



“Transforming Thailand Towards Science & Technology Frontiers”

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Director & Chairman of the Management Advisory Committee

CEO Innovation Forum 2018

Mon., Mar. 26, 2018 at 10.30-11.30hr

@ Ballroom, Queen Sirikit National Convention Center

@ SCG 2018



Bloomberg 2018 Innovation Index

2018 rank	2017 rank	YoY change	Economy	Total score	R&D intensity	Manufacturing value-added	Productivity	High-tech density	Tertiary efficiency	Researcher concentration	Patent activity
1	1	0	S. Korea	89.28	2	2	21	4	3	4	1
2	2	0	Sweden	84.70	4	11	5	7	18	5	8
3	6	+3	Singapore	83.05	15	5	12	21	1	7	12
4	3	-1	Germany	82.53	9	4	17	3	28	19	7
5	4	-1	Switzerland	82.34	7	7	8	9	11	17	17
6	7	+1	Japan	81.91	3	6	24	8	34	10	3
7	5	-2	Finland	81.46	8	16	10	13	19	6	4
8	8	0	Denmark	81.28	6	15	11	15	26	2	10
9	11	+2	France	80.75	12	35	14	2	10	21	9
10	10	0	Israel	80.64	1	27	9	5	41	1	19
11	9	-2	U.S.	80.42	10	23	6	1	42	20	2
12	12	0	Austria	79.12	5	8	15	26	12	12	5
13	16	+3	Ireland	77.87	22	1	1	18	20	14	33
14	13	-1	Belgium	77.12	11	22	13	10	37	13	21
15	14	-1	Norway	76.76	19	37	19	11	23	8	14
16	15	-1	Netherlands	75.09	17	26	20	6	47	15	18
17	17	0	U.K.	74.54	20	40	23	14	8	18	15
18	18	0	Australia	74.35	14	46	16	17	17	3	20

Source: <https://www.bloomberg.com/news/articles/2018-01-22/south-korea-tops-global-innovation-ranking-again-as-u-s-falls>

Innovation Index 2018

2018 rank	2017 rank	YoY change	Economy	Total R&D score	R&D intensity	Manufacturing value-added	High-tech Productivity	Tertiary density	Researcher efficiency	Patent concentration	Patent activity
19	21	+2	China	73.36	16	19	40	12	4	42	6
20	24	+4	Italy	68.88	25	20	22	20	32	36	23
21	22	+1	Poland	68.74	35	13	37	16	14	34	24
22	20	-2	Canada	67.98	21	32	26	23	45	16	22
23	19	-4	New Zealand	67.40	31	36	18	25	43	22	11
24	25	+1	Iceland	67.11	13	28	2	-	27	9	26
25	26	+1	Russia	66.61	32	33	44	22	5	28	16
26	23	-3	Malaysia	64.79	26	17	36	24	36	33	34
27	27	0	Hungary	64.37	24	10	42	18	48	32	35
28	28	0	Czech Rep.	63.47	18	3	25	-	33	24	28
29	29	0	Spain	63.06	29	25	27	36	6	31	31
30	31	+1	Portugal	61.38	28	31	32	42	7	23	37
31	30	-1	Greece	61.37	36	45	34	28	15	26	39
32	34	+2	Luxembourg	60.65	27	38	3	-	50	11	13
33	37	+4	Turkey	60.26	34	21	30	34	13	43	30
34	32	-2	Lithuania	59.04	33	14	33	-	9	29	43
35	38	+3	Romania	58.94	48	12	31	27	24	47	38
36	33	-3	Estonia	58.76	23	24	29	-	22	27	42
37	35	-2	Hong Kong	57.05	41	50	4	29	31	25	29
38	36	-2	Slovakia	56.88	30	8	35	-	39	30	45
39	40	+1	Malta	54.27	40	43	7	37	29	38	47
40	39	-1	Latvia	53.65	46	39	28	40	30	39	32
41	NR	-	Bulgaria	51.54	37	34	41	39	38	37	48

Source: <https://www.bloomberg.com/news/articles/2018-01-22/south-korea-tops-global-innovation-ranking-again-as-u-s-falls>



