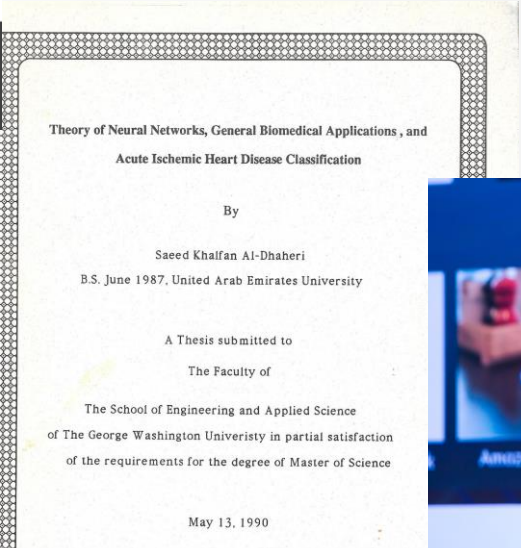




The UAE Digital Economy Post COVID-19: Value Creation and Policy Recommendations

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A brief about me

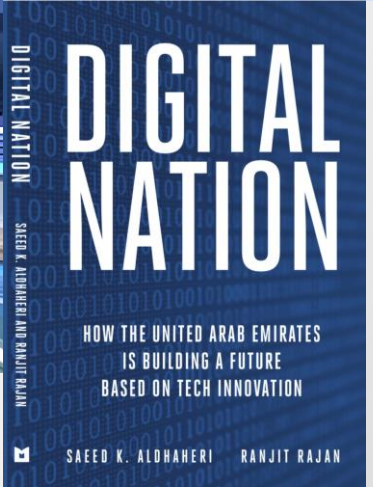


POLICY IN PRACTICE >

Building an AI Nation: Accelerating Artificial Intelligence Adoption through Agile Policymaking – The Case of the UAE

By Saeed AlDhaheeri

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COVID-19 Disrupting world economies

The New York Times

Meet Abu Dhabi's most promising startups. [Register](#)

Techstars Hub71 Accelerator Demo Day

Manufacturing Turns Local in Gulf as Coronavirus Disrupts Supply Chains

By Reuters

March 31, 2020

Economics

More Than 1 Billion Workers Face 'Drastic' Hit From Virus

By Catherine Bosley
April 7, 2020, 9:09 PM GMT+4

Home > Industries > [Retail](#)

Wed 4 Mar 2020 10:05 AM

Coronavirus driving online sales, says Dalma Capital CEO

Logistics fund Manrre to capitalise on growing e-commerce industry - CEO says now is time to invest in logistics and industrial real estate



United Nations  @UN · 3/9/20
The [#coronavirus](#) outbreak could cost the global economy up to \$2 trillion this year.

BUSINESS

Banking Aviation Property Energy Analysis Tourism Markets [Retail](#) Personal Finance

EXCLUSIVE

China coronavirus hits UAE online shoppers

Apparel, smartphones and electronics are the worst hit as shipments get held up in China

Published: February 14, 2020 11:48 Last updated: February 14, 2020 22:47
Manoj Nair, Associate Editor

HOME > CORONAVIRUS PANDEMIC

Covid-19 in UAE: Grocery stores working hard to meet online delivery orders

Ismael Sebugwaawo / Abu Dhabi
Filed on April 5, 2020



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[#Latest News](#) [#Coronavirus Dubai](#)

Home > Jobs

Thu 19 Mar 2020 08:00 AM

Arab world risks losing 1.7m jobs due to coronavirus, says UN

Arab nations' gross domestic product is expected to shrink by at least \$42bn in 2020



Font Size

Country's effort to Stimulate the economy

Abu Dhabi

GULF NEWS 

UAE / GOVERNMENT

Coronavirus: Abu Dhabi to announce wave of stimulus packages for investment

Sheikh Mohamed Bin Zayed announces new committee to encourage lending, SMEs in Abu Dhabi

