



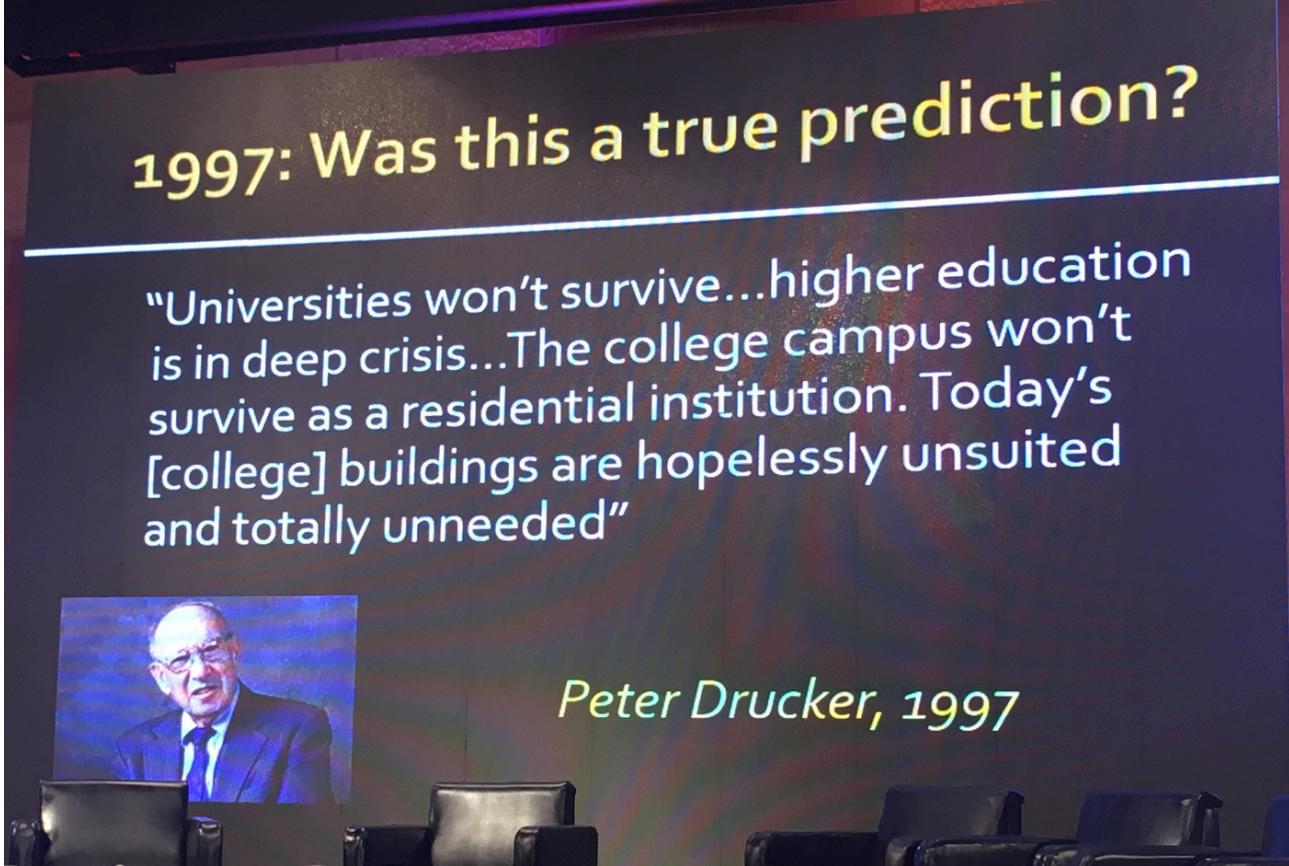
Digital Transformation and the Implications on the Economies in Emerging Markets

