also find that their interactions with entrepreneurs during the program helps boost internal entrepreneurship within their own organizations.

Procter & Gamble locates favorably to identification of partners

P&G's open innovation center, Israel House of Innovation (IHI), was established in 2007 as part of the corporate Connect+DevelopSM Strategy. Its mission is to leverage Israeli innovation capabilities and culture partnering with Israeli academia, private entrepreneurs, venture capitalists and governmental bodies to accelerate the company's innovation worldwide. In September 2011, IHI signed an agreement with the Hebrew University of Jerusalem faculty—through Yissum Research Development Co., the university's technology transfer office. According to Sophie Blum, general manager of P&G Israel and IHI, "The agreement will enable P&G to enjoy the breadth of research done at the Hebrew University and collaborate on creating innovative products that improve the lives of people around the world."

P&G didn't choose Israel by accident: It is one of the world's leading innovation ecosystems.¹⁸ Blum explains that Israeli innovation capabilities stem from its culture (history, public policy, military service encouraging leadership and entrepreneurship, the mindset of young people, etc.), that is favorable to innovation. Israel attracts 30 times more venture capital investment per person than Europe. The success of ICQ (a pioneer in instant messaging later acquired by AOL) and ISCAR (an innovative metal tool manufacturer created in the 1950s in Israel and acquired by Berkshire Hathaway) are a few examples of Israeli innovation successes.

Chapter 5:

Technology clusters, inspired by Silicon Valley, can provide a vital ecosystem for entrepreneurial success

While many factors contribute to entrepreneurial success, one of the biggest—and hardest to measure—is the ability to consort with other entrepreneurs. Having other like-minded individuals nearby who can serve as both a sounding board for new ideas and a support group when times get tough is something that has been proven valuable to entrepreneurs time and again. Entrepreneurs in our study are no exceptions: one-third of them currently work in a local technology "cluster"¹⁹ and 57 percent would like to (and would, if there were one nearby or cost and relocation hassles weren't preventing them from moving to an area that has one) (Figure 18).

Entrepreneurs value local technology clusters because their benefits are compelling. Among other things, clusters help entrepreneurs strengthen their professional network, improve business productivity, collaborate with peers, reduce time to market, and gain access to funding—all of which, in turn, helps them increase sales and grow faster than ventures that are not located in a cluster. These benefits are seen by many as easier to grasp through physical proximity and local business environments play an enduring critical role in the competitiveness of start-ups. Nevertheless, successful ecosystems are often open to international cooperation, leveraging technology to support virtual cooperation and distributed operations.

Figure 18: A large majority of entrepreneurs has a positive view of technology clusters (%)

Do you currently work in a local technology cluster (eg. Silicon Valley, etc.)?



- Yes
- No, but would like to:
 - One-third don't have a technology clusters close to them
 - Costs and hassles of relocation are seen as barriers by another 60%
- No, and are not interested

Which major benefits do you get from working in a technology cluster (eg. Silicon Valley, etc.)? (%)



One of the best examples of such a cluster is Silicon Valley, the birthplace of today's modern tech industry. What is it that has made Silicon Valley so effective in fostering countless high-tech success stories, to the point that it serves as the paragon for entrepreneurial clusters? Jeanne Harris and Chris DiGiorgio of the Accenture Institute for High Performance sought to provide some answers to that question by studying the region's distinctive ecosystem and workforce to understand their characteristics and what they value²⁰. Their research uncovered the contradictions at work in Silicon Valley.

It's just a geographical area of a few hundred square miles, but Silicon Valley's achievements are outsize. For example, it contains the highest concentration of high-tech workers, the largest high-tech manufacturing activity, and the most millionaires and billionaires on a per-capita basis of any major metropolitan area in the United States. But all this raises a crucial question: what makes Silicon Valley such an exceptional hothouse for innovative new businesses?

One key to the region's success is the tie between education and business. But it's not just the physical proximity of a typical world-class university that has made Silicon Valley what it is. Untypically, Stanford University has long espoused a meritocratic culture, a strong entrepreneurial spirit, active engagement

with local companies and industry, and an affinity toward technological innovation, all of which have led to tremendous startup activity. A recent study²¹ found that the alumni and faculty of Stanford University alone have created nearly 40,000 companies and 5.4 million jobs since the 1930s, generating annual revenues of \$2.7 trillion. If all that business activity were amassed into an independent nation, that country would rank as the world's 10th largest economy.

On a related note, the region's highly educated, diverse workforce has also played a major role. In Silicon Valley and the adjacent Bay Area, 46 percent of the general population has at least an undergraduate university degree (compared to 28 percent for the United States as a whole), and the region boasts twice the number of Ph.D.'s on a per-capita basis than elsewhere. Moreover, the area has been a powerful magnet for people from around the world. Indeed, a large percentage of its people speak English as their second language at home. That diversity has led to an influx of novel ideas and fertile cross-pollination, all pointing to higher innovation.

But looking beyond those talented, diverse individuals, what role does the area's overall workplace culture play, and what are the different components of that culture? Moreover, what fosters those different cultural characteristics?

"Entrepreneurs must learn to build their own virtual networks as part of the business ecosystem to access new innovations, technologies and resources faster and on a global scale."

Bruno Berthon,
Global Managing Director—
Strategy & Sustainability,
Accenture

76%

of entrepreneurs believe they are the major source of technology innovation in their countries.

The culture in Silicon Valley consists of five seemingly contradictory characteristics, and it's the complex mix of those characteristics that has enabled the region to flourish. It's also one of the main reasons why Silicon Valley has been so very difficult to replicate:

- **Laid back yet driven for speed:** congenial and laid-back, people will work intensely for long hours for their companies; one of the key resulting benefits is high productivity and relentless innovation (including quickly "pivoting" to fix things and move on when necessary).
- **Committed yet independent:** people are deeply committed to their work and their colleagues, yet they are essentially "free agents" with no allegiance to one company; the outcome is a mobile workforce that leads to a greater exchange of ideas and information across company borders.
- **Cutthroat yet cooperative:** companies and individuals can be ruthless competitors, yet they also cooperate towards larger goals. This way, information is rapidly shared across organizational borders, leading to greater cross-fertilization and innovation.

41%

expect to grow their businesses by more than eight percent annually over the next two years.

- **Pragmatic yet optimistic:** people realize that failures are inevitable but they can also be celebrated as an opportunity for learning and growth. As a result, they are also resilient and optimistic that any problem can eventually be solved.
- **Extrinsically motivated yet intrinsically fulfilled:** people are often motivated by money, yet they say inner fulfillment comes from being recognized for their creativity and innovation.

The research further shows that the characteristics of the talent in a city or region can go a long way toward creating an environment that is conducive to entrepreneurial activity. And there are many other important factors that governments interested in spurring entrepreneurial activity via a cluster should consider:

- Provide the table stakes, things that make an area a great place to live, work, innovate and succeed, such as a desirable environment, low taxes, modern infrastructure, economic stability, and honest and efficient government.
- Locate next to an attractive, young, cosmopolitan city.

81%

expect to create new jobs in that period.

- Be a global magnet for technology and entrepreneurial talent.
- Produce ample, diverse, top quality talent.
- Create a dense ecosystem of universities, basic research, large companies, venture funding, angels, incubators, business experts, and tech talents. Critical mass is required.
- Encourage the tech/entrepreneur culture, mindset, values.
- Enable the non stop, open and free exchange of ideas.
- Provide incentives to take responsible professional risks.

“New technologies are reshaping value chains across the globe and fundamentally transforming the context in which entrepreneurs develop their activities.”

Jean-Louis Grégoire, Thought Leaders Committee Chair, G20 YEA

Top 10 Tips to Foster Entrepreneurship and Innovation Locally

by Dr Tom Kosnik, Stanford Technology Ventures Program

Mentor and encourage diversity

- 1.** Encourage foreign entrepreneurs to come, study at your universities, then start companies.
- 2.** Give women entrepreneurs founding high growth ventures equal access to funding—whether bank loans, venture capital, or private equity.
- 3.** Believe in the young. Look for innovations in children, teens and university students, and teach them to implement by providing mentors.
- 4.** Focus on cross-generational, cross-gender, and cross-cultural collaboration to create new innovations and then to commercialize them.

