

THE AUTOMATION READINESS INDEX

# WHO IS READY FOR THE COMING WAVE OF AUTOMATION?

Whatever the impact of intelligent automation on work and employment, it is clear that governments must be prepared.

The Automation Readiness Index, built by The Economist Intelligence Unit and sponsored by ABB, assesses the extent to which the policy environment in 25 countries is ready for the coming wave of automation.

The index focuses on three policy areas:



It finds that even the top-scoring countries have more work to do.

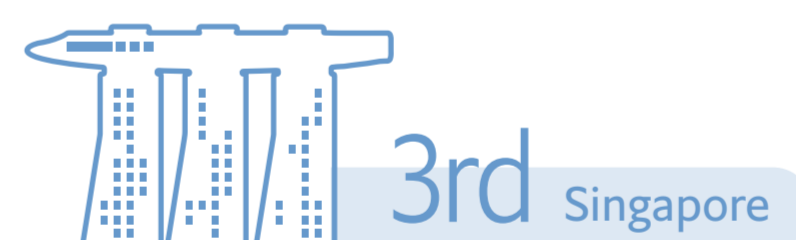


THE VAST MAJORITY OF COUNTRIES ... ARE ONLY *STARTING* TO THINK ABOUT PLANNING FOR THE CHALLENGES OF AUTOMATION.

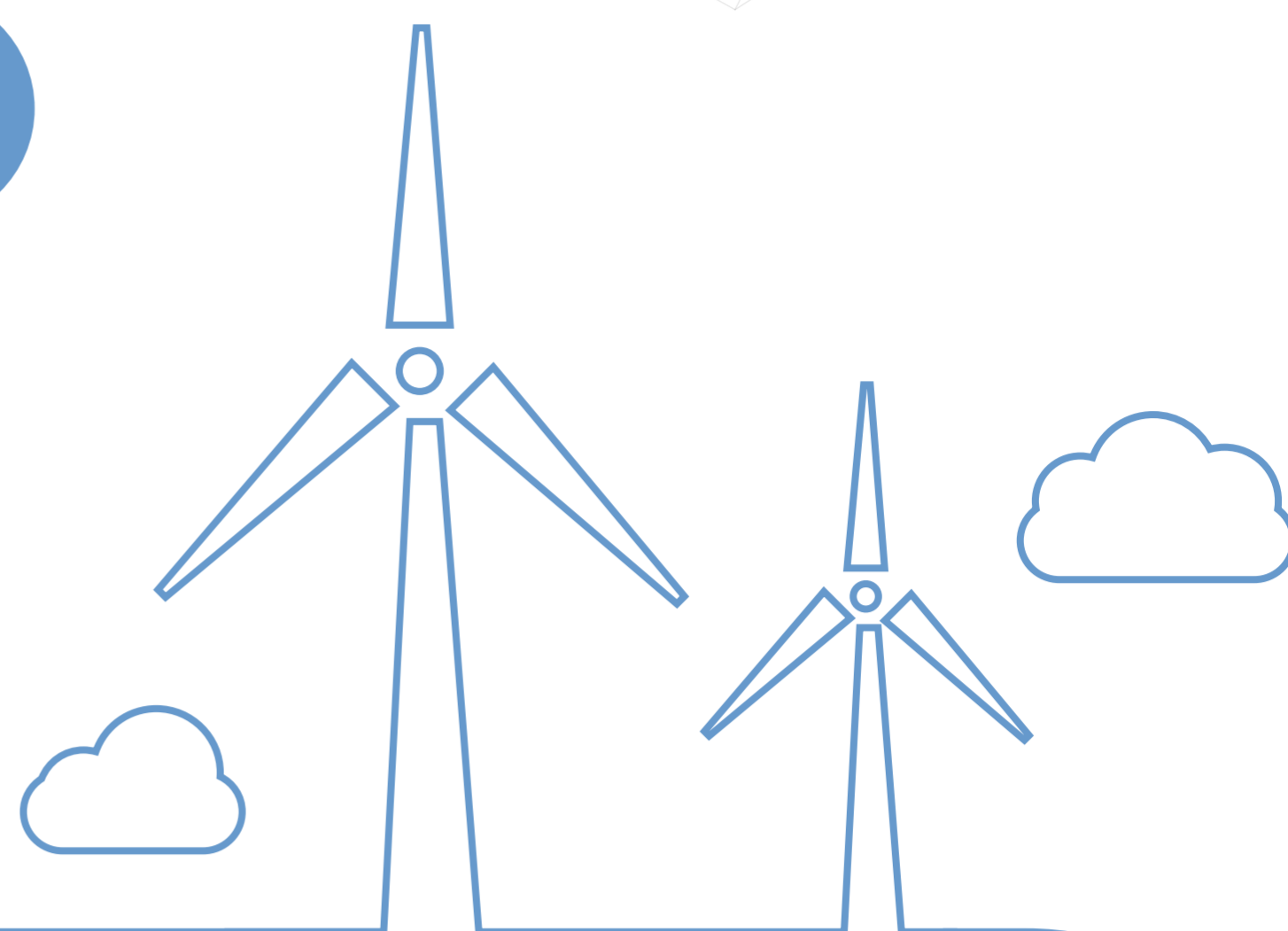
Julie Huxley-Jones, head of automation at GSK.