Role of Collaboration
and Innovation
Capital in MENA
Countries

*From Closed to Open Innovation:
A Game Changer for Value*

Sherif Kamel
Dean, School of Business
The American University in Cairo

**Middle East North Africa Conference of
Information Systems (MENACIS)**
3 December 2020

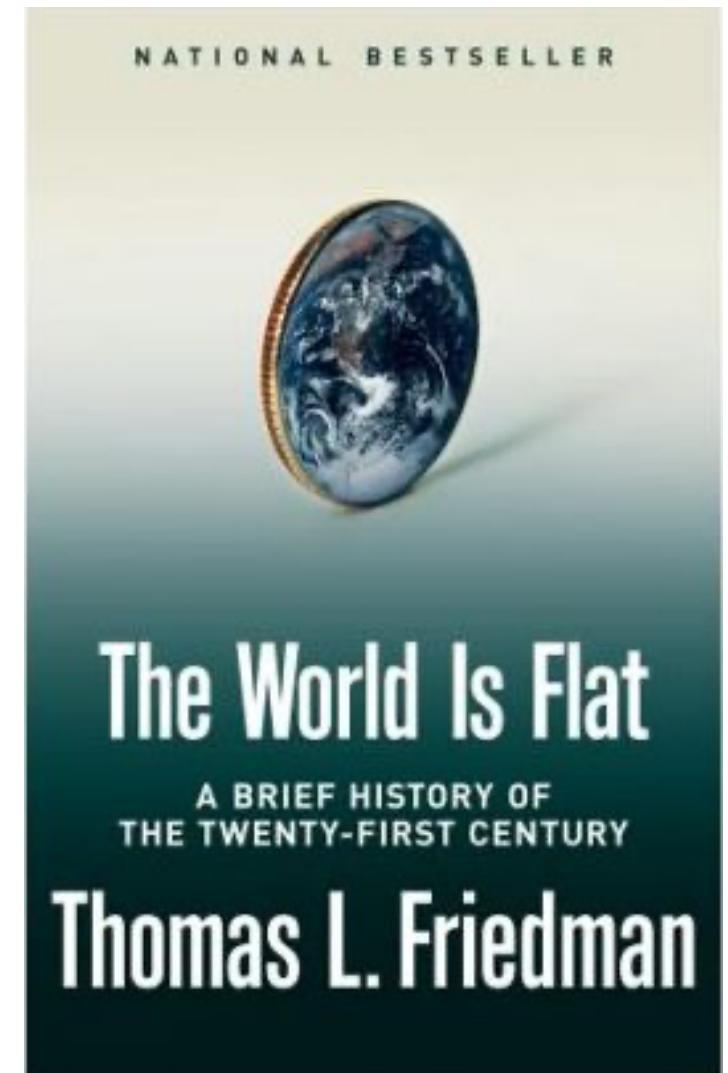


What do you think is going to happen next?

Are we 24+ years late in the transformation process?

“Regardless of your profession; lawyer, architect, accountant, MD, engineer, entrepreneur anything can be **digitized**, **outsourced** to either the smartest or the cheapest producer”

Thomas Friedman (2005)



“Age of Accelerations of technology, globalization and the climate and how to cope with our changing planet”

Thomas Friedman (2016)

#1 NEW YORK TIMES BESTSELLER

Thank You for Being Late

VERSION 2.0, WITH A NEW AFTERWORD

AN OPTIMIST'S GUIDE
TO THRIVING IN THE AGE
OF ACCELERATIONS

THOMAS L.
FRIEDMAN

AUTHOR OF *THE WORLD IS FLAT*

PICADOR

“We are at the beginning
of a revolution that is
fundamentally **changing**
the way we live, and
relate to each other”

Klaus Schwab (2016)



“The 4th Industrial Revolution is changing everything from the way we work, communicate, study, shop and what it means to be human”

Klaus Schwab (2018)

Foreword by Satya Nadella, CEO of Microsoft

Shaping the Future of the Fourth Industrial Revolution

Klaus Schwab

Founder and Executive Chairman, World Economic Forum
with Nicholas Davis

“The merging of **infotech**
and **biotech** is proving that
there will be no boundaries
to the prospects for
what lies ahead”

Yuval Noah Hariri (2018)

INTERNATIONAL BESTSELLER

AUTHOR OF *SAPIENS*

Yuval Noah
Harari



21 Lessons
for the
21st Century

“Offers a helpful framework for processing the news
and thinking about the challenges we face.”
—BILL GATES, IN “5 BOOKS I LOVED IN 2018”

Man-Machine Collaboration

Three Eras of Automation

If this wave of automation seems scarier than previous ones, it's for good reason. As machines encroach on decision making, it's hard to see the higher ground to which humans might move.

