SOUTH AFRICA

GE GLOBAL INNOVATION BAROMETER

2014 Edition
About the GE Global Innovation Barometer

Now in its fourth edition and spanning across 26 countries, the GE Global Innovation Barometer is an international opinion survey of senior business executives, all actively engaged in the management of their firm's innovation strategy.

The survey is conducted by Edelman Berland a consulting and research company on behalf of GE. The Barometer explores how the perception of innovation is changing in a complex, globalized environment.

It examines the way business executives around the world appreciate the framework for innovation their country has developed, it also details the perspective from business on the most efficient policies to support Innovation.

Finally it adopts a firm centric approach to better understand the way international businesses adapt their innovation practices and strategies in a challenging economic environment.
Sample and fieldwork details

3,209 phone interviews (in local languages)

Interview average duration: 35-40 minutes

Period: April 2nd to May 30th 2014

All respondents directly involved in the innovation strategy or process within their company. (31% C-Level).

28% of companies operate globally, average company size is 650 employees

Average age of respondent is 44 years old
A comprehensive assessment of innovation

1. The ideal innovation process
   *Today’s Drivers & Barriers*

   Is the **ideal innovation** process...
   - Planned or spontaneous?
   - Integrated or autonomous?
   - Internal or collaborative?
   - Protective or offensive?
   - Local or global

   What are the **drivers and barriers of successful innovation**...
   - In general?
   - In your company?

   The future of innovation in **specific sectors**:
   - The best type of innovation to drive the quality of **healthcare**
   - The ability of innovation to solve today’s and tomorrow’s energy challenges

2. Countries & Public policies
   *State of the National Innovation Framework*

   Which country is the **leading innovation champion**?

   What does your country do well?
   - Cross-disciplinary research? Effective IP system? Private funding?

   What do the **Public Authorities** in your country do well, or less well?
   - Sufficient support to SMEs? To larger companies?
   - Adequate budget allocation?

   **Public policies** – your country’s priorities should be:
   - IP protection?
   - Curriculum and talent management?
   - Relationship between public / private sectors?
   - To lead innovation through public procurement’s decisions?

3. Innovation trends & practices
   *Myths & Realities*

   Familiarity, relevance, readiness for your company:
   - **Convergence** of technology
   - **Collaboration**
   - **Industrial internet**
   - **Big data**

   The impact of the Industrial internet...
   - On the job market
   - On energy consumption and dependency
   - Leading the new Industrial Revolution

   Big data, data sciences and analytics: **buzz word** or ...
   - A critical priority?
   - A source of internal power / influence?
   - A rewarding investment?
South Africa executive summary
Macro findings

South African executives perceive innovation as a positive force with 79% agreeing that people in their country live better today than 10 years ago because of the impact of innovation – in line with the global average (80%).

96% of executives in South Africa agree that innovation is increasingly becoming a global game, merging and combining talents, ideas, insights and resources across the world is the only way to be successfully innovative – above the global average (82%).

Regarding collaboration, executives in South Africa are in line with the global average in saying that despite the risks associated with collaboration and IP infringements, collaboration is a risk worth taking if you want to successfully innovate nowadays (78% compared to 77% global average) displaying a high agreement rate.

Executives in South Africa are recognising the value of collaboration with 65% of executives reporting that the revenue generated by collaborative innovation activities has been growing over the last year, in line with the global average of 64%. However this percentage has dropped by 12 points compared to 2013 perhaps reflecting a slowdown in the number of collaborative innovation activities in the country.

54% of South African executives perceive smaller businesses such as SMEs and start-ups as driving innovation in South Africa – well above the global average (41%). They are followed by multinationals (16%), in line with the global average (19%).
Macro findings

South African executives highlight several priorities that their companies need to master to innovate successfully. The necessity of understanding customers and anticipate market evolutions comes in as a clear priority being mentioned by 86% of executives in South Africa – stable compared to last year (86%). The second crucial ability is to attract and retain the most talented and skilled individuals (78%), also stable compared to 2013 (80%) – and in line with the global average (79%). To quickly adapt and implement emerging technologies comes in third (75%) as a key ability for businesses to successfully innovate.

When asked about their company performance against these necessary abilities, 40% of executives thought their company performed extremely well at understanding the needs of customers and 36% said that their company performed extremely well at retaining new talent.

The critical challenges faced by companies in South Africa limiting their ability to innovate are the lack of talent (32%) – above the global average (22%), the incapacity to scale up successful innovations to a wider or international market (28%) – in line with the global average and the lack of investment and financial support (26%).
Macro findings

Internal organisation – how businesses in South Africa go about innovating

69% of executives in South Africa recognise the need for companies to encourage creative behaviours and disruptive processes in the business in order to be able to innovate successfully – slightly above the global average (64%).

77% of executives believe that when innovating, it is best to protect the core business' profitability as much as possible so as to support research & innovation efforts compared to 23% that say it is best not to worry about the potential short term negative impact on the core business' revenue – slightly above the global average of 72% for protecting the core business’ profitability.

51% of South African executives think that the most successful innovations are planned, emerging through a structured innovation process compared to 49% who say they are spontaneous, emerging through the interactions of creative individuals, this diverges from the global average: 62% and 38% respectively.

In terms of organizational design, 76% say it is best to position innovative teams and activities inside the existing lines of businesses and structured teams – above the global average of 68% while 24% believe innovative teams and activities should be placed outside in specialized and dedicated innovation / research centres – below the global average (32%).

46% of South African executives say it is best to get to market as quickly as possible to keep an edge on competition (in line with the global average of 50%), and 54% say they prefer not to rush and take all the time needed to perfect the innovation (in line with the global average – 50%).
Macro findings

The appreciation of predictive analytics in South Africa is quite high with 63% saying that to use analytics and predictive knowledge is a crucial ability compared with 53% globally.

A quarter of South African executives (25%) say they have never heard of big data before and 5% say that big data is more of a buzz word than a reality – in line with the global average (6%). A significant 42% of executives in South Africa report that their company is either totally or quite prepared to make the most out of big data – above the global average of 25%. Only 12% say they have not increased their ability to analyze large and complex amounts of data over the last year and won’t (compared to 29% global average).

Concerning the industrial internet, only 20% of executives in South Africa say they have never heard of the industrial internet – significantly lower than the global average of 44%. 71% believe the industrial internet will have a positive or neutral impact on the job market, well above the global average (49%). Only 11% of executives in South Africa believe their business is already totally prepared with a strategy or process to make the most of industrial internet – above the global average (6%).
Macro findings

South Africa’s framework for innovation is perceived as quite challenging with 25% of executives from other markets agreeing that South Africa has developed a framework conducive to innovation. This perception has slightly improved since 2013 (+5 points). South African executives’ self-evaluation of their overall framework for innovation has also improved this year, with 40% reporting their country has developed an innovation-conducive environment this year compared to 33% 18 months ago – a 7-point increase.

Regarding the perception of the efficiency of government support for innovation, only 24% of executives in South Africa agree that government support for innovation is efficiently organised, stable compared to last year (26%). This is also below the global average (40%).

When it comes to the priorities for government to tackle, 94% of executives in South Africa urge to facilitate research cooperation with other countries, above the global average (85%); 93% call for the government to better protect of business confidentiality and trade secrets and 92% would like to better align students’ curricula with the needs of business – 7 points above the global average.

Public authorities’ financial support towards innovative companies is seen as insufficient and is below the global average (47%), with only 34% agreeing that government and public authorities allocate an adequate share of their budget to support innovative companies – stable compared to last year (32%). 56% of executives in South Africa highlight an insufficient support to SMEs – in line with the global average (61%).

41% of executives in South Africa think the best policy would be to give subsidies/preferences to local business only to favour the development of local solutions, above the global average (29%). Whilst 40% are more in favour of giving subsidies/preferences to both local and international businesses willing to bring innovative solutions to their market – this is below the global average of 51%.
At a glance

<table>
<thead>
<tr>
<th>The game has changed</th>
<th>2013</th>
<th>2014</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>WE ARE CURRENTLY IN A NEW INDUSTRIAL REVOLUTION AT THE MEETING OF HARDWARE AND</strong></td>
<td></td>
<td></td>
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<tr>
<td><strong>SOFTWARE, A HISTORICAL SHIFT INTO THE AGE OF ADVANCED MANUFACTURING AND INDUSTRIAL</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>INTERNET – Agree</strong></td>
<td>77%</td>
<td></td>
</tr>
<tr>
<td><strong>INNOVATION IS INCREASINGLY BECOMING A GLOBAL GAME, MERGING AND COMBINING TALENTS,</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>IDEAS, INSIGHTS AND RESOURCES ACROSS THE WORLD IS THE ONLY WAY TO BE SUCCESSFULLY</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>INNOVATIVE – net agree</strong></td>
<td>96%</td>
<td></td>
</tr>
<tr>
<td><strong>MORE THAN EVER BEFORE, INNOVATION NEEDS TO BE LOCALIZED TO SERVE SPECIFIC MARKET</strong></td>
<td>85%</td>
<td>86%</td>
</tr>
<tr>
<td><strong>NEEDS</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>THE CONSTRAINTS EXPERIENCED BY SOME EMERGING COUNTRIES CREATE INNOVATION OPPORTUNITIES</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>FOR COMPANIES, WILLING TO INVEST IN OVERCOMING THEM</strong></td>
<td>81%</td>
<td></td>
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</tbody>
</table>

**DRIVING INNOVATION THE MOST TODAY IN YOUR COUNTRY**

<p>| | | |</p>
<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td>SMALLER BUSINESSES (NET:SMES+ START-UPS &amp; INDIVIDUALS)</td>
<td>54%</td>
<td></td>
</tr>
<tr>
<td>MULTINATIONALS</td>
<td>16%</td>
<td></td>
</tr>
<tr>
<td>LARGE ENTERPRISES HEADQUARTERED IN YOUR COUNTRY</td>
<td>14%</td>
<td></td>
</tr>
<tr>
<td>PUBLIC ORGANISATIONS</td>
<td>6%</td>
<td></td>
</tr>
</tbody>
</table>
### Changing business model

