





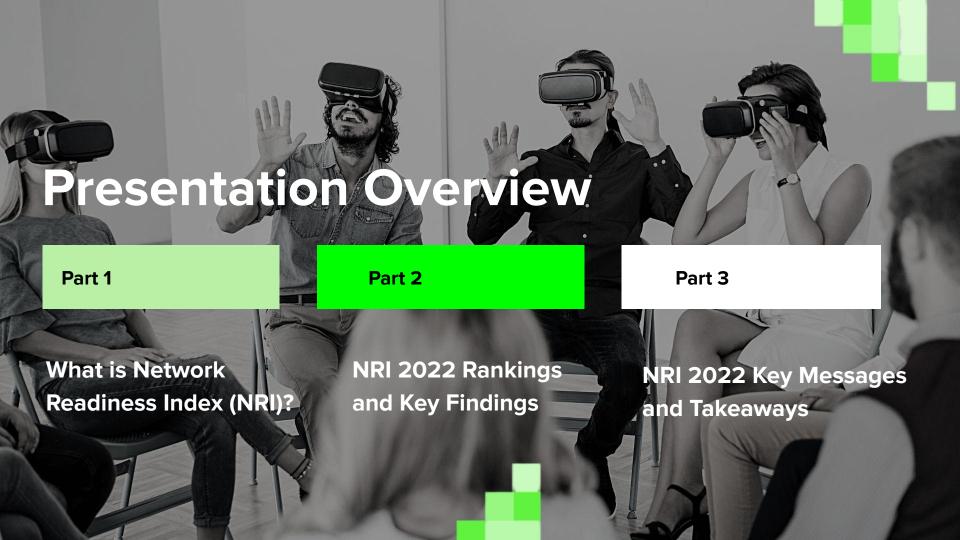


Stepping into the new digital era:

How and why digital natives will shape the world

With the support of our new Knowledge Partner







### A human-centric approach to ICTs

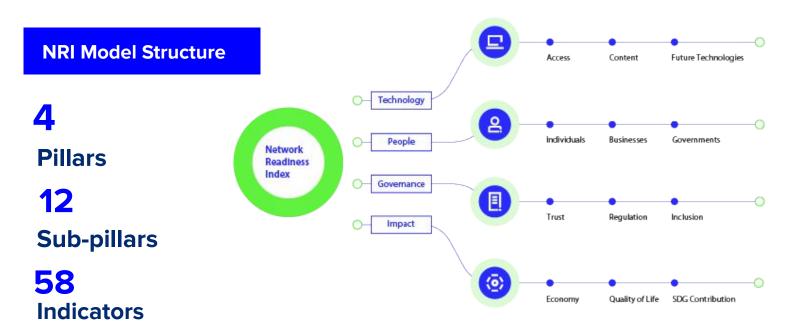
Key metrics of the use of ICT for development and competitiveness

Launched in 2002 by the World Economic Forum as part of the Global Information Technology Report (GITR)

Redesigned in 2019 to make it more reflective of current ICT issues and make it more future-ready



**Underlying principle:** our collective future will require a harmonious integration of people and technology





### 2022 Theme

### **Youth & Digital Transformation**

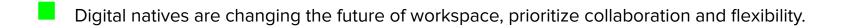
The COVID-19 pandemic turned digital transformation from a priority into a global imperative.

This accelerated digitalization of our societies is benefitting more those who understand and master them. These are usually younger generations - 'digital natives'.

Digital natives will shape the new world, but it is interesting with what goals and purposes they will do so, and the degree of readiness they can employ in the process.

## 2022 Theme

#### The future of work



We see a growing number of digital entrepreneurs and creators driven to make impact.

The popularity of gig and flexible work is increasing, allowing location-independent employment.

## 2022 Theme

#### **Education and skills**

The demand for digital skills is growing exponentially and formal education needs to keep up.

Formal education should support students to prepare for data-driven organizations and cultures.

Digital natives will need a mix of digital skills and social competences to navigate the digital world.

Rankings

warnings failing "include path"

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## NRI 2022 rankings

#### **Main Results**

- Top 3 economies: United States,
   Singapore, Sweden
- Europe, The Americas, and Asia & Pacific dominate the top 10
- All high-income group economies at the top 25
- China (23) and Malaysia (36) are the two upper middle-income economies closing the gap

#### **Top 10 Economies in NRI 2022**

Country	NRI rank	NRI score
United States	1	80,30
Singapore	2	79,35
Sweden	3	78,91
Netherlands	4	78,82
Switzerland	5	78,45
Denmark	6	78,26
Finland	7	77,90
Germany	8	76,11
Korea, Rep.	9	75,95
Norway	10	75,68





- Technology
- United States
- Switzerland
- Netherlands

People

- Korea, Rep.
- United States
- Japan

- Governance
- Norway
- Denmark
- Finland

Impact

- Sweden
- Singapore
- Finland

# NRI 2022: Top rankings by income group



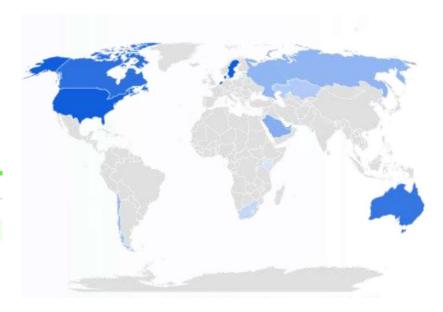
High-income economies	Upper middle-income economies	Lower middle-income economies	Low-income economies
1. United States (1)	1. China (23)	1. Ukraine (50)	1. Rwanda (101)
2. Singapore (2)	2. Malaysia (36)	2. Indonesia (59)	2. Zambia (113)
3. Sweden (3)	3. Russian Federation (40)	3. India (61)	3. Uganda (116)

- All top 25 economies are part of the high income group
- China is the only upper middle income economy in the NRI top quartile
- Rwanda (101st), Zambia (113th), and Uganda (116th) earn top performance scores for low-income economies.
- Ukraine is the only lower middle-income economy that makes it into the upper half of the NRI rankings.