ERA ONE 19TH CENTURY

Machines take away the **dirty and dangerous**—industrial equipment, from looms to the cotton gin, relieves humans of onerous manual labor.

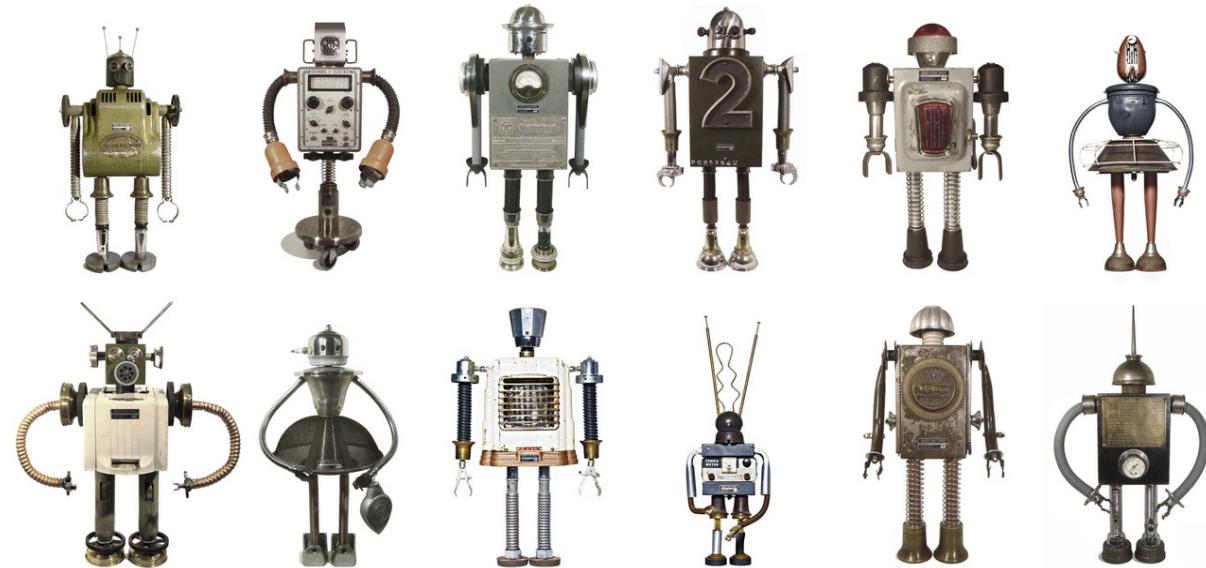
ERA TWO 20TH CENTURY

Machines take away the **dull**—automated interfaces, from airline kiosks to call centers, relieve humans of routine service transactions and clerical chores.

ERA THREE 21ST CENTURY

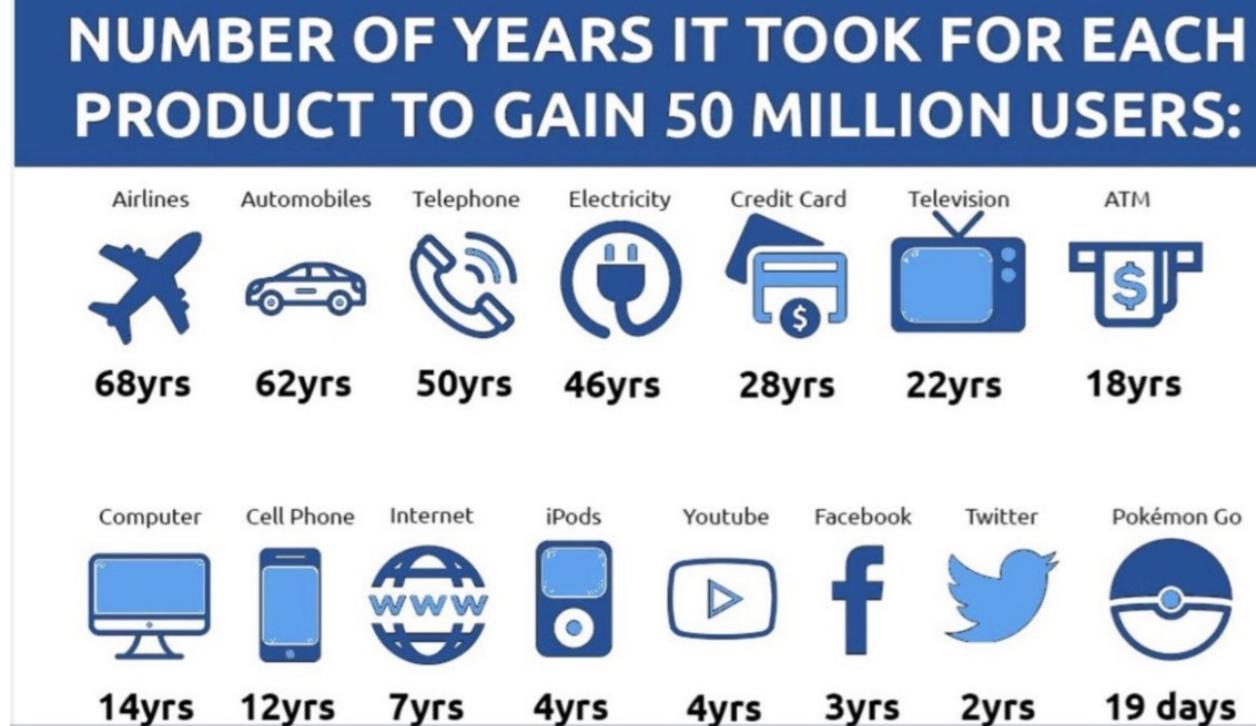
Machines take away the **decisions**—intelligent systems, from airfare pricing to IBM's Watson, make better choices than humans, reliably and fast.

