

هيئة تنظيم الاتصالات والحكومة الرقمية TELECOMMUNICATIONS AND DIGITAL GOVERNMENT REGULATORY AUTHORITY

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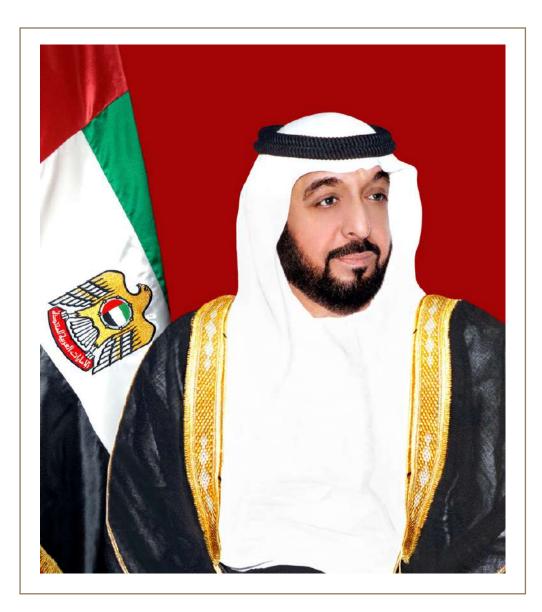
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The UAE

is a global leading country in ICT 202

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"The paradigm shift achieved by UAE has not been the product of contingent or exceptional circumstances, but it is the culmination of tireless efforts and the result of the integrated development strategy, formulated and carefully and precisely monitored by His Highness Sheikh Zayed bin Sultan Al Nahyan, the father of the Nation (May Allah bless his soul).

His Highness Sheikh Khalifa bin Zayed Al Nahyan President of the UAE





To maintain leadership and sustain growth and prosperity, we have to move towards the era of knowledge economy at the soonest.

His Highness Sheikh Mohammed bin Rashid Al Maktoum UAE Vice President, Prime Minister and Ruler of Dubai





Our reliance on science and knowledge to achieve comprehensive development is the only way to bring our country to the stage of qualitative production that does not rely on oil.

His Highness Sheikh Mohammed bin Zayed Al Nahyan, Crown Prince of Abu Dhabi and Deputy Supreme Commander of the UAE Armed Forces



Introduction

The Information and Communications Technology (ICT) sector has always been one of the main drivers of development for many other sectors. As the world is approaching the Fourth Industrial Revolution era, with its developments including the Internet of Things (IOT), the fifth generation, artificial intelligence technologies, smart transportation, among others, the ICT sector has gained a powerful position and became an integral part of the Future Shaping Strategies.

The UAE is one of the first countries to take the lead in adopting and employing communication and information technologies to enhance economic development and the community's happiness. Since its establishment in 2003, the Telecommunications and Digital Government Regulatory Authority has been working tirelessly to achieve this goal through two important pillars; (1) regulating the telecommunications sector; and (2) enabling digital transformation.



This Report briefly outlines a great success story at the national level as reflected in the ICT sector. The report includes several global indicators which prove that the ICT sector has managed to achieve its global goals, and realize the vision of the Telecommunications and Digital Government Regulatory Authority to make the UAE a global leader in this sector. Such a vision is in line with the State's orientation towards positioning the UAE among the best countries of the world in the different areas.



Telecommunications Sector: Overview

The story of telecommunications in the UAE began with the incorporation of the first telephone and telegraph company, Dubai Phone Ltd., which launched its initial telephone services in July 1960.

A few years later, other telephone and telegraph companies were incorporated in Abu Dhabi, Sharjah, Ras al-Khaimah and Fujairah, and they continued to provide their services until the formation of the Union in December 1971, when many service sectors in the various emirates, including telecommunications, were merged and unified.

On the 30th of August 1976, the late Sheikh Zayed bin Sultan Al Nahyan, the founding father of UAE (may Allah bless his soul), issued a decree to merge all telephone and telegraph companies in one entity (i.e., Emirates Telecommunications Corporation "Etisalat"). This Corporation has led the telecommunication sectors for many years, and the institutions specialized in this field achieved significant progress at both the regional and global levels.

Later on, new institutions specialized in the field of telecommunications, such as Thuraya Telecommunications Company, Emirates Integrated Telecommunications Corporation (du), and Yahsat Company, were established. In 2003, a decree was issued concerning the establishment of the Telecommunications Regulatory Authority, whose name was amended pursuant to another decree issued in 2020 to become the Telecommunications and Digital Government Regulatory Authority.