09:14 March 16, 2020

Dubai



Coronavirus: Dubai Free Zones Council announces economic relief package

► DIFC, Dubai Airport Free Zone Authority, Jebel Ali Free Zone, Dubai World Trade Centre, are among the free zones that will grant support to registered companies

Local Gov budget cut

Federal Gov

 Khaleej Times

POSITIVE NEWS OF THE DAY

Home » Positive News Of The Day

Covid-19 in UAE: Sheikh Mohammed announces additional Dh16 billion stimulus package

Wam

Last updated on March 22, 2020 at 04.34 pm

UAE Central Bank

 REUTERS

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 With over 45 years' experience [Find out more](#)
Losses can exceed deposits. IG is regulated by the DFSA

BUSINESS NEWS APRIL 5, 2020 / 10:09 AM / 6 DAYS AGO

UAE central bank boosts anti-coronavirus stimulus to \$70 billion

Lesson learned: Health drives the economy



HH Sheikh Mohammed  · 15h 

The world has long been questioning where the true power lies. Does economy drive politics or the other way around? The coronavirus spread has shown that healthcare is the main power that shapes the economy and politics at a time when a disease brought nations to a standstill.

 451

 1,890

 6,166



Competitiveness of the UAE Digital Economy (DE)

- **1st** regionally and **12th** Globally in Digital Competitiveness – [IMD world DCR 2019](#)
- **2nd** Globally in Gov Tech adoption*
- **4th** globally in legal frameworks adaptability to digital business*
- **8th** globally in ease of finding skilled talent*
- DE contributes **4.3%** to the UAE GDP. [MoE report 2018](#)
- Dubai is **9th** globally in tech start-ups per GDP

* [WEF GCI 2019 report](#)

Consumer Tech

WEF ranks UAE as 'stand out' digital economy

Digital Evolution Index highlights pace of change in digital economy, UAE rates 22nd worldwide

By | 01 August 2017

[f](#) [t](#) [in](#) [v](#) [e](#)



 INTERNATIONAL
FINANCE



ECONOMY

UAE leads the Gulf in digital economy with 18% of Middle East

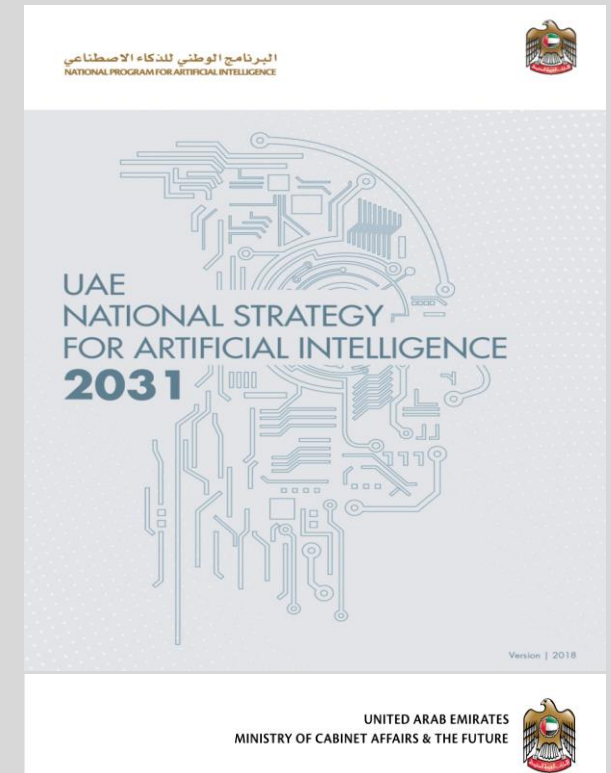
© January 9, 2020

UAE Gov Strategize on Digital Economy

- UAE 2021 vision: transitioning into knowledge-based economy
- Focus on knowledge and value creation
- UAE a hub for the 4IR
- UAE AI strategy 2031
 - Upskilling students, gov staff, and public training
 - National AI challenge
 - National virtual AI institute
- Emirates Blockchain strategy
 - 50% of gov transactions into the blockchain by 2021
 - Saving AED 11 billion in document processing every year
- UAE Centennial Plan 2071
- Digital skills and talent development



