



Cornell  
SC Johnson College of Business

INSEAD

The Business School  
for the World®



# GLOBAL INNOVATION INDEX 2018

Energizing the World with Innovation



# WIPO and the Sustainable Development Goals

- The mission of the World Intellectual Property Organization (WIPO) is to promote an effective and balanced intellectual property system that stimulates innovation and creativity
- As innovation is at the core of WIPO's mission, SDG 9 is the most central to WIPO's mandate

*SDG 9: Build resilient infrastructure, promote sustainable industrialization and foster innovation*

- The achievement of many other SDGs – on education, health, energy and others – depends on innovative technologies and their diffusion to where they are needed
- WIPO's activities span from providing a neutral forum for developing global IP rules to providing a large range of services and knowledge products for a range for stakeholders

# Introduction to the Global Innovation Index



- 11th year of publication
- Measures innovation across 126 economies
- Goes beyond narrow metrics such as R&D spending and patents
- A ‘tool for action’ for decision makers
- Complementary ranking of world’s top-100 science and technology clusters
- Thematic discussion: energy innovation

# Framework of the Global Innovation Index 2018

## INSTITUTIONS

Political environment  
Regulatory environment  
Business environment

## HUMAN CAPITAL AND RESEARCH

Education  
Tertiary education  
Research & development

## INFRASTRUCTURE

ICTs  
General infrastructure  
Ecological sustainability

## MARKET SOPHISTICATION

Credit  
Investment  
Trade, competition, & market scale

## BUSINESS SOPHISTICATION

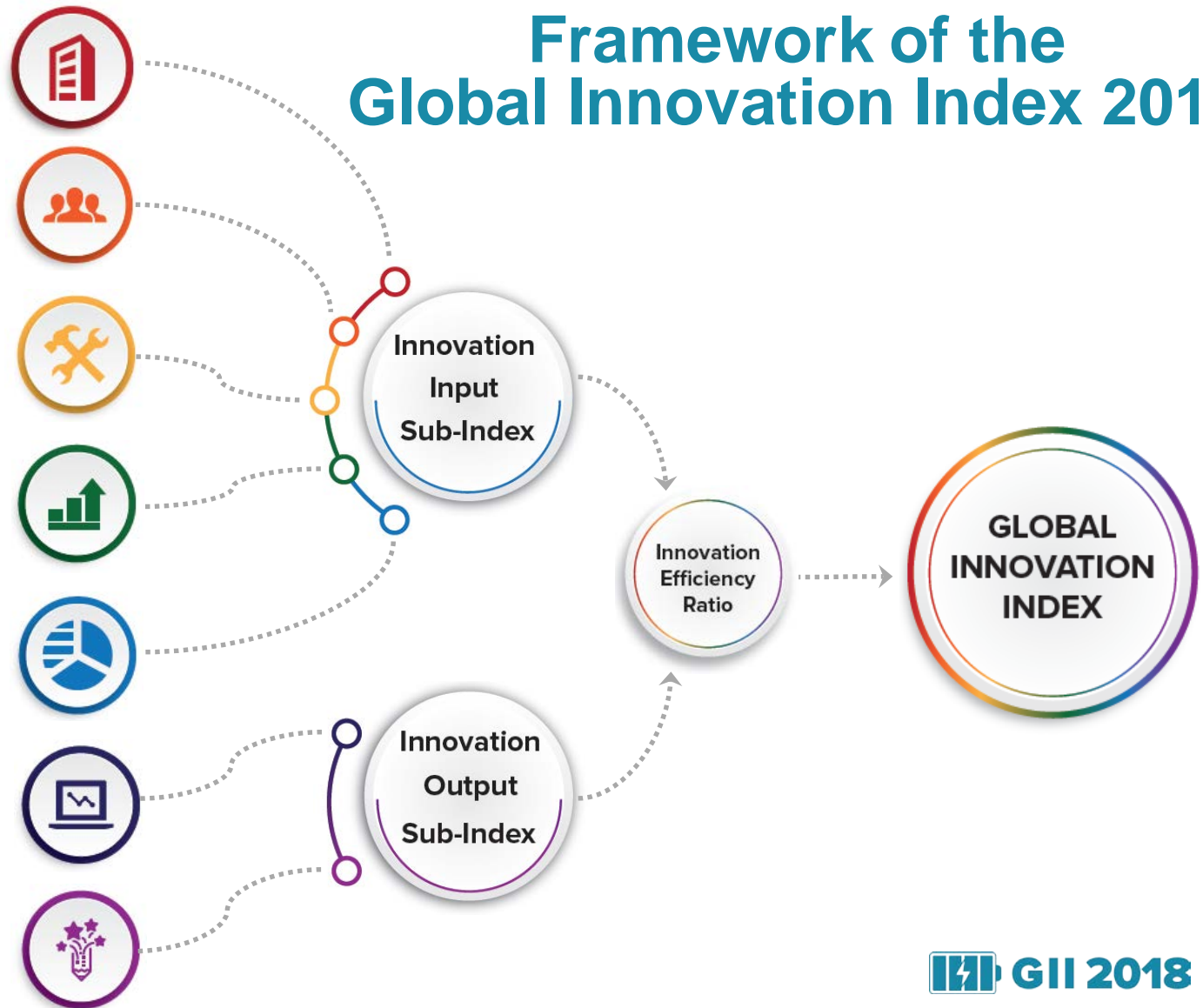
Knowledge workers  
Innovation linkages  
Knowledge absorption