Educate

- 5.** Encourage children and teens to study mathematics, science and subjects that will allow them to go into science and engineering at university level.
- 6.** In universities, encourage cross-disciplinary study, research and commercialization by co-locating faculty and grad students in engineering, computer science, medicine, biology and design in one location.
- 7.** Promote university-age entrepreneurship so students start companies to create jobs instead of graduating hoping for a job.
- 8.** Equip your science and engineering programs to also teach entrepreneurship to students in those majors so they understand how to commercialize scientific inventions.

Promote commercialization and innovation

- 9.** Develop licensee-friendly technology licensing programs at universities so industry can license and commercialize inventions from professors and grad students.
- 10.** Encourage global technology and innovation leaders to promote innovation and entrepreneurship through national and international competitions to accomplish objectives that are technically challenging and have commercial promise.

While Silicon Valley has dominated the startup scene for decades, promising ecosystems exist or are emerging in such areas as Tel Aviv, Boston, New York, Bangalore, London, Berlin, and Toronto and governments in such areas as Beijing, Moscow and Paris are developing plans to enhance local innovative entrepreneurship ecosystems at scale and at speed²². These initiatives are getting their inspiration from the Silicon Valley model²³, but are adapting the model to fit their own local characteristics, strengths, and needs.

Consider London's experience. Scarred by the fallout of the dot-com collapse several years ago, many viewed entrepreneurship in the United Kingdom as a risky, unattractive alternative to more "stable" career paths. However, this attitude is changing rapidly. London is the first European city ranked in the Startup Ecosystem report and seventh worldwide. Even if some regret a lack of a large funding ecosystem, especially in early stages, London benefits from a renewed buzz on the entrepreneurial scene—specifically due to a strong sense of community and collaboration, a creative technology spirit, arts and culture, cultural diversity (40 percent of the residents have international roots), a strong talent pool thanks to its 40 universities and a supportive government providing tax breaks to support entrepreneurship.

Toronto and the state of Ontario is also a cluster on the rise. The rise of RIM served as an anchor to this ecosystem, backed up by a voluntarist government policy, which invested \$3.6 billion in the past ten years in programs to boost research and development and innovation. Companies who have settled in this area also benefit from a generous research tax break, which allows them to save up to 43 percent of research spending. This contributed to an unprecedented growth of venture capital, which doubled between 2008 and 2012, at a time when the global economy was slowing down.

In Bangalore, the government has been instrumental in ensuring the capital of Karnataka plays a central role in India's IT landscape. Initiatives the Karnataka government have taken include launching formal policies designed to spur the growth of the IT and ICT sectors; holding a Global Investors Meet each year to encourage investment in Karnataka; creating a government-backed VC fund to invest in IT, biotech and other knowledge-based industries; and spearheading a task force designed to foster development of the education sector to address the growing demand for technology skills. These initiatives appear to have had the desired effect as the number of software companies in Karnataka has climbed from 782 in 2000 to 2,180 in 2011; Bangalore is the fourth-largest technology hub globally and the largest in Asia; and Karnataka's IT sector attracted 44.6 percent of all investments in the country's IT industry, with investment in small and medium-sized businesses growing by double digits. The state is now home to 35 percent of the country's IT employees²⁴. To help sustain and build on this momentum, the Karnataka government has created a framework for what it is calling an Information Technology Investment Region, designed to promote investments in technology-enabled services and manufacturing units.

Russia's experience in creating a formal technology cluster near Moscow is another interesting case to watch (see page 33). The government is striving to create from scratch a massive new complex outside the city to stimulate entrepreneurial activity across five industry areas and, in the process, help to drive the Russian economy well into the future.

These clusters, inspired by Silicon Valley, and adapted to different business and cultural environments, can provide a vital ecosystem for entrepreneurial development. Although Silicon Valley is unique, governments may stimulate the development of local clusters that leverage and expand the specific strengths of local economies and their "smart specialization". Specific measures which are beneficial to the development of clusters include providing sustained and increased support for basic research, reducing restrictions that inhibit the ability of universities to collaborate with industry to create value, "de-risking" the future for entrepreneurs by promoting stability and consistency in regulations, increasing permeability across companies, providing high-risk capital for start-ups, and embracing diversity in all aspects.

Thanks to the increasing adoption of new technologies, innovative entrepreneurs can connect with their stakeholders across geographic boundaries to support the development of "virtual entrepreneurial ecosystems"—which provide all the benefits of local ecosystems in a virtual environment.

57%

of entrepreneurs want to work in a local technology cluster but distance and relocation costs are major barriers.

Skolkovo, a Russian ambition

To boost Russia's ability to develop compelling new technologies, the country's government has launched a highly ambitious initiative: the Skolkovo Innovation Center, a complex to be built on the outskirts of Moscow that would bring together start-ups, multinational corporations, venture capitalists, and university and other key players to pursue innovation across five clusters that reflect the modernization priorities of the Russian government: energy, IT, nuclear, biomedical, and space. Within each of these clusters, the government has identified a series of high-priority investments on which participating companies will focus.

Funded initially from the Russian federal government, Skolkovo will include a "technopark" that is designed to provide the infrastructure and environment to foster innovation. The technopark provides access to offices and state-of-the-art research infrastructure in the form of Common Use Centres, helps start-ups recruit scientific, engineering and other skilled human resources, and provides assistance in the preparation of business plans and other materials to attract investors and enter markets.

Startups signing on for Skolkovo receive a variety of benefits, including legal status for 10 years, tax and customs privileges, access to Skolkovo's research infrastructure and commercialization services, grant applications, and access to regular cluster activities.

Skolkovo also includes two educational institutions, Skolkovo Tech and OpUS. The former is a private, not-for-profit graduate research university, governed by an independent and international board of trustees and established in cooperation with the Massachusetts Institute of Technology. Russian officials expect that by 2020 Skolkovo Tech will join the ranks of internationally recognized research universities.

While Skolkovo is still in its early stages, to date more than 200 companies have each signed up for the energy, IT and biomedical clusters, while 88 companies have joined the space cluster and 67 have become part of the nuclear cluster.

Chapter 6:

Young Entrepreneurs Demand Active Support from Government to Sustain Their Leadership in Technology Innovation

Most entrepreneurs interviewed in this research mentioned governments can play a critical role in encouraging entrepreneurial innovation and in providing the environment that encourages entrepreneurs to pursue their ambition.

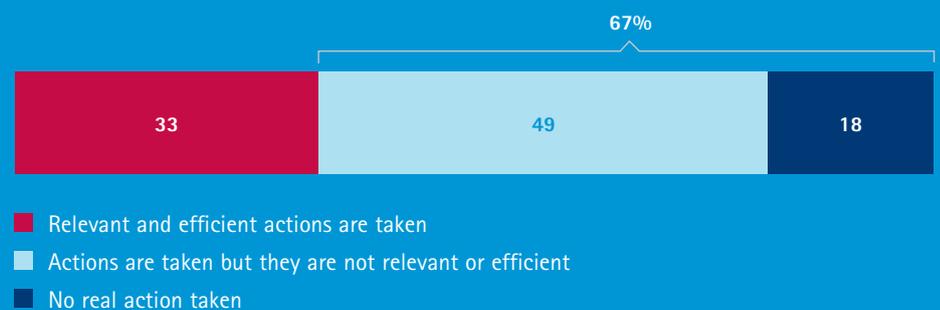
According to 67 percent of entrepreneurs in our study, governments are falling short in that regard: Eighteen percent said the government in their country has taken no real actions to support technology innovation by entrepreneurs, and an additional 49 percent indicated their government has taken actions, but those actions have not been relevant or efficient (Figure 19).

What do entrepreneurs expect?

Those in our study cited a wide range of actions, with the most popular being tax incentives, followed by the development of technology education and training to boost the availability of skilled tech workers and increased government purchasing of products and services from small innovative businesses (Figure 20). Better access to financing—banks and venture capital for instance—is also desired, as is a reduction in bureaucracy and regulations that constrain entrepreneurial businesses.

Figure 19: Two thirds of entrepreneurs consider that Governments' support for innovation driven by entrepreneurs is not sufficient (%)

What do you think of the actions taken by the government in your country to support technology innovation created by entrepreneurs?

