GE Global Innovation Barometer 2011

An Overview on Messaging, Data and Amplification





imagination at work

Innovation Barometer Data Overview

Survey objectives and design

Objectives

•Analyze perceptions around innovation challenges and the purpose of innovation from a multicultural perspective

•Contribute to conversations about how to encourage innovation globally

•Provide insights on current drivers and deterrents to innovation

Identify best practices from innovation champions

Design

•Managed by independent research and consulting firm, StrategyOne

•Telephone surveys of 1,000 senior business executives in 12 countries conducted between Dec 10, 2010 and Jan 14, 2011

•All respondents directly involved in their company's innovation processes

- •All respondents VP and above
 - •30% of respondents C-suite level (CEO, CFO, COO, etc.)



12 countries surveyed

Australia	100	Japan	50
Brazil	100	S Korea	50
China	100	Saudi Arabia	50
Germany	100	UAE	50
India	100	Sweden	100
Israel	100	USA	100



On the overall sample (1000 respondents) the error margin is situated between 0,9 and 3 pts

Hope for a more prosperous and competitive economy

95% of respondents believe innovation is the main lever for a more competitive national economy

88% of respondents believe innovation is the best way to create jobs in their country

This faith is global - results are quite consistent from one country to another



Innovation is a trusted driver for improvement in most areas of citizens' lives

How successfully do you think innovation could improve citizens' lives in each of the following areas in the next 10 years?

- • • • • • • • • • • • • • • • • • • •	_ • • • • • • • • • • • • • • • • • • •	
Communications	90%	1 <mark>0%</mark>
Health quality	87%	<mark>13%</mark>
Environmental quality	85%	<mark>15%</mark>
Job Market	85%	<mark>15%</mark>
Transport quality	84%	<mark>16%</mark>
Energy security	82%	18%
Access to education	81%	19%
Education quality	77%	23%
Access to healthcare	76%	24%
Housing quality	74%	26%
Citizen security	74%	26%

Unsuccessfully

Successfully



Innovation Optimism Index: Country Ranking

This country ranking is based on answers from respondents evaluating how successfully innovation could improve citizens' lives in their own country. It has a weight of 100 pts.





Innovating in the 21st Century: New players, new rules

Strongly agree Somewhat agr	ree Somewhat	disagree = Tota	ally disagree	ST Agree
More than ever before, innovation needs to be localized to serve specific market needs	37%	39%	17% 5%	76%
More than ever before, SMEs and individuals can be as innovative as large companies	41%	34%	18% <mark>5%</mark>	75%
The way companies will innovate in the 21 st century is totally different than the way they have innovated in the past	39%	36%	17% 5%	75%
Today innovation is more driven by people's creativity than by high level scientific research	27%	42%	22% <mark>6%</mark>	69%



Innovating in the 21st Century: A part of CSR





In the next 10 years who will drive innovation the most?





Global innovation context: Positive perceptions

Strongly agree Somewhat agree	Somewhat dis	agree = Tota	lly disagree	ST Agree
Society as a whole is supportive of innovation; there is an "appetite" for innovation among young generations	37%	40%	<mark>17% 4</mark> %	77%
Public-private partnerships have proved effective in supporting innovation	24%	45%	<mark>21% 4%</mark>	69%
It is quite easy for companies to partner with universities for their research and development needs	27%	42%	21% <mark>5%</mark>	69%
The general public is convinced of the value innovation can bring to their day-to-day life	22%	44%	<mark>24%</mark> 7%	66%



Global innovation context : Balanced perceptions



Global innovation context : Most negative perceptions





What 3 countries do you see as leading innovation champions?





Innovation potential in healthcare

More specifically about healthcare, do you think more innovation from companies operating in your country could improve the following:

■YES ■UNSURE ■NO





Innovation potential in energy

More specifically about energy, do you think more innovation from companies operating in your country could improve the following:

■YES ■UNSURE ■NO





Innovation Barometer

Innovation Synonymous with Prosperity – Financial, Social, Environmental

This belief is global...

- Innovation is the main lever for a more competitive national economy (95% agree)
- This belief is not new, rather the nature and value of innovation is changing
- ...and is centered on more prosperous and competitive national economies
 - Innovation is the best way to create jobs in their country (88% agree)
 - Innovation and competitiveness are inextricably linked through growth and jobs
 - Innovation increasingly integrating more social and human dimensions



Innovation in the 21st Century Must be Different

The most important innovation will be that which addresses societal needs

 77% of executives believe the greatest innovations of the 21st century will be those that help address human needs over those that simply create the most profit

Innovation will help "green" the world

- 90% believe innovation to be the main lever for greener national economies
- 85% are confident innovation will improve environmental quality

Innovation will improve lives

- 87% believe it will improve health quality
- 82% believe it will improve energy security
- 77% believe it will improve education quality



Innovation in the 21st Century Requires a New Model: The Power of "I"

•Innovation in the 21st century will be totally different than how we innovated in the past (75% agree) and will need to be localized to serve specific markets (76% agree)

•It will focus on **Individuals** (and SMEs) more than ever who can be as innovative as large companies (75% agree)

• 58% said creative people on the team was the number one factor in helping companies innovate more; 48% said advanced technical expertise was second most important factor

