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1. Introducing the Dialogue on Digital Transformation series

In 2020, the Portulans Institute launched the Dialogue on Digital Transformation series. Over the last few months of the year, we virtually convened a series of conversations with renowned global experts, addressing the critical issue of digital transformation. The Dialogue built on the Network Readiness Index (NRI) 2020, launched with the 'Building Forward Better' panels in October.

This series of thought-provoking conversations aimed to enrich long-term discussions about the state of global digital readiness.

Through these interviews, we noted a “silver-lining” dynamic amid a year of severe impacts on lives and livelihoods worldwide. From new opportunities to access talent across borders, to the acceleration of digital inclusion efforts by governments and international organizations, to improved access to health information, the digital transformations catalyzed by COVID-19 will have long-lasting effects. The Portulans Institute looks forward to further analyzing the scale of societal transformations during this unprecedented year.

The questions raised in the interviews pertain to four major themes of digital transformation in the age of COVID-19: the necessity for digital transformation due to the crisis; inclusion, diversity and the digital divide; the implications of digital transformation for talent and reskilling; and finally, the balance between economic competitiveness and sustainable development in the context of digital transformation. Based on the interviewee’s background and expertise, we tailored specific questions in order to explore issues in depth.
Within this report, we have consolidated some of the insights from the Dialogue interviews and insights from the 'Building Forward Better' panels accompanying the launch of NRI 2020.

It is not possible to do full justice to the quality and depth of the responses received in a short synthetic report. We encourage all interested readers to read the full interviews or watch their recordings, in order to appreciate their full content.

During 2021, we will continue to engage our community and host conversations relating to competitiveness, innovation, entrepreneurship and digital transformation.

For further insights and commentary, we invite you to connect with us online.
3. COVID-19 as a Catalyst of Digital Transformation

We begin the interviews with a series of common questions addressing the state of digital transformation in 2020.

The NRI 2020 report underlined the importance of readiness for the digital future. It underlined how the COVID-19 pandemic has offered examples of how digital tools can be leveraged to combat a global crisis. The crisis has also contributed to the emergence of a new normal, more digital than ever. Since the early months of 2020, the realities of living, working, and studying with COVID-19 have spurred an unprecedented digital transformation for individuals, firms, and governments. As explored in Portulans briefs from March and April 2020, digital readiness was—and continues to be—essential for mitigating the impacts of the “Great Lockdown” and surviving the dual onslaught on public health systems and socio-economic structures.

All of our interviewees commented on the overwhelming importance of the COVID-19 crisis in jump-starting or even accelerating a pre-existing digital transformation in families, workplaces, governments and economies. As reflected in the NRI 2020, digital transformation unfolds across multiple areas: from access to technology to network-ready individuals. Our interviewees recognized that digital transformation may unfold at a different pace in different sectors, and in different geographies, as a result of COVID-19 and uneven degrees of pre-existing digital readiness.
How has COVID-19 impacted the need for digital transformation in your sector?

"We are in the midst of a forced transformation, but I would argue that it's been underway for quite a while. The thing that is important here is to be adroit about understanding what is still needed."

Vint Cerf
Vice President and Chief Internet Evangelist, Google

"In 2020, we've entered the 'second lap' in connectivity. And the private sector has a different role to play. They need to open up the ecosystem of the Internet for those who can't afford it."

Manish Sinha
Chief Marketing Officer, STL

"I think what COVID-19 has done has really accelerated the pace and reach of digital transformation... Everybody understands that to get through the COVID-19 situation, you've got to have technology to connect with your employees, your customers, your suppliers, and so on. COVID-19 [has given] digital transformation an extra boost or acceleration."

Frances West
Founder and CEO, FrancesWestCo; Former Chief of Accessibility, IBM

"The reset of our economies suggests that a new order is now upon us. This means it is imperative that we are prepared for the change that will impact [our] daily lives. This is not only urgent but mandatory. COVID-19 is the catalyst in driving the necessary change required to shift mindsets and reframe how we work."

Olu Teniola
President, Association of Telecoms Companies of Nigeria
Does every individual, organization and government need to be digitally transformed in order to survive and thrive?

“COVID-19 has accelerated the acceleration [of digital transformation]... If you couldn’t survive, then you’re not ready for this kind of reality. My perspective is this: it has helped us do what needed to be done.”

Emma Arakelyan
CEO, Orion Worldwide Innovations; Founding Partner, BAJ Accelerator

“COVID-19 highlighted many outdated modes of operating and configuring a business, and also revealed opportunities to innovate and adopt change management initiatives to overcome the restrictions that COVID-19 brought into the equation.”

Olu Teniola
President, Association of Telecoms Companies of Nigeria

“If you’re not digital, you’re missing out on a big opportunity. I think it’s important to stress that this is not an obligation. It’s much more of an opportunity. If businesses are not taking advantage of that, then they’re missing out... You’d be crazy not to want to be part of a more digitally integrated world.”

Simon Kemp
Founder and CEO, Kepios, Chief Analyst, DataReportal

“Whether it is work from home or education online, these concepts had always existed – but the pandemic has made [these behaviors] mandatory. Over time, people are realizing that [digital transformation] is very effective, as well as efficient.”

Dr. Anand Agarwal
Group CEO, STL Group
What have you learned from (the first wave of) COVID-19 that you can apply to future crises?

“Organizations are totally seeing that the lack of [digital] tools has been hurting them in their ability to create scenarios, change their business strategy, and adapt to the changing environment. The very low level of penetration of AI is what we’ve seen... The majority of the world is still using old technology... People are like, ‘Now we need to rethink, re-design our supply chains, how we’ve been making decisions.’ These decisions will come with a digital aspect and an AI aspect.”

Jean-François Gagné
CEO, Element AI

“Surviving the first wave of COVID-19, we learned just how efficient and productive the virtual working environment can be. In just a few days, we shifted and enabled 25,000 employees to work remotely... In fact, our operation key performance indicators show that employee productivity increased by 10 percent.”

Marco Stefanini
CEO, Stefanini Global

“Digital transformation in the time of COVID-19 is unprecedentedly accelerating, increasingly disrupting and constantly evolving as new internal and external factors reshape its trajectory... In this new normal, the status of digital transformation is being elevated from strategic initiative to strategic imperative.”