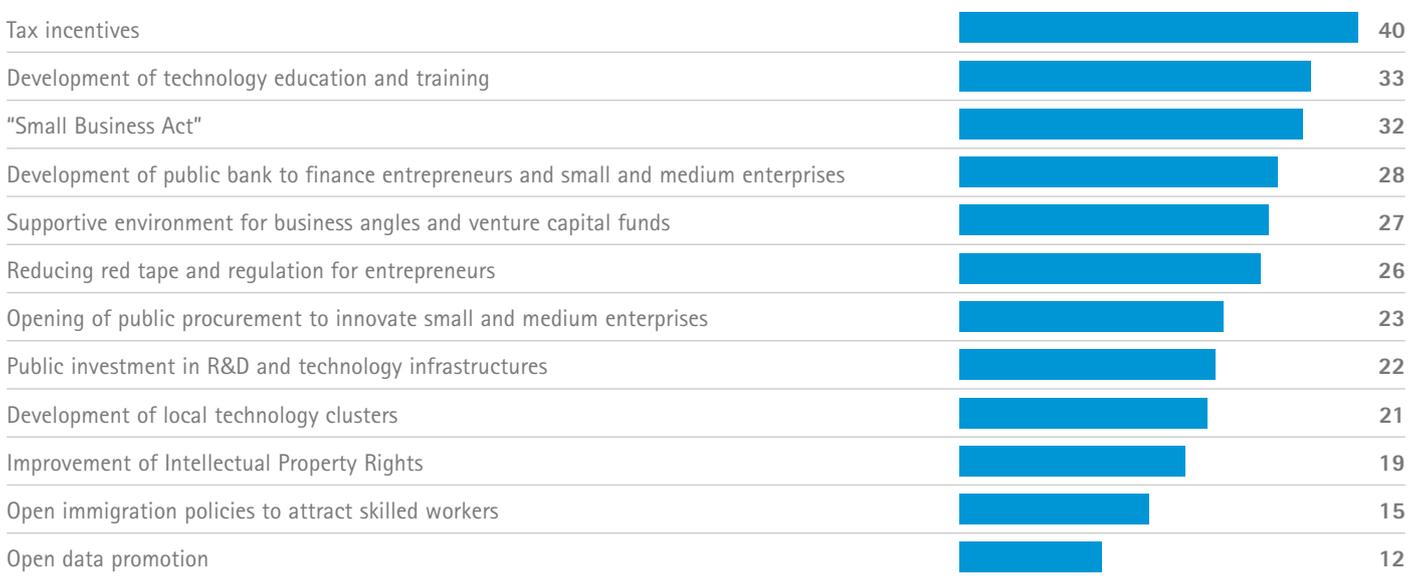


"Governments should do more to ensure that the innovation, power and ambition of young entrepreneurs can help address the problem of structural youth unemployment, and fuel economic growth."

Victor Sedov, President, Center for Entrepreneurship

Figure 20: Entrepreneurs expect a diverse series of actions from Governments to support them (%)

With regard to supporting your business in its technology innovation agenda, what priority actions do you expect from the government of the country in which your company is based?



67%

of entrepreneurs are not satisfied with current support initiatives from their government.

86%

of STEM graduates came from China, Brazil and India in 2011.

40%

Tax incentives is the highest rated government action needed to support technology innovation.

More specifically on technology innovation, entrepreneurs identified several actions G20 governments could implement rapidly:

- Support the development of digital infrastructures to help entrepreneurs and their ecosystems (e.g., clients and suppliers) drive the digital transformation of industries—especially through social, collaborative technologies that play a critical role in fostering the development of online relationships with all stakeholders and seamless collaboration of entrepreneurs with their suppliers, peers and clients.
- Facilitate international mobility of data while ensuring adequate protection of personal data, as it is one of the key success factors of entrepreneurs who

develop international businesses, and a critical element for entrepreneurs to get access to the right data.

- Promote cloud development based on harmonized standards to ensure that entrepreneurs can use the inherent flexibility and responsiveness the cloud enables to create additional value.
- Develop common government open data standards to enable entrepreneurs to create, test and develop new business models, powered by open data, which will provide new services to citizens.
- Make it easier to attract entrepreneurs to set up and conduct businesses in different countries—especially serial entrepreneurs who frequently develop their businesses across different countries and different regions and, thus, play an essential role in stimulating different ecosystems.

- Encourage development of “crowdfunding” at the international level; crowdfunding can play an expanding role to finance startups, especially those that are looking to quickly test their prototypes.

At the country level, entrepreneurs expressed a wide variety of requests, which depend on the local institutional context and business environment. Twelve policy levers were mentioned, which will vary according to the local context and ambitions (Figure 21) and whose impact will span different time horizons.

Figure 21: A dozen policy levers can be used by Governments to support technology innovation driven by entrepreneurs

| | Categories of policies | Policy levers | Example |
|--------------------------|------------------------|------------------------------------|---|
| Public policies strategy | Stimulate demand | Public spend | Digital infrastructures |
| | | Public Procurement and R&D | SBA/SBIR |
| | | Delivery of Public Services | Open data policies |
| | | Access to International Markets | Export schemes |
| | Support entrepreneurs | Taxation policies | Tax credits |
| | | Finance policies | VC, Banking, Capital Markets, crowd funding |
| | | Education/training | STEM graduates |
| | | Thriving eco-system | Mentoring, Incubators, Clusters |
| | Business environment | Simple and adapted admin processes | Integrated online portal |
| | | Tolerance for failure | Increased tolerance for failure (bankruptcy) |
| | | Data transfers and data privacy | Harmonized Cloud standards/certification |
| | | International business | Process to set up business in several countries |

The first series of actions is related to the role that governments can play in stimulating demand for digital goods and services:

- Development of digital infrastructures, which provide the backbone of the digital transformation of the economy and are an essential ingredient to the success of innovative entrepreneurs
- Adaptation of public procurement processes to innovative startups and "digitize" public procurement at speed, which will benefit both public authorities and their suppliers
- Involvement of startups in public R&D programs and processes tailored to SMEs such as SBIR
- Acceleration of the transition to "Digital Government" through specific measures to "digitalize" public services, such as consistent "open data" policies that will stimulate entrepreneurs' development of new services to citizens
- Support for entrepreneurs looking to conquer international markets, through adapted policies and encouragement to large companies to embed startups in their international development and help them benefit from their networks and access to markets.

The second series of actions is related to the direct support to innovative entrepreneurs through several specific policies:

- Efficient tax incentives tailored to entrepreneurs who invest in innovation and develop new products and services that create value.
- Financing adapted to the different stages of development of startups, and the different financing environment of the G20 countries, including bank financing, venture capital, and crowdfunding.
- Placing priority on the development of science, technology, engineering and mathematics (STEM) education and mechanisms to balance supply and demand of talents.
- Providing adequate support to encourage the development of a thriving ecosystem, including local clusters, incubators and virtual international ecosystems. Specific measures related to clusters include providing sustained and increased support for basic research, reducing restrictions that inhibit the ability of universities to collaborate with industry to create value, "de-risking" the future for entrepreneurs by promoting stability and consistency in regulations, increasing permeability across companies, being a source of high-risk capital for startups, and embracing diversity in all aspects.
- Encouraging entrepreneurs in the development of mentoring for other entrepreneurs.
- Stimulation of the various ways that large companies and entrepreneurs can cooperate on innovation efficiently.

The third series of actions is related to the development of a business friendly environment for technology innovation by entrepreneurs through a series of actions such as:

- A personalized simple online portal to deal with all administrative processes, with a consistent effort to make it easy to start and run a new business and avoid "red tape."
- A high tolerance for failure—for example, adapting bankruptcy rules to the new unstable business environment.
- Adaptation of data privacy and data transfers regulations to the new business environment in which access to the right data is a critical element for entrepreneurs to develop relevant data analytics processes.
- Promotion of cloud development standards to ensure entrepreneurs can "put the cloud to work" and create additional value through the flexibility and responsiveness the cloud enables.
- Ease of attracting entrepreneurs to set up and conduct businesses across different countries and different regions.

Large companies and entrepreneurs interviewed for this research also expressed their views on the roles they can play to ensure a continuous development of innovation.

Key expectations from large companies included the following priorities:

- Openness to innovation developed by startups, by putting formal systems in place to manage innovation, identifying high-potential collaboration, and facilitating proactive contacts with startups, with a focus on innovations that are relevant to customers and innovations that can be tested and scaled quickly or put aside.
- Adaptation of their own structure and processes to facilitate work with startups, such as creating clear agreement framework for commercial or R&D partnerships and having a Chief Alliance Officer in charge of facilitating the relationship with entrepreneurs.
- Contribution to the local ecosystem, especially by playing a central role in technology clusters, hence contributing to the development of a stream of local industry partners.
- Being an active player in mentoring programs to provide startups with the opportunity to test concepts and build networks and put "skin in the game" in working with startups.