SOURCE THOMAS H. DAVENPORT AND JULIA KIRBY
FROM "BEYOND AUTOMATION," JUNE 2015



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The increasing
pace of
acceleration,
change and
transformation



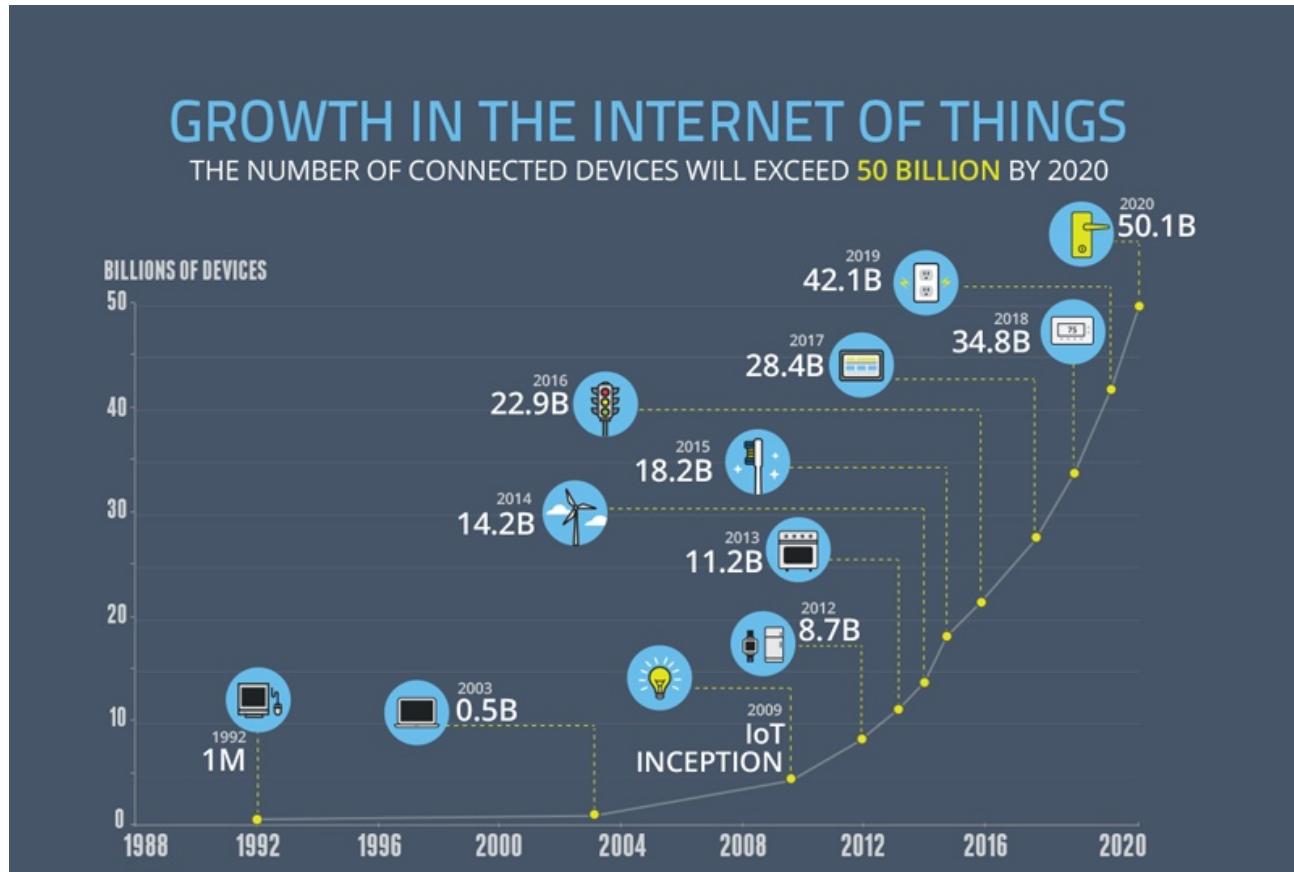
What's Next?

