Q&A Report:
The Network Readiness Index 2019
Towards a Future-Ready Society

February 14, 2020 8:00am EST

Soumitra Dutta, Former Founding Dean, Cornell SC Johnson College of Business
Chairman, Board of Directors, Global Business School Network
Founding Editor, Global Innovation Index
Founding CO-Editor, Network Readiness Index
Bruno Lanvin, Executive Director, Global Indices, INSEAD
Founder and CEO, DL Partners SA
President of the Smart City Observatory
Founding Co-Editor, Network Readiness Index
Carolina Rossini, Co-Founder, Network Readiness Index
Secretary for the Board and CEO, Portulans Institute

1. **NRI is closely related with the fourth industrial revolution. On the global level, how do you see your index being used in research on the fourth industrial revolution?**

Soumitra Dutta: I think you are absolutely right. digital and NRI are co-relevant to the fourth industrial revolution that is happening around us. If you look at the fourth industrial revolution, there is no other good model or framework, that I know of, that really tried to assess the broader holistic impact of the fourth industrial revolution. So, in my view, the NRI really tries to get us a step closer to having a framework; having some data-based and evidence-based support for policy and decisions in the public and private sector. What I do hope is that with the support of various key global organizations and key academic institutions, we will be able to enhance the work on the NRI further in key areas to understand in more depth how the fourth industrial revolution is impacting society. For example, in Egypt or in Northern Africa, the framework could be expanded to a much

more detailed analysis of the region or the country. The basic idea on how technology and people have to work together is central to the fourth industrial revolution.

Bruno Lanvin: What NRI is trying to do, which is look at future readiness, needs to be linked to the efforts made in part by the World Economic Forum, to chart what the fourth industrial revolution could be about. One of the major merits of the industry 4.0 approach is to move away from the traditional habit, which is to look at industry in terms of sectors and try to identify what the horizontal dimensions are that will influence all sectors of our economies. Whether we are talking about platform economies or talking about the way in which we want to finance innovation, there are horizontal dimensions which will not only affect all sectors but will destroy the barriers that we currently see between sectors. So, this is very convergent in terms of a way of thinking. By digging further into what is happening at the country level, we are going to uncover some truth to how these dimensions can be combined in the future.

2. **How much are you able to account for political will or lack thereof, versus resource as a reason for lack of progress/readiness?**

Bruno Lanvin: Let me frame this in a positive way. What we see in many countries is that political will, when incarnated at the highest level of government and industry, makes a difference. A brilliant example is Rwanda, a country that had to move away from the impact of genocide and attempt to identify potential sources of energy in order to rebuild its future. The choice made by the president and his team was to look at innovation and technology. We see that happening in other parts of the world. Singapore is also a key example. Fifty years ago, Singapore became independent from Malaysia and had no place to go. They rebuilt their economy around the notion of improving the use of technology and using it as a service of diversification and

innovation. So, political will makes a difference. The absence of political will does not necessarily say there is no interest in technology. The negative is to leave it to decision makers, who are more bureaucrats or linked to a particular part of the economy and that typically doesn't have the same positive effect on society. I would tend to focus on the positive aspects and the good examples we have. That being said, we cannot ignore that the biggest force that needs to be opposed is often inertia.

Carolina Rossini: I just want to add one element. Looking at the metrics we use for NRI, especially the input metrics, for example, on the regulation side, we do count as positive if a country has a privacy law. A lot of the input metrics mirror fundamental rights that are considered positives for the growth of a country.

Soumitra Dutta: I believe that government plays a very key role in helping drive the technology strategy for a country. And I think of the two important examples of China and the US. In China, we know the government plays a very key role in how the sector is evolving. In the U.S. too the government is playing a very key role in shaping the sector. In the recent budget proposals, President Trump has doubled the investments in AI and quantum computing and is giving a very determined government push towards new technology. The government role in helping shape digital policy is extremely critical.