Karim Michel Sabbagh
Former CEO, DarkMatter
Already, it is clear that inclusive and digitally-ready societies are better equipped to handle the pandemic’s fallout. In light of this observation, we asked interviewees for their insights about building back more inclusive and diverse societies, and the ways in which digital transformation could be leveraged to close the digital divide.

Good governance should be based on inclusion, trust and regulation. The NRI 2020 model and rankings reflect the overwhelming importance of inclusive digital development, with synergies between people and technology managed by forward-thinking and human-centric governance and technology.

In a global public health crisis, access to digital tools is more than just a luxury. Worryingly, half of the world’s population still lives without Internet access, and recent analysis suggests data is still too expensive for most people in low-income countries. Meaningful connectivity is a necessity, and vital to safeguarding the lives and livelihoods of citizens worldwide. The past few months have demonstrated the extent to which the COVID-19 crisis threatens to exacerbate the global digital divide. More generally, there is a chance that, without proper principles of governance, digital transformation might increase inequalities.

In the past few months, the international community has called attention to the importance of safeguarding and improving global digital connectivity. Launching the UN Roadmap on Digital Cooperation in June 2020, UN Secretary General Antonio Guterres stresses that the international community is facing an unprecedented multitude of digital challenges, such as rampant disinformation. “We have a collective responsibility to give direction to [digital] technologies so that we maximize benefits and curtail unintended consequences and malicious use.”
How can digital transformation be leveraged to rebuild more inclusive, diverse and equitable economies in the post-COVID world?

"We now have to be responsible for making [inclusivity and diversity] standard practice because the whole world is diverse. And in this COVID epidemic, we are returning to ourselves as people, people of culture, people of different races, people of different religions. And if we are to talk about digital transformation, if it's not inclusive, it isn't about us. And we have to remember that."

"Digital transformation prepares our company for the future and allows us to think and behave with more agility. We are preparing our workforce to use the technology of today and of tomorrow. We are preparing them for the roles of tomorrow. Everyone, regardless of where they are or who they are, has this opportunity. Supporting a culture of inclusion and diversity allows everyone to act more freely, be themselves, act with more creativity, be innovative, and offer their perspective..."

“This crisis has made us realize that those who do not have access to technology are victims. But we are all victims, in some respect... This realization of connectedness... really changes the approach to policy making, the approach to actions that different institutions take. I hope we’ll be inspired to fight for better policies and better actions from governments or the private sector to support the kind of [digital] transformation that is necessary."
How can digital transformation help fight unemployment?

"As human-machine collaboration becomes both necessary and prevalent, more than focusing on technology, workers’ experience must emerge as the focal point of organizational transformation."

Gianna Sagazio  
Director of Innovation, CNI.br

"Digitization does not create unemployment, per se. It actually creates a new type of employability. COVID accelerated that process and showed us that digitization is important... Within a digital frame [work], you can express much more creativity and brainstorming."

Dr. Jacques Bughin  
Former Director, McKinsey Global Institute

“Digital transformation: I think there’s an opportunity for a diversity of participation... I think that this is a time where we can actually level the playing field, so to speak, and learn from each other, versus just compete with each other.”

Frances West  
Founder and CEO, FrancesWestCo; Former Chief of Accessibility, IBM

“The digital age is [changing] requirements of jobs. Now, what does that mean? It means that instead of whining about [losing] jobs... governments have to get involved with the educational process, do a sweeping change of the curriculum, to bring everybody into the digital age so they can compete.”

Dr. Jim Poisant  
Secretary General, World Information Technology and Services Alliance
What leadership and culture are needed to ensure digital transformation does not exacerbate the global digital divide?

“A coalition leadership approach... will assist in ensuring the needs and requirements of the weakest in society are met! Inter- and intra-forum and collaborative dialogue that addresses the complex interplay across cultural and ethical [lines] is critical to the stakeholder engagement that will be required to achieve the outcomes in order to support a sustainable ecosystem.”

“Technology adoption needs to happen locally, right? It needs to be a bottom-up, not a top-down, process. You are much more likely to adopt something new, whether that is a new piece of technology or whether it’s a new piece of information, if it’s provided to you or shared with you from someone in your trusted network.”

“The role of the leader is to be able to impact and engage, and eventually have [employees adopt and follow the “new.” Exponential leaders have to have this vision, because people will follow. We need leaders to embrace and encourage followers.”

“If you have an innovation mindset, you can do it. People need to understand that you don’t need an MBA to be an innovator. You can innovate in very simple ways in your day-to-day work.”
5. Digital Transformation and Talent

We asked our interviewees to share their thoughts about the rapidly changing landscape of producing, recruiting and retaining global talent.

Measuring digital readiness requires disaggregation into the individual, business and government levels. Disjuncture between the levels of digital readiness of different segments of society undermines a country’s overall readiness for the digital future and its preparedness to face massive crises such as COVID-19.

The COVID-19 crisis has shone a bright spotlight on critical deficiencies in the digital skills required to continue working, trading or learning in a remote, hybrid or otherwise compromised environment. According to a recent study, 75 percent of employees surveyed noted they have maintained or even improved their levels of productivity while working remotely.

While the visibility of digital literacy gaps has indeed been acute, working from home has catalyzed a host of digital transformations, many of which might have taken years under normal circumstances. The efficacy of these transformations displays the inextricable linkages between network-ready individuals, businesses and governments that determines a country’s overall performance in NRI 2020.
What is the role of lifelong learning in becoming a future-ready firm, government or society?

“Digital transformation must follow along with human transformation, human agency, human capacity. This is why skills are very important. … In our roles in government, private sector organizations, technical organizations, civil society or individual users, we each have a role and responsibility.”

Nnenna Nwakanma
Chief Web Advocate, WWW Foundation

“How can we talk about digital transformation if individuals and communities do not even have the meaningful connectivity to access digital opportunities?

It makes no sense. And this idea is disruptive. It challenges decision-makers to aim higher.”

Sonia Jorge
Executive Director, Alliance for Affordable Internet

"You shouldn't have to climb a tree, you shouldn't have to sit on a curb outside a fast food restaurant, to gain access to the internet. We have to do better by our children."

Larry Irving
CEO, Irving Group; former Assistant Secretary of Commerce and Communications
How best should firms and governments build a supportive ecosystem for digital leadership, leveraging technology, governance and people for impact?

“We shouldn’t lose track of the fact there are important things that have to happen at the top level... if we want an online environment in which we feel safe and secure, we may very well need both national and international agreements in order to enforce that condition.”

