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GLOBAL INNOVATION INDEX 2018

Energizing the World with Innovation



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

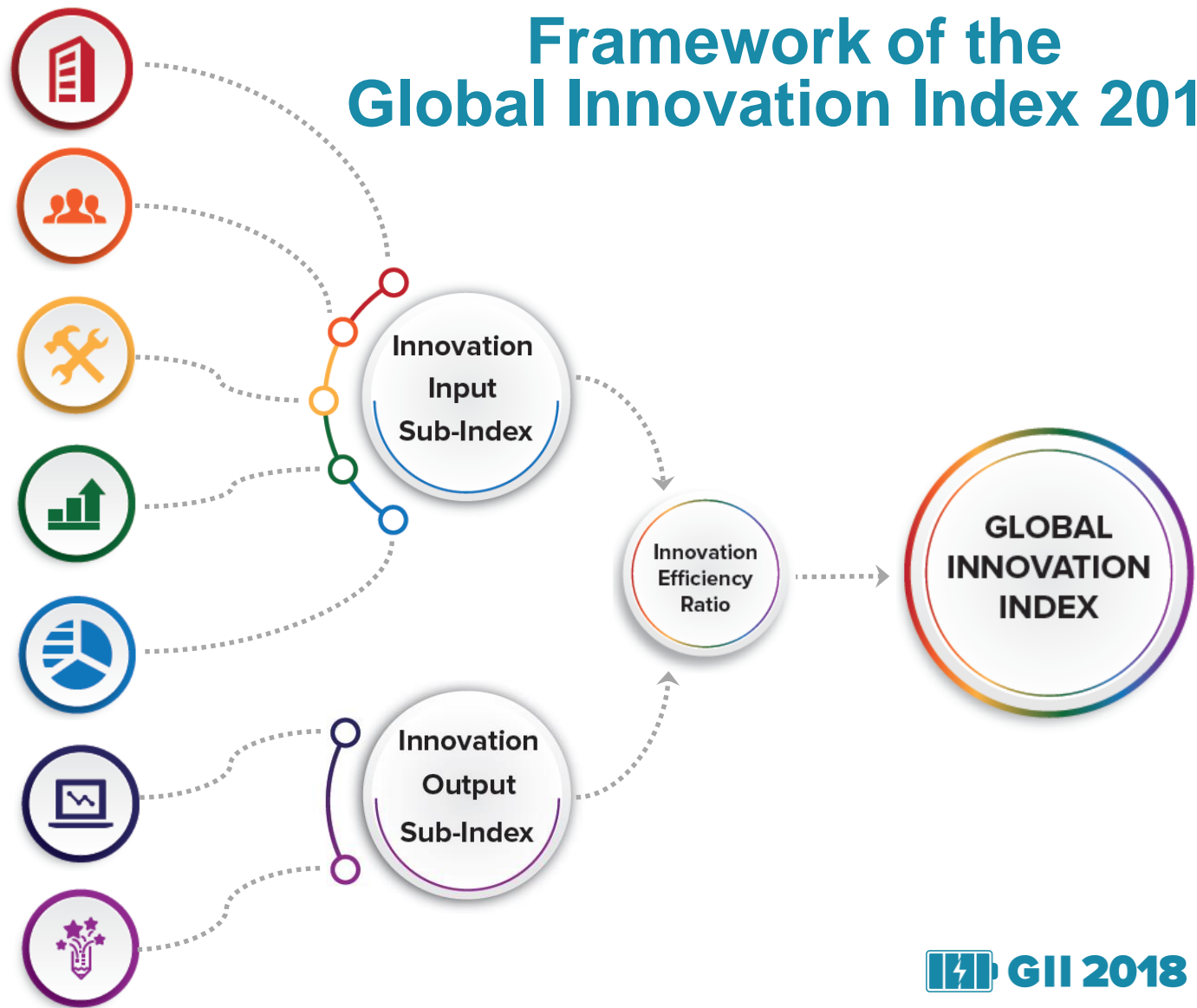
Knowledge workers
Innovation linkages
Knowledge absorption