<table>
<thead>
<tr>
<th>Statement</th>
<th>2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>When innovating, companies must encourage <strong>creative behaviours</strong> and <strong>disruptive processes</strong> in the business</td>
<td>69%</td>
</tr>
<tr>
<td>The difficulty to come up with <strong>radical and disruptive ideas</strong> as a key challenge killing your business’s ability to innovate efficiently, independently from the profile of their company</td>
<td>18%</td>
</tr>
<tr>
<td>When innovating, it is best to <strong>protect the core business’ profitability</strong> as much as possible, so to support research &amp; innovation efforts</td>
<td>77%</td>
</tr>
<tr>
<td>The most successful innovations are <strong>planned</strong>, emerging through a structured innovation process</td>
<td>51%</td>
</tr>
<tr>
<td>In terms of organizational design, it is best to position <strong>innovative teams</strong> and activities <strong>inside</strong> the existing lines of businesses and structured teams</td>
<td>76%</td>
</tr>
<tr>
<td>When innovating, it is best to <strong>get to market as quickly</strong> as possible to keep an edge on competition</td>
<td>46%</td>
</tr>
</tbody>
</table>
# At a glance

## Embracing new innovation abilities

<table>
<thead>
<tr>
<th></th>
<th>2013</th>
<th>2014</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Collaborating with external business partners</strong> can put my business at risk as regard intellectual property and trade secrets but this is a <strong>risk worth taking</strong> if you want to successfully innovate nowadays</td>
<td>78%</td>
<td></td>
</tr>
<tr>
<td>The revenue and profit generated by <strong>collaborative innovation activities</strong> has been growing over the last year</td>
<td>77%</td>
<td>65%</td>
</tr>
<tr>
<td><strong>Have never heard of Big Data</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Have not increased</strong> their ability to analyze large and complex amounts of data over the last year and won’t</td>
<td></td>
<td>12%</td>
</tr>
<tr>
<td>Business <strong>already fully / quite prepared</strong> with a strategy or process to make the most of Big Data</td>
<td>42%</td>
<td></td>
</tr>
<tr>
<td><strong>Have never heard of the Industrial Internet</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Industrial Internet</strong>: Positive impact on the job market, fuelling companies performance and growth and creating new demand for employment</td>
<td></td>
<td>20%</td>
</tr>
<tr>
<td>Business <strong>already fully / quite prepared</strong> with a strategy or process to make the most of Industrial Internet</td>
<td></td>
<td>48%</td>
</tr>
</tbody>
</table>
## At a glance

### 2014: Innovation framework ranking 22nd*

<table>
<thead>
<tr>
<th>Question</th>
<th>2013</th>
<th>2014</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>INNOVATION FRAMEWORK EVALUATION: COUNTRY HAS “INNOVATION-CONDUCIVE ENVIRONMENT?”</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Government support for innovation is efficiently organized</td>
<td>20%</td>
<td>25%</td>
</tr>
<tr>
<td>Government and public authorities allocate an adequate share of their budget to support innovative companies</td>
<td>26%</td>
<td>24%</td>
</tr>
<tr>
<td>32%</td>
<td>34%</td>
<td></td>
</tr>
</tbody>
</table>

### WHAT DO YOU THINK IS THE BEST PUBLIC POLICY?

<table>
<thead>
<tr>
<th>Policy</th>
<th>2013</th>
<th>2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>Give subsidies/preferences to both local and international businesses willing to bring innovative solutions to the market</td>
<td>40%</td>
<td></td>
</tr>
<tr>
<td>Give subsidies/preferences to local business only to favor the development of local solutions</td>
<td>41%</td>
<td></td>
</tr>
<tr>
<td>Subsidies and preferences are not an effective way to support innovation as they introduce strong bias and have only short term effects</td>
<td>19%</td>
<td></td>
</tr>
<tr>
<td>Public authorities do not support SME’s in their innovation efforts enough</td>
<td>56%</td>
<td></td>
</tr>
<tr>
<td>Private investors are supportive of companies that need funds to innovate</td>
<td>62%</td>
<td>79%</td>
</tr>
</tbody>
</table>

*Based on the 32 markets covered in Q9

*Over-indexes compared to global average

*Under-indexes compared to global average

*Based on the 32 markets covered in Q9
<table>
<thead>
<tr>
<th>Innovation success priorities</th>
<th>2013</th>
<th>2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>TO UNDERSTAND CUSTOMERS AND ANTICIPATE MARKET EVOLUTIONS</td>
<td>86%</td>
<td>86%</td>
</tr>
<tr>
<td>TO ATTRACT AND RETAIN THE MOST TALENTED AND SKILLED INDIVIDUALS</td>
<td>80%</td>
<td>78%</td>
</tr>
<tr>
<td>TO QUICKLY ADAPT AND IMPLEMENT EMERGING TECHNOLOGIES</td>
<td></td>
<td>75%</td>
</tr>
<tr>
<td>TO ENCOURAGE CREATIVE BEHAVIOURS AND DISRUPTIVE PROCESSES IN THE BUSINESS</td>
<td></td>
<td>69%</td>
</tr>
<tr>
<td>TO IDENTIFY AND WORK COLLABORATIVELY WITH THE BEST EXTERNAL BUSINESS PARTNERS</td>
<td>75%</td>
<td>64%</td>
</tr>
<tr>
<td>TO ALLOCATE AND SECURE A SPECIFIC BUDGET FOR INNOVATION ACTIVITIES</td>
<td>58%</td>
<td>65%</td>
</tr>
<tr>
<td>TO PRIORITIZE LONGER TERM INNOVATION GOALS OVER SHORTER TERM FINANCIAL OBJECTIVES</td>
<td></td>
<td>65%</td>
</tr>
<tr>
<td>TO ADOPT A TEST FAST, FAIL FAST, ADJUST FAST APPROACH</td>
<td></td>
<td>61%</td>
</tr>
<tr>
<td>TO USE ANALYTICS AND PREDICTIVE KNOWLEDGE</td>
<td></td>
<td>63%</td>
</tr>
<tr>
<td>TO MAKE THE MOST OF PUBLIC AUTHORITIES’ INCENTIVES, SUBSIDIES, TAX CREDIT</td>
<td></td>
<td>55%</td>
</tr>
<tr>
<td>TO ATTRACT INVESTORS TO FUND INNOVATIVE PROGRAMS</td>
<td>38%</td>
<td>52%</td>
</tr>
</tbody>
</table>

- Over-indexes compared to global average
- Under-indexes compared to global average
## Innovation killers

<table>
<thead>
<tr>
<th>Issue</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>The incapacity to scale up successful innovations, to a wider or international market</td>
<td>28%</td>
</tr>
<tr>
<td>The difficulty to come up with radical and disruptive ideas</td>
<td>18%</td>
</tr>
<tr>
<td>The difficulty to define an effective business model to support new ideas and make them profitable</td>
<td>19%</td>
</tr>
<tr>
<td>To lack sufficient investment and financial support</td>
<td>26%</td>
</tr>
<tr>
<td>A lack of talent / inadequate skillset</td>
<td>32%</td>
</tr>
<tr>
<td>To lack internal support from leadership team/top management</td>
<td>18%</td>
</tr>
<tr>
<td>The internal inertia and the incapacity to be nimble, failing at rapidly converting ideas into actions</td>
<td>19%</td>
</tr>
<tr>
<td>The incapacity of the business to take risks</td>
<td>16%</td>
</tr>
</tbody>
</table>
### MAIN PRIORITIES COUNTRY SHOULD FOCUS ON TO EFFICIENTLY SUPPORT INNOVATION

<table>
<thead>
<tr>
<th>Priority</th>
<th>2013</th>
<th>2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fight bureaucracy and red tape for companies willing to access funds and incentives allocated to innovation</td>
<td>90%</td>
<td>91%</td>
</tr>
<tr>
<td>Ensure that business confidentiality and trade secrets are adequately protected</td>
<td>83%</td>
<td>93%</td>
</tr>
<tr>
<td>Better align students curricula with the needs of business</td>
<td>93%</td>
<td>92%</td>
</tr>
<tr>
<td>Facilitate research cooperation with other countries</td>
<td></td>
<td>94%</td>
</tr>
<tr>
<td>Actively promote partnerships between the public and private sectors</td>
<td>86%</td>
<td></td>
</tr>
<tr>
<td>Reinforce IP to encourage stronger collaboration between companies</td>
<td>82%</td>
<td></td>
</tr>
<tr>
<td>Encourage the collaboration of private companies with SOEs</td>
<td>81%</td>
<td></td>
</tr>
<tr>
<td>Ensure public procurement leads the early adoption of major innovations</td>
<td>85%</td>
<td></td>
</tr>
<tr>
<td>Evaluate the impact some of its local content requirement and regulatory policies</td>
<td>78%</td>
<td></td>
</tr>
<tr>
<td>Ensure public procurement always favor the most innovative solutions even if they come from foreign countries</td>
<td>76%</td>
<td></td>
</tr>
<tr>
<td>Encourage and ease the hiring of talented foreign citizens</td>
<td>68%</td>
<td></td>
</tr>
</tbody>
</table>

*Over-indexes compared to global average | Under-indexes compared to global average*
Global findings
Innovation executives acutely aware that powerful trends are at work that will change the business environment.

Collaboration, convergence, Industrial Internet, Data-analytics change(d) the way business are innovating

Collaboration is already embraced and delivering positive results, the risk is worth taking

Convergence of technology and big data are more than buzz words, they become a reality but create implementation challenges

Firms broadly boosted their analytics capabilities but a small majority have leveraged the predictive dimension of Big data. Those who did recognized the value it added to their innovation process and the influence it conferred data scientists in their organization

Awareness of the Industrial Internet is significant, but the concept still needs to demonstrate its true revolutionary nature. High tech, Telecom and Energy industries have already prepared to embrace the revolution, Manufacturing and Healthcare slower to adopt

The debate around the impact of Industrial internet on the job market is not settled, but a majority reject the hypothesis of a net negative impact on employment
Increasingly Innovation is about finding the right talent, partners, resources, ideas and insight on a global scale.

Constraints in emerging markets can be converted into opportunities, even if some interesting differences emerge on this notion.

The focus on local needs and specificities is being recognized.

In most emerging economies, multinational companies drive Innovation much more prominently than local governments or academia, and more so than local business.

The GloCal nature of Innovation is becoming table-stake, the innovation playground knows no borders.

Infrastructure challenges of emerging economies don’t stop innovative businesses, even if scaling up is a clear issue for them.
The need for disruption in processes and behaviors is established as a criterion for success. But business leaders are still very much focused on short term profitability and struggle to adopt more spontaneous, creative and interactive innovation models. More traditional organizational design attached to Innovation activities remain the norm.