Vint Cerf  
Vice President and Chief  
Internet Evangelist, Google

“What governments need to do is put ICT at the core of every decision they make. That will drive what they have to do. If you look at ICT as the core, as the major consideration, then make your decisions based on that. It’s not a program on the side... You’ve got to look at how you’ll function with that as your primary focus... Hire somebody who will be a digital champion—one someone who gets up in the morning and can’t wait to do the next thing to get your country digitized and into the digital age.”

Dr. Jim Poisant  
Secretary General, World  
Information Technology and Services Alliance

"The pandemic has forced us to use digital networks much more actively, at the expense of face-to-face interaction, and we are now actively finding ways to leverage the social dynamic online."

Marie Lou Papazian  
CEO, TUMO Center for Creative Technologies
Leveraging international experiences and insights, we asked our interviewees to share their thoughts on the links between digital transformation, the achievement of the SDGs and building economic competitiveness.

The disruptive technologies of the Fourth Industrial Revolution, from artificial intelligence to big data, offer an opportunity for economies to leverage digital transformation in order to gain a competitive edge. As demonstrated by NRI 2020 rankings, the world’s most network-ready economies (Sweden, Singapore and Denmark) are high-income nations, with strong economic performance, quality of life and contributions to the UN Sustainable Development Goals (SDGs) that enable them to fully reap the benefits of investing in future technologies.

COVID-19 has displayed the critical balance that must be struck between economic competitiveness and human-centric needs when it comes to digital transformation, particularly given the importance of ICTs for sustainable development. For example, leveraging digital platforms to ensure educational continuity during this crisis requires innovation that puts learners at the core, and also requires innovation that ensures competitiveness for business survival. We asked our interviewees to tell us about how best to leverage digital transformation to achieve the SDGs, and how economies can ensure that digital transformation remains human-centric and ethical, while also providing a competitive advantage.
How can we leverage digital transformation to achieve the UN Sustainable Development Goals?

“We must also realize that connectivity is only part of the problem. **Affordability of data and skills to use digital solutions represent equally high thresholds for many** to become part of and benefit from digital transformation.”

**Dr. Rene Arnold**
Public Affairs Expert, Huawei

Balancing “economic growth and the well-being of citizens [represents] a challenge for governments to critically use digital technologies... [They need] strategy development for political commitment. They have to put the right people in the right position in order to make decisions. And [they have] to understand the technologies to be able to communicate them to people that maybe don’t have a background in them.”

**Dr. Giacomo Damioli**
Researcher, European Commission

“If you want to use big data to support the SDGs, it’s even one more reason we need to address all those [biases], limitations, and data-sets that are informing big data. Otherwise they won’t get us to what the SDGs are hoping to get to.”

**Sonia Jorge**
Executive Director, Alliance for Affordable Internet
How can we make sure that digital transformation remains human-centric and ethical, while also providing individuals, firms, and governments with a competitive advantage?

"Libraries are very much human-centric spaces. Tech readiness and innovation are incredibly powerful tools when we’re thinking about economic development and competitiveness… The for-profit community owns, in a lot of ways, access to information, and so libraries have a role to play in framing that information… we can take something that has been hidden behind paywalls - difficult to find, difficult to manage - and [release] that information out into the public - I think that’s an example of where thinking innovatively [leads to competitive advantage].”

Jocelyn Kennedy
Director, Harvard Law School Library

"Governments are responsible for [putting] this human technology in place, and knowing enough about the technology. It’s not acceptable for someone who’s responsible for society [not to know about digital technology]. We need our government to be educated to the same level so they can [pass] regulations - not to kill innovation, but to [make sure] people are responsible and accountable… Ethics must become a lifestyle - more than an action or a role.”

Emma Arakelyan
CEO, Orion Worldwide Innovations; Founding Partner, BAJ Accelerator

"The government needs to worry about connectivity as a core element of a country’s competitiveness.”

Prof. Demi
Getschko
Director, CNI.br
For more, visit the Dialogue on Digital Transformation online.

Visit our website for recorded and written interviews, highlights and commentary from the series.

- COVID-19 as a Catalyst of 'Necessary Change': Olu Teniola's Thoughts on Digital Transformation
- Preparing Our Workforce for the Tech of Tomorrow: A Conversation with Marco Stefanini
- Hear Nnenna Nwakanma's Thoughts on Digital Transformation and Meaningful Connectivity
- Frances West Tells Us About Authentic Inclusion, Women in Tech and Digital Transformation
- Havard Law School Library Director Jocelyn Kennedy Tells Us About Digital Transformation
- Internet Pioneers Talk About Digital Transformation in the Age of COVID-19 (Vint Cerf, Mei Lin Fung and Samantha Schartman-Cycyk)
- Huawei Public Affairs Expert Dr. Rene Arnold Shares Insights About Digital Tools
- Marie Lou Papazian's Perspective on Digitally Transforming Education
- From Strategic Initiative to Strategic Imperative: Digital Transformation According to Karim Michel Sabbagh
- Emma Arakelyan's Approach to People-First Digital Transformation
- WITSA Secretary-General Dr. Jim Poissant Explains Why Championing ICT Development is So Important
- The Power of People-First Innovation, According to Brazilian Digital Trailblazer Dr. Cristiano Ferri
- A Conversation with Sonia Jorge About Meaningful Connectivity, Digital Transformation and COVID-19
- Larry Irving Tells Us About the COVID-19 Digital Divide: and What We Need To Do to Close It
- Element AI CEO Jean François Gagné: The COVID-19 Crisis Was a Digitization "Cold Shower"
- Dr. Jacques Bughin Shares New Research Insights About the Success and Failure of Digital Transformation Worldwide
- Brazil Needs to Reinforce Its Bets on Scientific and Technological Development, Says Gianna Sagazio (Director, CNI)
- Why Individuals, Firms and Governments Need Digital 'Mindsets, According to Simon Kemp
- European Commission Researcher Dr. Giacomo Damioli Talks About Building Togetherness for the Digital Future
- Dr. Anand Agarwal Shares Insights About Public-Private Partnerships and Digital Transformation
7. 'Building Forward Better' NRI Launch Regional Highlights
The 2020 edition of the Network Readiness Index (NRI) revealed the world's most future-ready societies. COVID-19 is accelerating digital transformation, and better governance is required to avoid a global digital disconnect.