- Development of an entrepreneur mindset within the company by constantly providing opportunities for employees to take risks and be entrepreneurial in their work. Corporate citizenship policies is one of the best ways to promote such an entrepreneurial mindset. As the importance of contributing to the local ecosystem and to the local society is rising in most countries, firms can encourage their employees to pursue entrepreneurial activities in their local ecosystem, as firms will also benefit eventually of operating in thriving ecosystem.

Key expectations from entrepreneurs included the following priorities:

- Investigations of possibilities offered by new technologies to create new business models, especially by building relationship at scale, getting the right data through their analytics systems, increasing data velocity, and putting the cloud to work.
- Multi-local growth, with one foot in mature market and one foot in emerging market countries, to harness the full range of innovation across markets.
- Involvement in local technology clusters to benefit from their competitive advantage.
- Contribution to their ecosystems—through regular engagement in the life of the community and through active cooperation with other entrepreneurs such as with "payforward" mechanisms—including virtual ecosystems across geographies.
- Investment in mentoring opportunities offered by large corporations to test products, grow networks, identify clients and accelerate growth.

"In order to continue the drive for job creation, entrepreneurs must foster more and stronger collaborations with big business to scale their ideas quickly and accelerate their growth."

Bruno Berthon,
Global Managing Director—
Strategy & Sustainability,
Accenture

The final word

As our Entrepreneurial Innovation survey revealed, a very large majority of entrepreneurs are optimistic about their ability to drive growth and job creation in the coming years, whether based in mature or emerging markets. Entrepreneurs we interviewed are ready to play a key role in reinvigorating growth and job creation in the G20 countries. Through their relentless investment in innovation, they create new products, new services, and new innovative business models—and do so at a scale and speed that is unprecedented in recent decades.

To develop their businesses, innovative entrepreneurs are also eager to collaborate more with large companies. As collaboration increases, new models of cooperation will emerge to respond to the current challenges faced by entrepreneurs, especially to facilitate connections, clarify the frameworks of engagement and protect intellectual property. There is no "one size fits all" solution in this area, as approaches depend on the industry and the size and cultural environment of the players. However, the budding collaboration between startups and large companies is a symbol of a new era of cooperation between these two groups.

Contrary to conventional wisdom, governments also have a role to play in encouraging entrepreneurial innovation, but this role is changing with the rise of

digital entrepreneurship. Entrepreneurs believe specific actions can have a significant and positive impact on their ability to grow and create jobs—but only if these actions are implemented with the required scale, speed and consistency.

In summary, working together, large companies, governments and entrepreneurs can devise the right combination of approaches and policies—those that respect the diversity of G20 economies and are tailored to the unique conditions and needs of individual countries—to unleash the entrepreneurial spirit. In the process, they can contribute to innovation, sustained growth and the job creation momentum that is vital to G20 governments' efforts to create a dynamic economy that provides significant opportunities for the people they serve.

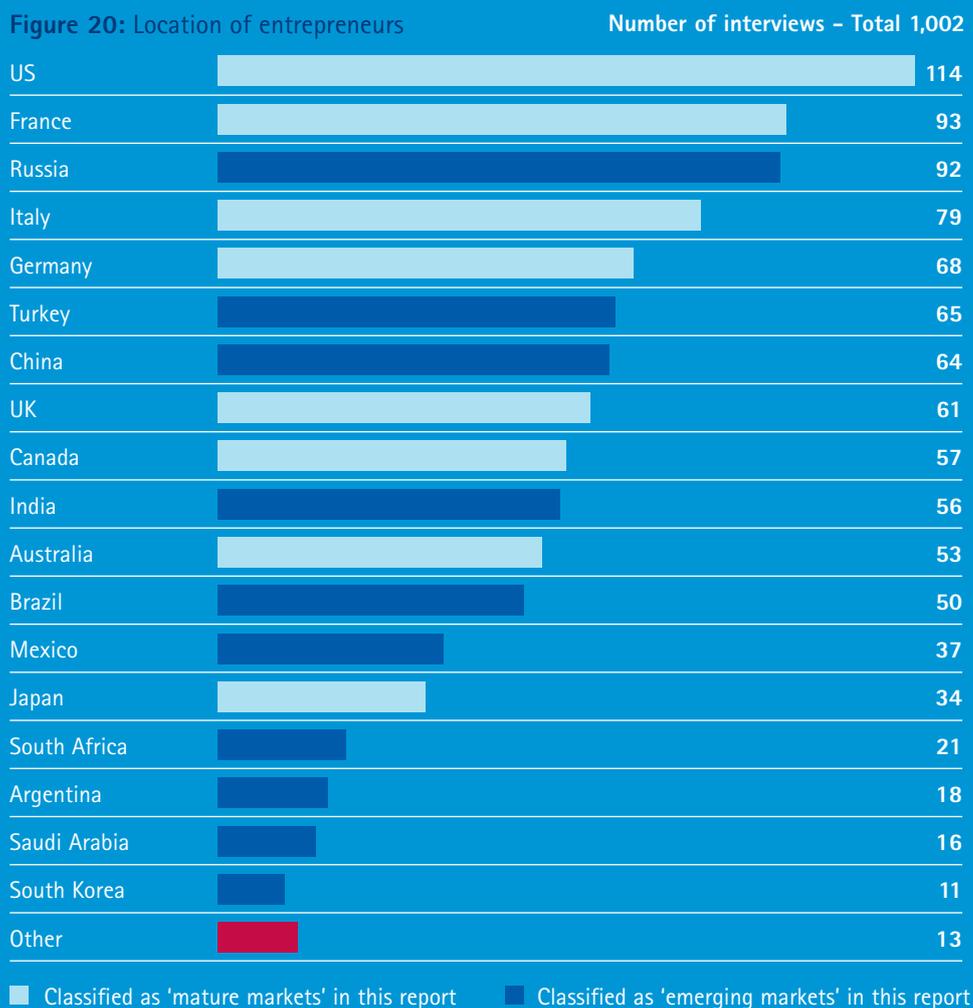
About the research

To identify entrepreneurs' views on the importance of innovation within their business, the drivers and inhibitors for innovation, and their expectations related to G20 governments' policies to support entrepreneurs, Accenture conducted a comprehensive research effort in close cooperation with the Young Entrepreneurs' Alliance's global management and country associations. The research comprised three streams:

-  An exclusive online survey of 1,000 young entrepreneurs*
-  Eight workshops with entrepreneurs in selected countries
-  Interviews with subject matter experts

Online survey of 1,000 young entrepreneurs

The fieldwork for the online survey of young entrepreneurs was conducted by Harris Interactive between February 2013 and April 2013. All the G20 countries are represented in the sample. The detailed breakdown is as follows:



* As defined by the G20 Young Entrepreneurs' Alliance



Interviews with subject matter experts

We conducted a series of interviews with subject matter experts between February 2013 and May 2013 to get insights on some specific topics.

In addition to the preceding, we leveraged other relevant materials developed by Accenture on entrepreneurship, including outcomes of specific actions, such the Accenture Global "Skills to Succeed" program or the recent "Assises de l'Entrepreneuriat" in France, where the Country Managing Director for France led one of the task forces that presented its report to the French President at the end of April 2013.

The project was supported by Accenture Institute of High Performance Managing Directors Paul Nunes and Jeanne Harris who shared draft materials being developed for new publications related to entrepreneurship. Jeanne Harris was the main writer of the enclosed chapter on Silicon Valley.

Eight local workshops with entrepreneurs

To deepen the qualitative analysis, gather relevant country examples and develop actionable recommendations, we conducted eight workshops in March 2013 and April 2013, in Bangalore, Beijing, London, Moscow, New York, Paris, San José/San Francisco, and Canada (teleconference).

Each workshop included between eight and 12 entrepreneurs, mainly coming from the delegations to the YEA Summit in Russia.