To maximize the potential of this new environment, business leaders need to make some « tough calls ».

Innovation is disrupting the business status-quo, business leaders face uneasy trade-offs.
Internal agility and speed clearly identified as prerequisites to Innovation success.

“Fast works” related concepts are getting traction, but old reflexes are hard to shake-off.

Internal inertia is identified a strong « innovation killer »

How to foster an environment fully ready for disruptive and radical innovation is a key challenge

The ability to adopt and implement emerging technologies fast is clearly identified as a business driver and competitive advantage, but only a few excel at it.

The acceleration of the go-to market process (test fast, fail fast, pivot fast) is embraced by half of Innovation executives, but still generate considerable nervousness.

"Fast works" related concepts are getting traction, but old reflexes are hard to shake-off.
Designing effective and sustainable business models lays at the very core of innovation executives’ concerns and priorities.

Managing collaboration, articulating revenue streams, funding innovation activities and finding them a « home » in the company are identified as focus areas.

The difficulty to scale up Innovative business is the number one “Innovation killer”

How to articulate revenue streams coming from innovative activities and more core business operations is challenging. Only a minority of respondents are ready to risk disrupting current profit streams to enable innovative business to grow.

How to fund innovation aggressively both from public and private sources is a challenge, both because of internal and external factors.

Deciding where best to embed and integrate the new functions and external partners can have important consequences on the operations and on the culture of the firm.
Governments have to provide the right framework for Innovation (IP protection, minimal red tape and bureaucracy, public private partnership)

They should also harness the power of public procurement to support innovation and manage subsidies carefully

They should make sure they prepare and give access to the talent pool needed to innovate better

They should focus innovation incentives on the value created beyond geographic or national considerations

They should amplify the support to Innovative SMEs and at the same time capitalize on the drive Multinationals can bring to their Innovation landscape

What are business leaders’ expectations regarding the role of government and public authorities?

Provide a conducive Innovation framework, set the right incentives for Innovation, invest in talent, support SMEs and harness the power of multinationals
Country specifics, there is no one size fits all model for Innovation

Innovation champions like USA and Germany, display contrasted perceptions and priorities. Emerging economies are not a consistent block, Asia emerging more positive and than African markets.

The efficacy of government support to Innovation is increasingly contrasted (Singapore, UAE, China and KSA still and even more leading on this indicator than before, USA is stable at a low level of satisfaction).

USA confirms and amplifies its status as a leader for Innovation (Innovation champion, and most innovation conducive environment) at least from a reputation standpoint (macro economic indicators providing a more contrasted picture).

South Korea, Singapore, India are less perceived as innovation-friendly environments by the Global community.
The Energy industry is facing multiple challenges, but driving economic growth through new and more sustainable sources of energy is identified as the absolute priority. The contribution from energy to the broader economic growth is identified as the number one challenge. The reduction of the environmental impact of energy and the diversification of the energy mix comes second. The rising role of analytics in helping the industry become more efficient is recognized but less prominent in energy respondents’ opinion.

Technical and medical innovation such as imaging devices and diagnosis tool is expected to drive progress the most in quality of healthcare. This is the first driver identified by Healthcare industry respondents. Scientific innovation and especially applied genetic science to diagnostic are also very high in the ranking. Policy innovation (awareness campaigns, early detection of diseases) is also expected to play a leading role.
Detailed findings
Collaboration is already embraced and delivering positive results, the risk is worth taking.

Convergence of technology and big data are more than buzz words, they become a reality but create implementation challenges.

Firms broadly boosted their analytics capabilities but a small majority have leveraged the predictive dimension of Big data. Those who did recognized the value it added to their innovation process and the influence it conferred data scientists in their organization.

Awareness of the Industrial Internet is significant, but the concept still needs to demonstrate its true revolutionary nature. High tech, Telecom and Energy industries have already prepared to embrace the revolution, Manufacturing and Healthcare slower to adopt.

The debate around the impact of Industrial internet on the job market is not settled, but a majority reject the hypothesis of a net negative impact on employment.
Innovation is acknowledged as driver of general improvement in countries. But some executives sense a scepticism amongst their national public opinion about the impact of technological innovation on inequalities.

“PEOPLE IN MY COUNTRY LIVE BETTER TODAY THAN 10 YEARS AGO BECAUSE OF THE IMPACT OF INNOVATION ON THEIR LIFE AND ON OUR COUNTRY”

Q6-3. Would you say that you strongly agree, somewhat agree, somewhat disagree or strongly disagree with the following opinions?

Q10-4. Thinking about your country in particular, how far do you agree with the following statements? There is a strong fear that technological innovation will increase inequalities. Base: Global results N= 3,209 / Base: South Africa results N= 100

“THERE IS A STRONG FEAR THAT TECHNOLOGICAL INNOVATION WILL INCREASE INEQUALITIES”

The country is over-indexing compared to the global average.
The apprehension of the impact of technological innovation on inequalities varies across countries.

“THERE IS A STRONG FEAR THAT TECHNOLOGICAL INNOVATION WILL INCREASE INEQUALITIES”

Q10-4. Thinking about your country in particular, how far do you agree with the following statements? There is a strong fear that technological innovation will increase inequalities. Base: Country results N= 100–300 per market / Base: South Africa results N= 100
“We are currently in a new Industrial Revolution at the meeting of hardware and software, a historical shift into the age of advanced manufacturing and industrial internet”

Q18-2. Now we are going to present different views on these emerging trends, we would like you to pick the one you feel is the truest or the most relevant. Base: Global results N= 3,209
Continuity for developed markets, a radical change for the emerging ones

“We are currently in a new Industrial Revolution at the meeting of hardware and software, a historical shift into the age of advanced manufacturing and industrial internet”

Q18-2. Now we are going to present different views on these emerging trends, we would like you to pick the one you feel is the truest or the most relevant.

Base: Country results N= 100 – 300 per market / Base: South Africa results N= 100
Collaboration with start-up and entrepreneurs

- Collaboration is an established trend and a (upcoming) reality for most
  - 47% Totally prepared
  - 32% Quite prepared
  - 25% Not quite prepared but planning to
  - 25% Not at all prepared and not planning to

Convergence of technology

- Not all have heard of it, but many are getting ready for it
  - 32% Totally prepared
  - 44% Quite prepared
  - 25% Not quite prepared but planning to
  - 25% Not at all prepared and not planning to

Big Data

- Not all have heard of Big data, but half companies are getting ready for it
  - 47% Totally prepared
  - 40% Quite prepared
  - 25% Not quite prepared but planning to
  - 25% Not at all prepared and not planning to

“Industrial Internet”

- A more confidential trend but some are already actively looking into it
  - 25% Totally prepared
  - 44% Quite prepared
  - 25% Not quite prepared but planning to
  - 25% Not at all prepared and not planning to

Q17. Is your business already equipped with a strategy or process to make the most of…

Base: Global results N= 3,209

% OF BUSINESSES ALREADY EQUIPPED WITH A STRATEGY OR PROCESS TO MAKE THE MOST OF…

A multifaceted change, businesses are embracing by stages
External collaboration is now a reality, and demonstrates to be a profitable risk worth taking.

Collaborating with external business partners can put my business at risk as regard intellectual property and trade secrets...

But this is a risk worth taking if you want to successfully innovate nowadays.

And this is why you company should avoid.

Q14. Which of these two statements is closer to your opinion? Q13. Which of the following apply in your company? Base: Global results N= 3,209 / Base: South Africa results N= 100

The facts

The revenue and profit generated by collaborative innovation activities has been growing over the last year.

My company embraces open source innovation – involving external stakeholders such as entrepreneurs in the internal development of new ideas.

My company has already resorted to crowdsourcing soliciting contributions (ideas, content, investment, etc.) from a large and varied group of stakeholders for its innovation activities.

The country is over-indexing compared to the global average.

The country is under-indexing compared to the global average.
Collaboration, a reality in most markets

AND THE REVENUE AND PROFIT GENERATED BY COLLABORATIVE INNOVATION ACTIVITIES HAS BEEN GROWING OVER THE LAST YEAR

Q13. Which of the following apply in your company? YES Base: Country results N= 100–300 per market / Base: South Africa results N= 100
Some countries have increased their collaboration effort even further than last year

AND THE REVENUE AND PROFIT GENERATED BY COLLABORATIVE INNOVATION ACTIVITIES HAS BEEN GROWING OVER THE LAST YEAR

Q13. Which of the following apply in your company? YES Base: Country results N= 100–300 per market/ South Africa results N= 100

- Increased
- Stable
- Decreased

NEW markets 2014

2013 2014
The ability or willingness to embrace change varies size of company

The revenue and profit generated by **collaborative innovation activities** has been growing over the last year

And similarly, **reinforcing IP** to encourage stronger collaboration between companies is critical especially for companies with 501 to 1,000 employees

Q13-1. Which of the following apply in your company? (% Yes) & Q12-1. What are the main priorities your country should focus on to efficiently support innovation? (% critical priority)

Base: <100 employees N= 907; 101-500 employees N= 1045; 501-1,000 employees N=588; >1,000 employees N= 669
And it also varies by sector

- My company has already resorted to crowdsourcing
- My company embraces open source innovation

Q13-2&3. Which of the following apply in your company? Base: Sectors – Min n=140 – Max n=469

- Professional services: 40% (Other: 61%)
- High-tech / IT: 40% (Other: 62%)
- Industrial products: 37% (Other: 67%)
- Energy: 37% (Other: 60%)
- Healthcare: 35% (Other: 58%)
- FMCG: 32% (Other: 58%)
- Manufacturing: 31% (Other: 58%)
- Electronics: 31% (Other: 57%)
- Telecoms: 30% (Other: 58%)
- Automotive: 30% (Other: 52%)
Big data is not longer a buzz word

Do you believe in the importance of data sciences and analytics in enabling innovation?