# NRI 2022: Top rankings by region

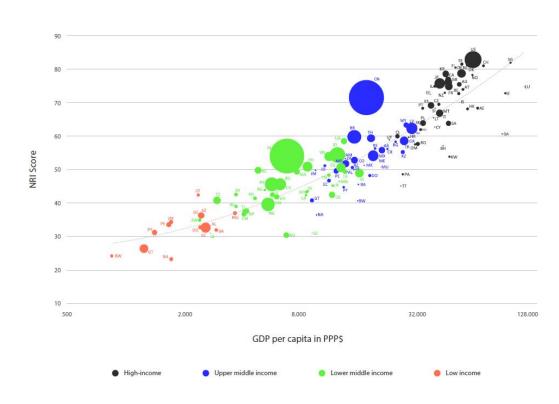
Africa	Arab States	Asia & Pacific
1. South Africa (68)	1. United Arab Emirates (28)	1. Singapore (2)
2. Mauritius (72)	2. Saudi Arabia (35)	2. Korea, Rep. (9)
3. Kenya (77)	3. Qatar (42)	3. Japan (13)

CIS	Europe	The Americas
1. Russian Federation (40)	1. Sweden (3)	1. United States (1)
2. Kazakhstan (58)	2. Netherlands (4)	2. Canada (11)
3. Armenia (64)	3. Switzerland (5)	3. Chile (43)



## NRI 2022: performance versus GDP per capita

- High income, developed economies compose 86% of top 50 ranked;
- China (23), Ukraine (50) and Malaysia (36) are at the forefront of bridging the technological divide;
- Africa is the most laggard region.



## NRI 2022: pillar outperformers

A group of middle-and low-income economies stand out as performing above their expected levels of development in one or more of the structural categories comprising the four main pillars of the NRI.

Most of the outstanding pillar performers are among the lower middle-income group, and are predominantly located in Africa and the Asia & the Pacific regions

#### **Economies that outperform in all 4 pillars**

- China
- India
- Rwanda

#### Other economies in this group:

- Brazil
- Kenya
- Viet Nam
- Pakistan
- Ukraine





## Message 1: We are entering a new digital era

"

Digital transformation is a global imperative in today's data-driven world. This became most evident during the COVID-19 pandemic, which accelerated the need to rapidly adopt digital solutions. As many aspects of life now rely on online connections, the amount of data generated daily continues to grow at exponential rates and is expected to continue for the foreseeable future. This raises new issues regarding our individual and collective ability to derive value from data, as well as the governance that should be put in place around data and data flows.



# Message 2: Digital transformation may create new inequalities

"

To this day, over 2.9 billion people, mostly in developing countries, lack stable internet access. As of 2021, only 53% of LDC (least developed countries) territory had access to 4G (ITU, 2021). As the demand for digital skills increases, such disparities in access and connectivity will only amplify existing divides among, as well as within, national economies and regions. Such inequalities within these countries and regions may also hinder the ability of younger generations to meaningfully engage in the digital economy. Regardless of their appetite for digital technologies, they will be unable to fully harness the rich opportunities brought about by the digital era.



# Message 3: Digital transformation remains a powerful way to do more with less at all levels of income

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A group of middle-and low-income economies stand out as being highly efficient in one or more of the elements that lead to successful digital transformation. These economies - led by China, India, and Rwanda - are creating the necessary opportunities to induce faster paced change above their expected levels of development. Many of these economies are located in Africa. They perform particularly well in two pillars of the NRI model, namely technology and impact. Such successes can be a source of inspiration for other emerging economies.

# Message 4: Digital Natives are shaping the future of work, and ready to lead in the new digital era

"

With the age of digital transformation, new ways of working have emerged. Digital natives operate in a more collaborative and less hierarchical manner than what has been traditionally seen in the office workplace. This flexible work environment is further supported by the emergence of gig work. To fully leverage the potential of new generations to create value in those environments in which they feel comfortable, public and private organizations should encourage the involvement of young people in conversations that govern how they work and communicate.

# Message 5: Formal education is evolving, and will continue to do so

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Technologies and ways of working will continue to see cumulative innovations in the coming years. By 2025, it is estimated that 50% of all employees will need reskilling due to the adoption of new technologies. Further, a third of these essential skills will consist of technical competencies not yet regarded as crucial to today's job requirements (WEF, 2021). Thus, the process of learning and its intended objectives will continue to evolve, becoming an essential dimension in the lives of digital natives. Higher education institutions, non-traditional programs, and employers must commit to making opportunities for reskilling and upskilling accessible, available, and affordable. Giving all people the opportunities they need to develop the necessary skills to fully participate in the future workplace will contribute to more inclusive and sustainable economies and societies.

### **Message 6: Metrics are important**

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While we cannot fully measure digital transformation, or the direct impact of digital natives in this process, it is important to harness the appropriate metrics to support informed policy-making. As we enter a new digital era, understanding the limits of existing measures and developing new metrics that effectively track core dimensions of digital transformation is key. For example, this year's NRI uses an updated software development indicator with GitHub data. These results allow for metrics that better identify those countries which have attracted global contributions, as well as enable more accurate and insightful comparisons across all countries. Through such improvements, we hope the NRI can remain a 'frontier tool' that will help decision makers better prepare for the future.





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# Thank you for your attention!

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