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Core Accenture project team

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Young Entrepreneurs' Alliance Executives

From the G20 YEA Thought Leaders Committee, we would like to recognize the significant contributions of:

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Appendix:

Survey Results

| | Australia | Brazil | Canada | China | France | Germany | India | Italy | Japan* | Mexico* | Russian Federation | Turkey | UK | US | Other countries | |
|--|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|--------------------|-------------|-------------|-------------|-----------------|--|
| | Col % | Col % | Col % | Col % | Col % | |
| Is innovation considered as a strategic priority of your company? | | | | | | | | | | | | | | | | |
| Number one priority | 30% | 20% | 33% | 25% | 31% | 13% | 39% | 27% | 3% | 38% | 23% | 5% | 15% | 25% | 27% | |
| One of the top priorities | 57% | 52% | 46% | 58% | 55% | 62% | 48% | 59% | 47% | 54% | 51% | 60% | 56% | 52% | 51% | |
| An important priority but not a top priority | 11% | 28% | 16% | 17% | 10% | 22% | 11% | 13% | 32% | 8% | 25% | 32% | 26% | 17% | 18% | |
| Not a priority | 2% | 0% | 5% | 0% | 4% | 3% | 2% | 1% | 18% | 0% | 1% | 3% | 3% | 6% | 4% | |
| Total | 100% | 100% | 100% | 100% | 100% | |
| What is the importance of new technologies to support and enable innovation in your business processes ? | | | | | | | | | | | | | | | | |
| Critical - all process innovation is driven by new technologies | 36% | 14% | 30% | 21% | 28% | 20% | 31% | 16% | 7% | 22% | 16% | 14% | 22% | 27% | 22% | |
| Important - most of process innovation is driven by new technologies | 56% | 82% | 47% | 69% | 59% | 64% | 61% | 72% | 48% | 59% | 60% | 60% | 70% | 60% | 68% | |
| Not very important - some process innovation is driven by new technologies | 8% | 2% | 16% | 10% | 12% | 16% | 8% | 11% | 41% | 14% | 23% | 26% | 8% | 10% | 10% | |
| Not important at all - process innovation is not driven by new technologies | 0% | 2% | 7% | 0% | 1% | 0% | 0% | 1% | 4% | 5% | 1% | 0% | 0% | 3% | 0% | |
| Total | 100% | 100% | 100% | 100% | 100% | |
| Do you currently leverage any of the following new technologies? Do you expect to leverage any in the next two years? - Biotechnology | | | | | | | | | | | | | | | | |
| Currently being leveraged | 11% | 34% | 19% | 30% | 10% | 19% | 29% | 22% | 9% | 11% | 15% | 8% | 15% | 18% | 18% | |
| Not currently leveraged but will be leveraged in the next two years | 28% | 30% | 11% | 38% | 12% | 15% | 31% | 22% | 18% | 19% | 27% | 6% | 18% | 17% | 24% | |
| Not currently leveraged and will not be leveraged in the next two years | 42% | 22% | 45% | 23% | 43% | 45% | 27% | 32% | 29% | 35% | 35% | 32% | 47% | 44% | 31% | |
| Do not know/ not familiar with this technology | 19% | 14% | 25% | 9% | 35% | 21% | 13% | 24% | 44% | 35% | 23% | 54% | 20% | 21% | 27% | |
| Total | 100% | 100% | 100% | 100% | 100% | |
| Do you currently leverage any of the following new technologies? Do you expect to leverage any in the next two years? - Nanotechnology | | | | | | | | | | | | | | | | |
| Currently being leveraged | 19% | 30% | 12% | 27% | 13% | 19% | 25% | 18% | 9% | 11% | 16% | 23% | 10% | 18% | 18% | |
| Not currently leveraged but will be leveraged in the next two years | 23% | 38% | 16% | 42% | 10% | 12% | 25% | 24% | 15% | 24% | 22% | 48% | 20% | 22% | 22% | |
| Not currently leveraged and will not be leveraged in the next two years | 37% | 20% | 42% | 23% | 46% | 47% | 36% | 39% | 21% | 38% | 45% | 15% | 49% | 39% | 24% | |
| Do not know/ not familiar with this technology | 21% | 12% | 30% | 8% | 31% | 22% | 14% | 19% | 55% | 27% | 17% | 14% | 21% | 21% | 36% | |
| Total | 100% | 100% | 100% | 100% | 100% | |
| Do you currently leverage any of the following new technologies? Do you expect to leverage any in the next two years? - Social technologies | | | | | | | | | | | | | | | | |
| Currently being leveraged | 70% | 58% | 68% | 52% | 55% | 47% | 77% | 35% | 6% | 68% | 43% | 76% | 63% | 65% | 54% | |
| Not currently leveraged but will be leveraged in the next two years | 15% | 28% | 9% | 31% | 28% | 25% | 16% | 37% | 47% | 22% | 28% | 15% | 21% | 18% | 30% | |
| Not currently leveraged and will not be leveraged in the next two years | 15% | 10% | 18% | 14% | 14% | 16% | 5% | 22% | 21% | 5% | 16% | 3% | 13% | 12% | 10% | |
| Do not know/ not familiar with this technology | 0% | 4% | 5% | 3% | 3% | 12% | 2% | 6% | 26% | 5% | 13% | 6% | 3% | 5% | 6% | |
| Total | 100% | 100% | 100% | 100% | 100% | |
| Do you currently leverage any of the following new technologies? Do you expect to leverage any in the next two years? - Mobile technology | | | | | | | | | | | | | | | | |
| Currently being leveraged | 65% | 34% | 48% | 56% | 44% | 40% | 50% | 38% | 38% | 55% | 35% | 57% | 58% | 52% | 37% | |
| Not currently leveraged but will be leveraged in the next two years | 26% | 38% | 26% | 33% | 26% | 37% | 43% | 32% | 26% | 35% | 35% | 29% | 21% | 25% | 43% | |
| Not currently leveraged and will not be leveraged in the next two years | 9% | 18% | 12% | 8% | 12% | 13% | 7% | 22% | 21% | 5% | 22% | 3% | 16% | 13% | 12% | |
| Do not know/ not familiar with this technology | 0% | 10% | 14% | 3% | 18% | 10% | 0% | 8% | 15% | 5% | 8% | 11% | 5% | 10% | 7% | |
| Total | 100% | 100% | 100% | 100% | 100% | |
| Do you currently leverage any of the following new technologies? Do you expect to leverage any in the next two years? - Data analytics | | | | | | | | | | | | | | | | |
| Currently being leveraged | 65% | 34% | 48% | 56% | 44% | 40% | 50% | 38% | 38% | 55% | 35% | 57% | 58% | 52% | 37% | |
| Not currently leveraged but will be leveraged in the next two years | 26% | 38% | 26% | 33% | 26% | 37% | 43% | 32% | 26% | 35% | 35% | 29% | 21% | 25% | 43% | |
| Not currently leveraged and will not be leveraged in the next two years | 9% | 18% | 12% | 8% | 12% | 13% | 7% | 22% | 21% | 5% | 22% | 3% | 16% | 13% | 12% | |
| Do not know/ not familiar with this technology | 0% | 10% | 14% | 3% | 18% | 10% | 0% | 8% | 15% | 5% | 8% | 11% | 5% | 10% | 7% | |
| Total | 100% | 100% | 100% | 100% | 100% | |

| | Australia | Brazil | Canada | China | France | Germany | India | Italy | Japan* | Mexico* | Russian Federation | Turkey | UK | US | Other countries |
|--|-----------|--------|--------|-------|--------|---------|-------|-------|--------|---------|--------------------|--------|-------|-------|-----------------|
| | Col % | Col % | Col % | Col % | Col % | Col % | Col % | Col % | Col % | Col % | Col % | Col % | Col % | Col % | Col % |

Do you currently leverage any of the following new technologies? Do you expect to leverage any in the next two years? – Cloud technologies

| | | | | | | | | | | | | | | | |
|---|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Currently being leveraged | 57% | 48% | 39% | 42% | 49% | 43% | 38% | 30% | 21% | 57% | 38% | 11% | 41% | 56% | 33% |
| Not currently leveraged but will be leveraged in the next two years | 30% | 34% | 33% | 36% | 24% | 29% | 40% | 37% | 31% | 30% | 35% | 35% | 33% | 24% | 37% |
| Not currently leveraged and will not be leveraged in the next two years | 9% | 12% | 16% | 17% | 16% | 18% | 11% | 22% | 24% | 5% | 18% | 40% | 18% | 12% | 15% |
| Do not know/ not familiar with this technology | 4% | 6% | 12% | 5% | 11% | 10% | 11% | 11% | 24% | 8% | 9% | 14% | 8% | 8% | 15% |
| Total | 100% |