Data Sources – International Organizations

All the figures and indicators contained in this report were issued by international organizations concerned with and specialized in issuing the relevant indicators. These organizations are listed below.



Data Sources – Reports on the Global Competitiveness

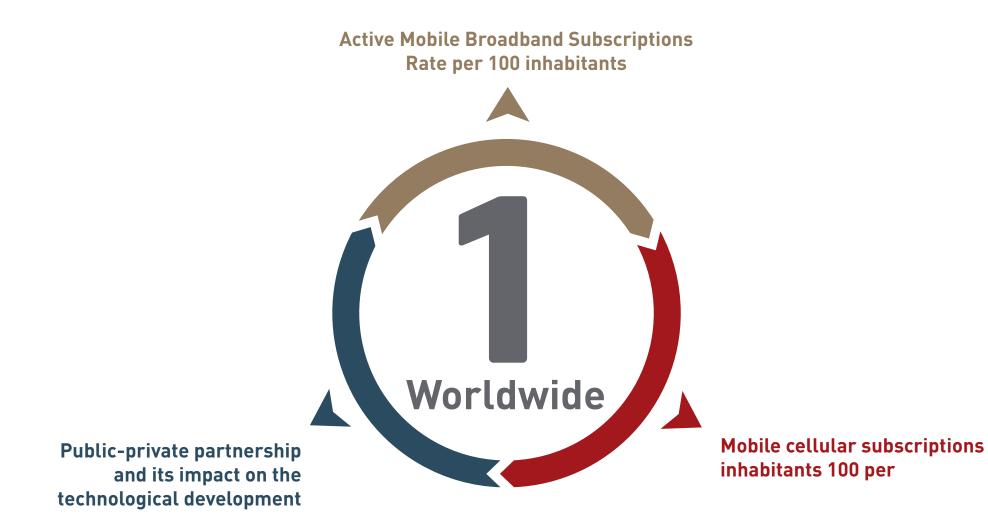
The Telecommunications and Digital Government Regulatory Authority is contributing to the development of 17 competitiveness reports, and these reports contain 142 competitive indicators.





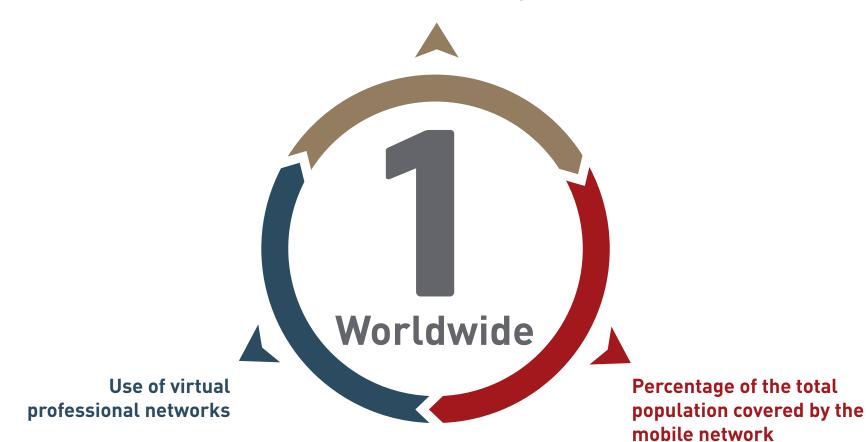
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UAE has been ranked first worldwide in:

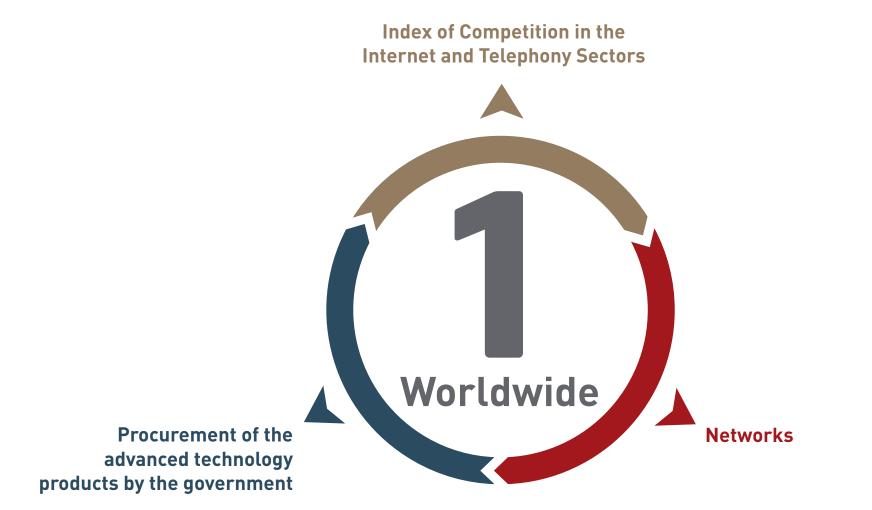




Wireless Broadband Penetration inhabitants 100 rate per







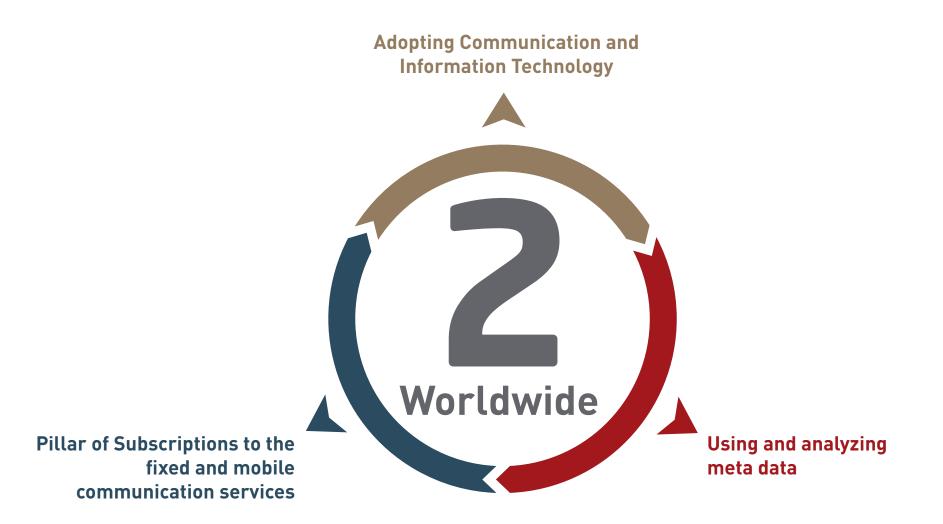


Mobile Broadband Speed





The UAE has been ranked second worldwide in:





Technological Infrastructure





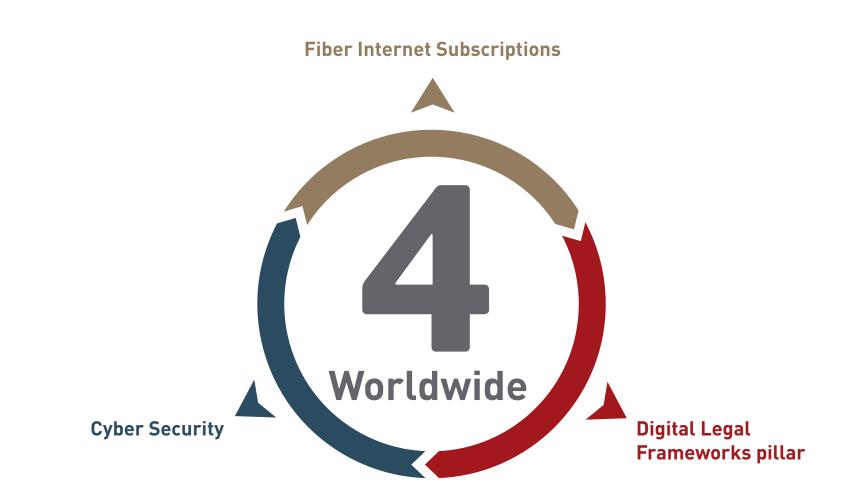
The UAE has been ranked third worldwide in:

The Regulatory Framework





The UAE has been ranked fourth worldwide in:





Response to Opportunities and Threats Worldwide **Technology Indicator Readiness of the ICT** sector







The UAE has been ranked fifth worldwide in the percentage of internet users.

Percentage of Internet Users Worldwide



Indicators for measuring the development and quality of the communications infrastructure

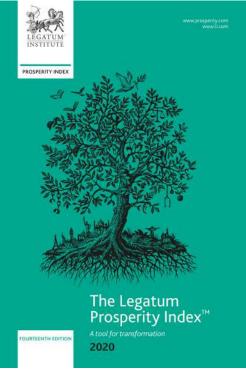
The UAE has maintained the first ranking worldwide in many global competitiveness indicators that measure the development and quality of the communications infrastructure. This, in turn, has contributed to improving the country's overall ranking in the following competitiveness reports.