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

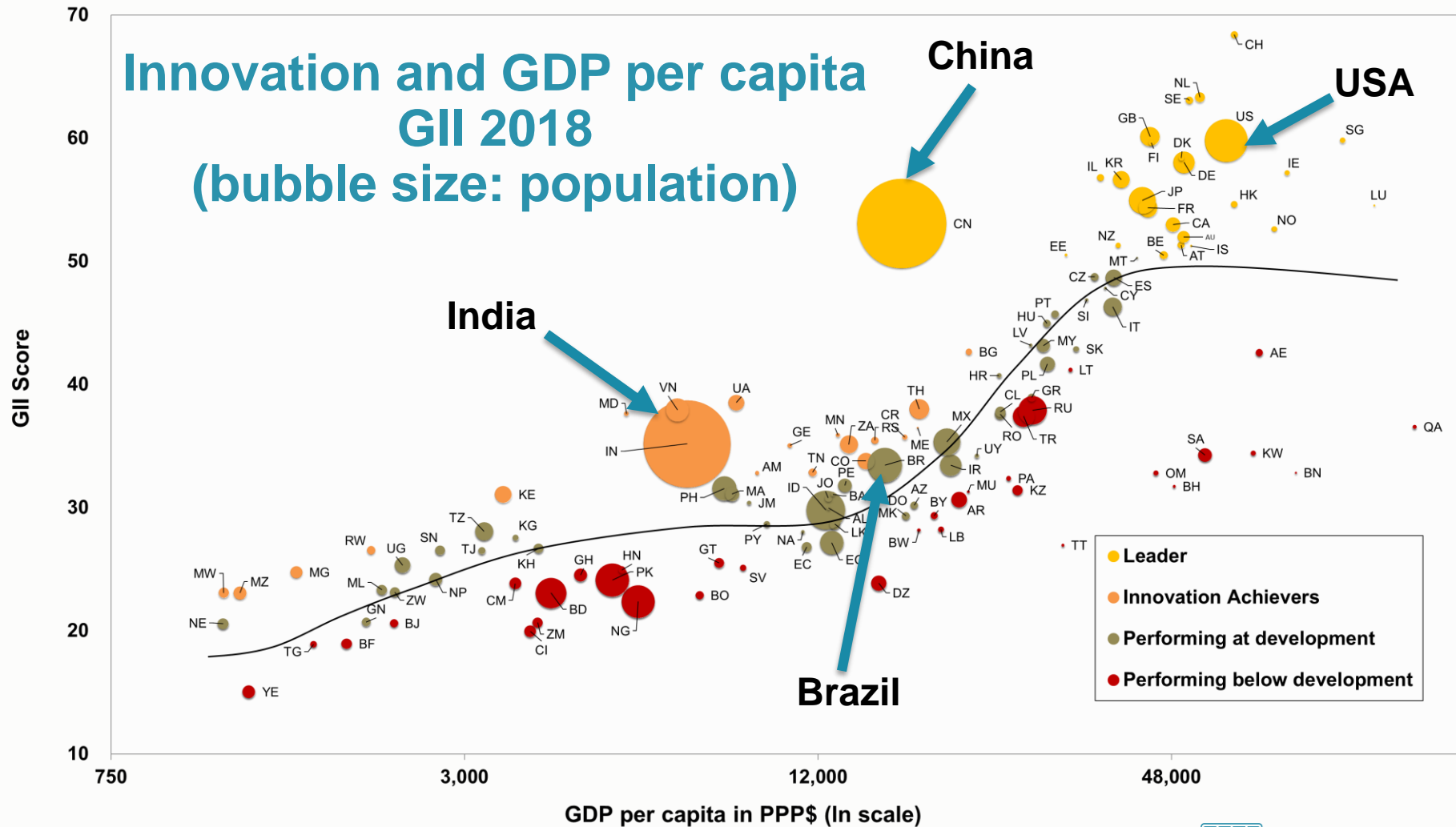
Output

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

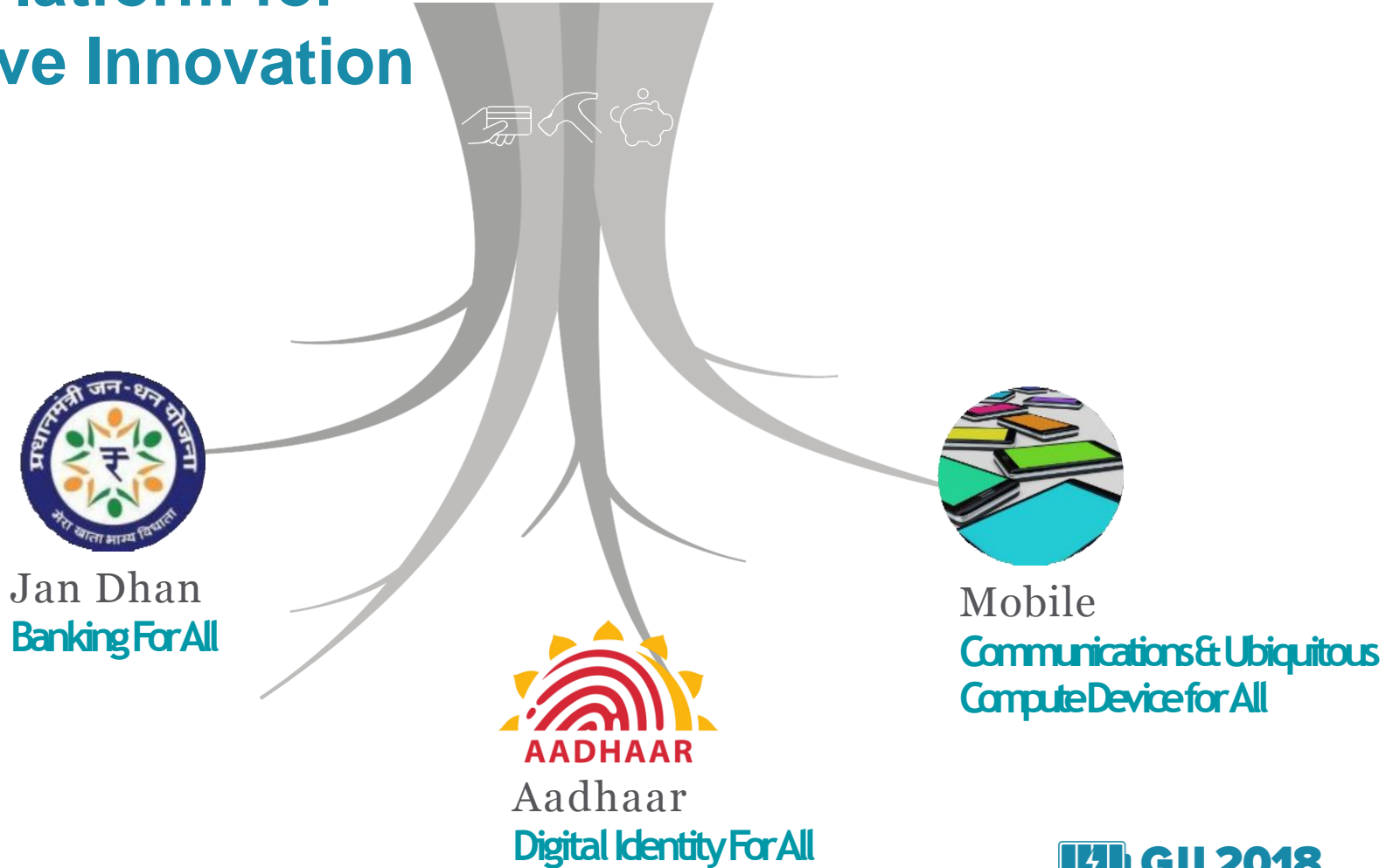