Big data is critical to optimize the business operational efficiency of all types of businesses

31% Critical for all

Big data is a critical tool to optimize the business efficiency, but only for certain types of businesses

39% Critical for some

Data sciences and analytics can be useful tools but not as critical as often said

23% Useful tool

Big data is more of a buzz word than a reality

6% Buzz Word

5%
Q15-3. Are you familiar with the following notions? Big data Base: Country results N= 100–300 per market / Base: South Africa results N= 100

But not all markets are familiar with Big data
Believe it is critical to understand customers and anticipate market evolutions to innovate successfully (84%)

Believe it is critical to use analytics and predictive knowledge to innovate successfully (53%)

Most identify the need for predictive data

But only half identify Big Data as being the solution

Q1-3 Q2-9 – innovation priorities, Base all n=3,209. Q21. Big data is / will be a real challenge for my company as it forces to allocate resources and budget at the expense of more traditional activities (e.g. marketing, insight, research, etc). Base Those which increased/planning to increase ability N= 1,851 //Q22/Has your company managed to make the most out of the data collected and convert this into added value for the innovation process? Base: Big Data users global N= 1,135 //20 bis/ Do data scientists, i.e. those who able to make sense of large amounts of data, have strong influence and authority in your company . Base Big data enabled companies N=721
The planning of increased analytical capabilities is polarising across countries

HAVE NOT INCREASED THEIR ABILITY TO ANALYZE LARGE AND COMPLEX AMOUNTS OF DATA OVER THE LAST YEAR AND WON’T

Q20. Has your company increased its ability to analyze large and complex amounts of data over the last year? (% Yes)
Base: Country results N= 100–300 per market, South Africa results N= 100
Sectors with more advanced technical expertise or more structured sets of data lead the change, but better be a larger company.

NUMBER OF COMPANIES WHICH HAVE **INCREASED ABILITY** TO ANALYZE LARGE AND COMPLEX AMOUNTS OF DATA OVER THE LAST YEAR?

Q20. Has your company increased its ability to analyze large and complex amounts of data over the last year? (% Yes) Base: Sectors – Min n=140 – Max n=469 / company size: <100 employees N= 907; 101-500 employees N= 1045; 501-1,000 employees N=588; >1,000 employees N= 669
Big Data, the reality:

Q1-3 Q2-9 – innovation priorities, Base all n=3,209. Q21. Big data is / will be a real challenge for my company as it forces to allocate resources and budget at the expense of more traditional activities (e.g. marketing, insight, research, etc). Base Those which increased/planning to increase ability N= 1,851

Has your company managed to make the most out of the data collected and convert this into added value for the innovation process? Base: Big Data users global N= 1,135

Do data scientists, i.e. those who able to make sense of large amounts of data, have strong influence and authority in your company. Base Big data enabled companies N=721

And many dread the challenge/ impact of its implementation on the business model

Those experiencing increased data analytics capabilities see the added value Big Data brings into their innovation process

61% of those who have made the move or are planning so, Declare Big data is / will be a real challenge as it forces to allocate resources and budget at the expense of more traditional activities

69% declare they made the most out of the data collected and converted it into added value for the innovation process
“Industrial internet” or “Internet of things” = “The next generation of internet integrating complex physical machinery with networked sensors and software”

**FAMILIARITY WITH THE NOTION**

- Fully familiar with this notion: 26%
- Heard of it but were not completely sure of its meaning: 30%
- Never heard of it: 44%

**THE 'INDUSTRIAL INTERNET' OR 'INTERNET OF THINGS' WILL HAVE A RATHER...**

- **Positive impact** on the job market, fuelling companies performance and growth and creating new demand for employment: 31%
- **Neutral impact** on the job market, transforming the overall job market: 18%
- **Negative impact** on the job market, making it easier to replace unskilled workers by machines and automated processes: 7%

Q15. Are you familiar with the following notions? Base: Global results N= 3,209 // Q18-1. Now we are going to present different views on these emerging trends, we would like you to pick the one you feel is the truest or the most relevant. Base: Global results N= 3,209
High tech / IT and Telecoms are paving the way

50% of business executives agree the “industrial internet” will drive innovation success in the future.

50% of businesses already equipped with a strategy or process to make the most of...

Q17. Is your business already equipped with a strategy or process to make the most of... Base: Global results N= 3,209 / Sectors – Min n=140 – Max n=469
The GloCal nature of Innovation is becoming table-stake, the innovation playground knows no borders

Infrastructure challenges of emerging economies don’t stop innovative businesses, even if scaling up is a clear issue for them

Increasingly Innovation is about finding the right talent, partners, resources, ideas and insight on a global scale

Constraints in emerging markets can be converted into opportunities, even if some interesting differences emerge on this notion

The focus on local needs and specificities is being recognized

In most emerging economies, multinational companies drive Innovation much more prominently than local governments or academia, and more so than local business
Think “glocal”!

INNOVATION IS INCREASINGLY BECOMING A GLOBAL GAME, MERGING AND COMBINING TALENTS, IDEAS, INSIGHTS AND RESOURCES ACROSS THE WORLD IS THE ONLY WAY TO BE SUCCESSFULLY INNOVATIVE.

Q6-2&1. Would you say that you strongly agree, somewhat agree, somewhat disagree or strongly disagree with the following opinions? Base: Global results N= 3,209

GLOBALIZATION

MORE THAN EVER BEFORE, INNOVATION NEEDS TO BE LOCALIZED TO SERVE SPECIFIC MARKET NEEDS.

Strongly agree
Somewhat agree
Somewhat disagree
Strongly disagree

Global 82%
Local 73%

2012 2013 2014

76% 84% 73%

48% 37% 36%

4% 9% 18%
Localized innovation is more polarizing

MORE THAN EVER BEFORE, INNOVATION NEEDS TO BE LOCALIZED TO SERVE SPECIFIC MARKET NEEDS

INNOVATION IS INCREASINGLY BECOMING A GLOBAL GAME, MERGING AND COMBINING TALENTS, IDEAS, INSIGHTS AND RESOURCES ACROSS THE WORLD IS THE ONLY WAY TO BE SUCCESSFULLY INNOVATIVE

Q6-2&1. Would you say that you strongly agree, somewhat agree, somewhat disagree or strongly disagree with the following opinions?
Base: Global results N= 3,209. Base: Country results N= 100–300 per market / Base: South Africa results N= 100
Constraints in emerging markets mostly seen as an innovation opportunity

THE CONSTRAINTS EXPERIENCED BY SOME EMERGING COUNTRIES (E.G. LOWER PURCASHING POWER, ENERGY CHALLENGES, LACK OF INFRASTRUCTURES, ETC.)

Create innovation opportunities for companies, willing to invest in overcoming them

74%

26%

Make it almost impossible to innovate there

CREATE INNOVATION OPPORTUNITIES

Professional services
Telecoms
FMCG
Healthcare
Energy
Other
High-tech / IT
Automotive
Manufacturing
Industrial products
Electronics

1,000+
501-1,000
101-500
<100

77%
76%
76%
76%
75%
73%
73%
71%
70%
70%
79%
71%
73%
74%

Q4-5. Now we are going to present different views on the ideal innovation process, we would like you to pick the one you feel is the truest or the most relevant in driving successful innovation. Base: Global results N= 3,209 / Base: Country results N= 100–300 per market / Base: South Africa results N= 100

The country is under-indexing compared to the global average.
Q4-5. Now we are going to present different views on the ideal innovation process. We would like you to pick the one you feel is the truest or the most relevant in driving successful innovation. Base: Country results N= 100–300 per market / Base: South Africa results N= 100
Multinationals more likely to be the local innovation champion than large national enterprises

WHO IS DRIVING INNOVATION THE MOST TODAY IN YOUR COUNTRY?

- Multinationals
- Large enterprises headquartered in your country

Q7. Who do you think is driving innovation the most today in your country? Base: Country results N= 100–300 per market / Base: South Africa results N= 100
Q7. Who do you think is driving innovation the most today in your country? Based on businesses for which a country over-indexes compared to global average Base: Country results N= 100–300 per market / Base South Africa N= 100

The business fabric of innovation varies across countries, each picking a combination of business types to lead it.
The need for disruption in processes and behaviors is established as a criterion for success. But business leaders are still very much focused on short term profitability. And struggle to adopt more spontaneous, creative and interactive innovation models. More traditional organizational design attached to Innovation activities remain the norm.

To maximize the potential of this new environment, business leaders need to make some « tough calls ».

Innovation is disrupting the business status-quo, business leaders face uneasy trade-offs.
Being truly innovative is a challenge, requiring to change mind-sets, behaviours and processes. Disrupt!

64% agree that to be successful when innovating, companies must encourage creative behaviours and disruptive processes in the business, especially:

<table>
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<tr>
<th>Sector</th>
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<tr>
<td>Healthcare sector</td>
<td>70%</td>
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<td>Vs. 64% in all other sectors</td>
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<td>67% Amongst those that already collaborate</td>
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<td>Vs. 60% for those who don’t</td>
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<td>68% Amongst those already use open sources</td>
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<td>Vs. 60% for those who don’t</td>
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<td>69% Amongst those already use big data</td>
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<td>Vs. 63% for those who don’t</td>
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Very consistently across audience, 59% consider the difficulty to come up with radical and disruptive ideas as a key challenge killing your business’s ability to innovate efficiently, independently from the profile of their company.
Emerging countries are the most open to disrupt their internal business model

WHEN INNOVATING, COMPANIES MUST ENCOURAGE CREATIVE BEHAVIOURS AND DISRUPTIVE PROCESSES IN THE BUSINESS, ESPECIALLY

THE DIFFICULTY TO COME UP WITH RADICAL AND DISRUPTIVE IDEAS AS A KEY CHALLENGE KILLING YOUR BUSINESS’S ABILITY TO INNOVATE EFFICIENTLY, INDEPENDENTLY FROM THE PROFILE OF THEIR COMPANY

Q5-1. Do you consider any of the following as key challenges killing your business’s ability to innovate efficiently?  Q1_5. Thinking about how companies manage innovation, how important are the following for a company to be able to innovate successfully? (Grades from 8 to 10)

Base: Country results N= 100–300 per market / Base: South Africa results N= 100
But behind good “disruptive” intentions, most prefer to stick to well-established and more conservative practices and processes.

**When innovating, it is best...**

- To protect the core business’ profitability as much as possible, so to support research & innovation efforts: 77%
- Not to worry about the potential short term negative impact on the core business' revenue: 23%

**The most successful innovations are**

- Planned, emerging through a structured innovation process: 62%
- Spontaneous, emerging through the interactions of creative individuals: 38%

Q4-1&2. Now we are going to present different views on the ideal innovation process, we would like you to pick the one you feel is the truest or the most relevant in driving successful innovation. Base: Global results N= 3,209 / Base: South Africa results N= 100
Some markets are more disruptive than others as regard the ideal innovation process, but the large majority agrees on the importance to protect the core business' profitability.