2019

The Global Entrepreneurship Index

The Legatum Prosperity Index



2019

The Travel & Tourism Competitiveness Report

| WORLD ECONOMIC FORUM |
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| COMMITTED TO IMPROVING THE STATE OF THE WORLD |

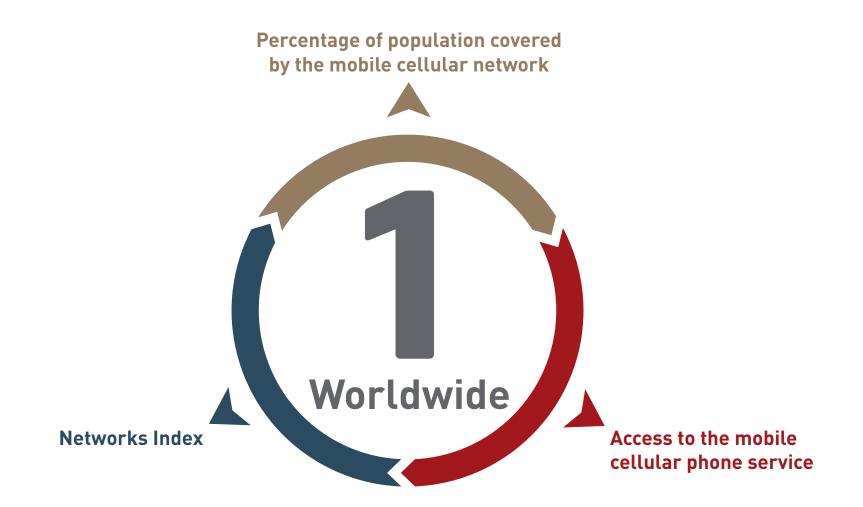
The Travel & Tourism Competitiveness Report 2019

2019

Travel and Tourism at a Tipping Point



Indicators for measuring the development and quality of the communications infrastructure





Indicators for measuring the development and quality of the communications infrastructure

Coverage of the 2nd, 3rd and 4th generations networks





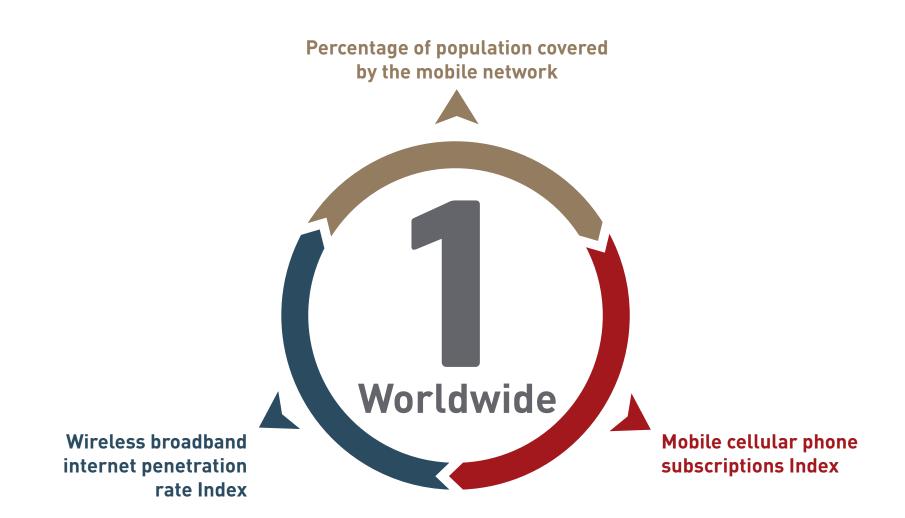
Mobile Cellular Phone Services Subscriptions Index

The UAE continues to be the global leader in the competitiveness index, which measures the rate of subscriptions in the mobile broadband internet and the mobile cellular phone services in the countries of the world. These indicators support the improvement of UAE overall ranking in the following competitiveness reports:





Mobile Cellular Phone Services Subscriptions Index





ICT Use Index

The "ICT Use" pillar in the Global Competitiveness Report includes a set of indicators that measure the development of the telecommunications sector all over the world. The The UAE's global ranking in this pillar has increased from the 24th position in 2017 to the 2nd position according to the last report issued in 2019. Despite Covid-19 pandemic, the UAE has managed to maintain its second place among the world countries in 2020.