On 19 October 2020, the Portulans Institute launched the NRI 2020 and hosted the panel, 'Building Forward Better: Network Readiness and Digital Transformation in a post-COVID World' in cooperation with UNESCO. On this occasion, Portulans presented the results and rankings of the NRI 2020, assessing how prepared countries are to leverage information technology to be future-ready and competitive.

Over the next two months, Portulans Institute hosted regional spotlight events, highlighting regional data and inviting regional thought leaders from the public and private sectors, civil society and academia to share their insights.

This section shares highlights from the global and regional virtual panel events as shared on the Portulans blog.
Building Forward Better: Global Panel Discusses Digital Transformation, Network Readiness and COVID-19

19 October 2020

Portulans Institute, in cooperation with UNESCO and with support from our 2020 Knowledge Partner, STL Group, hosted a global panel addressing the year’s most critical digital questions: how has COVID-19 accelerated the need for digital transformation worldwide? Are countries network-ready to ensure digital transformation is beneficial to their economies and citizens? What are the main digital challenges in the coming months and years? On this occasion, Dr. Bruno Lanvin and Prof. Soumitra Dutta also released the results and rankings of the 2020 Network Readiness Index (summary).

The virtual panel, moderated by Portulans CEO and Co-Founder, Carolina Rossini, featured global thought leaders from government, the private sector and the nonprofit community, including:
To handle the pandemic’s fallout, meaningful connectivity is paramount
As Professor Demi Getschko commented, drawing on Brazil’s experience, connectivity is not the end of the story. With nearly three out of four Brazilians connected, Professor Getschko noted that many may think connectivity is the end of the story. This is not the case whatsoever: getting people connected is only the first half of the struggle. In order to ensure connectivity is meaningful, governments must champion the development of digital literacy and skills, and build digital infrastructure to “develop the instrumental use of ICTs” throughout society. To rebuild more inclusive, diverse and equitable post-COVID societies, Ms. Dorothy Gordon emphasized that we stronger national ecosystems of innovation, a better understanding of the “inclusion dynamic” and support for programmes that encourage digital capacity-building.

Digital transformation threatens to exacerbate inequality
Ms. Dorothy Gordon stressed that “with rapid digitization, we actually see inequality accentuated.” Drawing on UNESCO’s advocacy and research on inequality and connectivity gaps, Ms. Sacha Rubel educated the speakers and attendees alike about the gender inequalities in the ICT sector in developed and developing economies alike. Rubel continued: “We need digital transformation based on human rights. Technology is not neutral, nor is it a mirror – it is a magnifier of existing inequalities.” Dr. Bruno Lanvin commented on the overwhelming importance of youth engagement in digital futures: “The future is about young people – and we need to involve them. If we can use digital tech to generate their appetite about the future, then we’re doing our job correctly.”

COVID-19 is accelerating digital transformation
All speakers agreed that COVID-19 has accelerated digital transformation. Drawing on the example of Sweden’s experience with the COVID-19 crisis, H.E. Anders Ygeman noted that “in some sectors, we have taken digital steps that would have otherwise taken years.” Professor Soumitra Dutta shares his insights about the changes to global conversations about digital transformation during the past two decades: “today, conversations about digital transformation are far more complex, with a discourse rooted in both competitiveness and the wellbeing of people”.

The digital future requires a “portolans” to navigate both challenges and opportunities
Prof. Getschko played with words and commented we need good data to drive good policy, and mentioned we need a “portolans”. The name of our institute, Portulans (or “portolans”), refers to ancient nautical maps, first crafted during the 13th century for navigation around the Mediterranean basin. The word comes from the Italian portulano, which refers to “a collection of sailing directions”. In these ancient maps, only a few harbors were visible – and much of the coastlines (and, indeed, the world) were hypothetical. At the precipice of unprecedented digital transformations, all speakers referred to the necessity for a roadmap for the digital future, informed by accurate data, common global methodologies and ethical impact assessments, supported by open access.
Ms. Sasha Rubel called for the development of a digital readiness methodology where practice informs policy, as opposed to policy informing practice. Ms. Dorothy Gordon, also representing UNESCO’s digital agenda, agreed that research that looks to the future and gauges the prospective impact of digital technologies is a necessity.

**International cooperation is more important than ever before**

While each speaker contributed their own sectoral and regional perspective on the pandemic crisis and digital transformation, they all converged on one necessity: international cooperation and digital roadmaps for ethical, human-centric transformation is more important than perhaps ever before. As Prof. Getschko emphasized, “Cooperation in the Digital Age is paramount. Individuals, institutions and governments cannot manage digital transformation alone: global vulnerabilities are interconnected and interdependent.” Speaking from a private sector perspective, Dr. Anand Agarwal said he “sees the role of the private sector as an enabler of digital transformation.” And Ms. Sacha Rubel shared UNESCO’s agenda to encourage the “co-creation” of the post-COVID digital future, ensuring all stakeholders are empowered to create context-driven digital solutions to local needs.

**Learning from Sweden: what is the recipe for digital success?**

H.E. Ygeman commented that Sweden sees their top ranking in the Network Readiness Index 2020 as an indicator that Sweden is taking full advantage of digital solutions, which “help us overcome some of the challenges we face as a country, for example, a small population and geographical distance.” In order to be better prepared for the digital future, H.E. Ygeman explained, countries must “work hard to make sure that legislation supports innovation – and doesn’t stop it… We must act fast to update the laws to fit the world we now live in.” Most importantly, economies must develop digital solutions that “manage their [citizen’s] everyday matters.” The COVID-19 crisis represents a unique opportunity, and a moment of realization: “digitization is more about people than it is about technology.”
Asia Pacific Panel Highlights Digital Transformation Track Records and NRI Regional Data

21 October 2020

Portulans Institute, in cooperation with UNESCO and with support from our 2020 Knowledge Partner, STL Group, hosted a regional panel on Wednesday, addressing digital transformation’s track record in Asia and the Pacific. For years, many Asian economies like South Korea and Singapore have been world-renowned champions of digital transformation. In which ways has COVID-19 impacted their ongoing digital progress? On this occasion, Dr. Bruno Lanvin presented the region’s results and rankings in the 2020 Network Readiness Index.