GII

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

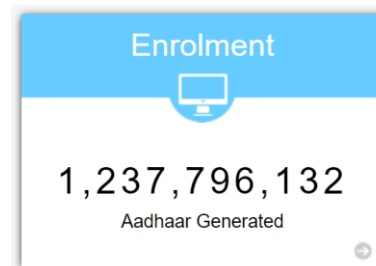
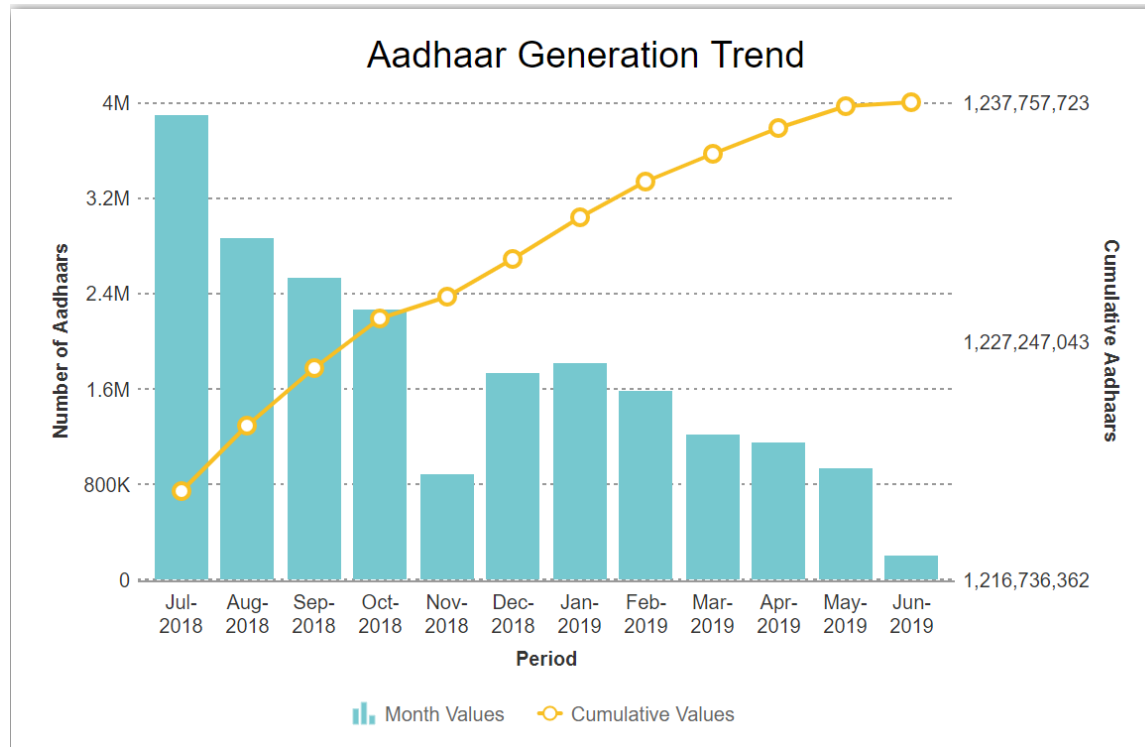
India: 57 Brazil: 64