Q4-1&2. Now we are going to present different views on the ideal innovation process, we would like you to pick the one you feel is the truest or the most relevant in driving successful innovation. Base: Country results N=100–300 per market / Base: South Africa results N=100

The most successful innovations are planned, emerging through a structured innovation process.

When innovating, it is best to protect the core business' profitability as much as possible, so to support research & innovation efforts.
Internal agility and speed clearly identified as pre-requisites to Innovation success.

“Fast works” related concepts are getting traction, but old reflexes are hard to shake-off

Internal inertia is identified a strong « innovation killer »

How to foster an environment fully ready for disruptive and radical innovation is a key challenge

The ability to adopt and implement emerging technologies fast is clearly identified as a business driver and competitive advantage, but only a few excel at it

The acceleration of the go-to market process (test fast, fail fast, pivot fast) is embraced by half of Innovation executives, but still generate considerable nervousness
There is a strong consensus on the need for internal agility, and the difficulty of achieving it.

67% agree that to be successful when innovating, companies **must quickly adapt and implement emerging technologies**.

57% consider the **internal inertia** and the **incapacity to be nimble**, failing at rapidly converting ideas into actions is a **challenge limiting** their business’s ability to innovate efficiently.

**Internal inertia** is a **key critical challenge** killing their business’s ability to innovate efficiently.

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<thead>
<tr>
<th>Industry</th>
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Q1/Q2. Thinking about how companies **manage innovation**, how important are the following for a company to be able to innovate successfully? (Grades 8-10)

Q5-7. Do you consider any of the following as key challenges killing your business’s ability to innovate efficiently (A critical challenge/A bit of a challenge)?

Base: Global results N= 3,209
Emerging technologies are a priority for most

TO BE SUCCESSFUL WHEN INNOVATING, COMPANIES MUST QUICKLY ADAPT AND IMPLEMENT EMERGING TECHNOLOGIES

Q1/Q2. Thinking about how companies manage innovation, how important are the following for a company to be able to innovate successfully? (Grades 8-10)

Base: Country results N= 100–300 per market / Base: South Africa results N = 100
Internal inertia is an innovation challenge in most countries.

INTERNAL INERTIA IS A KEY CRITICAL CHALLENGE KILLING THEIR BUSINESS’S ABILITY TO INNOVATE EFFICIENTLY

Q5-7. Do you consider any of the following as key challenges killing your business’s ability to innovate efficiently (A critical challenge/ A bit of a challenge)?
Base: Country results N= 100–300 per market / Base: South Africa results N= 100
Speed to market remains a tougher decision dividing innovation executives into 2 camps

50% think it is crucial for companies to adopt a test fast, fail fast, adjust fast approach in order to innovate successfully.

When innovating, it is best...

To get to market as quickly as possible to keep an edge on competition

Not to rush and take all the time needed to perfect the innovation

IT IS CRUCIAL FOR COMPANIES TO ADOPT A TEST FAST, FAIL FAST, ADJUST FAST APPROACH IN ORDER TO INNOVATE SUCCESSFULLY...

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Q4-4. Now we are going to present different views on the ideal innovation process, we would like you to pick the one you feel is the truest or the most relevant in driving successful innovation. Q1/Q2. Thinking about how companies manage innovation, how important are the following for a company to be able to innovate successfully? (Grades 8 to 10) Base: Global results N= 3,209 & Base: Global – sectors N= min n=40 (Telecomms) max n=469 (Manufacturers), / Base: South Africa results N= 100
Speed to market, Japan leads the race

WHEN INNOVATING, IT IS BEST TO GET TO MARKET AS QUICKLY AS POSSIBLE TO KEEP AN EDGE ON COMPETITION

Q4-4. Now we are going to present different views on the ideal innovation process, we would like you to pick the one you feel is the truest or the most relevant in driving successful innovation. Base: Country results N= 100–300 per market / Base: South Africa results N= 100
The speed at which business adopt emerging technologies is critical

TO INNOVATE EFFICIENTLY AND SUCCESSFULLY, IT IS CRITICAL FOR COMPANIES…

- To understand customers and anticipate market evolutions: 84% (+3 pts)
- To attract and retain the most talented and skilled individuals: 79% (+6 pts)
- To quickly adapt and implement emerging technologies: 67% (+1 pt)
- To encourage creative behaviours and disruptive processes in the business: 64% (unchanged)
- To identify and work collaboratively with the best external business partners: 62% (-4 pts)
- To allocate and secure a specific budget for innovation activities: 59% (+5 pts)
- To prioritize longer term innovation goals over shorter term financial objectives: 58% (-1 pt)
- To adopt a test fast, fail fast, adjust fast approach: 53% (-4 pts)
- To use analytics and predictive knowledge: 50% (-4 pts)
- To make the most of public authorities' incentives, subsidies, tax credit: 48% (unchanged)
- To attract investors to fund innovative programs: 41% (+7 pts)
Identifying future opportunity is a core priority for all

To understand customers and anticipate market evolutions.

Q1/Q2. How important do you think the following elements are for a company to be able to innovate successfully? (Grades from 8 to 10)

Base: Country results N=100–300 per market / South Africa results N=100
In many countries, the need for talent is becoming even more strategic

TO ATTRACT AND RETAIN THE MOST TALENTED AND SKILLED INDIVIDUALS

Q1/Q2. How important do you think the following elements are for a company to be able to innovate successfully? (Grades from 8 to 10)

Base: Country results N= 100–300 per market/ South Africa results N= 100

NEW markets 2014
Less of a consensus on how best to council longer and shorter terms requirements

TO PRIORITIZE LONGER TERM INNOVATION GOALS OVER SHORTER TERM FINANCIAL OBJECTIVES

Q1/Q2. How important do you think the following elements are for a company to be able to innovate successfully? (Grades from 8 to 10)

Base: Country results N= 100–300 per market/ South Africa results N= 100
More businesses rely on internal funds in emerging markets

Q1/Q2. How important do you think the following elements are for a company to be able to innovate successfully? (Grades from 8 to 10)

Base: Country results N=100–300 per market; South Africa results N = 100
Attracting investors, still key in emerging markets

Q1/Q2. How important do you think the following elements are for a company to be able to innovate successfully? (Grades from 8 to 10)
Base: Country results N= 100–300 per market/ South Africa results N= 100
Designing effective and sustainable business models lays at the very core of innovation executives’ concerns and priorities.

Managing collaboration, articulating revenue streams, funding innovation activities and finding them a « home » in the company are identified as focus areas.

The difficulty to scale up Innovative business is the number one “Innovation killer”

How to articulate revenue streams coming from innovative activities and more core business operations is challenging. Only a minority of respondents are ready to risk disrupting current profit streams to enable innovative business to grow.

How to fund innovation aggressively both from public and private sources is a challenge, both because of internal and external factors.

Deciding where best to embed and integrate the new functions and external partners can have important consequences on the operations and on the culture of the firm.
The difficulty to define an effective business model to support new ideas and make them profitable is a challenge killing the ability to innovate for 60%.
Some markets express a stronger need to define a new business model to support successful innovation

THE DIFFICULTY TO DEFINE AN EFFECTIVE BUSINESS MODEL TO SUPPORT NEW IDEAS AND MAKE THEM PROFITABLE IS A CHALLENGE KILLING THE ABILITY TO INNOVATE
Businesses face many challenges limiting their ability to lead more radical and larger scale innovation

**The incapacity to scale up successful innovations, to a wider or international market**

**The difficulty to come up with radical and disruptive ideas**

**The difficulty to define an effective business model to support new ideas and make them profitable**

**To lack sufficient investment**

**A lack of talent / inadequate skillset**

**To lack internal support from leadership team/top management**

**The internal inertia and the incapacity to be nimble, failing at rapidly converting ideas into actions**

**The incapacity of the business to take risks**

---

**KEY CHALLENGES KILLING THEIR BUSINESS’S ABILITY TO INNOVATE EFFICIENTLY**

<table>
<thead>
<tr>
<th>Challenges</th>
<th>Critical challenge</th>
<th>A bit of a challenge</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scaling up</td>
<td>61%</td>
<td>24%</td>
</tr>
<tr>
<td>Disruptive ideas</td>
<td>59%</td>
<td>21%</td>
</tr>
<tr>
<td>Effective business model</td>
<td>60%</td>
<td>18%</td>
</tr>
<tr>
<td>Lack of investment</td>
<td>56%</td>
<td>23%</td>
</tr>
<tr>
<td>Lack of talent</td>
<td>57%</td>
<td>22%</td>
</tr>
<tr>
<td>Lack of top-down support</td>
<td>44%</td>
<td>19%</td>
</tr>
<tr>
<td>Internal inertia</td>
<td>57%</td>
<td>17%</td>
</tr>
<tr>
<td>Risk averse</td>
<td>50%</td>
<td>16%</td>
</tr>
</tbody>
</table>

Q5. Do you consider any of the following as key challenges killing your business’s ability to innovate efficiently? Base: Global results N= 3,209
Q5. Do you consider any of the following as key challenges killing your business’s ability to innovate efficiently?