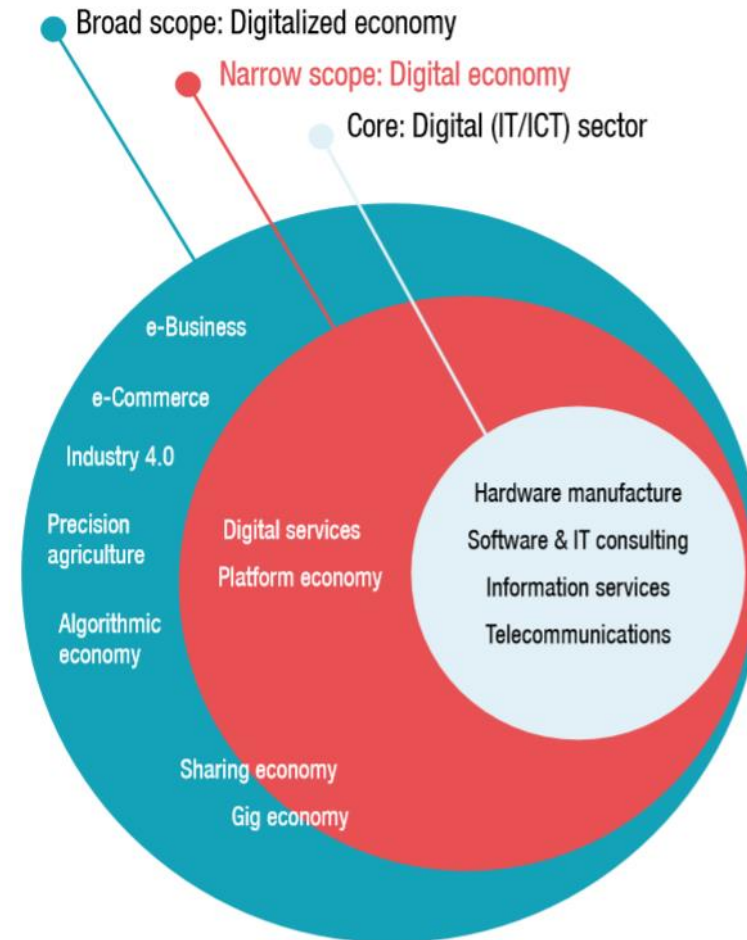
Emirates Blockchain Strategy 2021



Components of the Digital Economy

- Lack of widely accepted definition
- **Core aspect:** internet, telecom, HW/Software manufacture, IT consulting
 - UAE has a high quality ICT infrastructure
- **Digital & Info Tech Sectors**
 - Produce key products & services platforms, mobile app, payment services
- **Wider set of digital sectors**

Digitalization: the transition of businesses through the use of digital technologies, products and services. (Brennen and Kreiss, 2014)



Source: Bukht and Heeks, 2017: 13.

Source: UNCTAD digital economy report 2019

RECENT TRENDS IN THE DIGITAL ECONOMY



The evolving digital economy

is closely associated with several frontier technologies and **fuelled by data**



-  Blockchain
-  Data analytics
-  Artificial intelligence
-  3D printing
-  Internet of Things
-  Automation & Robotics
-  Cloud computing