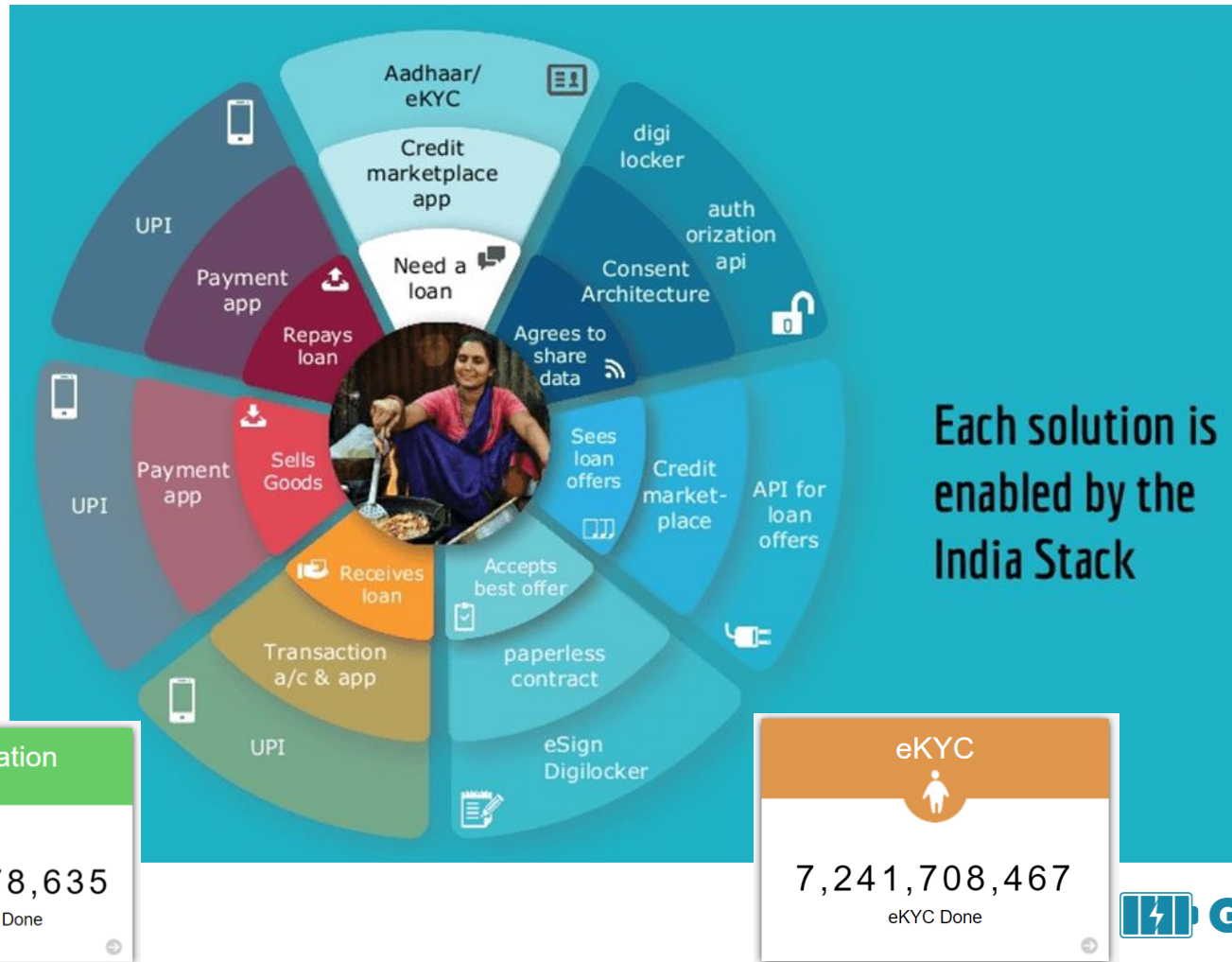
India's Platform for Disruptive Innovation