The virtual panel was moderated by Portulans CEO and Co-Founder Carolina Rossini, and featured a line-up of regional experts and global thought leaders, including:
Singapore, South Korea maintain network readiness; Malaysia, China and Vietnam display upper- and low-middle income leadership

Dr. Bruno Lanvin presented the NRI regional results and rankings, highlighting Singapore’s impressive digital performance as the world’s third-most network-ready economy and the highest-ranked economy for Impact. South Korea boasts similarly impressive digital readiness, with a second-place global ranking in People. Within the upper-middle income country group, Malaysia and China display strong leadership; within lower-middle income countries, Vietnam’s track record is notable. This year’s NRI data suggests that the region’s core strengths are in Governance and Impact, with room for improvement in Technology performance and People. John Garrity, as an NRI technical advisor, shared his predictions for NRI 2021 and beyond: indicator performance will likely be impacted by economies’ digital changes catalyzed by COVID-19 recovery and relief efforts.

Digital transformation should put people first

Our speakers’ perspectives were rooted in a variety of sectors and backgrounds, from the nonprofit community to the private sector. Yet all speakers converged on the overwhelming importance of putting people first in digital transformation policymaking, particularly in the age of COVID-19. As explained by John Garrity, countries in Asia and the Pacific with “robust digital infrastructure” and high smartphone penetration were the ones best suited to handle the pandemic’s fallout, for lives and livelihoods alike. As a result, “it is clear that a robust digital ecosystem is an imperative when it comes to poverty alleviation.” Garrity cited the Indonesian government’s refocusing of digital solutions for pandemic relief and recovery initiatives, and the growing prominence of digital payment systems in the Philippines.

Inclusion and diversity are at the core of effective digital transformation

Frances West shared with the panel her perspectives about “authentic inclusion”, informed by years of organizational experience trailblazing inclusion, diversity and accessibility initiatives in the private sector: “The last thing we want to do is thinking about inclusion sequentially. As we move forward, we need a holistic and proactive approach [to inclusion and diversity in digital transformation], thinking about inclusion not as a human resources issue but rather as a human-first digital promise... It is more important than ever before that inclusion is built into digital frameworks.” Misako Ito commented on the regional digital divide, and highlighted that more often than not, while young people constitute the majority of digital users, “there is a clearly accelerating digital divide affecting older people.” Other panelists agreed that the digital exclusion of the region’s growing elderly demographic is a particularly acute dilemma during a public health crisis, when access to information is sometimes a matter of life-or-death.
The COVID-19 crisis has had a Janus-faced impact on digital progress
On the one hand, COVID-19 has accelerated a variety of positive digital changes, such as improving accessibility to education and healthcare by leveraging digital tools and platforms. On the other hand, the crisis has also exposed the malign ways in which governments may leverage digital progress for oppression, surveillance and intimidation. As emphasized by Misako Ito, “COVID-19 has accelerated changes that are already underway in the digital world, like learning and working online. But it has also created new challenges and increased existing inequalities,” as digital tools are increasingly used to curb the freedom of expression through surveillance and online harassment. (On that note, Freedom House released their Freedom on the Net 2020 report, which dives deeper into the pandemic’s “digital shadow”).

We need better digital leadership for a post-COVID world
Dr. Jim Poisant’s remarks underlined the importance of digital champions and effective digital strategies, informed by indexes like the “gold standard” of digital readiness, the NRI. “Digital transformation is more than just leadership. It’s about championship – individuals and groups who will champion digital change and digital progress within countries.” Poisant continued: “A successful digital transformation needs a champion behind a comprehensive, long-term, untouchable digital plan that can be adjusted according to digital changes. That’s how countries can move up the NRI rankings.” Dr. Bruno Lanvin’s closing remarks highlighted the significance of youth participation in the “digital future”: “We have to restore faith in the future. The digital future is a source of hope and energy – let’s work with the younger generation to make this a reality.”
Regional Panel Turns the Spotlight on North America at a Digital Innovation Crossroads

26 October 2020

While the United States and Canada are globally celebrated as innovation trailblazers, COVID-19 has undoubtedly impacted their competitiveness and revealed both the strengths and shortcomings of their progress in digital transformation. To discuss this and more, this Monday, Portulans Institute, in cooperation with UNESCO, hosted the second regional panel event in our 'Building Forward Better' series, focusing on digital transformation and network readiness in North America. Professor Soumitra Dutta presented the region’s results and rankings in the 2020 Network Readiness Index (read our summary here) to provide the latest data-based insights about the region’s performance.

The virtual panel was moderated by Portulans CEO and Co-Founder Carolina Rossini, and featured a line-up of regional experts and global thought leaders, including:

- **Prof. Soumitra Dutta**
  Prof of Management, Cornell; President, Portulans Institute

- **Larry Irving**
  CEO, Irving Group; former Assistant Secretary of Commerce and Communications

- **Dr. Lara Mangravite**
  President, Sage Bionetworks

- **Carolina Rossini**
  CEO, Portulans Institute (moderator)

- **Marie-Paule Roudil**
  Director of UNESCO Liaison Office in New York; UNESCO Representative to the United Nations

- **Manish Sinha**
  Chief Marketing Officer, STL Group

- **Tom Wheeler**
  Senior Research Fellow, Harvard Kennedy School; former Chairman, Federal Communications Commission
Connectivity gaps threaten the lives and livelihoods of millions, especially with COVID-19

Larry Irving delivered a wake-up call to the panel. “For far too many people – in the neighborhood I grew up in, in the US as a country – don’t have access to tele-health. And the folks that don’t have access to this tech are also the ones on the front line of the pandemic.” More often than not, it is Black, Latinx and minority communities that suffer the consequences of these connectivity gaps. Irving cited a study showing that as of late 2020, the pandemic had claimed the lives of 1 in 1000 African Americans, compared to around 1 in 2,100 white Americans. Joining us from the UNESCO office in New York, Marie Paule Roudil commented on the gravity of connectivity gaps in developed and developing economies alike, noting that unless we identify bias in existing data and technologies, we cannot leverage digital tools to help us combat the growing digital divide and its often lethal consequences. Drawing on the NRI data, Professor Dutta noted that digital transformation may create new types of digital divide, even between neighboring blocks in the same city, as is the case in New York.

Today, the biomedical research sector faces new obstacles, but also new opportunities

Dr. Lara Mangravite shared an optimistic message from the biomedical research sector: “Increasingly, we’re seeing research and information sharing across countries.” In fact, “the sector did not have a digital transformation. The technology already existed. Instead, the crisis has created a transformation of incentives.” According to Dr. Mangravite, this transformation is nothing short of revolutionary: tele-health tools empower the provision of healthcare to move out of the office and back into the home, enabling a more holistic understanding of the individual and treatment, not to mention disease prevention. Learn more about Sage Bionetworks’ National COVID Cohort Collaborative Data Enclave, launched in September this year.