New technologies of the Digital Economy

Value creation

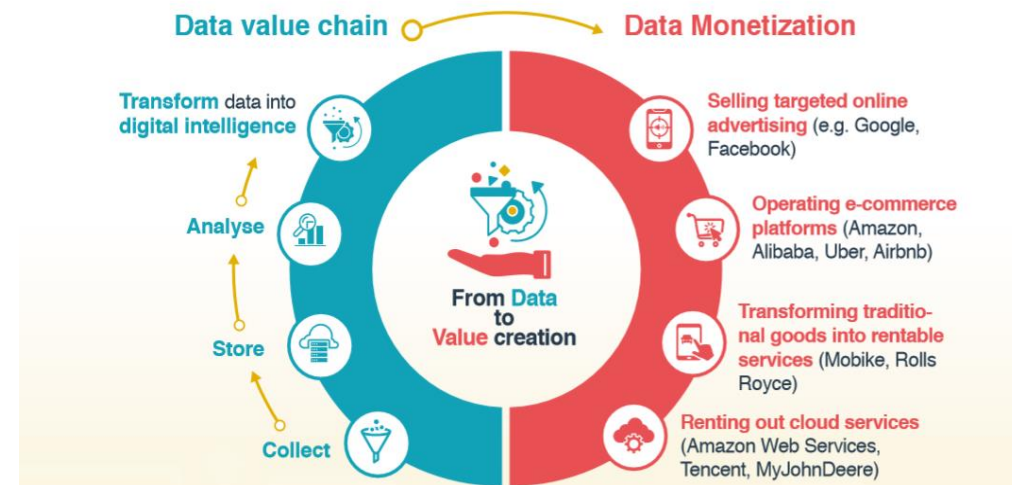
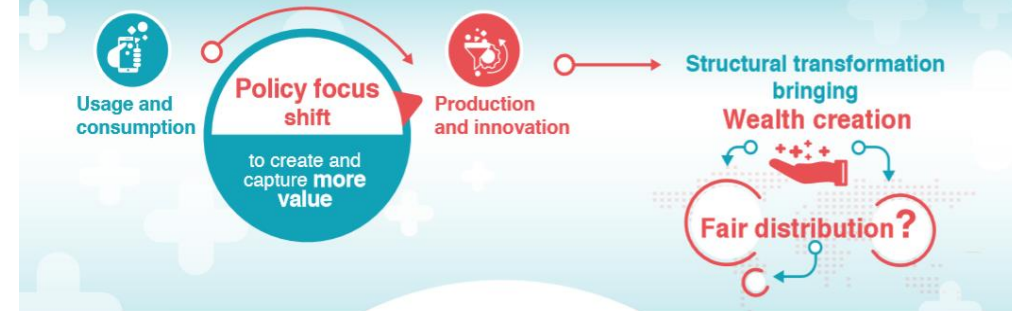
- two main drivers:
 - **Digital data:** producing and innovating
 - data are core to digital technologies, such as data analytics, AI, blockchain, IoT, cloud computing
 - Value creation: transforming data into digital intelligence and monetized through commercial use
 - **Digital Platforms (platformization)**
 - Using data-driven business model
 - Transactional platforms:
 - Example: Amazon, Alibaba, Facebook, eBay, Uber, AirBnB
 - Innovation platforms:
 - create environments for code and content producers, for example, operating systems (e.g. Android or Linux)

Source: UNCTAD digital economy report 2019

VALUE IN THE DIGITAL ECONOMY

How to create value from digital data?

Digital data are an increasingly valuable economic resource, but only once they are transformed into digital intelligence that can be monetized.



Four dimensions to consider



Different actors to consider

Assessing the scope for value creation needs to consider the **possible impacts** on different **actors**:



Digital disruption opens both opportunities and challenges for developing countries. The net impact depends on the level of development and readiness of countries and their stakeholders. Policies adopted and enforced are key to influence the outcome.