India Innovation Initiative - Aadhar



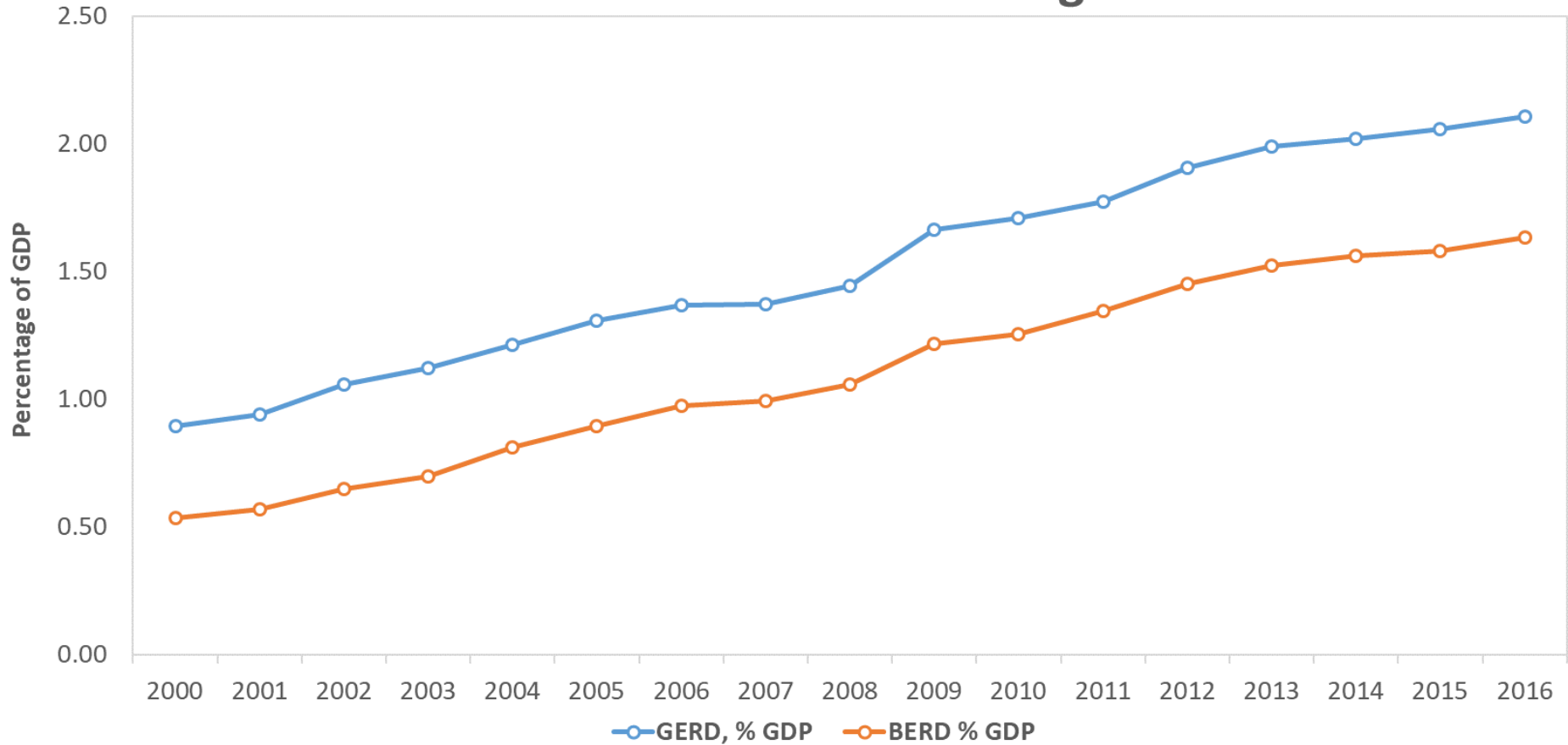
India Innovation Initiative – India Stack