•It will call for **Integrated Solutions** that bring value to society as a whole, not only to select groups of consumers and citizens (86% agree)

•It will require **Impactful Innovations** focused on human needs more than just profits (77% agree)

•It will require **Incorporating Partnerships** between several players more than the success of an organization alone (86% agree)

• 40% believe a combo of players partnering will drive innovation in the next decade vs. 19% who believe big companies will drive



Innovation Optimism Continuum

•A new continuum based on country's self-perceptions

•Optimism continuum shows degree to which self-perception sees innovation as driving improvements in the lives of citizen

- •What differentiates them is the trust they have in the ability of innovation to transform their society and improve citizens' lives
- More than a classical "emerging vs. developed" divide, these clusters are driven by the country's relationship to innovation changes, sources and purpose





Innovation Optimism Continuum

- **Optimists:** Embrace the new innovation model. Convinced their country transformation will be <u>innovation</u> and <u>education</u>-driven. More than others, they believe innovation is about partnership with public authorities (PPPs), thriving on individuals and SMEs creativity. They are eager to partner with universities
- **Traditionalists:** Innovation has not changed that much and is mainly driven by hard science. Innovation should serve global markets' products or services needs and not specifically to serve society needs. They want to protect what they have more than adhere to a new model, their needs are very specific and diverse
- **Pessimists:** Innovation serves common good but mainly from the stand alone success of large companies. They tend to be frustrated with the lack of support innovation receives both from their government or community. Express "doubts " about their model and its ability to drive economic growth. They need partners to help bring ideas to market and IP protection more than others



* Commonalities are based on a statistical analysis based on positive Significance tests > 99%

Innovation Optimism Continuum

	Optimists	Traditionalists	Pessimists	
Perception of government action to address country priorities	Positive, mainly on education, environment and energy security	Positive, mainly on social inequalities and sustainable healthcare	Negative, mostly on education, inequalities and energy security	
General public support to innovation	Strong , appetite for innovation from young generations	Medium	Poor, lowest appetite from young generations. Faith in innovation is challenged , doubts about universities	
Public private partnerships	Most positive vision on PPPs impact on innovation	Most skeptical on the impact PPPs have on innovation	Medium	
Innovation should bring value to society	Innovation has changed. Strongest agreement	If innovation does good, fine but this is not the main point. Innovation has not changed that much	Yes innovation must serve common good. Innovation may be changing	
Innovation has to be localized	Strongest agreement	Innovation is global, not local	Medium	
Innovation is creativity driven	Strongest agreement	Lowest agreement	Medium	
Innovation can come from everywhere	Strong agreement, innovation is galvanized by individuals and SMEs , supported both by government	Medium agreement	Lowest agreement, innovation comes from large companies	
NEED MOSTLY	Financial support Partnership with university for R&D	Inconsistent from one country to another	Partners to bring ideas to market IP protection Long term private investors	



Innovation's Ability to Unleash Human Potential Varies by Market

Human potential must be unleashed locally

• Innovation dependent on human creativity/problem solving over pure scientific research (69% agree)

•Partnerships between players more important than the success of the organization (86% agree)

Local variations are key

- Innovation to be localized to serve market needs (76% agree)
- This is not about an east west divide but rather the unique nature of each market based on maturity, legacy and self-perception.

Next decade drivers of innovation in market:

- **Brazil**: **52% combo**, 27% sm/med cos, 15% large cos, 6% other
- US: 42% combo, 33% sm/med cos, 7% large cos, 18% other
- Saudi: 38% combo, 6% sm/med cos, 34% large cos, 22% other
- India: 25% combo, 38% sm/med cos, 27% large cos, 11% other
- <u>China</u>: 23% combo, 24% sm/med cos, 26% large cos, 27% other



Innovation's Ability to Unleash Human Potential Varies by Market: Top 3

needs to innovate more	S. Arabia /UAE	Brazil	India	Israel	USA	Australia	Germany	Sweden	China	Japan /S Korea	GLOBAL AVERAGE
Talents											
MORE OUT OF THE BOX THINKERS	56%	53%	55%	69%	42%	50%	63%	69%	62%	64%	58%
MORE TECHNICAL EXPERTS	47%	52%	60%	56%	35%	39%	48%	40%	48%	45%	48%
Gov. / Policy factors											
MORE FINANCIAL SUPPORT	37%	45%	39%	33%	28%	33%	18%	26%	56%	28%	34%
LESS BUREAUCRACY WHEN APPLYING FOR INNO. FUNDS	12%	34%	20%	15%	28%	25%	27%	23%	22%	26%	22%
BEING PROTECTED FROM PIRACY	10%	13%	17%	8%	15%	10%	21%	13%	15%	19%	15%
Partnerships											
LONG TERM INVESTORS	36%	28%	40%	32%	32%	24%	33%	35%	31%	17%	31%
WORKING WITH UNIVERSITIES FOR R&D	34%	32%	29%	17%	26%	19%	29%	37%	27%	28%	27%
PARTNERS TO BRING IDEAS TO MARKET	9%	31%	20%	25%	30%	28%	31%	24%	27%	45%	27%
PARTNERS UNDERSTANDING RISK	13%	11%	20%	8%	19%	22%	14%	14%	16%	26%	16%