Do you currently leverage any of the following new technologies? Do you expect to leverage any in the next two years? – Internet of Things

| | | | | | | | | | | | | | | | |
|---|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Currently being leveraged | 38% | 52% | 37% | 46% | 40% | 26% | 59% | 37% | 21% | 43% | 48% | 57% | 31% | 46% | 52% |
| Not currently leveraged but will be leveraged in the next two years | 30% | 36% | 7% | 42% | 19% | 33% | 21% | 30% | 15% | 41% | 23% | 29% | 31% | 18% | 30% |
| Not currently leveraged and will not be leveraged in the next two years | 21% | 8% | 44% | 9% | 28% | 29% | 13% | 25% | 38% | 8% | 17% | 9% | 36% | 22% | 9% |
| Do not know/ not familiar with this technology | 11% | 4% | 12% | 3% | 13% | 12% | 7% | 8% | 26% | 8% | 12% | 5% | 2% | 14% | 9% |
| Total | 100% |

Do you currently leverage any of the following new technologies? Do you expect to leverage any in the next two years? – Cognitive science

| | | | | | | | | | | | | | | | |
|---|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Currently being leveraged | 25% | 32% | 12% | 36% | 24% | 22% | 23% | 25% | 6% | 19% | 17% | 9% | 18% | 21% | 19% |
| Not currently leveraged but will be leveraged in the next two years | 34% | 40% | 23% | 40% | 18% | 28% | 30% | 19% | 24% | 22% | 32% | 22% | 25% | 27% | 33% |
| Not currently leveraged and will not be leveraged in the next two years | 28% | 12% | 32% | 13% | 29% | 31% | 18% | 33% | 26% | 27% | 35% | 51% | 34% | 29% | 16% |
| Do not know/ not familiar with this technology | 13% | 16% | 33% | 11% | 29% | 19% | 29% | 23% | 44% | 32% | 16% | 18% | 23% | 23% | 31% |
| Total | 100% |

Do you consider each of the following to be a technology innovation enabler in your country? % Yes

| | | | | | | | | | | | | | | | |
|---|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Clients' demands | 56% | 62% | 65% | 66% | 61% | 50% | 57% | 50% | 36% | 69% | 48% | 72% | 67% | 67% | 45% |
| Availability of technology skilled workers | 61% | 58% | 70% | 64% | 48% | 41% | 60% | 39% | 27% | 65% | 35% | 44% | 58% | 59% | 45% |
| Entrepreneurial culture and successful entrepreneurs | 56% | 64% | 67% | 70% | 43% | 44% | 59% | 48% | 39% | 73% | 37% | 33% | 52% | 64% | 45% |
| Ease of collaboration with entrepreneurs and start-ups | 58% | 52% | 65% | 64% | 39% | 42% | 54% | 32% | 36% | 74% | 41% | 34% | 61% | 61% | 43% |
| Maturity of technology infrastructure | 51% | 58% | 67% | 57% | 49% | 49% | 60% | 47% | 39% | 56% | 30% | 31% | 44% | 58% | 37% |
| Co-production companies/clients | 49% | 50% | 48% | 66% | 42% | 42% | 48% | 41% | 33% | 60% | 39% | 27% | 45% | 57% | 42% |
| Access to funding | 43% | 60% | 48% | 60% | 36% | 37% | 56% | 41% | 24% | 69% | 29% | 42% | 55% | 55% | 37% |
| Ease of collaboration with universities/Research Laboratories | 42% | 62% | 61% | 65% | 30% | 38% | 54% | 48% | 21% | 61% | 34% | 38% | 45% | 51% | 39% |
| Ease of collaboration with large companies | 46% | 52% | 52% | 60% | 30% | 37% | 50% | 39% | 24% | 65% | 40% | 33% | 58% | 55% | 36% |
| Intellectual Property Policy | 40% | 58% | 59% | 64% | 38% | 43% | 47% | 39% | 21% | 65% | 26% | 22% | 56% | 50% | 40% |
| Government policies such as tax incentives and regulation | 36% | 56% | 48% | 65% | 34% | 40% | 41% | 36% | 24% | 57% | 25% | 27% | 61% | 47% | 43% |
| Availability of local technology clusters | 48% | 52% | 51% | 60% | 27% | 33% | 54% | 36% | 27% | 51% | 29% | 26% | 50% | 53% | 34% |
| R&D public policies | 47% | 52% | 46% | 61% | 36% | 31% | 52% | 41% | 18% | 49% | 27% | 37% | 43% | 46% | 42% |
| Immigration policy to attract skilled workers | 47% | 54% | 44% | 61% | 22% | 29% | 47% | 34% | 24% | 40% | 26% | 22% | 44% | 40% | 30% |

What are the main benefits that technology-driven innovation delivers for your business? - Ranked in top three

| | | | | | | | | | | | | | | | |
|--|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Cost efficiency | 39% | 36% | 47% | 33% | 22% | 39% | 51% | 42% | 47% | 47% | 36% | 74% | 49% | 53% | 51% |
| Creation of new products/services | 37% | 36% | 56% | 29% | 63% | 43% | 28% | 42% | 47% | 43% | 52% | 31% | 31% | 35% | 28% |
| Quality improvement & management | 30% | 45% | 32% | 51% | 29% | 43% | 53% | 34% | 27% | 37% | 29% | 57% | 47% | 44% | 42% |
| Access to global markets | 43% | 36% | 21% | 25% | 31% | 17% | 28% | 36% | 20% | 37% | 26% | 24% | 27% | 22% | 32% |
| Ability to target specific segments of clients | 33% | 23% | 24% | 25% | 26% | 24% | 21% | 19% | 47% | 30% | 21% | 24% | 38% | 34% | 30% |
| Process agility/flexibility | 26% | 38% | 29% | 20% | 38% | 28% | 17% | 34% | 33% | 27% | 26% | 10% | 33% | 19% | 16% |
| Quicker time to market | 15% | 13% | 24% | 27% | 23% | 35% | 38% | 15% | 13% | 20% | 32% | 26% | 27% | 18% | 23% |
| Collaboration | 20% | 21% | 32% | 29% | 25% | 24% | 17% | 27% | 27% | 30% | 17% | 14% | 11% | 27% | 21% |
| Supply chain optimization | 22% | 15% | 9% | 25% | 15% | 20% | 17% | 18% | 27% | 13% | 20% | 17% | 11% | 13% | 18% |
| Attraction and retention of best talent | 17% | 21% | 12% | 16% | 14% | 15% | 19% | 18% | 13% | 13% | 21% | 10% | 18% | 23% | 21% |
| Access to venture capital funding | 17% | 15% | 15% | 18% | 14% | 11% | 11% | 15% | 0% | 3% | 21% | 14% | 9% | 10% | 19% |

Do you think Entrepreneurs are currently the major source of technology innovation in your country?

| | | | | | | | | | | | | | | | |
|---------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Certainly | 46% | 38% | 40% | 44% | 49% | 34% | 48% | 38% | 26% | 27% | 41% | 8% | 37% | 36% | 37% |
| Probably | 43% | 34% | 33% | 36% | 37% | 38% | 36% | 41% | 35% | 59% | 26% | 52% | 36% | 50% | 27% |
| Probably not | 9% | 22% | 23% | 11% | 8% | 16% | 9% | 16% | 21% | 11% | 22% | 28% | 20% | 10% | 24% |
| Certainly not | 2% | 6% | 4% | 9% | 6% | 12% | 7% | 5% | 18% | 3% | 11% | 12% | 7% | 4% | 12% |
| Total | 100% |

| | Australia | Brazil | Canada | China | France | Germany | India | Italy | Japan* | Mexico* | Russian Federation | Turkey | UK | US | Other countries |
|--|-----------|--------|--------|-------|--------|---------|-------|-------|--------|---------|--------------------|--------|-------|-------|-----------------|
| | Col % | Col % | Col % | Col % | Col % | Col % | Col % | Col % | Col % | Col % | Col % | Col % | Col % | Col % | Col % |

Would you agree with the statement : "I am optimistic about the rise of entrepreneurial innovation in G20 countries in the next two years and its impact on job creation"?

| | | | | | | | | | | | | | | | |
|--------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Agree | 91% | 82% | 82% | 91% | 76% | 90% | 89% | 75% | 56% | 97% | 86% | 94% | 72% | 83% | 87% |
| Disagree | 9% | 18% | 18% | 9% | 24% | 10% | 11% | 25% | 44% | 3% | 14% | 6% | 28% | 17% | 13% |
| Total | 100% |