Data platforms, AI and Blockchain: drivers of the digital economy

- UAE Open Data initiatives
- Dubai Data law – 2015
- Dubai Data Strategy
- Dubai Pulse open data platform
 - Improve decision making
 - Encourage culture of innovation
 - Building skilled talent
- Use cases
 - City Flow 2.0
 - Crowd tracking & management
- Abu Dhabi Gov AI Lab
 - Engagement with the public
 - High-performance computing
- Blockchain
 - Education certificates are now digital on Blockchain

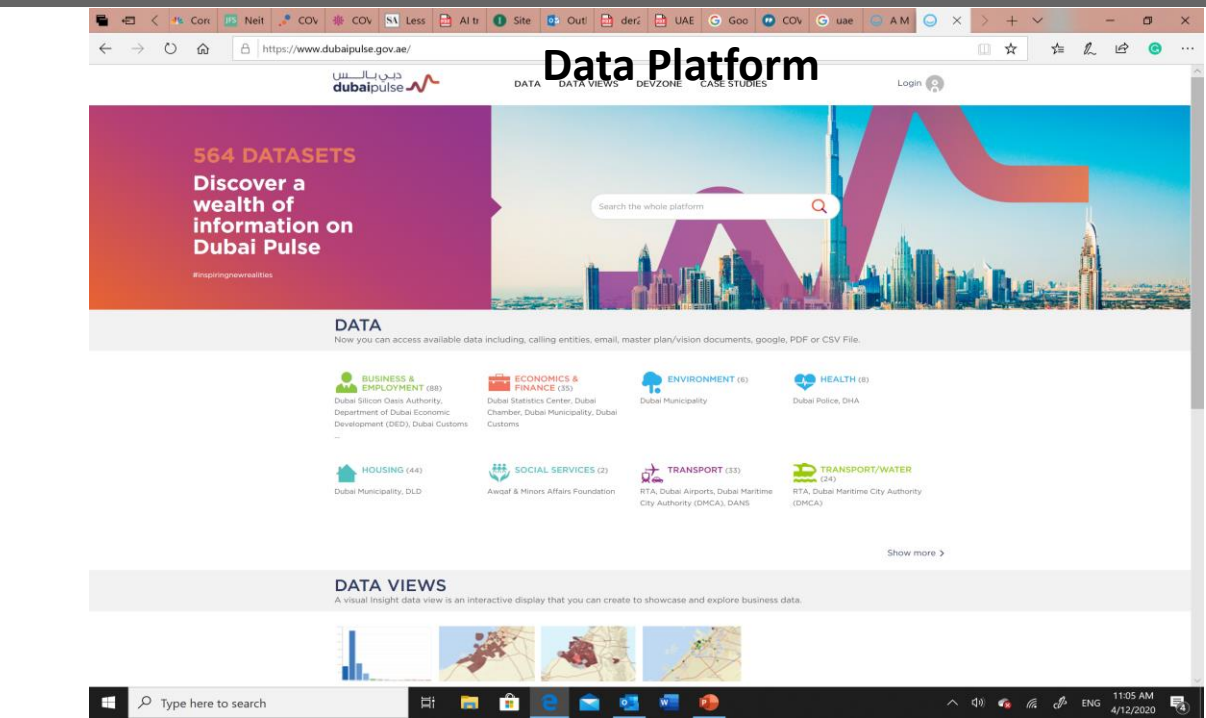
Artificial Intelligence (AI)