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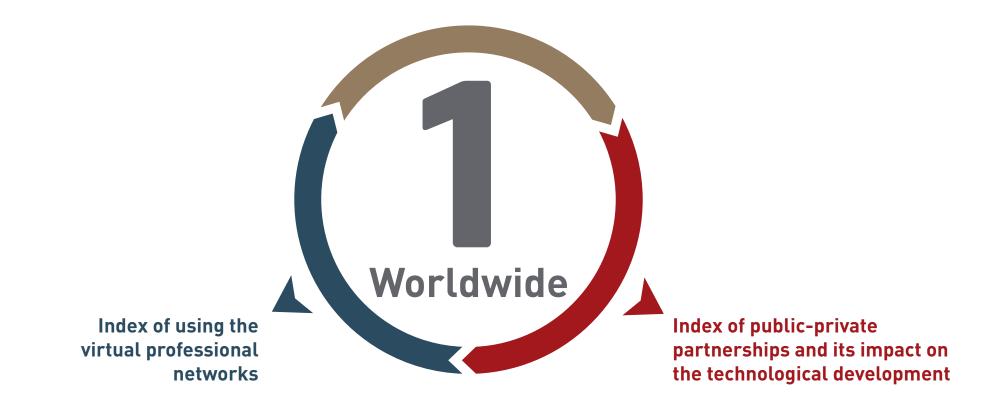
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The UAE continues to be the global leader in the indicators of technological development and its uses. This achievement has been the result of the communications infrastructure quality, and the keenness of the various sectors in the State to be empowered with the latest technological means.

This also has contributed to enhancing the resilience of various sectors in the UAE and boosting their ability to cope with the Covid-19 crisis, adapt to the circumstances resulting from the pandemic and maintain efficient business continuity.



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Index of the government's success in encouraging the use of technology





Indicators of the Efficiency of the Telecommunications Sector Regulation The UAE has been ranked first worldwide in the indicators that measure the efficiency of regulating the telecommunication sector in the world countries.





Indicators of the Efficiency of the Telecommunications Sector Regulation





Indicators of Investment in Infrastructure and Technology

The UAE has come first globally in terms of investing in infrastructure according to the global competitiveness index which measures the level of countries> investment in the telecommunications infrastructure and technology.





Indicators of Investment in Infrastructure and Technology



Direct Foreign Investment and Technology Transfer





Index of Cyber Security

The UAE has been ranked second worldwide in the cybersecurity index related to the way companies and institutions deal with cybersecurity issues, according to the Global Digital Competitiveness Report.





Response to Opportunities and Threats

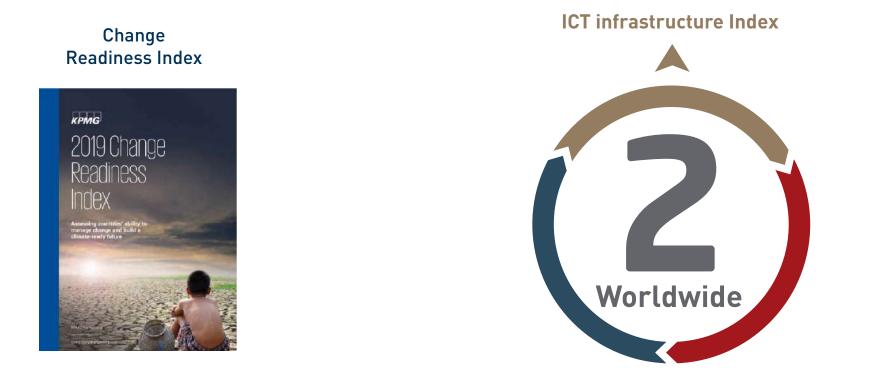
The UAE has been ranked fourth worldwide in the response to opportunities and threats index according to the Global Digital Competitiveness Report. The index measures the extent to which companies and businesses benefit from the quality and development of communications infrastructure to cope with crises, address threats, and the ability to maintain business continuity and seize opportunities.



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Ability of the ICT infrastructure to adapt to changes

The UAE has been ranked second worldwide in the Telecommunications Infrastructure Index according to the Global Change Readiness Index Report. This index measures the ability of the telecommunications infrastructure in countries to deal with future changes, being a major enabler for the continuity of doing business and growth in light of changes. The outcomes of this index have been corroborated by real-life evidence during the Covid-19 pandemic, as business continuity has been maintained in all sectors of the State efficiently.





Future Readiness

The UAE topped the global rankings in the competitiveness indicators that measure the future readiness of the ICT sector.





Global Competitiveness Indicators Reports

The Telecommunications and Digital Government Regulatory Authority is contributing to the development of 17 competitiveness reports and index by promoting the State's ranking in the global competitiveness index included in these reports.