What is your expected revenue growth per year in the next two years?

| | | | | | | | | | | | | | | | |
|--------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Decrease or stable | 6% | 8% | 12% | 0% | 18% | 15% | 4% | 20% | 18% | 16% | 5% | 11% | 20% | 12% | 4% |
| Increase < 4% | 19% | 12% | 18% | 8% | 16% | 19% | 14% | 30% | 15% | 19% | 7% | 25% | 16% | 14% | 25% |
| Increase 4 - 8% | 33% | 52% | 14% | 47% | 13% | 31% | 34% | 23% | 31% | 11% | 29% | 38% | 35% | 35% | 24% |
| Increase 8 - 12% | 11% | 20% | 19% | 25% | 18% | 16% | 25% | 18% | 24% | 19% | 23% | 15% | 16% | 16% | 22% |
| Increase 12-20% | 6% | 6% | 5% | 17% | 4% | 13% | 18% | 3% | 6% | 8% | 9% | 6% | 2% | 8% | 16% |
| Increase > 20% | 25% | 2% | 32% | 3% | 31% | 6% | 5% | 6% | 6% | 27% | 27% | 5% | 11% | 15% | 7% |
| Total | 100% |

What is your expected employee growth per year in the next two years?

| | | | | | | | | | | | | | | | |
|--------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Decrease or stable | 8% | 12% | 31% | 5% | 29% | 25% | 14% | 25% | 15% | 14% | 8% | 14% | 34% | 24% | 15% |
| Increase < 4% | 25% | 18% | 9% | 11% | 12% | 25% | 13% | 34% | 29% | 24% | 16% | 28% | 21% | 26% | 31% |
| Increase 4 - 8% | 19% | 40% | 16% | 37% | 19% | 24% | 43% | 24% | 41% | 24% | 30% | 36% | 30% | 20% | 24% |
| Increase 8 - 12% | 21% | 22% | 7% | 33% | 8% | 13% | 20% | 10% | 9% | 22% | 15% | 18% | 8% | 15% | 15% |
| Increase 12-20% | 6% | 6% | 9% | 8% | 13% | 6% | 5% | 3% | 3% | 8% | 8% | 2% | 2% | 4% | 6% |
| Increase > 20% | 21% | 2% | 28% | 6% | 19% | 7% | 5% | 4% | 3% | 8% | 23% | 2% | 5% | 11% | 9% |
| Total | 100% |

In your industry, where do you expect the next wave of technology innovation to come from?

| | | | | | | | | | | | | | | | |
|---------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Primarily from mature markets | 60% | 58% | 72% | 72% | 86% | 81% | 52% | 81% | 65% | 41% | 54% | 58% | 64% | 74% | 45% |
| Primarily from emerging markets | 40% | 42% | 28% | 28% | 14% | 19% | 48% | 19% | 35% | 59% | 46% | 42% | 36% | 26% | 55% |
| Total | 100% |

In your industry, what will be the 3 most innovative countries in two years' time? Ranked within top 3

| | | | | | | | | | | | | | | | |
|--------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Argentina | 2% | 24% | 2% | 5% | 3% | 1% | 7% | 4% | 0% | 0% | 1% | 2% | 3% | 3% | 10% |
| Australia | 45% | 4% | 7% | 16% | 8% | 1% | 20% | 6% | 3% | 8% | 4% | 22% | 8% | 14% | 9% |
| Austria | 0% | 6% | 0% | 5% | 1% | 7% | 5% | 10% | 0% | 0% | 4% | 0% | 2% | 0% | 0% |
| Belgium | 0% | 0% | 0% | 0% | 5% | 1% | 0% | 3% | 0% | 0% | 2% | 3% | 2% | 1% | 0% |
| Brazil | 2% | 70% | 11% | 2% | 13% | 1% | 5% | 9% | 6% | 19% | 3% | 2% | 11% | 9% | 22% |
| Canada | 2% | 10% | 47% | 9% | 9% | 3% | 4% | 1% | 0% | 14% | 3% | 3% | 2% | 27% | 4% |
| China | 38% | 24% | 28% | 50% | 19% | 25% | 34% | 18% | 53% | 22% | 26% | 37% | 39% | 38% | 45% |
| France | 0% | 2% | 11% | 5% | 52% | 9% | 5% | 15% | 6% | 8% | 5% | 6% | 8% | 4% | 10% |
| Germany | 13% | 6% | 12% | 20% | 27% | 74% | 7% | 32% | 6% | 11% | 24% | 43% | 13% | 12% | 12% |
| Hong Kong | 6% | 0% | 5% | 9% | 2% | 0% | 7% | 1% | 3% | 0% | 2% | 0% | 7% | 1% | 4% |
| India | 17% | 10% | 12% | 5% | 10% | 12% | 59% | 11% | 12% | 22% | 5% | 8% | 18% | 15% | 10% |
| Indonesia | 2% | 2% | 2% | 0% | 0% | 0% | 0% | 0% | 9% | 0% | 1% | 0% | 0% | 0% | 3% |
| Ireland | 0% | 0% | 2% | 0% | 1% | 0% | 2% | 4% | 0% | 0% | 0% | 0% | 0% | 3% | 0% |
| Italy | 4% | 6% | 0% | 0% | 5% | 7% | 2% | 44% | 0% | 0% | 2% | 6% | 2% | 3% | 4% |
| Japan | 8% | 14% | 5% | 19% | 13% | 16% | 14% | 9% | 59% | 14% | 7% | 22% | 13% | 18% | 9% |
| Mexico | 2% | 2% | 2% | 2% | 0% | 0% | 2% | 1% | 0% | 46% | 0% | 0% | 2% | 2% | 1% |
| South Africa | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 1% | 9% | 0% | 0% | 10% |
| Russian Federation | 2% | 0% | 4% | 5% | 2% | 3% | 4% | 11% | 3% | 5% | 53% | 3% | 0% | 4% | 3% |
| Saudi Arabia | 0% | 0% | 0% | 0% | 0% | 0% | 4% | 0% | 0% | 0% | 0% | 3% | 0% | 2% | 4% |
| South Korea | 4% | 2% | 2% | 2% | 4% | 4% | 4% | 1% | 9% | 0% | 5% | 2% | 5% | 5% | 10% |
| Spain | 2% | 2% | 0% | 3% | 6% | 3% | 0% | 4% | 0% | 3% | 5% | 3% | 0% | 3% | 3% |
| Turkey | 0% | 0% | 0% | 0% | 2% | 0% | 0% | 3% | 0% | 0% | 2% | 17% | 0% | 2% | 7% |
| United Kingdom | 26% | 2% | 19% | 5% | 17% | 15% | 14% | 9% | 0% | 14% | 11% | 26% | 44% | 25% | 7% |
| United States | 51% | 40% | 70% | 39% | 49% | 46% | 41% | 22% | 38% | 68% | 33% | 46% | 46% | 64% | 34% |
| Total | 100% |

Do you currently collaborate or do you plan to collaborate in the next two years with large companies on technology innovation topics?

| | | | | | | | | | | | | | | | |
|----------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Yes | 62% | 44% | 35% | 51% | 33% | 38% | 34% | 38% | 21% | 30% | 30% | 11% | 40% | 32% | 25% |
| No, but intend to within 2 years | 30% | 54% | 30% | 44% | 44% | 40% | 48% | 49% | 26% | 46% | 58% | 71% | 39% | 43% | 57% |
| No and have no plans to do so | 8% | 2% | 35% | 5% | 23% | 22% | 18% | 13% | 53% | 24% | 12% | 18% | 21% | 25% | 18% |
| Total | 100% |

| | Australia | Brazil | Canada | China | France | Germany | India | Italy | Japan* | Mexico* | Russian Federation | Turkey | UK | US | Other countries |
|--|-----------|--------|--------|-------|--------|---------|-------|-------|--------|---------|--------------------|--------|-------|-------|-----------------|
| | Col % | Col % | Col % | Col % | Col % | Col % | Col % | Col % | Col % | Col % | Col % | Col % | Col % | Col % | Col % |

What are/would be the key benefits for your business as a result of collaborating with large companies on technology innovation topics?