Are you ready?

What do you
need?

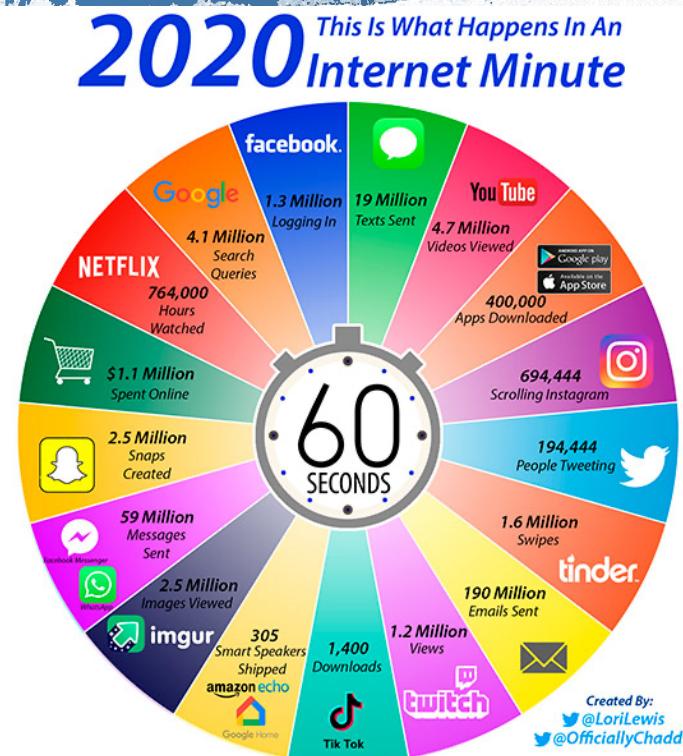
Future-ready leadership

This requires a different type of innovative leaders

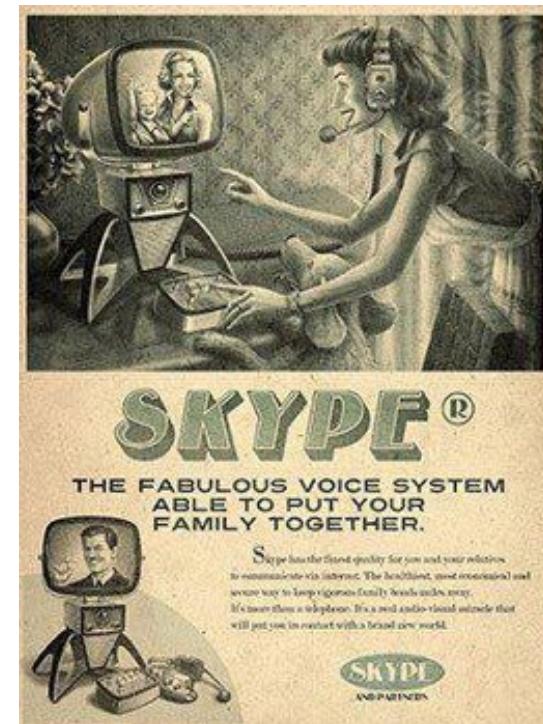
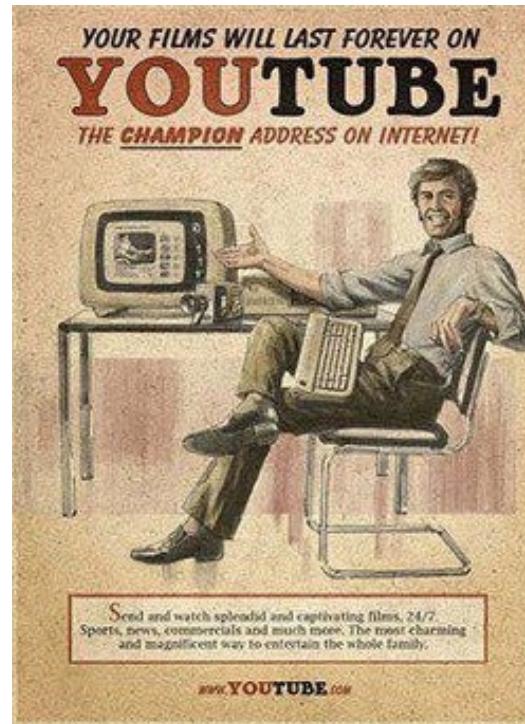
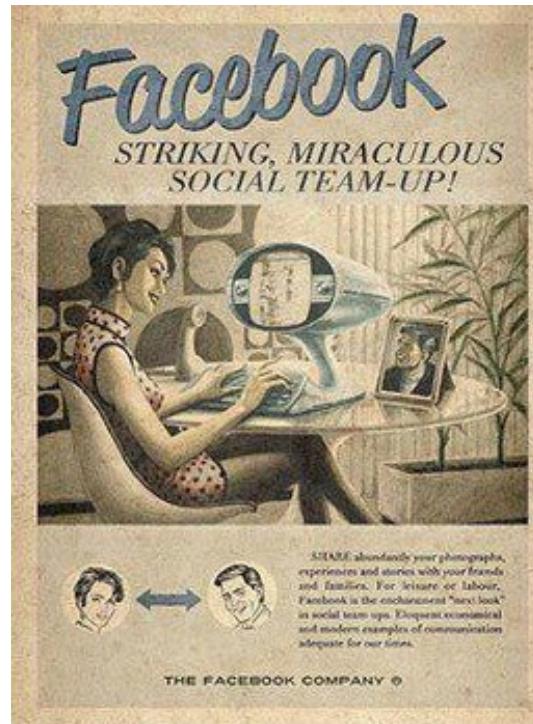
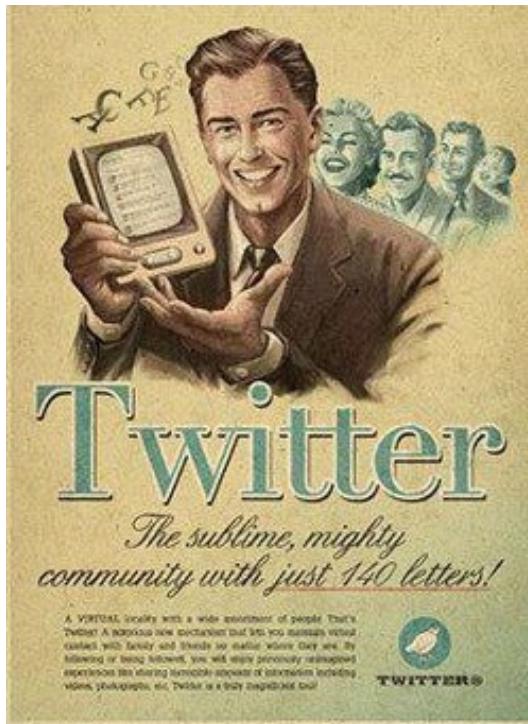


The World Today!

Navigating the next industrial revolution



| Revolution | Year | What happened? |
|------------|------|--|
| 1 | 1784 | Steam, water, mechanical production equipment |
| 2 | 1870 | Division of labour, electricity, mass production |
| 3 | 1969 | The computer, electronics and the internet |
| 4 | ? | The barriers between man and machine dissolve |



How long have we been
using these platforms?