Innovation Index 2018

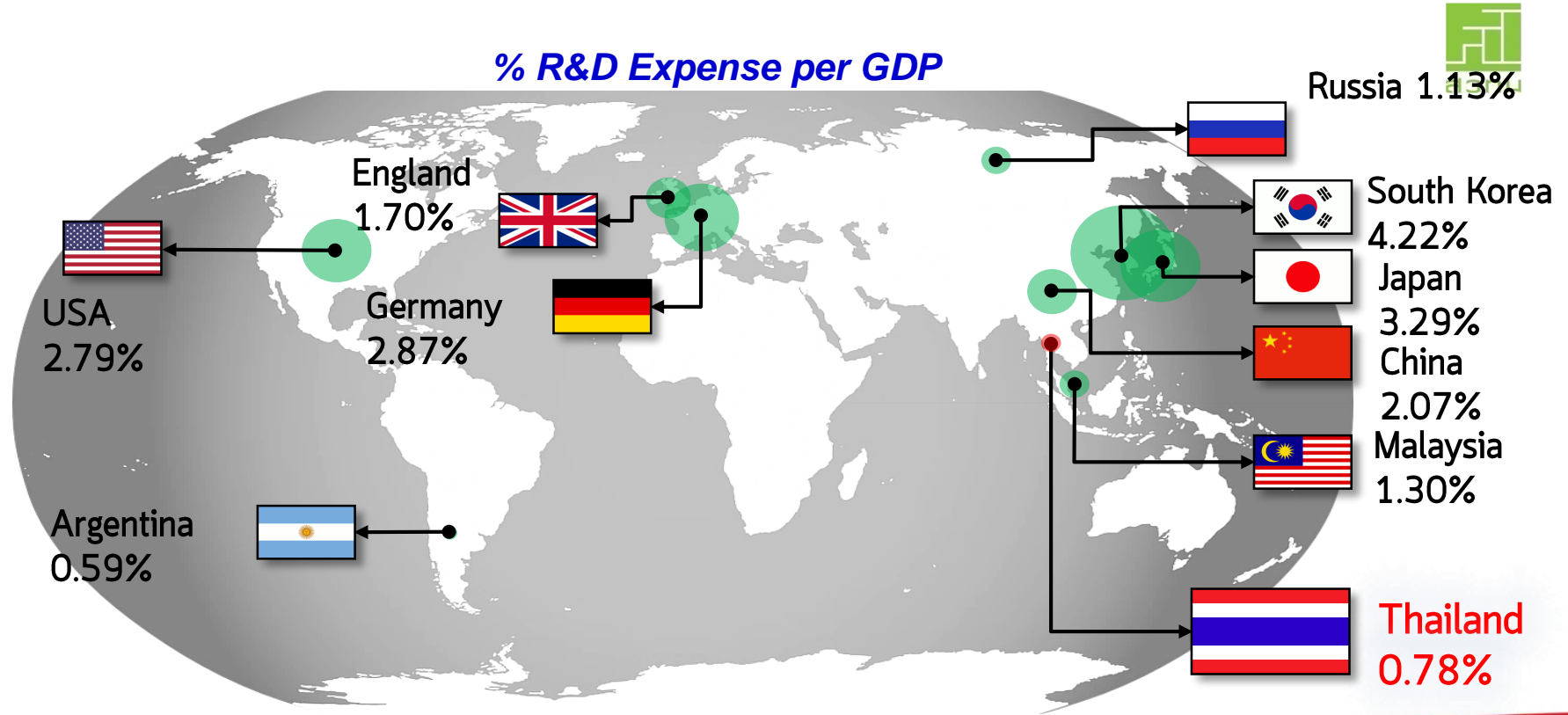
2018 rank	2017 rank	YoY change	Economy	Total score	R&D intensity	Manufacturing value-added	High-tech Productivity	High-tech density	Tertiary efficiency	Researcher concentration	Patent activity
42	41	-1	Croatia	51.24	39	30	39	44	35	41	41
43	45	+2	Tunisia	49.83	44	41	46	41	16	40	44
44	43	-1	Serbia	48.93	38	29	47	43	44	35	46
45	44	-1	Thailand	47.83	45	18	45	31	25	48	-
46	42	-4	Ukraine	47.28	47	48	50	32	21	46	27
47	47	0	Cyprus	47.01	49	49	38	30	40	45	40
48	-	-	S. Africa	46.98	42	47	43	35	49	50	25
49	-	-	Iran	46.09	50	42	49	38	2	49	36
50	50	0	Morocco	44.84	43	44	48	33	46	44	49

Source: <https://www.bloomberg.com/news/articles/2018-01-22/south-korea-tops-global-innovation-ranking-again-as-u-s-falls>



Research and Development Expenditure (% of GDP)