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Global Competitiveness Indicators Reports



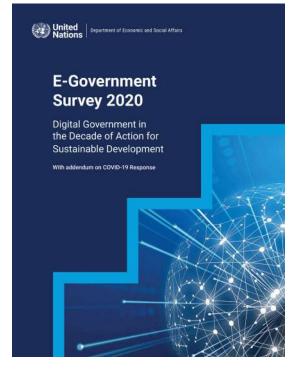
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Global Competitiveness Indicators Reports





ICT Infrastructure Index

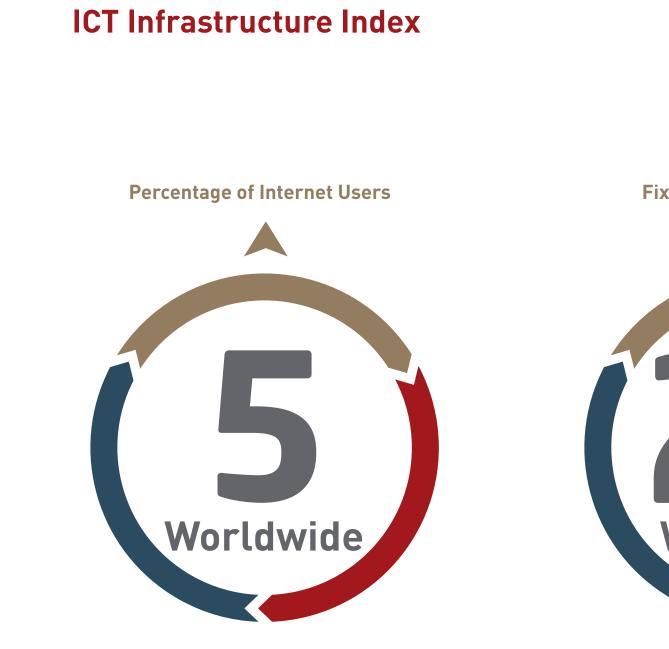


Source:

Division for Public Administration and Development Management of the United Nations Department of Economic and Social Affairs (2020)











E-government Survey Report



Source:

Division for Public Administration and Development Management of the United Nations Department of Economic and Social Affairs (2020)



Global Change Readiness Index



Source: KPMG (2019)





Source: KPMG (2019)

Active Mobile Broadband Subscriptions Rate per 100 inhabitants













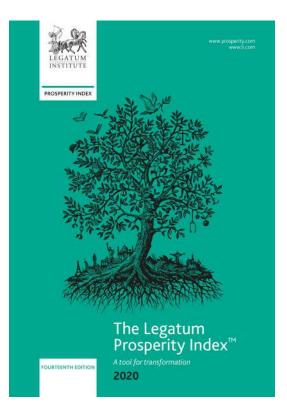


Rate of fixed broadband Internet subscriptions per 100 inhabitants





The Legatum Prosperity Index Report



Source: Legatum Institute (2020) Coverage of the 2nd, 3rd and 4th generations networks **Internet Use** Subscriptions to the fixed broadband



Social Progress Index





By Scott Stern & Tamar Epner

Mobile cellular subscriptions per 100 inhabitants

> Percentage of Internet Individual Users

Electronic access to the government services

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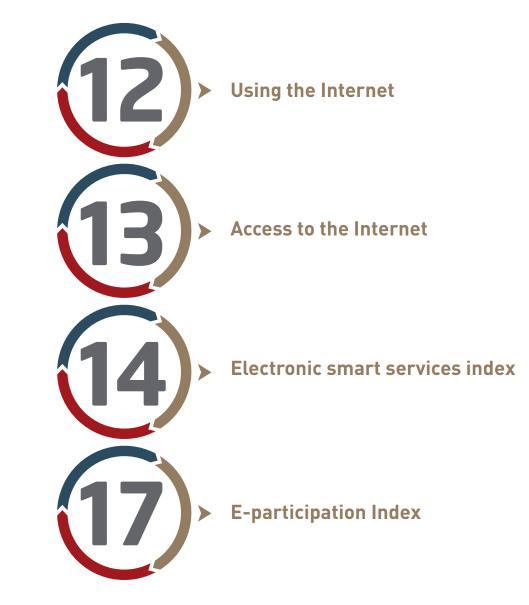
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Source: Social Progress Imperative (2020)