For fun and for
business

Disruption has been in the making for years...
INNOVATION

Innovative business models

Uber – The global transportation company with **no cars**.

Airbnb – The largest accommodation platform with **no real estate**.

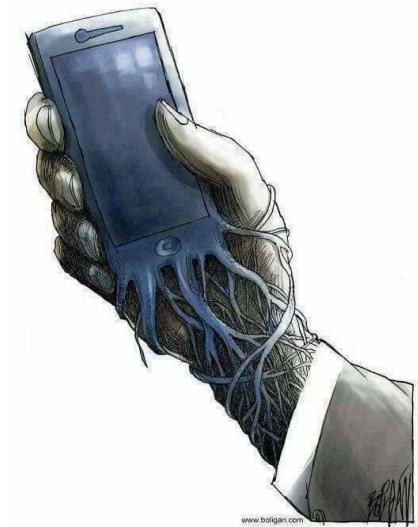
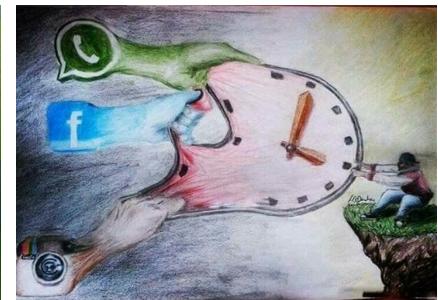
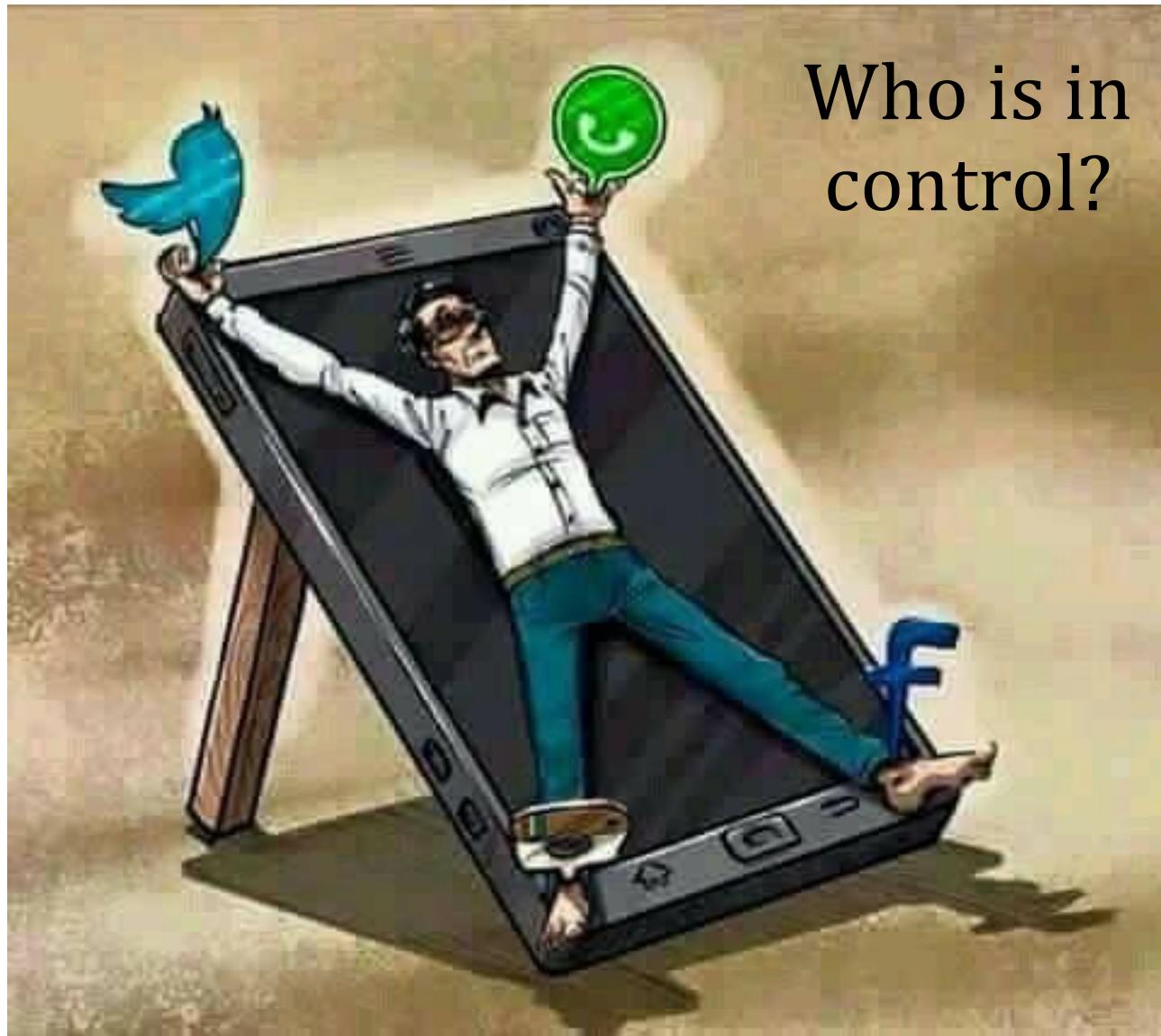
Ali Baba – The global retailer in the click and mortar space with **no inventory**.