Yet weak political leadership undermines digital excellence

Drawing on his experience as Chairman of the Federal Communications Commission during the Obama administration (2013-2017), Tom Wheeler shared his perspective about US leadership at this critical digital precipice. “Internationally, the US has failed to be a leader. Period. And part of the reason we’ve failed is that we’re not stepping up.” The current administration, Wheeler commented, has “engaged in showbiz rather than substance” and failed to implement meaningful policy initiatives to close the digital divide. “We can’t lead if we can’t figure out what we stand for. And we need people with digital DNA who are representing the public interest and making rules that create guardrails for digital companies.” Irving continued: “the US can, and should, lead the global conservation” about building forward better with digital tools.
Now more than ever, private sector actors need to take responsibility

As a representative from the private sector, STL Group’s Manish Sinha commented that “with great power comes great responsibility and private sector actors have a responsibility to open up the ecosystem of the Internet, and ensure the bottom fifty percent also has access”, particularly in terms of improving affordability and access to help individuals and communities better handle the stresses of COVID-19. “Connectivity gaps prohibit individuals from having an impact on their own lives, and the world around them.” Wheeler underlined the importance of innovating current ICT regulatory policy: “We are stuck in a policy that was appropriately established twenty years ago, and has failed to evolve” to address new digital realities and challenges: and we cannot evolve if big tech continues to make the rules based on a business model that exploits personal data for profit (Antitrust Lawsuit Will Not Stop Big Tech’s Abuses). Irving agreed: “We’ve allowed the interests of big tech to drive our policy: but we need to put people first.” Without trust and security, Professor Dutta commented in regards to the NRI data, “developments in tech will harm the core fabric of our societies.”

Platforms need better regulation: “industrial revolution”—age regulation is no longer appropriate

Continuing the discussion on the role of the private sector, panelists discussed the need for regulatory modernization. Tom Wheeler mentioned his latest paper with Philip Verveer and Gene Kimmelman, published by Harvard Kennedy School’s Shorenstein Center think tank. The authors recommend the creation of a new independent federal regulatory agency – the Digital Platform Agency (DPA) – to oversee big tech’s expanding presence in American business and life (New Digital Realities, New Oversight Solutions). They cite “the enormous power of data control in the hands of a limited few tech platforms” and focus on the limited competitive landscape that is evolving. Their report envisions DPA as a “federal agency agile enough to handle the oversight of data abuses and gaps in competition policy, while being capable of establishing corporate duties that promote fair market practices.”
Stakeholders need to co-create their joint digital futures
Marie Lou Roudil emphasized that “democracy is not just about voting for your leaders – it is a principle premised upon ordinary people understanding issues and proposing solutions using the tools available to them. We need a democratic debate about what our digital future looks like.” To do so, Roudil outlined UNESCO’s approach to building digital literacy and institutional capacity for inclusive, people-first digital innovations. Irving stressed that “there is nothing wrong with the Internet that cannot be solved with exactly what is right about the Internet.” Professor Dutta agreed that the US has a “special responsibility” to provide global leadership of digital transformation, and provide models to emulate for digital progress. “Engagement from the US in global digital progress is critical. I hope that the next administration will make global engagement their priority.”

North America is one of the world’s most network-ready regions, but positive impact remains limited to some, not all
Following the panelists’ conversation about the challenges and opportunities the US faces, Professor Dutta presented the NRI results on the USA and Canada. As displayed by this year’s Network Readiness Index, the US remains in the top-ten most network-ready economies, ranking 8th globally. Professor Soumitra Dutta drew attention to US leadership in Future Technologies, ranking highly in all of the sub-pillar’s five indicators. Close behind, Canada ranks 13th globally, with global leadership in the Inclusion sub-pillar. However, Canada and the US both lag behind in Regulation (28th and 30th, respectively). The US could especially do more to improve its SDG Contributions (31st) and Quality of Life (40th, its lowest performance in any sub-pillar). Professor Dutta emphasized that the US could be the NRI’s global leader if not for its sub-par performance in Impact.
Latin America Panel Reviews Regional Inclusion, Connectivity and COVID-19

27 October 2020

This Tuesday, Portulans Institute, in cooperation with UNESCO and CETIC.Br|NIC.br, and with support from our 2020 Knowledge Partner, STL Group, hosted the third regional spotlight event in our “Digital Transformation: Building Forward Better” series. The panel honed in on digital transformation and network readiness in Latin America, a region that has witnessed remarkable digital change in recent years. COVID-19 brings a host of new challenges to the table; the crisis has exposed both the gaps in the region’s digital progress and areas of digital excellence in healthcare, education and political leadership alike. In this panel, Prof. Soumitra Dutta took the opportunity to present and analyze the region’s performance in the 2020 Network Readiness Index, to contribute data-based insights to a thought-provoking discussion.

Portulans CEO Carolina Rossini moderated the panel, which featured some of the region’s most well-respected leaders and changemakers from academia, the nonprofit, public and private sectors:

Dr. Alexandre Barbosa
Head, Regional Center for Studies on the Development of the Information Society

Lidia Brito
Director, UNESCO Regional Office for Science in Latin America and the Caribbean

Prof. Lourdes Casanova
Director, Emerging Markets Institute, Cornell University

Prof. Soumitra Dutta
Prof of Management, Cornell; President, Portulans Institute

Diego Molano
Senior Advisor, IDB, EECD and McKinsey; former Minister for ICT, Colombia

Carolina Rossini
CEO, Portulans Institute (moderator)

Dr. Sebastian Rovira
Economic Affairs Officer, UN Economic Commission for Latin America and the Caribbean
To address inequalities and inform effective policy, good data is critical
Dr. Alexandre Barbosa shared his experiences spearheading CETIC.br’s efforts to collect accurate and unbiased data about Brazil’s emergent challenges in digital exclusion during the COVID-19 pandemic, drawing panelists’ attention to the fact that “without data, issues related to inequality and exclusion become invisible. And without visibility, policy-makers won’t include these issues on their political agenda.” As such, “data is the key ingredient to support policies that will create meaningful and inclusive digital transformation in the region.” Learn more about CETIC.br’s activities and research (Painel TIC COVID-19 apresenta dados inéditos sobre acesso a serviços públicos on-line e desafios a privacidade durante a pandemia).