<table>
<thead>
<tr>
<th>Challenge</th>
<th>Global average</th>
<th>South Africa</th>
</tr>
</thead>
<tbody>
<tr>
<td>The incapacity to scale up successful innovations, to a wider or international market</td>
<td>24%</td>
<td>28%</td>
</tr>
<tr>
<td>To lack sufficient investment and financial support</td>
<td>23%</td>
<td>26%</td>
</tr>
<tr>
<td>The difficulty to come up with radical and disruptive ideas</td>
<td>21%</td>
<td>18%</td>
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<td>A lack of talent / inadequate skillset</td>
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<td>32%</td>
</tr>
<tr>
<td>The difficulty to define an effective business model to support new ideas and make them profitable</td>
<td>18%</td>
<td>19%</td>
</tr>
<tr>
<td>To lack internal support from leadership team/top management</td>
<td>19%</td>
<td>18%</td>
</tr>
<tr>
<td>The internal inertia and the incapacity to be nimble, failing at rapidly converting ideas into actions</td>
<td>17%</td>
<td>19%</td>
</tr>
<tr>
<td>The incapacity of the business to take risks</td>
<td>16%</td>
<td>16%</td>
</tr>
</tbody>
</table>

South African executives find lack of talent is a crucial barrier for innovation in their business.
Unsurprisingly, smaller and younger businesses suffer the most from this challenges

Q5. Do you consider any of the following as key challenges killing your business’s ability to innovate efficiently?
Base: Global results N= 3,209

<table>
<thead>
<tr>
<th>Challenge</th>
<th>Global Average</th>
<th>Number of employees</th>
<th>Age of company</th>
</tr>
</thead>
<tbody>
<tr>
<td>The incapacity to scale up successful innovations, to a wider or international market</td>
<td>24%</td>
<td>&lt;100: 26% 101-500: 26% 501-1000: 23% 1000+: 17%</td>
<td>&lt;5 yrs: 30% 5 yrs+: 23% C-level: 23%</td>
</tr>
<tr>
<td>To lack sufficient investment and financial support</td>
<td>23%</td>
<td>&lt;100: 28% 101-500: 22% 501-1000: 20% 1000+: 20%</td>
<td>&lt;5 yrs: 18% 5 yrs+: 23% C-level: 26%</td>
</tr>
<tr>
<td>The difficulty to come up with radical and disruptive ideas</td>
<td>21%</td>
<td>&lt;100: 23% 101-500: 20% 501-1000: 20% 1000+: 21%</td>
<td>&lt;5 yrs: 21% 5 yrs+: 21% C-level: 23%</td>
</tr>
<tr>
<td>A lack of talent / inadequate skillset</td>
<td>22%</td>
<td>&lt;100: 26% 101-500: 20% 501-1000: 20% 1000+: 18%</td>
<td>&lt;5 yrs: 24% 5 yrs+: 21% C-level: 24%</td>
</tr>
<tr>
<td>The difficulty to define an effective business model to support new ideas and make them profitable</td>
<td>18%</td>
<td>&lt;100: 18% 101-500: 18% 501-1000: 16% 1000+: 19%</td>
<td>&lt;5 yrs: 28% 5 yrs+: 18% C-level: 17%</td>
</tr>
<tr>
<td>To lack internal support from leadership team/ top management</td>
<td>19%</td>
<td>&lt;100: 21% 101-500: 18% 501-1000: 18% 1000+: 16%</td>
<td>&lt;5 yrs: 23% 5 yrs+: 18% C-level: 16%</td>
</tr>
<tr>
<td>The internal inertia and the incapacity to be nimble, failing at rapidly converting ideas into actions</td>
<td>17%</td>
<td>&lt;100: 15% 101-500: 18% 501-1000: 18% 1000+: 20%</td>
<td>&lt;5 yrs: 12% 5 yrs+: 18% C-level: 16%</td>
</tr>
<tr>
<td>The incapacity of the business to take risks</td>
<td>16%</td>
<td>&lt;100: 19% 101-500: 16% 501-1000: 14% 1000+: 15%</td>
<td>&lt;5 yrs: 15% 5 yrs+: 16% C-level: 16%</td>
</tr>
</tbody>
</table>

Over-indexing: More of a innovation killer
Under-indexing: Less of a innovation killer
The incapacity to scale up successful innovations, to a wider or international market
24% 20% 26% 24% 23% 16% 19% 27% 25% 22% 31% 21%

To lack sufficient investment and financial support
23% 23% 25% 21% 22% 21% 27% 24% 24% 23% 23% 20%

The difficulty to come up with radical and disruptive ideas
21% 18% 21% 24% 21% 22% 17% 23% 18% 18% 25% 18%

A lack of talent / inadequate skillset
22% 19% 24% 19% 20% 17% 24% 21% 25% 25% 24% 17%

The difficulty to define an effective business model to support new ideas and make them profitable
18% 19% 20% 20% 19% 15% 23% 18% 14% 17% 15% 11%

To lack internal support from leadership team/top management
19% 18% 20% 17% 18% 15% 23% 18% 19% 22% 18% 15%

The internal inertia and the incapacity to be nimble, failing at rapidly converting ideas into actions
17% 17% 18% 20% 16% 13% 15% 18% 15% 23% 18% 15%

The incapacity of the business to take risks
16% 17% 18% 14% 12% 17% 18% 19% 10% 18% 18% 11%

Q5. Do you consider any of the following as key challenges killing your business’s ability to innovate efficiently?
Base: Global results N= 3,209
Despite seeing a factor as a critical innovation driver, only some excel in delivering it in their company

The Performance of their company against innovation drivers:

- To understand customers and anticipate market evolutions: 33% critical, 84% extreme well, 39% conversion rate.
- To attract and retain the most talented and skilled individuals: 25% critical, 79% extreme well, 32% conversion rate.
- To quickly adapt and implement emerging technologies: 28% critical, 67% extreme well, 42% conversion rate.
- To encourage creative behaviours and disruptive processes in the business: 26% critical, 64% extreme well, 41% conversion rate.
- To identify and work collaboratively with the best external business partners: 27% critical, 62% extreme well, 44% conversion rate.
- To allocate and secure a specific budget for innovation activities: 23% critical, 59% extreme well, 39% conversion rate.
- To prioritize longer term innovation goals over shorter term financial objectives: 25% critical, 58% extreme well, 43% conversion rate.
- To use analytics and predictive knowledge: 25% critical, 53% extreme well, 47% conversion rate.
- To adopt a test fast, fail fast, adjust fast approach: 24% critical, 50% extreme well, 48% conversion rate.
- To make the most of public authorities' incentives, subsidies, tax credit: 27% critical, 48% extreme well, 56% conversion rate.
- To attract investors to fund innovative programs: 21% critical, 41% extreme well, 51% conversion rate.

Only 39% of those who said it was an important driver think their company is excelling at delivering it.

Q1/Q2. How important do you think the following elements are for a company to be able to innovate successfully? Base: Global results N= 3,209

Q3. To what extent does your company currently perform against these success criteria? Based on those who said it was a critical factor (8-10)
Despite seeing a factor as a critical innovation driver, only some excel in delivering it in their company.

The Performance of Their Company Against Innovation Drivers:

1. To understand customers and anticipate market evolutions: 40% of respondents believe it is critical, and 86% of those think their company is performing extremely well.
2. To attract and retain the most talented and skilled individuals: 36% believe it is critical, and 78% of those think their company is performing extremely well.
3. To quickly adapt and implement emerging technologies: 33% believe it is critical, and 75% of those think their company is performing extremely well.
4. To encourage creative behaviours and disruptive processes in the business: 29% believe it is critical, and 69% of those think their company is performing extremely well.
5. To identify and work collaboratively with the best external business partners: 33% believe it is critical, and 64% of those think their company is performing extremely well.
6. To allocate and secure a specific budget for innovation activities: 25% believe it is critical, and 65% of those think their company is performing extremely well.
7. To prioritize longer term innovation goals over shorter term financial objectives: 18% believe it is critical, and 65% of those think their company is performing extremely well.
8. To use analytics and predictive knowledge: 25% believe it is critical, and 63% of those think their company is performing extremely well.
9. To adopt a test fast, fail fast, adjust fast approach: 30% believe it is critical, and 61% of those think their company is performing extremely well.
10. To make the most of public authorities' incentives, subsidies, tax credit: 35% believe it is critical, and 55% of those think their company is performing extremely well.
11. To attract investors to fund innovative programs: 19% believe it is critical, and 52% of those think their company is performing extremely well.

Q1/Q2. How important do you think the following elements are for a company to be able to innovate successfully? Base: South Africa results N= 100

Q3. To what extent does your company currently perform against these success criteria? Based on those who said it was a critical factor (8-10)
Funding Innovation remains highly complex

**External environment**
- Private investors are supportive of companies that need funds to innovate 65%
- The lack of sufficient investment and financial support is a key challenge for 56%
- Government and public authorities allocate an adequate share of their budget to support innovative companies 47%
- The first priority is to fight bureaucracy and red tape for companies willing to access funds and incentives allocated to innovation 87%

**Crucial internal Innovation drivers**
- To attract investors to fund innovative programs 41%
- To make the most of public authorities’ incentives, subsidies, tax credit 48%
- To allocate and secure a specific budget for innovation activities 59%
- To prioritize longer term innovation goals over shorter term financial objectives 58%

**Company performance**
- 21% of whom perform extremely well at attracting investors to fund innovative programs
- 27% of whom perform extremely well at making the most of public authorities’ incentives, subsidies, tax credit
- 23%* of whom perform extremely well at it
- 25%* of whom perform extremely well at it

Q1/Q2. How important do you think the following elements are for a company to be able to **innovate successfully**? Base: Global results N= 3,209
Q3. To what extent does your company currently perform against these success criteria? Based on those who said it was a critical factor (8-10)
Overall, a consolidated support from private investors

PRIVATE INVESTORS ARE **SUPPORTIVE** OF COMPANIES THAT **NEED FUNDS TO INNOVATE**

Q10-1. Thinking about your country in particular, how far do you agree with the following statements? Private investors are supportive of companies that need funds to innovate. Results for top 2 boxes (somewhat agree + totally agree).

Base: Country results N= 100–300 per market; South Africa results N= 100
Even if disruption is accepted in theory, most prefer to stick to well-established and more conservative practices and processes.
Positioning innovative teams and activities inside the business is the dominant model, only High-tech and IT companies tend to be more open to an outside model.

In terms of organizational design, it is best to position innovative teams and activities:

- **Inside** the existing lines of businesses and structured teams: 68%
- **Outside** in a specialized and dedicated innovation/research centres: 32%

Q4-3. Now we are going to present different views on the ideal innovation process. We would like you to pick the one you feel is the truest or the most relevant in driving successful innovation. Base: Global results N= 3,209. Base: Global – sectors N= min 140 (Telecomms) max 469 (Manufacturers). Base: South Africa results N= 100.

- **High-tech / IT**: 38%
- **Healthcare**: 36%
- **Electronics**: 33%
- **FMCG**: 33%
- **Other**: 32%
- **Automotive**: 32%
- **Manufacturing**: 31%
- **Professional services**: 30%
- **Telecoms**: 30%
- **Energy**: 30%
- **Industrial products**: 26%

**Global average**: 32%

The country is over-indexing compared to the global average.

The country is under-indexing compared to the global average.
Apart from Japan, the majority of innovative executives prefer to keep innovative teams and activities inside the existing lines of business. However, some are less closed than other to externalization.

In terms of organizational design, it is best to position innovative teams and activities outside in a specialized and dedicated innovation/research centres.