| | | | | | | | | | | | | | | | |
|---|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Access to specific skills | 38% | 26% | 18% | 39% | 29% | 22% | 34% | 30% | 35% | 35% | 33% | 23% | 31% | 29% | 39% |
| Economies of scale | 45% | 30% | 26% | 27% | 17% | 18% | 25% | 34% | 21% | 24% | 25% | 26% | 36% | 19% | 15% |
| Funding | 42% | 6% | 35% | 22% | 26% | 19% | 34% | 24% | 18% | 19% | 22% | 58% | 33% | 26% | 22% |
| Access to expensive technologies | 25% | 36% | 16% | 41% | 31% | 38% | 25% | 32% | 15% | 27% | 29% | 31% | 11% | 32% | 33% |
| Access to new markets | 32% | 48% | 39% | 34% | 52% | 46% | 46% | 49% | 47% | 62% | 57% | 42% | 57% | 45% | 58% |
| Possibility to sell your business | 15% | 34% | 19% | 31% | 28% | 38% | 25% | 28% | 12% | 16% | 17% | 17% | 20% | 19% | 18% |
| Other (please specify) | 4% | 0% | 5% | 0% | 2% | 1% | 0% | 0% | 0% | 0% | 0% | 0% | 2% | 1% | 0% |
| None – you do not see any benefit for your business to collaborate with large companies on technology innovation topics | 0% | 10% | 21% | 3% | 8% | 9% | 5% | 1% | 26% | 8% | 9% | 2% | 5% | 14% | 7% |

Do you currently work in a local technology cluster (e.g., Silicon Valley, etc.)?

| | | | | | | | | | | | | | | | |
|----------------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Yes | 34% | 60% | 30% | 70% | 18% | 24% | 45% | 35% | 24% | 27% | 38% | 11% | 16% | 26% | 30% |
| No, but would like to | 55% | 36% | 59% | 28% | 42% | 65% | 46% | 57% | 70% | 69% | 39% | 59% | 71% | 44% | 63% |
| No, and are not interested | 11% | 4% | 11% | 2% | 40% | 11% | 9% | 8% | 6% | 4% | 23% | 30% | 13% | 30% | 7% |
| Total | 100% |

Which major benefits do you get from working in a technology cluster (e.g., Silicon Valley, etc.)?

| | | | | | | | | | | | | | | | |
|--|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Business productivity | 28% | 23% | 35% | 27% | 18% | 19% | 32% | 14% | 25% | 50% | 34% | 43% | 10% | 20% | 35% |
| Access to specific skills | 22% | 7% | 24% | 18% | 18% | 38% | 16% | 7% | 38% | 10% | 26% | 29% | 30% | 17% | 15% |
| Co-production with local clients on technology innovation topics | 11% | 23% | 6% | 29% | 12% | 6% | 24% | 18% | 50% | 20% | 14% | 0% | 20% | 27% | 5% |
| Collaboration with entrepreneurs and startups settled in the cluster | 50% | 23% | 24% | 18% | 35% | 50% | 12% | 29% | 25% | 20% | 23% | 0% | 30% | 30% | 25% |
| Collaboration with large companies settled in the cluster | 17% | 20% | 24% | 13% | 41% | 13% | 32% | 25% | 13% | 30% | 11% | 14% | 20% | 30% | 10% |
| Collaboration with universities, research laboratories | 6% | 17% | 12% | 22% | 29% | 19% | 12% | 18% | 0% | 20% | 34% | 14% | 10% | 20% | 25% |
| Access to funding: proximity with Venture Capitalists, Business Angels, etc. | 17% | 17% | 24% | 31% | 12% | 6% | 16% | 29% | 25% | 30% | 23% | 57% | 10% | 17% | 35% |
| Mature technology infrastructure | 17% | 30% | 18% | 24% | 18% | 13% | 8% | 21% | 13% | 10% | 17% | 29% | 20% | 7% | 10% |
| Higher speed to market | 28% | 20% | 29% | 20% | 0% | 31% | 48% | 21% | 13% | 20% | 29% | 29% | 30% | 20% | 20% |
| Personal professional network | 17% | 23% | 18% | 27% | 41% | 38% | 32% | 29% | 50% | 30% | 29% | 43% | 30% | 23% | 35% |
| Entrepreneurial culture and successful entrepreneurs | 33% | 23% | 41% | 7% | 18% | 25% | 20% | 32% | 0% | 20% | 11% | 0% | 10% | 37% | 40% |
| Highly diverse communities enhanced by open immigration policies | 17% | 23% | 29% | 18% | 6% | 25% | 16% | 18% | 25% | 0% | 14% | 14% | 30% | 23% | 10% |
| Public infrastructures | 28% | 27% | 6% | 18% | 24% | 6% | 24% | 18% | 13% | 30% | 17% | 14% | 20% | 10% | 15% |
| Government programs i.e. tax incentives etc. | 11% | 23% | 12% | 29% | 29% | 13% | 8% | 21% | 13% | 10% | 17% | 14% | 30% | 20% | 20% |

What do you think of the actions taken by the government in your country to support technology innovation created by entrepreneurs?

| | | | | | | | | | | | | | | | |
|--|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Relevant and efficient actions are taken | 23% | 38% | 40% | 64% | 22% | 45% | 45% | 18% | 29% | 24% | 30% | 28% | 26% | 41% | 24% |
| Actions are taken but they are not relevant or efficient | 49% | 52% | 48% | 33% | 45% | 43% | 48% | 49% | 39% | 73% | 57% | 61% | 54% | 41% | 60% |
| No real action taken | 28% | 10% | 12% | 3% | 33% | 12% | 7% | 33% | 32% | 3% | 13% | 11% | 20% | 18% | 16% |
| Total | 100% |

With regard to supporting your business in its technology innovation agenda, what priority actions do you expect from the government of the country in which your company is based? – Ranked within top 3

| | | | | | | | | | | | | | | | |
|--|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Reducing Red Tape and regulation for entrepreneurs | 30% | 18% | 26% | 28% | 31% | 34% | 27% | 23% | 6% | 30% | 23% | 9% | 43% | 35% | 19% |
| Improvement of Intellectual Property rights | 26% | 22% | 14% | 27% | 13% | 18% | 16% | 16% | 29% | 16% | 24% | 11% | 18% | 22% | 18% |
| Tax incentives | 42% | 36% | 28% | 27% | 35% | 43% | 30% | 63% | 50% | 35% | 35% | 66% | 41% | 43% | 24% |
| Development of technology education and training, Supportive environment for business angels and venture capital funds | 26% | 44% | 30% | 28% | 28% | 31% | 34% | 27% | 35% | 32% | 42% | 28% | 34% | 28% | 42% |
| Public investment in R&D and technology infrastructures | 30% | 26% | 28% | 17% | 22% | 22% | 27% | 35% | 21% | 27% | 22% | 8% | 20% | 18% | 24% |
| Development of public bank to finance entrepreneurs and small and medium enterprises | 25% | 24% | 35% | 28% | 28% | 18% | 25% | 28% | 32% | 24% | 17% | 52% | 33% | 26% | 34% |
| Development of local technology clusters | 21% | 28% | 28% | 23% | 20% | 18% | 21% | 20% | 15% | 38% | 20% | 18% | 18% | 16% | 25% |
| Open Data promotion | 11% | 12% | 12% | 19% | 9% | 12% | 13% | 10% | 21% | 5% | 18% | 11% | 7% | 13% | 9% |
| Opening of public procurement to innovative small and medium enterprises | 19% | 22% | 35% | 31% | 27% | 26% | 21% | 14% | 26% | 14% | 20% | 37% | 13% | 21% | 24% |
| "Small Business Act" | 25% | 26% | 25% | 22% | 45% | 37% | 27% | 28% | 21% | 35% | 30% | 18% | 39% | 43% | 34% |
| Open immigration policies to attract skilled workers | 8% | 16% | 7% | 27% | 14% | 21% | 25% | 11% | 26% | 14% | 27% | 3% | 8% | 12% | 13% |

About Accenture

Accenture is a global management consulting, technology services and outsourcing company, with approximately 261,000 people serving clients in more than 120 countries. Combining unparalleled experience, comprehensive capabilities across all industries and business functions, and extensive research on the world's most successful companies, Accenture collaborates with clients to help them become high-performance businesses and governments. The company generated net revenues of US\$27.9 billion for the fiscal year ended Aug. 31, 2012. Its home page is www.accenture.com.

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