## INDEX RANKINGS

South Korea take the top spot in the index, with strong scores in every policy area, followed by Germany and Singapore.



## INNOVATION ENVIRONMENT



The Innovation Environment category tracks the extent to which each country has policies and strategies in place to promote research, the infrastructure required to support innovation, and initiatives to safely capture the opportunities of intelligent automation.



# 1st

Japan

# 94.6

Japan's lead in the Innovation Environment category reflects policies and initiatives including the following:

- Japan's total budget for artificial intelligence development in 2017 was an estimated ¥92.4bn (US\$817m), nine times the 2016 figure
- The country has a strategy to promote innovation clusters, such as the Aichi robotics cluster, which includes 429 companies
- The Ethics Committee of Japan Society for AI has established ethical guidelines for the use of the technology

<sup>1</sup> [https://www.nikkei.com/article/DGKKASFS29H4C\\_Z20C16A9EE8000/](https://www.nikkei.com/article/DGKKASFS29H4C_Z20C16A9EE8000/)

<sup>2</sup> <http://www.pref.aichi.jp/sangyoshinko/jisedai/robot/council.html>

<sup>3</sup> <http://ai-elsi.org/>

# 2nd

South Korea

# 93.9

# 3rd

Germany

# 93.8

## EDUCATION POLICIES

As intelligent automation takes on tasks traditionally performed by people, the skills required by employers will evolve. So too will the educational requirements of the workforce. The Education Policies category tracks readiness for these emerging education requirements.

1st South Korea 87.5

2nd Estonia 86.1

3rd Singapore 84.7

South Korea tops the list for Education Policies, thanks to measures including:

- The Character Education Promotion Act 2015 provides a strategy for boosting soft skills, including co-operation, communication and responsibility
- Adopted in January 2016, the Third Basic Plan for Science and Technology Talent Development and Support provides a six-point strategy for fostering science and technology talent in the era of globalisation
- The Lifelong Education Act (February 2008) requires central and local governments to promote lifelong education

## LABOUR MARKET POLICIES

Intelligent automation is likely to displace at least some workers currently engaged in automatable tasks. Countries therefore require policies that promote worker mobility and flexibility, allowing displaced workers to easily transition to other roles and industries, as well as programmes that help to develop new skills. Such measures are scored in the Labour Policies category.

<sup>4</sup> <http://www.law.go.kr/%EB%B2%95%EB%A0%B9/%EC%9D%B8%EC%84%B1%EA%B5%90%EC%9C%A1%EC%A7%84%ED%9D%A5%EB%B2%95>

<sup>5</sup> <http://www.ndsl.kr/ndsl/search/detail/report/reportSearchResultDetail.do?cn=TRKO201600010917>

<sup>6</sup> <http://www.law.go.kr/engLsSc.do?menuId=0&subMenu=5&query=%ED%8F%89%EC%83%9D%EA%B5%90%EC%9C%A1#liBgcolor0>

South Korea, Germany and Singapore tied equally at the top of the rankings for Labour Market Policies. This reflects policy measures including:

1<sup>st</sup>= South Korea 93.8

South Korea offers jobless people subsidies of up to ₩2m (US\$1,770) for vocational education and training

1<sup>st</sup>= Germany 93.8

Germany's Ministry for Labour and Social Affairs offers to cover up to 80% of the costs of HR transformation projects

1<sup>st</sup>= Singapore 93.8

SkillsFuture Singapore offer SMEs funding for training employees, with over 8,000 training courses on offer

## AN URGENT NEED FOR ENGAGEMENT

Even these top-ranking policies are just the beginning. More engagement between government, industry, educational specialists and other stakeholders is needed if policymaking is to keep pace with innovation in automation.

<sup>7</sup> [http://www.ssg.gov.sg/programmes-and-initiatives/funding/enhanced-training-support-for-smes1.html?\\_ga=2.253973064.1937568318.1509976248-1334933884.1509976248](http://www.ssg.gov.sg/programmes-and-initiatives/funding/enhanced-training-support-for-smes1.html?_ga=2.253973064.1937568318.1509976248-1334933884.1509976248)

<sup>8</sup> <http://www.hrd.go.kr/hrdp/gj/pgico/PGICO0100T.do>

<sup>9</sup> <http://www.foerderdatenbank.de/Foerder-DB/Navigation/Foerderrecherche/inhaltsverzeichnis.html?get=3f512d6de1682b6be280a501244d0872;views=document&doc=11690>