Q4-3. Now we are going to present different views on the ideal innovation process. We would like you to pick the one you feel is the truest or the most relevant in driving successful innovation. Base: Country results N= 100–300 per market / Base: South Africa results N= 100.
What are business leaders’ expectations regarding the role of government and public authorities?

Provide a conducive Innovation framework, set the right incentives for Innovation, invest in talent, support SMEs and harness the power of multinationals

Governments have to provide the right framework for Innovation (IP protection, minimal red tape and bureaucracy, public private partnership)

They should also harness the power of public procurement to support innovation and manage subsidies carefully

They should make sure they prepare and give access to the talent pool needed to innovate better

They should focus innovation incentives on the value created beyond geographic or national considerations

They should amplify the support to Innovative SMEs and at the same time capitalize on the drive Multinationals can bring to their Innovation landscape
Innovation executive expect Public Authorities to improve the overall innovation framework of their country

Q12. What are the main priorities your country should focus on to efficiently support innovation? Global average. Results for top 2 boxes (critical priority & important but not critical priority). Base: N= 3,209

- **Fight bureaucracy** and red tape for companies willing to access funds and incentives allocated to innovation
- **Ensure that business confidentiality and trade secrets** are adequately protected
- Better align **students curricula** with the needs of business
- Facilitate **research cooperation** with other countries
- Actively promote **partnerships** between the public and private sectors
- **Reinforce IP** to encourage stronger collaboration between companies
- Encourage the **collaboration** of private companies with SoEs
- Ensure **public procurement** leads the early adoption of major innovations
- **Evaluate** the impact some of its local content requirement and regulatory policies
- Ensure **public procurement** always favor the most innovative solutions even if they come from foreign countries
- Encourage and ease the **hiring of talented foreign citizens**

Critical priority

Important but not a critical priority

Global average

- Fight bureaucracy: 87% (+1 pt)
- Business confidentiality: 86% (-3)
- Trade secrets: 85% (-4)
- Students curricula: 85%
- Research cooperation: 85%
- Partnerships: 83%
- Reinforce IP: 80%
- Collaboration: 72%
- Public procurement: 76%
- Local content requirement: 71%
- Regulatory policies: 70%
- Hiring of talented foreign citizens: 67%
Emerging markets put more pressure on policymakers to provide them with the framework they need to innovate successfully.

Innovation executives identify 4.1 priorities out of 12 as being critical to be addressed on average.

Q12. What are the main priorities your country should focus on to efficiently support innovation? Average number of critical priorities per country out of 12.

Base: Country results N= 100–300 per market / Base: South Africa results N= 100
The efficiency of government support for innovation is variable

Government support for innovation is efficiently organized

Q11-2. Thinking about the policies and actions undertaken in your country by the government and public authorities, how far do you agree with the following statements. Government support for innovation is efficiently organized. Results for top 2 boxes (somewhat agree + totally agree).

Base: Country results N= 100–300 per market; South Africa results N= 100

NEW markets 2014
A strong priority: ensure that business confidentiality and trade secrets are adequately protected

ENSURE THAT **BUSINESS CONFIDENTIALITY AND TRADE SECRETS** ARE ADEQUATELY PROTECTED

Q12-8. What are the main priorities your country should focus on to efficiently support innovation? Ensure that business confidentiality and trade secrets are adequately protected. Results for top 2 boxes (critical priority & important but not critical priority).

Base: Country results N= 100–300 per market; South Africa results N= 100
Q12. What are the main priorities your country should focus on to efficiently support innovation? Average number of critical priorities per country out of 12.

Base: Country results N= 100–300 per market; South Africa results N= 100

Talent management remains an essential priority
The financial support from governments and public authorities varies significantly across countries

Q12. What are the main priorities your country should focus on to efficiently support innovation? Average number of critical priorities per country out of 12. Base: Country results N= 100–300 per market; South Africa results N= 100
Public Procurement is expected to adopt a first in class practices

MAIN PRIORITIES COUNTRY SHOULD FOCUS ON TO EFFICIENTLY SUPPORT INNOVATION

Lead
To ensure public procurement leads the early adoption of major innovations is a critical priority for 76%

Better regulate
Evaluate the impact some of its local content requirement and regulatory policies 71%

Be open
To ensure public procurement always favor the most innovative solutions even if they come from foreign countries 70%
Nuances in expectations in regards to procurement

MAIN PRIORITIES COUNTRY SHOULD FOCUS ON TO EFFICIENTLY SUPPORT INNOVATION

To ensure public procurement…
- always favor the most innovative solutions even if they come from foreign countries
- leads the early adoption of major innovations is a critical priority for

Q12-10&11. What are the main priorities your country should focus on to efficiently support innovation? Global average. Results for top 2 boxes (critical priority & important but not critical priority). Base: Country results N= 100–300 per market / Base: South Africa results N= 100
Public subsidies / preference are broadly accepted, but nationality bias are favoured by a minority

What do you think is the best public policy?

Give subsidies/preferences to local business only to favor the development of local solutions

Give subsidies/preferences to both local and international businesses willing to bring innovative solutions to the market

Subsidies and preferences are not an effective way to support innovation as they introduce strong bias and have only short term effects

Q4-6. Now we are going to present different views on the ideal innovation process, we would like you to pick the one you feel is the truest or the most relevant in driving successful innovation. Base: Global results N= 3,209

Sectors

- Automotive 54%
- Healthcare 55%
- Energy 53%
- High-tech / IT 53%

- Telecommunications 38%
- Other 34%
- Electronics 32%
- Professional services 29%

- Industrial products 22%
- FMCG 22%
- Manufacturing 21%
No consensus on the use of Public subsidies / preference

- Give subsidies/presences to **both local** and **international** businesses willing to bring innovative solutions to the market
- Subsidies and preferences are **not an effective way** to support innovation as they introduce strong bias and have only short term effects
- Give subsidies/presences to local businesses only to favor the development of local solutions

In Germany, Indonesia and the US, the role for Public Subsidies is rejected by more than 1 in 3 Innovation executives

Q4-6. Now we are going to present different views on the ideal innovation process, we would like you to pick the one you feel is the truest or the most relevant in driving successful innovation. Base: Country results N= 100–300 per market / Base: South Africa results N= 100
Governments’ support to SMEs is largely seen as currently insufficient

**PUBLIC AUTHORITIES DO NOT SUPPORT SME’S IN THEIR INNOVATION EFFORTS ENOUGH**

Q11-3. Thinking about the policies and actions undertaken in your country by the government and public authorities, how far do you agree with the following statements. Public authorities do not support SME’s in their innovation efforts enough. Results for top 2 boxes (somewhat agree + totally agree).

Base: N= 3,209 / Base: South Africa results N= 100
Small is beautiful!
SMEs, start-ups and individuals are seen as the innovation champions and the most promising collaboration partners

WHO IS DRIVING INNOVATION THE MOST TODAY IN YOUR COUNTRY?

- **SMEs**: 21%
- **Start-ups & Individuals**: 20%
- **Multinationals**: 19%
- **Large Enterprises headquartered in your country**: 13%
- **Governments and public authorities**: 11%
- **Universities and research labs**: 11%
- **Public authorities at local level**: 3%
- **SoEs**: 1%

**Q7. Who do you think are driving innovation the most today in your country?**
Base: Global results N= 3,209

85% of innovation executives agree collaboration with start-up and entrepreneurs will drive innovation success in the future
SME’s and start-ups are battling the innovation champions title across countries

WHO IS DRIVING INNOVATION THE MOST TODAY IN YOUR COUNTRY?

- SMEs
- Start-ups & Individuals
- Multinationals
- Large Enterprises headquartered in your country

Q7. Who do you think are driving innovation the most today in your country? Base: Country results N= 100–300 per market / Base: South Africa results N= 100
Country specifics, there is no one size fits all model for Innovation

Innovation champions like USA and Germany, display contrasted perceptions and priorities. Emerging economies are not a consistent block, Asia emerging more positive and than African markets

The efficacy of government support to Innovation is increasingly contrasted (Singapore, UAE, China and KSA still and even more leading on this indicator than before, USA is stable at a low level of satisfaction)

USA confirms and amplifies its status as a leader for Innovation (Innovation champion, and most innovation conducive environment) at least from a reputation standpoint (macro economic indicators providing a more contrasted picture)

South Korea, Singapore, India are less perceived as innovation-friendly environments by the Global community
Understanding customers/markets and attracting / retaining talents are increasingly the top priority drivers of successful innovation

TO INNOVATE EFFICIENTLY AND SUCCESSFULLY, IT IS CRITICAL FOR COMPANIES…

<table>
<thead>
<tr>
<th>Element</th>
<th>Percentage</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>To understand customers and anticipate market evolutions</td>
<td>84%</td>
<td>+3 pts</td>
</tr>
<tr>
<td>To attract and retain the most talented and skilled individuals</td>
<td>79%</td>
<td>+6 pts</td>
</tr>
<tr>
<td>To quickly adapt and implement emerging technologies</td>
<td>67%</td>
<td>+1 pt</td>
</tr>
<tr>
<td>To encourage creative behaviours and disruptive processes in the business</td>
<td>64%</td>
<td>=</td>
</tr>
<tr>
<td>To identify and work collaboratively with the best external business partners</td>
<td>62%</td>
<td>- 4 pts</td>
</tr>
<tr>
<td>To allocate and secure a specific budget for innovation activities</td>
<td>59%</td>
<td>+ 5 pts</td>
</tr>
<tr>
<td>To prioritize longer term innovation goals over shorter term financial objectives</td>
<td>58%</td>
<td>- 1 pt</td>
</tr>
<tr>
<td>To use analytics and predictive knowledge</td>
<td>53%</td>
<td></td>
</tr>
<tr>
<td>To adopt a test fast, fail fast, adjust fast approach</td>
<td>50%</td>
<td>- 1 pt</td>
</tr>
<tr>
<td>To make the most of public authorities’ incentives, subsidies, tax credit</td>
<td>48%</td>
<td></td>
</tr>
<tr>
<td>To attract investors to fund innovative programs</td>
<td>41%</td>
<td>+ 7 pts</td>
</tr>
</tbody>
</table>

On average, executives describe 6.7 out of 12 as being critical priorities.