Global Innovation Index

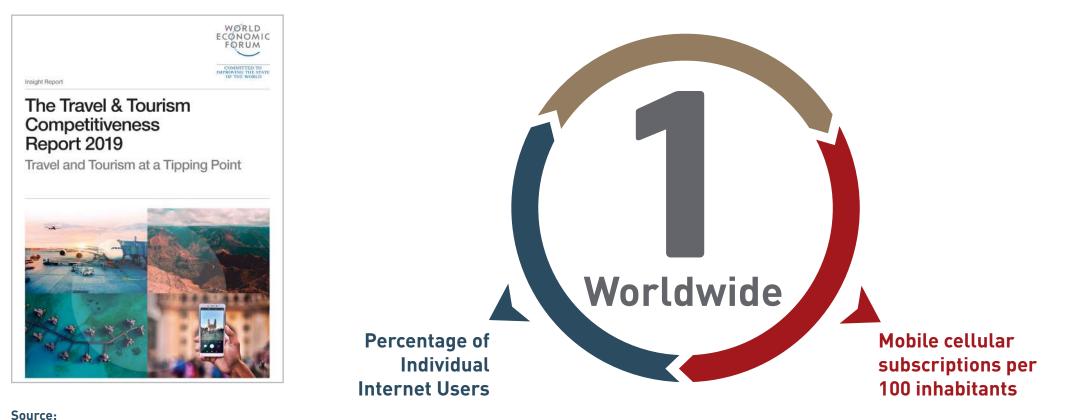


Source: Cornell, INSEAD, WIPO (2020)





The Travel & Tourism Competitiveness Report



World Economic Forum (2019)

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The Travel & Tourism Competitiveness Report



Source: World Economic Forum (2019) Electronic access to the government services





The Travel & Tourism Competitiveness Report



Source: World Economic Forum (2019)

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Rate of Subscriptions to the fixed broadband per 100 inhabitants

