



Press Release

COVID is Accelerating Digital Transformation - Better Governance Required to Avoid Global Disconnect

2020 Edition of Network Readiness Index Report Reveals Most Future-Ready Societies

NRI 2020 Key Messages

- Sweden, Denmark and Singapore are the most future-ready societies, according to the latest Network Readiness Index (NRI) report. This makes Europe (with three countries in the global top 4) the leading region in the world.
- The United States remains the undisputed global leader when it comes to Future Technologies; indeed, it is ranked in the top 10 in each of the sub-pillar's five indicators (claiming the top spot in two of them); China is now a global contender in key areas such as AI, e-commerce, 5G.
- Africa continues to trail behind other regions, especially when it comes to access, affordability and usage of ICTs.
 Once the "ripple effect" of COVID starts to hit international trade and investment flows, such divergences between "network-ready economies" and "laggards" may be amplified.
- In all types of economies, investments in technology alone cannot guarantee higher levels of network readiness. The ability of national economies to sustain efforts to allow reskilling and up-skilling of their local workforce and talents is key to their future. **Recovery packages will have a key role to play**.
- COVID and lockdown strategies have accelerated digital transformation. This creates both opportunities and challenges, such as possible increases in inequalities. Appropriate governance mechanisms are required to mitigate the matter without hindering the former.

Washington DC, 19 October 2020

Today, the results and rankings of the latest edition of the Network Readiness Report (NRI) were released by Portulans Institute, the Washington DC-based think tank which took over from the World Economic Forum in 2019 to publish the annual rankings assessing how countries are ready to leverage information technologies to be future-ready. In this latest edition, 134 economies are covered. The report's title is 'Accelerating Digital Transformation in a Post-COVID Global Economy'.

Soumitra Dutta, co-founder of Portulans Institute and co-author of the report, underlined that "The main concept underlying the new NRI model is that our collective future will require a harmonious integration of people and technology. People and technology will increasingly interact as collaborators and partners in most parts of society and business. To ensure the effectiveness of this integration, appropriate governance mechanisms will have to be implemented to address issues related to trust, security, and inclusion".

Before the COVID pandemic, the main elements of a global digital transformation were already in place, both within nations and within enterprises. They have all been accelerated in the last few months: new practices have affected the way we work, learn, trade and interact. They will not disappear in a post-COVID environment. "The COVID sanitary crisis showed how digital technologies could help us be better organized and resilient when facing unprecedented challenges. However, the economic and social crisis that will follow has hardly started to be felt. To face the threats of massive unemployment and growing inequalities, digital transformation is now an urgent obligation." said **Bruno Lanvin**, co-founder of Portulans, and co-author of the report.

Commenting on Sweden's #1 ranking, Mr Anders Ygeman, Minister for Digital Development, said "Sweden aim to be the leader of harnessing the benefits of digitalisation. The NRI is a proof we are on the right way. That said, there is still much work to do. For example, we have to strengthen our efforts to make our public data available".

This year, our knowledge partner for the NRI report is STL, an industry-leading integrator of digital networks. At the launch of the report, STL's CEO **Anand Agarwal** commented: "We believe that great digital networks are the core platforms

for better human collaboration and a better world. The Network Readiness Index is a powerful tool to help companies and nations transform digitally. Digital Network Integrators like STL, are working diligently towards our responsibility to make networks efficient and affordable."

The NRI 2020 Rankings: the world's most future-ready societies per income group and region.

Top 3 countries by income group

High-income countries	Upper-middle-income countries	Lower-middle-income countries	Low-income countries
1. Sweden (1)	1. Malaysia (34)	1. Viet Nam (62)	1. Rwanda (96)
2. Denmark (2)	2. China (40)	2. Ukraine (64)	2. Tajikistan (109)
3. Singapore (3)	3. Bulgaria (46)	3. Moldova (71)	3. Uganda (114)

Top 3 countries by region (global ranks in parentheses)

Africa	Arab States	Asia & Pacific	CIS	Europe	The Americas
1. Mauritius (61)	1. United Arab Emirates (30)	1. Singapore (3)	1. Russian Federation (48)	1. Sweden (1)	1. United States (8)
2. South Africa (76)	2. Qatar (38)	2. Australia (12)	2. Armenia (55)	2. Denmark (2)	2. Canada (13)
3. Kenya (82)	3. Saudi Arabia (41)	3. Korea, Rep. (14)	3. Kazakhstan (56)	3. Netherlands(4)	3. Uruguay (47)

Regarding the top performers in this year's index, 17 of the top 25 countries are in Europe (primarily Northern and Western Europe), four economies are in Eastern and South-eastern Asia, two are in Oceania (Australia and New Zealand), and two are in Northern America (Canada and the United States). Rich countries continue to be better prepared to face future challenges. Additional action is required to prevent international inequalities to broaden in a post-COVID environment.