% R&D Expense per GDP

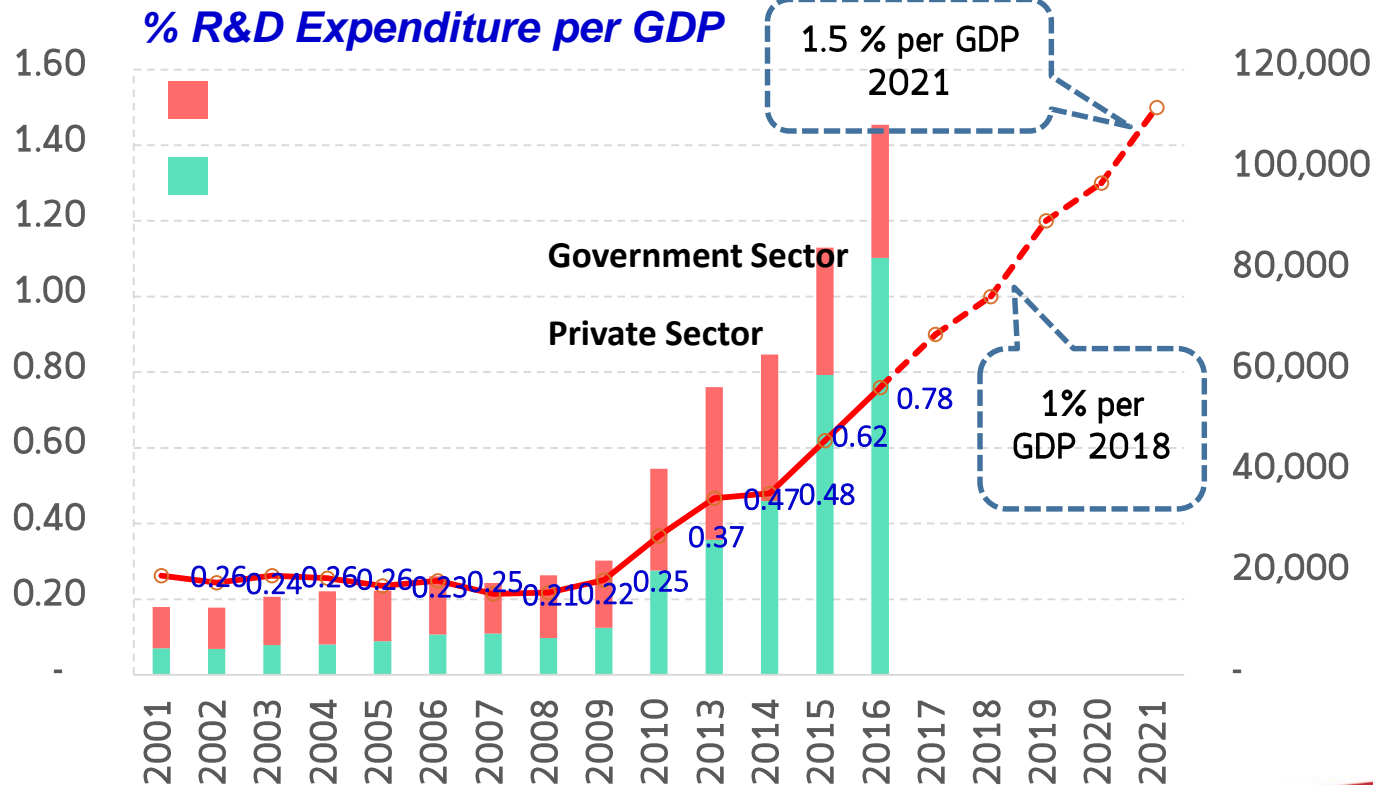


Source: IMD 2017 and STI, 2018. Note: International data as of 2015 and Thailand data as of 2016.

Thailand needs Much More Investment in R&D



Targeted future R&D investments in the private and government sectors



- **BOI Privileges** for R&D and Innovation Investment
- **Competitiveness Fund**
- **Startup Ecosystem**
- **Economic Zone for Innovation**
 - Food Innopolis
 - Science Park
 - EECi
- **300% Tax Exempt** of R&D and Innovation Cost
- **Spearhead Innovate Thailand**
- **Ease of Doing Innovation Business**
 - Talent Mobility
 - Smart Visa

Note: Figures since 2560 are forecasted. Source: IMD 2017 and STI, 2018.



20 year Research and Innovation Strategy

Spearhead Research & Innovation Program (2017-2036)

Research and Innovation Budget Plan 20 year Research and Innovation Strategy

Strategy 1

Research and
Innovation for
Economic Stability

Strategy 2

Research and
Innovation for Social
and Environmental
Development

Strategy 3

Research and Innovation
for the Creation of Basic
Knowledge

Strategy 4

Development of
Research and Innovation
Eco-system

Integration of Strategic Program for the Promotion of
Research and Innovation

Spearhead Research and Innovation

create innovation with speed, quality and affordability

Eastern Economic Corridor
Innovation (EECI)
New growth hubs to drive innovation

Open Innovation

Gateway to connect & innovate

R&D Consortium

Select right target for driving RD to commercialization

Technology Startup

Support and encourage startup growth ecosystem

“Innovation
Ecosystems”



Academic



Government



Industry



Research
institute

Thank You