China in Global Innovation Index 2018

China's Ranking over time				
	GII	Input	Output	Efficiency
2018	17	27	10	3
2017	22	31	11	3
2016	25	29	15	7
2015	29	41	21	6

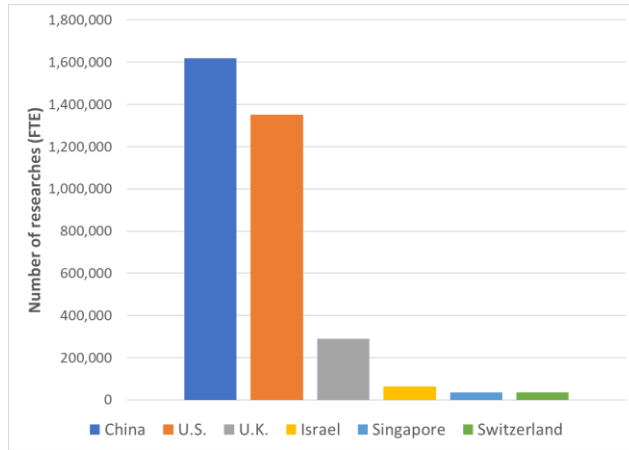
GERD and BERD as a Percentage of GDP



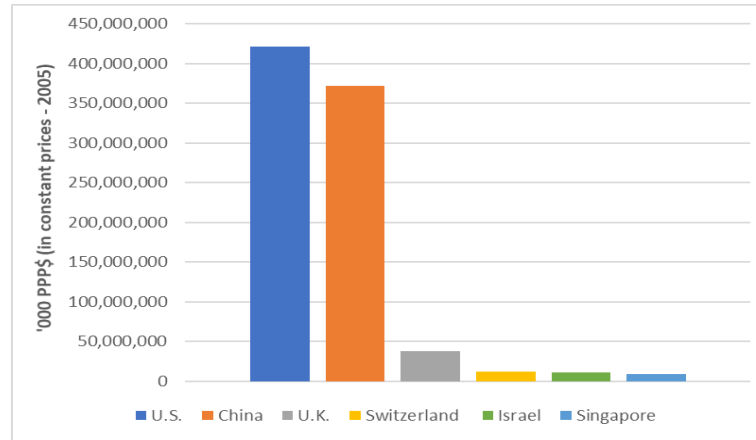
China in the GII – Performance in Absolute Values

China at the top of the Big Asian Movers in absolute terms in key innovation indicators