Q1/Q2. How important do you think the following elements are for a company to be able to innovate successfully? Base: Global results N= 3,209
Innovation executive expect Public Authorities to improve the overall innovation framework of their country

**Q12. What are the main priorities your country should focus on to efficiently support innovation? Global average. Results for top 2 boxes (critical priority & important but not critical priority). Base: N=3,209**

<table>
<thead>
<tr>
<th>Priority</th>
<th>Critical priority</th>
<th>Important but not a critical priority</th>
<th>Global average</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fight bureaucracy and red tape for companies willing to access funds and incentives allocated to innovation</td>
<td>54%</td>
<td>32%</td>
<td>87% (-1 pt)</td>
</tr>
<tr>
<td>Ensure that business confidentiality and trade secrets are adequately protected</td>
<td>53%</td>
<td>33%</td>
<td>86% (-3)</td>
</tr>
<tr>
<td>Better align students curricula with the needs of business</td>
<td>52%</td>
<td>34%</td>
<td>85% (-4)</td>
</tr>
<tr>
<td>Facilitate research cooperation with other countries</td>
<td>42%</td>
<td>43%</td>
<td>85%</td>
</tr>
<tr>
<td>Actively promote partnerships between the public and private sectors</td>
<td>41%</td>
<td>42%</td>
<td>83%</td>
</tr>
<tr>
<td>Reinforce IP to encourage stronger collaboration between companies</td>
<td>39%</td>
<td>42%</td>
<td>80%</td>
</tr>
<tr>
<td>Encourage the collaboration of private companies with SoEs</td>
<td>30%</td>
<td>42%</td>
<td>72%</td>
</tr>
<tr>
<td>Ensure public procurement leads the early adoption of major innovations</td>
<td>29%</td>
<td>47%</td>
<td>76%</td>
</tr>
<tr>
<td>Evaluate the impact some of its local content requirement and regulatory policies</td>
<td>25%</td>
<td>46%</td>
<td>71%</td>
</tr>
<tr>
<td>Ensure public procurement always favor the most innovative solutions even if they come from foreign countries</td>
<td>24%</td>
<td>46%</td>
<td>70%</td>
</tr>
<tr>
<td>Encourage and ease the hiring of talented foreign citizens</td>
<td>23%</td>
<td>43%</td>
<td>67%</td>
</tr>
</tbody>
</table>
Overall, a consolidated support from private investors

PRIVATE INVESTORS ARE SUPPORTIVE OF COMPANIES THAT NEED FUNDS TO INNOVATE

Q10-1. Thinking about your country in particular, how far do you agree with the following statements? Private investors are supportive of companies that need funds to innovate. Results for top 2 boxes (somewhat agree + totally agree). Base: N= 3,209 / Base: South Africa results N= 100

- Has improved
- Unchanged
- Has worsened

2013
2014

Overall, a consolidated support from private investors
A strong priority: ensure that business confidentiality and trade secrets are adequately protected

ENSURE THAT BUSINESS CONFIDENTIALITY AND TRADE SECRETS ARE ADEQUATELY PROTECTED

Q12-8. What are the main priorities your country should focus on to efficiently support innovation? Ensure that business confidentiality and trade secrets are adequately protected. Results for top 2 boxes (critical priority & important but not critical priority).

Base: N= 3,209 / Base: South Africa results N= 100
The efficiency of government support for innovation is variable

<table>
<thead>
<tr>
<th>Country</th>
<th>2013</th>
<th>2014</th>
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<tr>
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<td>Japan</td>
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<tr>
<td>Italy</td>
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<td>31%</td>
</tr>
<tr>
<td>Kenya</td>
<td>9%</td>
<td>30%</td>
</tr>
</tbody>
</table>

Q11-2. Thinking about the policies and actions undertaken in your country by the government and public authorities, how far do you agree with the following statements. Government support for innovation is efficiently organized. Results for top 2 boxes (somewhat agree + totally agree).

Base: N= 3,209 / Base: South Africa results N= 100
Innovation champion

WHAT IS THE COUNTRY THAT YOU CONSIDER TO BE THE LEADING INNOVATION CHAMPION?

35%

1st

USA

16%

2nd

Germany

12%

3rd

Japan

10%

China

South Korea

UK

India

Israel

France

Singapore

Sweden

Switzerland

UAE

Other

Unsure

Exit: Netherlands, Canada

Q8. What is THE country that you consider to be the leading innovation champion? Base: N= 3,209 / Open-ended question
### Assessment of the innovation environment in each market

<table>
<thead>
<tr>
<th>Market</th>
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<th>3</th>
<th>4</th>
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<th>6</th>
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<td>Singapore</td>
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<td>4%</td>
<td>2%</td>
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<tr>
<td>Finland</td>
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<td>2%</td>
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<tr>
<td>Netherlands</td>
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<td>12%</td>
<td>5%</td>
<td>4%</td>
<td>2%</td>
<td>2%</td>
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</table>

Q9. For each of the following markets, how far would you say that they have developed an Innovation-conducive environment? Base: N=3,171 / Note: % of respondents that have given a grade superior or equal to 7/10
A consistency between reputation and performance

<table>
<thead>
<tr>
<th>Country</th>
<th>Perception</th>
<th>« Reality »*</th>
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<tbody>
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<tr>
<td>Algeria</td>
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</tr>
</tbody>
</table>

The innovation frameworks of Sweden, Malaysia, Singapore are underappreciated

The innovation frameworks of China, India and Japan are over evaluated

*INSEAD Global Innovation Index - 2013
The self-evaluation of the innovation framework in own country varies

Q9. For each of the following markets, how far would you say that they have developed an Innovation-conducive environment?
Note: % of respondents that have given a grade superior or equal to 7/10 to their own country
Base: Country results N= 100–300 per market/ South Africa results N= 100
The Energy industry is facing multiple challenges, but driving economic growth through new and more sustainable sources of energy is identified as the absolute priority. The contribution from energy to the broader economic growth is identified as the number one challenge. The reduction of the environmental impact of energy and the diversification of the energy mix comes second. The rising role of analytics in helping the industry become more efficient is recognized but less prominent in energy respondents’ opinion.

Technical and medical innovation such as imaging devices and diagnosis tool is expected to drive progress the most in quality of healthcare. This is the first driver identified by Healthcare industry respondents. Scientific innovation and especially applied genetic science to diagnostic are also very high in the ranking. Policy innovation (awareness campaigns, early detection of diseases) is also expected to play a leading role.
Energy – priorities to tackle within 5 years

WHAT ARE THE main challenges the energy industry will have to face in the next five years?

To drive economic growth by developing new sources of energy
Identify and develop more sustainable sources of energy
Reduce the environmental impact of conventional energy sources such as oil and gas
Develop solutions to make conventional energy sources such as oil and gas more efficient and sustainable
Make energy prices lower and more competitive
Develop IT and analytic solutions to improve the control and maintenance of energy production, responding more efficiently to potential /breakage/technical issues
Reduce the geostrategic tensions linked to energy, answering the challenges of energy security
Improve the access to energy for individuals
To be able to operate remotely in inaccessible areas such as deep seas, South pole, etc.
Better answer the increasing need to share revenue and risk between companies involved in a collaborative innovation process

Absolute priority
Absolute/somewhat a priority

- To drive economic growth by developing new sources of energy: 50% (Absolute priority) - 86% (Absolute/somewhat a priority)
- Identify and develop more sustainable sources of energy: 50% (Absolute priority) - 86% (Absolute/somewhat a priority)
- Reduce the environmental impact of conventional energy sources such as oil and gas: 49% (Absolute priority) - 84% (Absolute/somewhat a priority)
- Develop solutions to make conventional energy sources such as oil and gas more efficient and sustainable: 46% (Absolute priority) - 85% (Absolute/somewhat a priority)
- Make energy prices lower and more competitive: 43% (Absolute priority) - 74% (Absolute/somewhat a priority)
- Develop IT and analytic solutions to improve the control and maintenance of energy production, responding more efficiently to potential /breakage/technical issues: 36% (Absolute priority) - 73% (Absolute/somewhat a priority)
- Reduce the geostrategic tensions linked to energy, answering the challenges of energy security: 34% (Absolute priority) - 77% (Absolute/somewhat a priority)
- Improve the access to energy for individuals: 30% (Absolute priority) - 71% (Absolute/somewhat a priority)
- To be able to operate remotely in inaccessible areas such as deep seas, South pole, etc.: 23% (Absolute priority) - 59% (Absolute/somewhat a priority)
- Better answer the increasing need to share revenue and risk between companies involved in a collaborative innovation process: 20% (Absolute priority) - 65% (Absolute/somewhat a priority)

E1. What are the main challenges the energy industry will have to face in the next five years?
Base: Global results N= 340* *Question asked only to executives from the energy sector
Healthcare – what will drive progress in quality of healthcare in next five years

In the next five years, what do you think will drive the most progress in the quality of healthcare delivered to citizens in your country? Please select 3 options from the most important, to the second most important to the third most important driver.

Base: Global results N= 417* *Question asked only to executives from the healthcare sector

First most important driver

- Innovations in genomics and molecular medicine that can more precisely diagnose disease at the individual level (17%)
- New imaging devices, medical techniques or diagnosis tools (17%)
- Consumer awareness campaigns, screening and early detection of disease (16%)
- New molecules / medicines (16%)
- Making sure we train enough healthcare professionals and technicians with the right skills to meet local needs (19%)
- Home health solutions, the consumerization of healthcare and the rise of wearable health monitoring devices (25%)
- Re-thinking how healthcare systems are organized and managed to build more financially sustainable operating models (26%)
- A cultural shift away from a disease based model to the value of healthy life (25%)
- Redefining how the private healthcare sector and public authorities collaborate (17%)
- The digitization of healthcare; improving healthcare delivery via use of information technology / data (19%)
- New financial / reimbursement / incentive models (10%)
- The adoption by developed markets of solutions initially created to answer the resource constraints in emerging markets (8%)

Summary 3 drivers

- Scientific innovation: 42%
- Technical / Medical innovation: 41%
- Policy innovation: 25%
- Pharma innovation: 26%
- Talent innovation: 25%
- Mobile innovation: 24%
- System innovation: 23%
- Cultural innovation: 23%
- Partnership innovation: 16%
- Digital Innovation: 16%
- Payment innovation: 10%
- Reverse innovation: 3%

None of these: 10%

H1. In the next five years, what do you think will drive the most progress in the quality of healthcare delivered to citizens in your country? Please select 3 options from the most important, to the second most important to the third most important driver.

Base: Global results N= 417* *Question asked only to executives from the healthcare sector