Top 10 countries

Although there were some ranking changes within the group, the countries in the NRI 2020 top 10 remain the same from last year's edition. One distinguishing feature of the top 10 performers is that they do well in most dimensions of the NRI. Indeed, they are all among the 15 highest-ranked countries in each of the four pillars and perform equally well in at least two-thirds of the 12 sub-pillars. As would be expected, all of the top 10 countries are high-income economies. As for the regional distribution, Europe dominates with eight countries, while Singapore is the only top 10 economy situated in Asia and the Pacific, and the United States is the only one located in the Americas.

Country	NRI Rank	NRI Score
Sweden	1	82.75
Denmark	2	82.19
Singapore	3	81.39

Netherlands	4	81.37
Switzerland	5	80.41
Finland	6	80.16
Norway	7	79.39
United States	8	78.91
Germany	9	77.48
United Kingdom	10	76.27

The NRI model recognizes the pervasiveness of digital technologies in today's networked world and therefore rests on four fundamental dimensions: Technology, People, Governance and Impact. This holistic approach means that the NRI covers issues ranging from future technologies such as AI and Internet of Things (IoT) to the role of digital transformation in reaching the Sustainable Development Goals (SDGs).

Origins of the NRI:

Initially launched in 2002 by the World Economic Forum, the NRI has been redesigned in 2019 by its founders and coeditors, Soumitra Dutta and Bruno Lanvin, to reflect how technology and people need to be integrated within an effective governance structure in order to have the right impact on our economy, society and the environment. This 2020 edition marks the 2nd edition of the redesigned model of the NRI.

For more information:

The 2019 NRI full report can be downloaded here

Please click on networkreadinessindex.org and read the 2020 report which will be available starting October 19th!

About the NRI:

The 2020 NRI is the second edition of a renewed NRI model, and it ranks a total of 134 economies based on their performance across 60 variables. This year's edition is accompanied by Portulans' Digital Transformation Dialogue Series, which interviewed high-level experts from across the globe on various aspects of Digital Transformation - from the role of business and governments to issues of inclusion, and more. Check out the series of high-level interviews here.

About Portulans Institute (PI):

Founded in 2019 by Soumitra Dutta and Bruno Lanvin, Portulans Institute is an independent nonprofit, nonpartisan research and educational institute based in Washington DC. Pl's areas of expertise include technology competitiveness, innovation readiness, and global talent. Its founding CEO is Carolina Rossini. The Institute's missions are:

- To develop cross-community knowledge and dialogue on how people, technology, and innovation contribute to sustainable and inclusive growth.
- To inform policymakers by producing independent, rigorous metrics and data-based research and training activities.
- To collaborate with private sector leaders in driving a business agenda that invests in people, technology, and innovation for a prosperous common future.
- To host and co-organize events and conferences on the above issues affecting human-centric sustainable economic prosperity.

Learn more at www.portulansinstitute.org.

About STL:

STL is an industry-leading integrator of digital networks. With STL's 25 years of experience in Optical Fibre innovations and India-made secure 5G solutions, we enable full value of connectivity by building end to end technology solutions that make digital networks ready for tomorrow. We design and integrate these digital networks for our customers. With core capabilities in Optical Interconnect, Virtualised Access Solutions, Network Software and System Integration, we are the industry's leading end-to-end solutions provider for global digital networks. We partner with global telecom companies, cloud companies, citizen networks and large enterprises to deliver solutions for their fixed and wireless networks for current and future needs.

Contacts for Press:

Portulans Institute: info@portulansinstitute.org

STL: alok.chander@stl.tech

2020 Edition of Network Readiness Index Report Key Messages

Key message No. 1 – Digital transformation needs to be "system-wide." The best-performing countries in the index typically do well in many dimensions. A case in point is that eight of the top 10 in the overall rankings also feature in the top 10 in at least three of the four pillars. Similarly, at the other end of the rankings, seven of the bottom 10 in the overall rankings are in the bottom 10 in at least three of the four pillars. This underlines the importance of adopting a multi-dimensional approach in improving network readiness and indicates that economies should take steps to address a broad range of issues—from access to technology through matters of trust to the application of digital technologies in healthcare—rather than focusing on just a few policy areas.