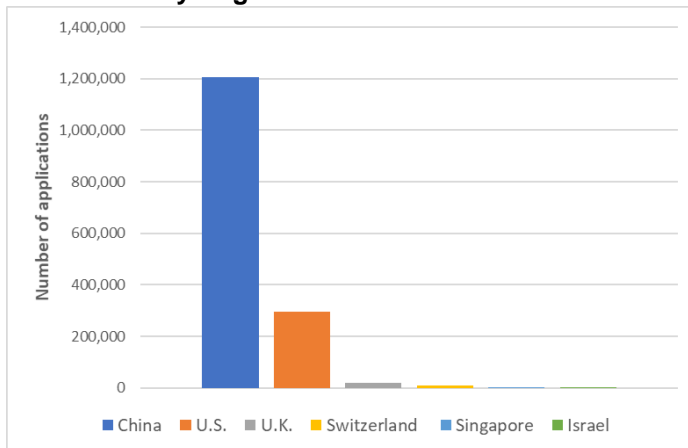
Researchers



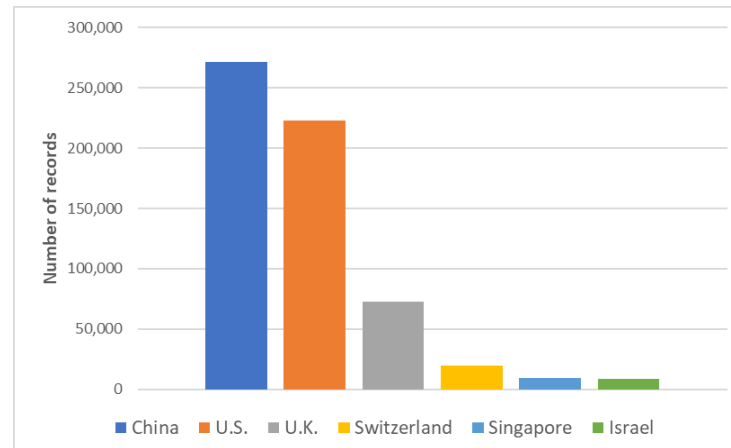
R&D expenditures



Patents by origin



Scientific and technical articles



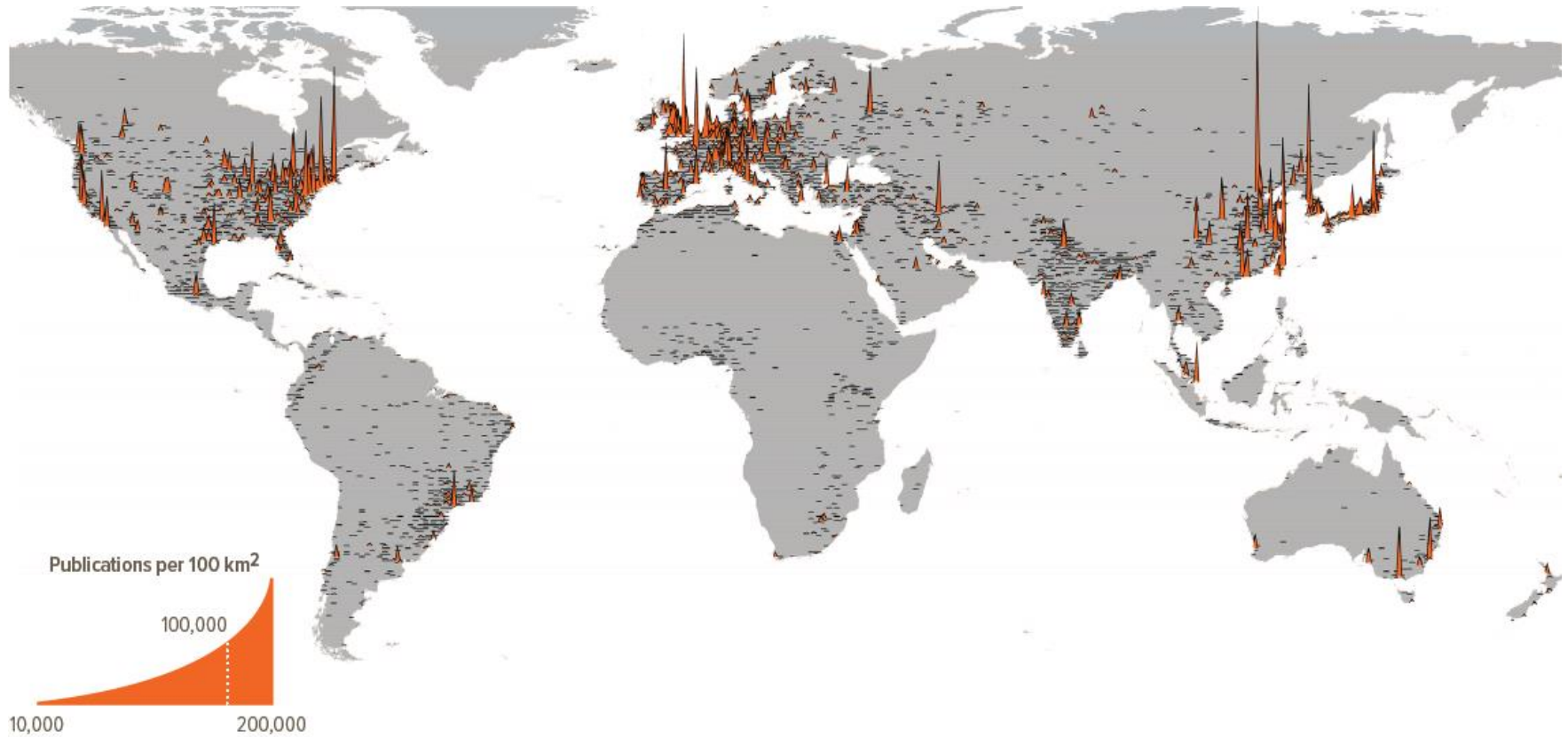
Brazil in the GII: Strengths and Weaknesses

Strengths	Weaknesses
<ul style="list-style-type: none">• Expenditure on education (23rd)• R&D expenditures (27th)• Global R&D by companies (22nd)• High-tech imports (23rd)• Domestic market scale (8th)• Quality of scientific publications (23rd)• High-tech exports (35th)	<ul style="list-style-type: none">• Business environment (110th)• Ease of starting a business (123rd)• Credit (104th)• Applied tariff rate (106th)• Gross capital formation (104th)• Productivity growth (101st)• New businesses (98th)