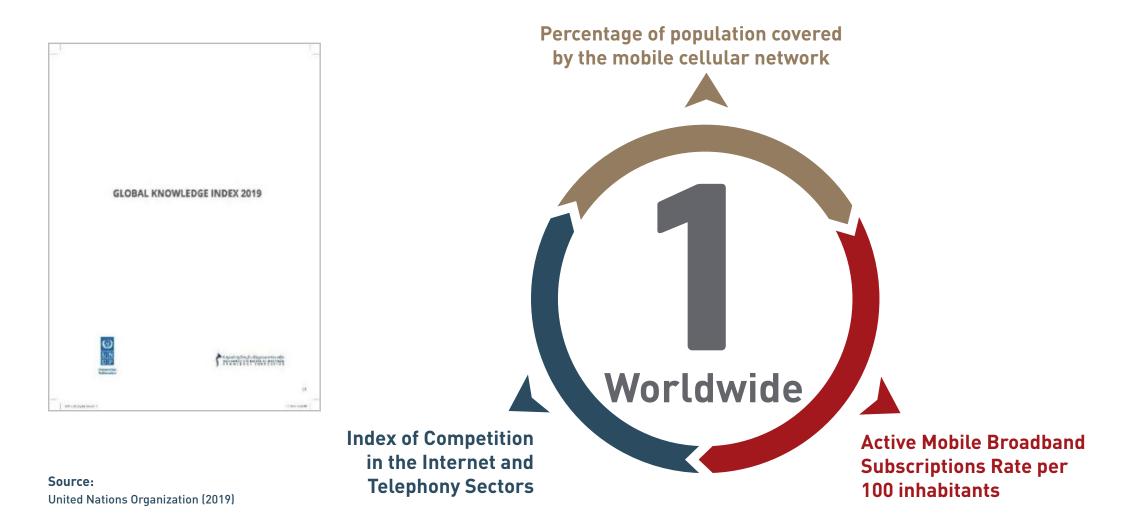
IT adoption in dealings among

Percentage of Individual

Internet Users

companies



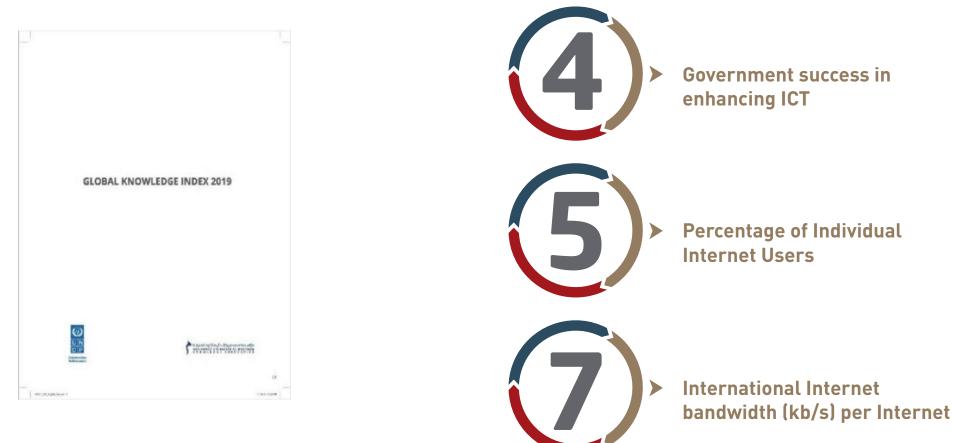






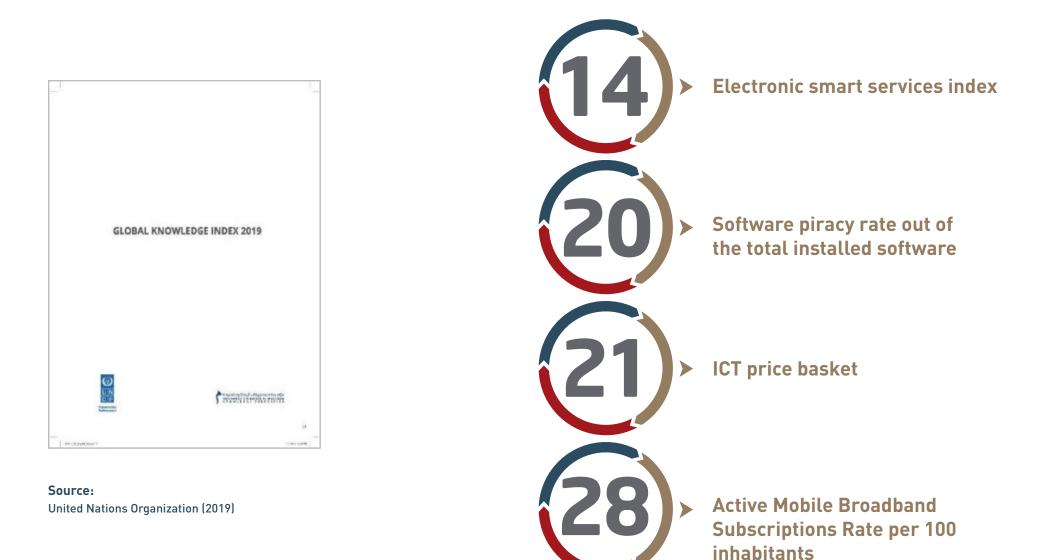
Source: United Nations Organization (2019)





Source: United Nations Organization (2019)

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impact of public-private partnerships on the technological development





Source: World Competitiveness Center of the Institute for Management Development (2019)

Using and analyzing meta data







Source: World Competitiveness Center of the Institute for Management Development (2019)

Regulatory Framework Pillar







Source: World Competitiveness Center of the Institute for Management Development (2019)

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Source: World Competitiveness Center of the Institute for Management Development (2019)

Integration of Information Technology Sub-pillar: Technological Framework **Digital Performance Pillar**























Source: World Competitiveness Center of the Institute for Management Development (2019)

Possession of a Smart Phone E-government Survey Report Software piracy rate out of the total installed software



The Global Entrepreneurship Index



Source: Global Entrepreneurship and Development Institute (2019)

Network Usage Index

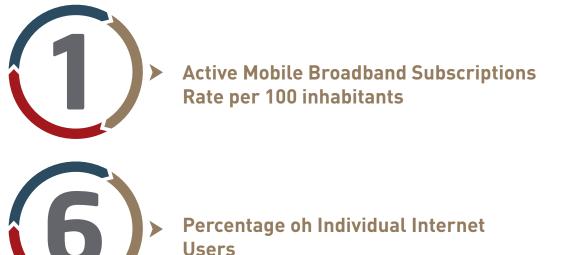




Sustainable Development Goals Report



Source: United Nations (2019)





The Global Talent Competitiveness Index Report



Source: Global Competitiveness Center International Institute for Administrative Development (2019)



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Acknowledgment

The Telecommunications and Digital Government Regulatory Authority extends its sincere thanks and appreciation to our partners in the information and communications technology sector from the government, private sector, and the academic sector for their vital and central role in achieving the successes outlined in this report.

We would also like to thank the community members who have always helped us in achieving the Authority>s vision to make the UAE a global leader in information and communications technology, through their participation in our improvement and development.

We have cooperated together as a team and, God willing, together, we will start a new era spanning fifty years filled with success stories and taking a pioneering position under our wise leadership.