Key message No. 2 – Digital transformation may create new forms of digital divides. As in previous years, the NRI rankings show remarkable stability at the top: All of the top 10 countries in the NRI 2020 were also in the top 10 last year. In fact, the same can be said about the top 25 economies in this year's NRI. At the same time, specific regions continue to lag. Most notably, Africa trails all regions, especially when it comes to access and usage of ICTs. Once the "ripple effect" of COVID starts to hit international trade and investment flows, such divergences between "network-ready economies" and "laggards" may be amplified.

Key message No. 3 – Trust and security are central to successful digital transformation. High levels of trust and security are strongly associated with performance in the NRI for economies in the top quartile, which suggests that these are among the most important factors that separate the most advanced economies. For instance, 18 of the top 20 economies in the NRI are also among the top 20 performers when it comes to trust, which is the highest number of all sub-pillars (along with the use of digital technologies by governments). In this regard, the NRI also carries a strong message for other economies: Trust and security need to be at the core of digital transformation strategies to allow them to generate their full expected benefits, be it in electronic transactions (including e-commerce) or in broader areas such as education (certification, grading). A novelty in this year's index is that it emphasizes that there are various facets in building digital trust; in particular, it draws attention to the importance of fostering a trusting environment and trusting behavior. As the protection of privacy is becoming crucial as big data and AI continue to develop, global lessons can be drawn from Europe's experience with GDPR.

Key message No. 4 – The COVID crisis is accelerating digital transformation. It is still too early to see any impact on the NRI data due to COVID (national accounts and annual reports will only start showing comparable evidence at the end of the calendar year). Yet, the rapid development of tele-working in locked-down economies, as well as the substitution of tele-conferencing for physical meetings and events have shown that the potential to digitize a number of activities (including education, for example) was generally far greater than anticipated. The resulting practices, for the majority, are here to stay, and will continue to affect the way we work, learn, compete, and cooperate.

Key message No. 5 – Education and re-skilling are critically important for successful and sustainable digital transformation. In all types of economies, investments in technology alone cannot guarantee higher levels of network readiness. New technologies, equipment, and services require that the corresponding skills be available locally. The ability of national economies to sustain efforts to allow a constant re-skilling and up-skilling of their local workforce and talents is key to their future. The example of NRI top-ranking economies shows that education is a central tenet of global competitiveness. As jobs continue to change, education needs to be seen as a life-long process. Curricula and methods need to be constantly updated, and increased attention should be brought to the certifications needed to ensure that efforts to re-skill and up-skill (both by employers and employees) are properly rewarded. This will be critically important in new areas such as AI.

Key message No. 6 – Digital transformation can help the accelerated implementation of SDGs. Each and every one of the 17 UN Sustainable Development Goals adopted in 2015 (SDGs) can be accelerated through the adequate use of digital technology. A truly planetary digital transformation would be one that strives to end poverty and inequality, tackle climate change and environmental degradation, and strive for peace and justice. Available data, however, show that a new acceleration of policies and efforts is needed to trigger such a transformation. The new NRI model proposed in 2019 includes a sub-pillar that aims to monitor efforts towards that end. One of the takeaways of that sub-pillar is that it highlights the positive impact digital technologies can have on sustainable development, as well as on issues related to health, well-being, and education. This strong connection between digital transformation as a tool to accelerate the realization of SDGs is further underlined in the NRI 2020 by making explicit the SDGs where ICTs have most impact.

Key message No. 7 – Digital transformation can help rebuild global cooperation and redefine globalization. The last decade has been marked by a continuous erosion of multilateral cooperation and increasing tendencies toward protectionist—and sometimes nationalistic—policies. In such a context, digital technologies have come to be seen as instruments of domination, interference, and sometimes as weapons, rather than as vectors of cooperation and openness. Available data show that successful innovators tend to be open economies, encouraging the free flow of ideas and innovations. Network readiness is one dimension of the ability of national economies (as well as other players such as cities, including smart cities) may have to rebuild globalization around a set of shared values, including environmental sustainability, reduced inequality, and faith in a shared global future. As such, it deserves to be closely monitored and supported in all types of economies.