Inventors listed in international patent applications



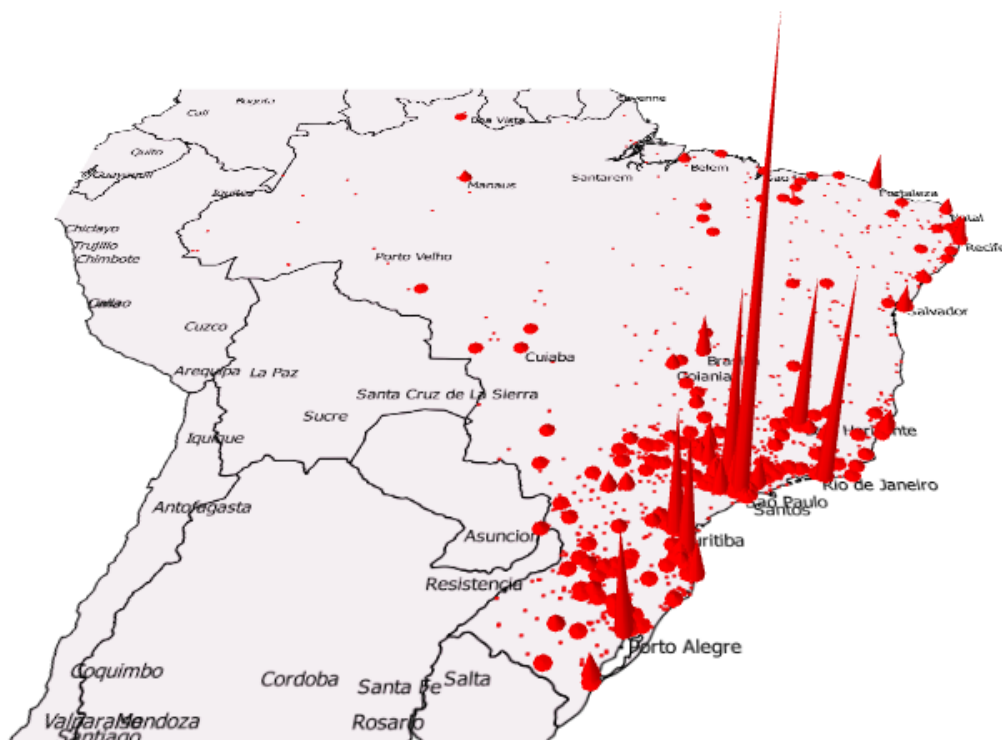
Authors of scientific journal articles



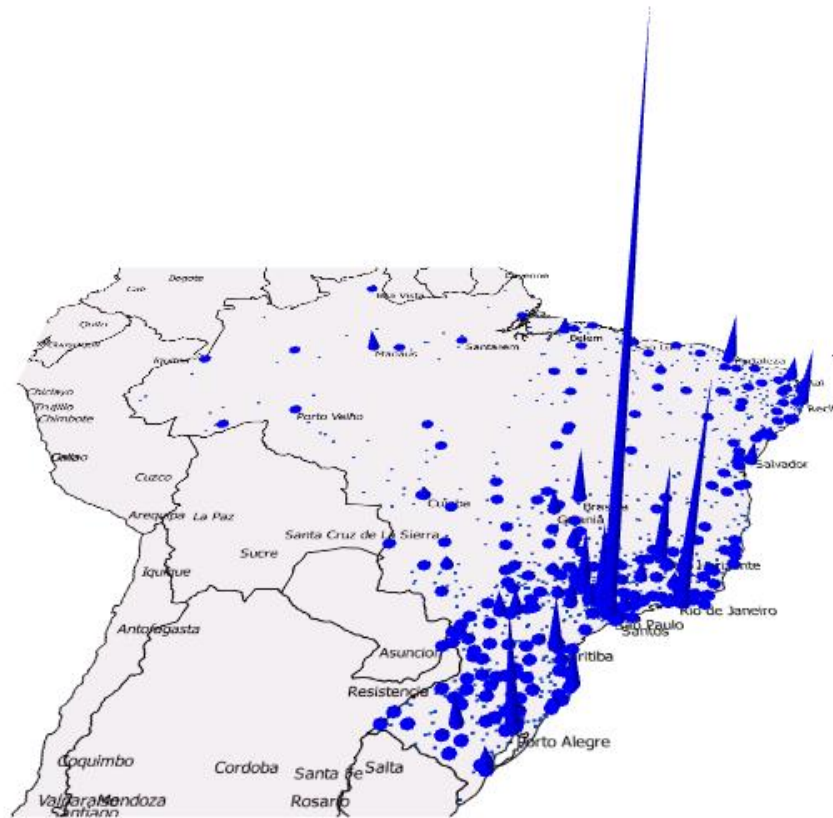
Top science and technology clusters

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

Inventors listed in patents in Brazil



Scientific authors in Brazil



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