Blockchain



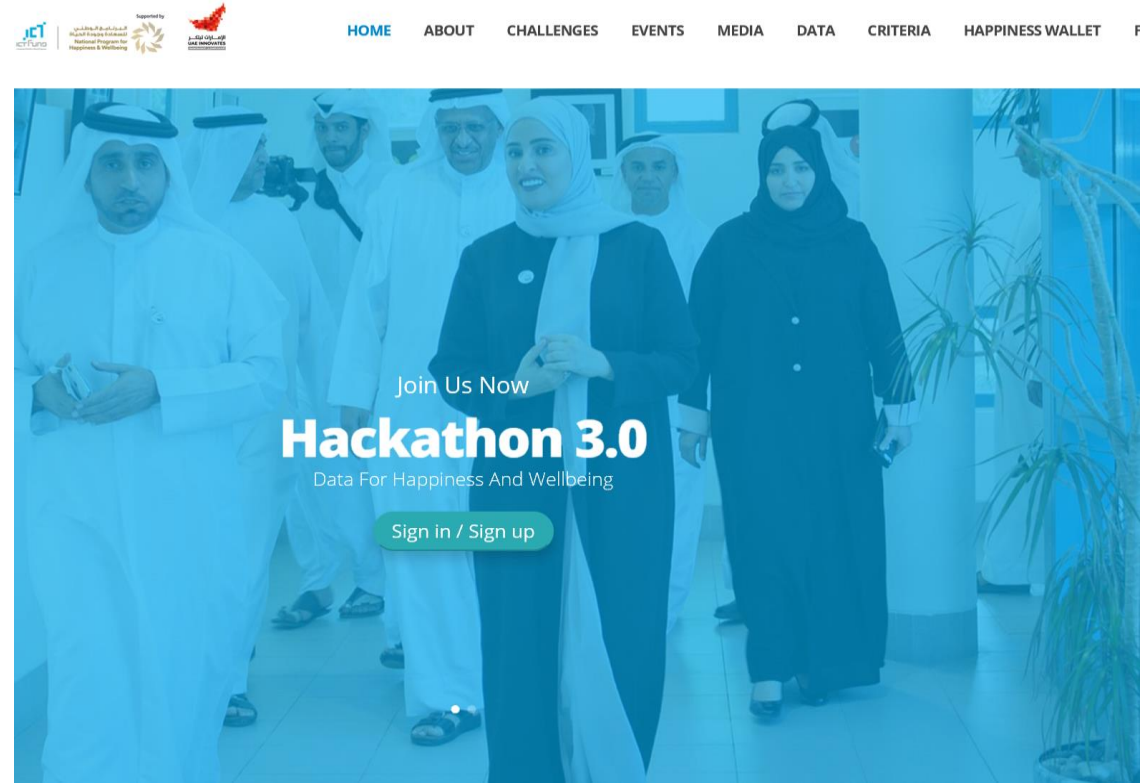
Shahada | A digital certificate protocol built on blockchain technology.



Example: UAE Data Hackathon: creating value

“If there is one ingredient that makes a city smart, it is data.” – Deloitte

- Public engagement with Data
- Solving challenges and providing solutions
- Using Data science and AI
- Schools, Universities, and civic society
- Promoting and creating awareness



16 / 113 Play slideshow All sizes Report



UAE Innovations During COVID-19 Crises: Examples

COVID-19 Tracing app

Abu Dhabi Launches TraceCovid App For Contact Tracing

April 11, 2020



Online: correction facility

Translated from Arabic by Google

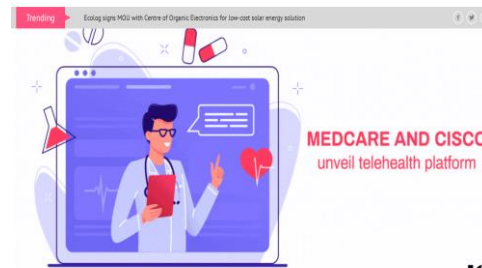
Great work that we have never seen before in the world, from the Dubai Holy Quran Award @quran_award To use technology and #الفديو_المرئي In memorizing the Noble Qur'an for inmates of correctional and punitive institutions in Dubai, especially in these circumstances that the world is going through أزمة كورونا. These efforts were blessed

@quran_a... · 3/30/20 جائزة دبي للقرآن

جائزة دبي للقرآن تختتم اختبارات برنامج التحفيز في المؤسسات الإصلاحية والعقابية بدبي عن بعد



Telehealth platform



MEDCARE AND CISCO unveil telehealth platform



Coronavirus: lab capable of testing tens of thousands of samples a day opens in Abu Dhabi

The facility, the first of its kind outside of China, is part of the country's plans to help step up testing to contain the outbreak



Online court hearings

Translated from Arabic by Google

The Judicial Department in Abu Dhabi announces the holding of the first remote litigation session using the video trial system as part of its business continuity plan.