3. **I noticed the Uzbekistan is not on the NRI. How could we incorporate and get Uzbekistan, and other absent countries, on the NRI?**

Soumitra Dutta: Our goal is to try and cover as many countries as we can. Breadth is an important goal for us. Yet, because of data limitations we are often unable to cover all countries. Typically, the informal heuristic we use is to include a certain variable, it should have data for at least 70% of the countries. To include a certain country, there should be

data for at least 70% of the variables on that country. So, when some countries do not meet the criteria, they are unfortunately not included in the ranking. When some variables do not meet the criteria, they are also not included. For example, there are lots of great variables that are only available on OECD countries. These are challenges of any data collection exercise that we undertake. Yet, for the countries for which we are missing data, we often work with them to help them towards providing data for the right international sources. This is because most of our data comes from global, international and multinational organizations. Often, there are internal challenges the countries are facing in providing data at the right time and at the right frequency. We are happy to work with other countries to see how we can address the data problems that are currently preventing the country from being included.

Bruno Lanvin: If I may add a quick footnote. Very often we have countries that are not included in the rankings because data is missing. The data is not always missing everywhere. There may be three well documented pillars for which we have the data and one for which there is insufficient or no data. This means that some of the countries that are not included also have interesting stories to tell. And because we are mentioning Uzbekistan, I should note that indeed we have decided to conduct a special case study on Uzbekistan as an example of a country with missing data but still has an interesting story to tell. So, expect to see a few things on our website about Uzbekistan soon.

Carolina Rossini: If I may just add one thing. One of the goals of NRI is to serve as an assessment for action leaders. If we understand that and if we actually additionally map the countries where data is missing, the message we are giving to those countries is: we need more data collection to enable you to make data-based decisions for policies and innovations. It is also a tool to pressure countries to create better internal assessments in order to help guide policy making.

4. **What are some of the most prohibitive regulations you have found that stand in the way of what could be easy wins?**

Bruno Lanvin: We have a number of variables that look at various components of what makes a good environment for technology disruption and the use of ICTs generally. Clearly there are many things that have proved successful. For instance, to have competitive environments for the disruption of mobile telecom monopolies or other aspects, has proved to work very well. Countries that have kept either telecom monopolies (there are very few now) or insufficient competition are actually hampering their own efforts to move up the ladder in the NRI. Some of the most prohibitive regulations, occasionally have to do with more than just technology. We have seen a rise over the last few years of multi-axle disciplines. The rise of nationalistic and protectionist policies, which indeed are hampering global disruption, in terms of innovation and technology. Therefore, if we try to identify the most prohibitive regulations we would need to look beyond just technology. It is important to realize that the countries that have been able to move up the ladder the fastest - smaller economies in particular, but also China - have done so ultimately because they have been assimilating into international trade more and more. For emerging countries in Africa, the Middle East and Latin America, this becomes a big threat. If international trade, investments, circulation of people and ideas become more restricted, their own efforts to move up the ladder in the NRI may be diminished.

Soumitra Dutta: Over the years we have worked with a number of governments and organizations in both the public and private sector. At the government level, within both the local and national levels, one of the issues we see is the challenge of coordination across different ministries, different functional departments and groups. ICT or technology is a horizontal platform that impacts different sectors. If you want to actually

experience positive change and impact, you need to bring these other parallel systems, ministries, and organizations on board. For example, if you want to use technology to improve education, you need to have the ministry of education completely bought into the process and helping to drive the change. The technology ministries themselves can only accomplish limited change, unless of course they can change the landscape of broadband competition or the number of telecom players allowed. The technology ministries have important roles, but a lot of the actual impact relies on the coordination and cooperation with ministries and other functions. So, that is an area where I think there are some easy wins, but at the same time requires a determined push to drive that coordination and collaboration across the government or organization.

Carolina Rossini: If I may just add one thing. Soumitra and Bruno are also behind a couple of other indexes, like the Global Innovation Index. The restrictions go beyond technology and looking at those other indexes, together with the NRI, offers a great depiction of how a certain country is tackling all the key elements for competitiveness.