Panelists cast a spotlight on the education sector and building digital skills
In his opening remarks, Diego Molano underlined the gravity of digital skills gaps in education, exacerbated by the COVID-19 crisis. “We have to align all elements in the value chain – good Internet access, digital infrastructure connected to the home, and institutional change: but then, is the student ready? Is the teacher ready? If not, the gap grows and grows.” Lidia Brito agreed, and emphasized the importance of digital readiness: “It’s not enough to train teachers if schools are not ready for e-learning.” More generally, “it’s not just about training in digital skills, but providing knowledge that empowers individuals to co-create solutions in the digital world.” Dr. Barbosa followed these comments with the observation that the “digital skills gap is complex – and it is inseparable from access to quality education.”

Conversations about tech are inseparable from conversations about inequalities
Mr. Molano likened the current crisis to “walking towards a cliff. The social contract is not working. People perceive that they are not being included in society.” This exclusion is exacerbated by the digital transformation of already inequitable economies. “Political leaders don’t understand this urgency.” Representing UNESCO, Lidia Brito emphasized that digital policies and development policies are inextricable. “We’re living in a region where inequality is a major challenge. COVID-19 has put this challenge right in front of us. We need to think – and act – to include those that are left behind.” Drawing on personal experiences, Professor Casanova drew attention to community networks, and the disruption of their service due to pandemic prevention measures, such as social distancing.
Latin America may have many crisis “silver linings” for digital transformation

Professor Lourdes Casanova stated that “we must take digital opportunities as they come, and use them as a platform to jump ahead and solve the region’s social problems.” Dr. Sebastian Rovira honed in on opportunities in the region’s digital economy; noting that access and connectivity is fragmented by socio-economic status, Dr. Rovira argued that economies should take advantage of the “necessity for digitalization” and rethink how we trade, invest and promote commerce across borders using digital tools. On a related note, Mr. Molano – as Colombia’s former Minister for ICTs – noted that policy initiatives to take advantage of the digital momentum must cover a diverse range of considerations across a “spectrum of issues”, from digital infrastructure on the one hand to human rights on the other hand.

Regional stakeholders must co-create their own digital futures

Closing the panel, Lidia Brito told panelists that “we must ensure our digital future is co-created, and enable everyone to participate in that co-creation. It’s our future, and it’s our responsibility.” Across cultures and borders, “stakeholders must collaborate to ensure an inclusive digital transformation, where the voices of smaller or vulnerable counties can be heard. For the voiceless, we must make sure they are not only visible, but also active shapers of change.”

There’s room for improvement in Latin America’s regional performance

Reflecting on the panelist contributions, Professor Soumitra Dutta observed that “even though we’re talking about technology, most of our discussion has been about people, leadership, regulation and other similar issues.. The keys issues around technology adoption are not necessarily about technology alone.” Professor Dutta presented Latin America’s results and rankings in the 2020 NRI, and exposed the region’s diversity of performances in digital readiness. The region’s top-ranked economy, Uruguay, ranks at 47th, with high performance in network-ready individuals (31st) and Government (35th), trailed by Costa Rica (64th globally), Brazil (59th globally) and Argentina (60th globally). Latin America’s lowest-ranked economy, Venezuela, ranks globally at 108th. As a region, Latin American economies perform marginally better on Governance and Impact, compared to the People and Technology pillars.
Europe Panel Highlights Regional Best-Practices and Emphasizes Strategic Digital Transformation

28 October 2020

On Wednesday, Portulans Institute, in cooperation with UNESCO and ICANN, hosted a regional panel on Europe’s digital transformation, highlighting regional data from the 2020 Network Readiness Index. While COVID-19 has demonstrated the ways in which digital tools may be leveraged to combat a global crisis, the pandemic has also exposed that much more progress and groundwork is required to ensure digital transformations put people first. Which economies are best positioned to maintain and improve the region’s competitiveness in a post-COVID world?

Portulans CEO Carolina Rossini moderated the panel, which featured some of the region’s most well-respected leaders and changemakers from academia, the nonprofit, public and private sectors:
Europe must prioritize strategic, not reactive digital transformation

According to Christ Mondini, from ICANN, “we have to work towards being more strategic and less reactive” in the process of digital transformation, particularly during the COVID-19 crisis. All panelists agreed on the importance of comprehensive, strategic and flexible digital plans, based on multistakeholder input. Speaking from a private sector perspective, Ankit Agarwal shared his enthusiasm for the digital transformations in learning, working and governing that have already taken place: some of which may have taken years under regular circumstances. “There are opportunities that lie ahead – but we have to go beyond just access to technology, and make sure that there is a real impact.” Noting this, Dr. Jacques Bughin agreed, and drew panelists’ attention to the education sector. Instead of reactively digitizing education, Dr. Bughin said, schools and institutions must “redefine, redeploy and re-transform”, leveraging digital tools.

Regional stakeholders must co-create digital solutions to shared challenges

Paul Hofheinz, from the Lisbon Council, outlined his vision for political leadership capable of harnessing the power of digital transformation: leadership with a clear objective and a clear programme. According to Hofheinz, the way to encourage this leadership is to encourage the growth of digital skills and talent transfers across the region, particularly from digitally-ready clusters to European economies ranking lower on the NRI. Doing so is a critical step in strengthening a European approach to digital transformation, as opposed to an amalgamation of national approaches. Hofheinz noted that the EU’s Recovery Plan – with a dual emphasis on green and digital transitions for short-term recovery and long-term sustainability – is a step in the right direction. Chris Mondini agreed, and emphasized the necessity of encouraging active, engaged participation from a diversity of stakeholders and “newcomers” to conversations about digital futures.