## KNOWLEDGE AND TECHNOLOGY OUTPUTS

Knowledge creation  
Knowledge impact  
Knowledge diffusion

## CREATIVE OUTPUTS

Intangible assets  
Creative goods and services  
Online creativity



# Global rankings of GII 2018 (top 10)

## Input

1. Singapore
2. Switzerland
3. Sweden
4. United Kingdom
5. Finland
6. USA
7. Denmark
8. Hong Kong (China)
9. Netherlands
10. Canada

## Output

1. Switzerland
2. Netherlands
3. Sweden
4. Luxembourg
5. Germany
6. United Kingdom
7. USA
8. Finland
9. Ireland
10. China

## GI

1. Switzerland
2. Netherlands
3. Sweden
4. United Kingdom
5. Singapore
6. USA
7. Finland
8. Denmark
9. Germany
10. Ireland

# Region group rankings (top 3)

## Northern America

USA  
Canada

1

## South East Asia, East Asia, and Oceania

Singapore  
Republic of Korea  
Japan

3

## Europe

Switzerland  
Netherlands  
Sweden

2

## Latin America and the Caribbean

Chile  
Costa Rica  
Mexico

5

## Sub Saharan Africa

South Africa  
Mauritius  
Kenya

7

## Northern Africa and Western Asia

Israel  
Cyprus  
UAE

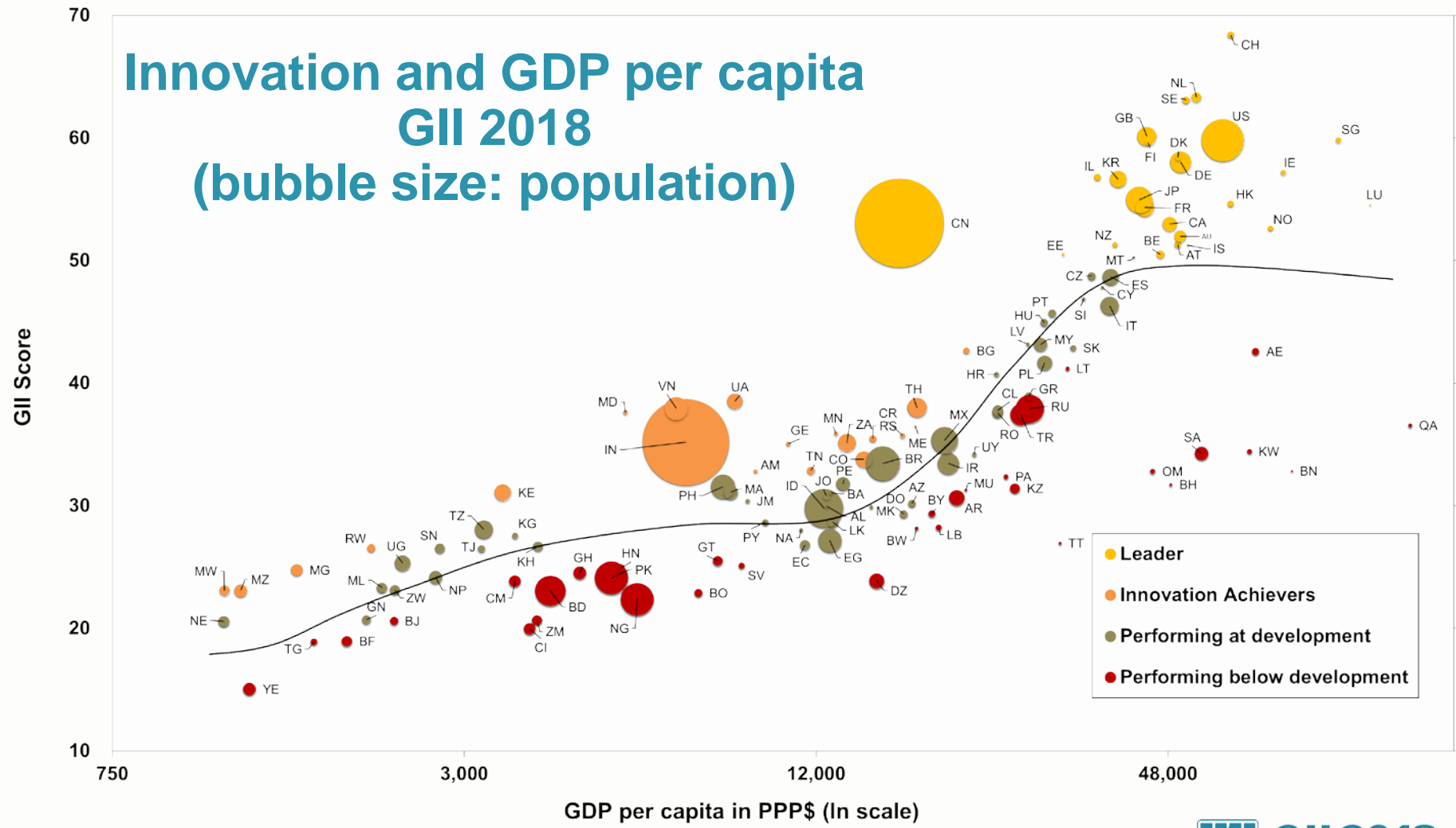
4

6

## Central and Southern Asia

India  
Iran  
Kazakhstan

# Innovation and GDP per capita GII 2018 (bubble size: population)

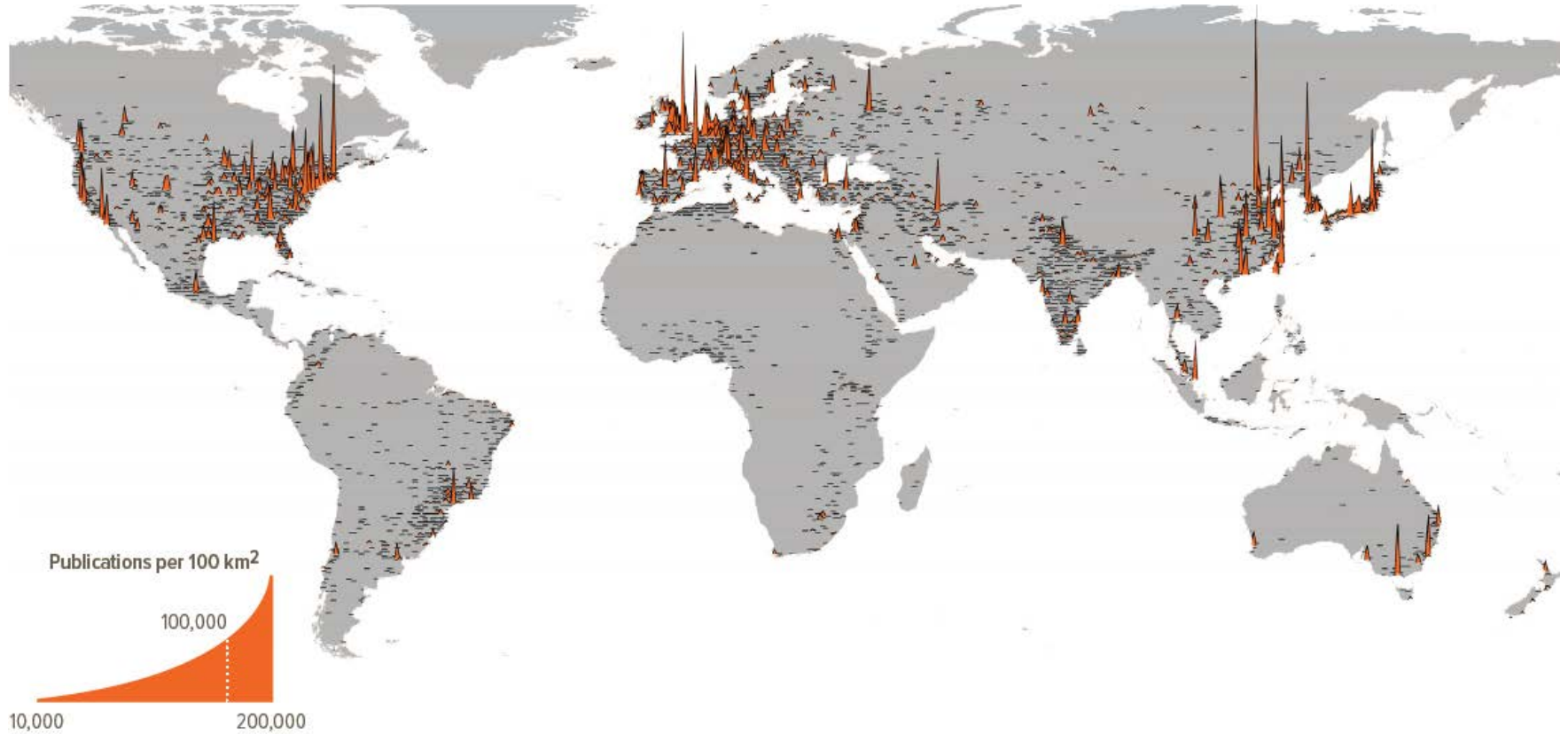


# Inventors listed in international patent applications





# Authors of scientific journal articles



# Top science and technology clusters

Overall Rank	Cluster name	Patent rank	Scientific publication rank
1	Tokyo–Yokohama	1	2
2	Shenzhen–Hong Kong (China)	2	1
3	Seoul	3	3
4	San Jose–San Francisco, CA	4	10
5	Beijing	8	1
6	Osaka–Kobe–Kyoto	5	13
7	Boston–Cambridge, MA	9	6
8	New York, NY	11	4
9	Paris	10	9
10	San Diego, CA	7	41

# Energizing the World with Innovation – GII 2018

- Technological progress has dramatically changed the way energy is supplied, distributed and consumed
- Costs of renewable energy have decreased at a remarkable pace
- Further innovation – including the dissemination of new technologies – is needed to meet future energy needs in a sustainable way
- Public policy matters: funding, mitigating investment risks, setting regulatory incentives that promote innovation and adoption

# GLOBAL INNOVATION INDEX 2018

Energizing the World with Innovation