#العمل_عن_بعد



972 views

3:35 PM · 3/30/20 · Sprout Social

Distance learning platform



How Will the COVID-19 Outbreak Impact the Overall ICT Market Growth

Product and technology	Impact in Q1, 2020	Impact in 2020
Smart Phone	★★★★★	★★
PC	★★★★★	★★
Tablet	★★★★★	★★
Storage	★★★★	★
Network	★★★★	★
Server	★★★★	★
IoT	★★★	★
Big Data	★★	★
Security	★★★	★
IT service	★★★	★
Smart home	★★	★
UC&C	★★	★★★
Software	★★	★
AI	★★	★
Wearable device	★	★
VR/AR	★	★
Cloud service	★	★★
Overall ICT	★★★	★

Product and technology	Impact in Q1, 2020	Impact in 2020
Retail	★★★★★	★★★
Transportation	★★★★	★★
Customer	★★★	★★
Manufacture	★★★	★
Energy	★★	★★
Agriculture	★★	★
Service	★★	★
Architecture	★★	★
Finance	★	★
Telecommunications	★	★
Education	★	★★
Utilities	★	★★
Media	★★	★★
Government	★★	★★
Healthcare	★★★	★★★★
Overall ICT	★★★	★

The way forward

- Adopt Digital first strategy
- Digital countries more resilient
- Adopt 4IR technologies and new business models for value creation
 - Ex. big Data and AI for pandemic surveillance, vaccine & drug development,,etc
 - Blockchain to digitalize supply chain
 - Digital money to accelerate payment

AI & Robotics

Digital Payment



4IR
FOURTH INDUSTRIAL REVOLUTION

LOCKCHAIN
IN SUPPLY
CHAIN

Sustaining innovation post COVID-19: Do more for less

- Crises give birth to innovations
- Lesson learned: COVID-19 to accelerate digital transformation
- Telehealth & population health management platforms
- Data Science & AI: turn data into insight
- Distant learning
- Work from home
- Business meetings: video conference
- TV Interviews: video conference
- Digitalizing supply chain
- Accelerate adoption of 4IR
 - Platforms and Apps

Telehealth



Data Science & AI



Teleconference



Distance learning



Teleinterview



Work from Home



Policy recommendations



Bring Entrepreneurship to the classroom: Investment in education at all levels in building the skill sets of tomorrow's digital entrepreneurs which is key to value creation



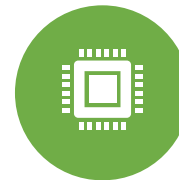
Policymaking need to accelerate in this fast changing world and Focus on policies to accelerate 4IR strategy Implementation and on value creation using data and platforms



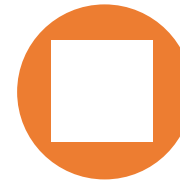
Adjust education and work policies to accommodate new norms of distance learning and work from home



Continue to improve regulations to accommodate privacy & data protection and the new emerging technologies



Address risks of cybersecurity through proper measures and technologies



Stimulate the economy through accelerator funds and focus on building startup ecosystem in key industries such as Biotech

“We are in a race to the Day of Judgment with the whole world. We can advance with two things: with knowledge, and with the distinguished national cadres that will lead this country in the twenty-first and twenty-second century, with capabilities that seek the help of God, artificial intelligence and technology.”

HH Sheikh Mohammed Bin Zayed Al Nahyan



محمد بن زايد خلال جلسة مع المسؤولين عبر اتصال مرئي | تصوير: محمد الحمادي ويوسف الحمادي وراشد المنصوري وحمد الكعبي