Revolutionary access and reskilling can empower youth, combat inequalities, and create jobs

Following the presentations of the 2020 NRI results and rankings, panelists commented on the importance of “well-rounded countries”, such as Sweden, that have achieved the critical balance between digital excellence and good governance rooted in inclusion, diversity and equity. “Well-rounded” countries are best-placed to use digital tools to put people first. Speaking on a regional and global basis, panelists agreed that access to ICTs is just part of the picture. As Dr. Bughin underlined, “the question is not about access and usage of ICTs per se, but whether this access is revolutionary or not.” Dr. Bruno Lanvin outlined an “equation of objectives for the digital future – creating jobs, empowering the younger generation, and combating inequalities. We need to put digital reskilling at the core of these efforts.” To this end, Ankit Agarwal shared STL Group’s experience working to improve connectivity in India’s rural areas; in sum, improving access to ICTs is only transformative when efforts are supported by locally-specific programmes designed to build digital skills and knowledge.
Northern European countries lead the 2020 NRI, and dominate the NRI Top Ten rankings

As a region, Europe has always topped the rankings of the NRI, with Sweden, Denmark and the Netherlands among the world’s top-four most network-ready economies, and the top-ten rankings dominated by European countries. There is, however, a great deal of regional disparity: the lowest ranking European economies are Bosnia and Herzegovina (87th), Albania (78th) and Moldova (71st). Our panel in mid-October explored Sweden’s “recipe for digital success”, featuring insights from the Swedish Minister for Digital Development and Energy, H.E. Anders Ygeman. Denmark climbed from 6th to 2nd in this year’s NRI; as explained by Dr. Lanvin, the reason for its improvement is higher scores in Governance (2nd) and Technology (5th), which room for improvement in inclusive access to ICTs (13th). As for the Netherlands (4th), its best showings are in Technology and Governance (3rd), and the economy falls outside of the NRI top-three by a slim margin. Again, Europe’s top performers demonstrate the importance of well-rounded, even performance across the NRI’s four pillars.
MENA Panel Highlights Enabling Environments for Digital Transformation

12 November 2020

On Wednesday, Portulans Institute, in cooperation with UNESCO, the School of Business at the American University in Cairo and the American Chamber of Commerce in Egypt hosted a regional panel highlighting MENA’s track record in digital transformation, in addition to discussing regional data from the 2020 Network Readiness Index. In recent years, MENA’s digital track record has generated much international attention and interest. With the onset of the COVID-19 crisis, which regional economies are best prepared to maintain and improve their competitiveness and digital readiness for a post-COVID-19 world?

The virtual panel was moderated by Maroulla Haddad, Senior Digital Development Policy Specialist at the World Bank, and hosted by Carolina Rossini, CEO at Portulans Institute. The panel featured a lineup of regional and global experts representing the private, nonprofit and academic sectors, including:

- **Paul Hector**
  Advisor for Information and Communication, UNESCO Regional Bureau for Arab States

- **Dr. Sherif Kamel**
  President, American Chamber of Commerce in Egypt; Dean, School of Business, American University of Cairo

- **Dr. Bruno Lanvin**
  Executive Director for Global Indices, INSEAD; Director, Portulans Institute

- **Prof. Nagla Rizk**
  Prof of Economics; Founding Director of the Access to Knowledge for Development Center (A2K4D), School of Business at the American University in Cairo

- **Dr. Ahmed Tantawy**
  Advisor to the Minister of Communications and Information Technology, Egypt

- **Carolina Rossini**
  CEO, Portulans Institute (moderator)
Partnerships and “enabling environments” are decisive for digital transformation
All panelists noted the importance of an “enabling environment” for digital transformation in the public and private sectors. Dean Sherif Kamel noted that while the government enables digital transformation – for example, by building critical digital infrastructure – the private sector needs to reap the benefits of this environment and be a “driving force” of change. Paul Hector outlined the ways in which UNESCO seeks to foster this enabling environment, with frameworks for collaboration between civil society, government and educational institutions to ensure digital inclusion of individuals and communities on the one hand, and global progress towards achieving the UN Sustainable Development Goals on the other. Mr. Hector praised the research and implementation of emerging technologies such as AI across the region; however, “unfortunately, the legal guidelines that should regulate it are developing a lot slower.”

Digital transformation must take a people-first, multidimensional approach, rooted in good governance
Professor Nagla Rizk emphasized that digital transformation strategies must adopt a people-first approach, and consider the unique characteristics of the MENA region’s societies and demographics. Professor Rizk provided a range of thought-provoking examples of this disjuncture between national innovation and local challenges from across the region, stating that “while technology is important, it is just part of the story… in the region, we suffer from the ills of a fragmented approach.” As Dean Kamel noted, the ecosystem of digital transformation and emerging technology is “by design, an ecosystem [in which all parts] benefit from each other and affect each other. It’s like a value chain – the more it develops, the more everyone benefits.” Panelists praised the multidimensional approach adopted by the Network Readiness Index, demonstrating why leaps in digital innovation and technology are only effective when supported by good governance, strong talent and impact-oriented policy-making.

Building digital talent for lasting change
Drawing on his experiences as an Advisor in the Egyptian Ministry of Information and Communication, Ahmed Tantawy stressed the importance of confidence-building among leaders faced with unprecedented digital transformations. “The level of confidence… in the digital domain is critical.” While many digital literacy programs focus on the younger generation, it is critical to focus on the older generation, too, and particularly political leaders who may face a hesitation to become learners. Professor Rizk agreed, and raised the issue of brain drain. “We need collaborative models for growing [digital] skills” that are designed with skill retention in mind. “We must allow for organic knowledge production”, using digital solutions to fight local challenges. Marolla Haddad commented that while COVID-19 produces newfound strains on talent landscapes, digital transformation has the potential to diversify regional economies and in fact create new jobs.
The United Arab Emirates, Qatar and Saudi Arabia are regional leaders in the NRI 2020

Dr. Bruno Lanvin presented highlights of regional data in this year’s NRI, and commented on key takeaways about digital transformation on a global level. Leading the region are the United Arab Emirates (30th), Qatar (38th) and Saudi Arabia (41st), with the region’s other major economies like Jordan and Egypt ranked at 84th and 69th, respectively. The region’s lowest-ranking economy is Yemen, in 132nd place. Dr. Lanvin stressed that the region performs relatively well in the People and Technology pillars, while there is room for improvement in the Governance and Impact pillars. Highlighting regional data regarding Impact, Dr. Lanvin stressed that “technology is not an end in itself. We advance technology in the hope that it will improve the lives of people: is it making people happier? Is it making societies more inclusive?” Mr. Tantawy’s remarks also focused on the importance of social inclusion and quality of life as key indicators and objectives in a country’s digital transformation strategy.
Looking Ahead to 2021

Conversations about digital transformation and disruption are far from over. As we enter 2021, the Portulans Institute intends to host further conversations, spark thought-provoking debates and amplify global voices. To join our network, we invite interested readers to connect with us online.

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