Facebook – The 2+ billion (26% of the world population) citizens' network “borderless continent” with **no content**.

How can business schools adapt to the needs of the individuals who can/want to impact the future/society?

Innovation + business/management education = societal transformation

Who is in control?



Something
happened...

An invisible
stealth attack

Affected lives and
livelihoods

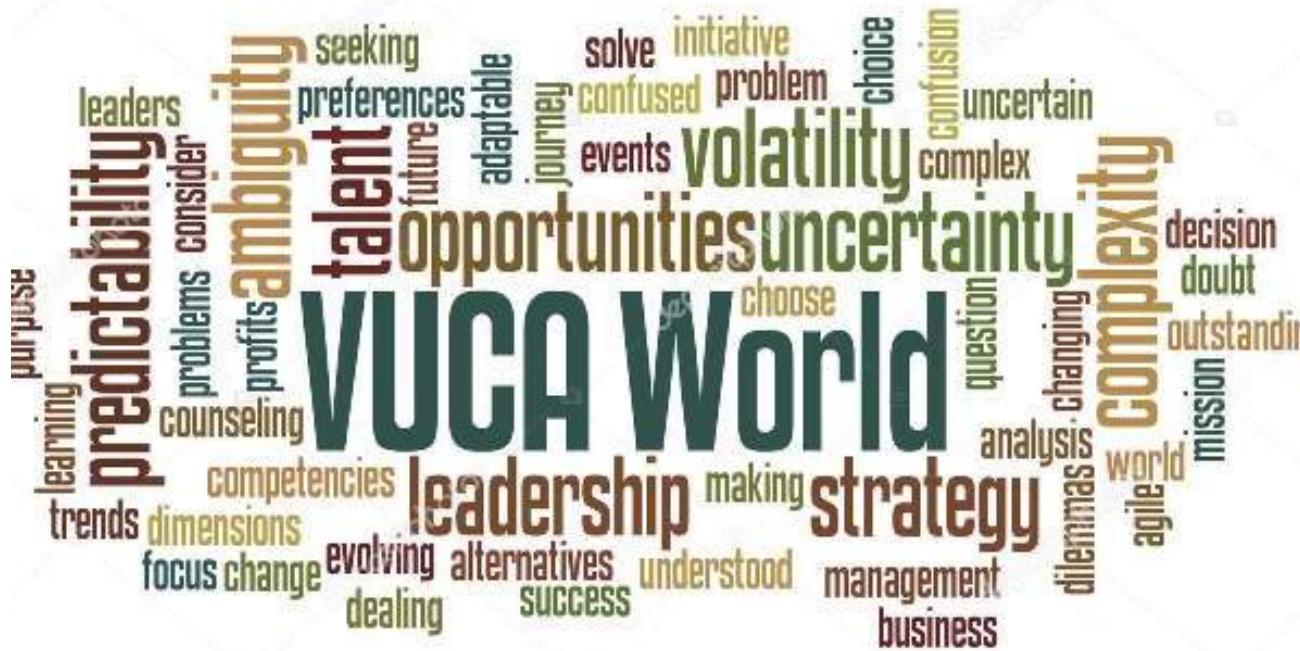
Disruption

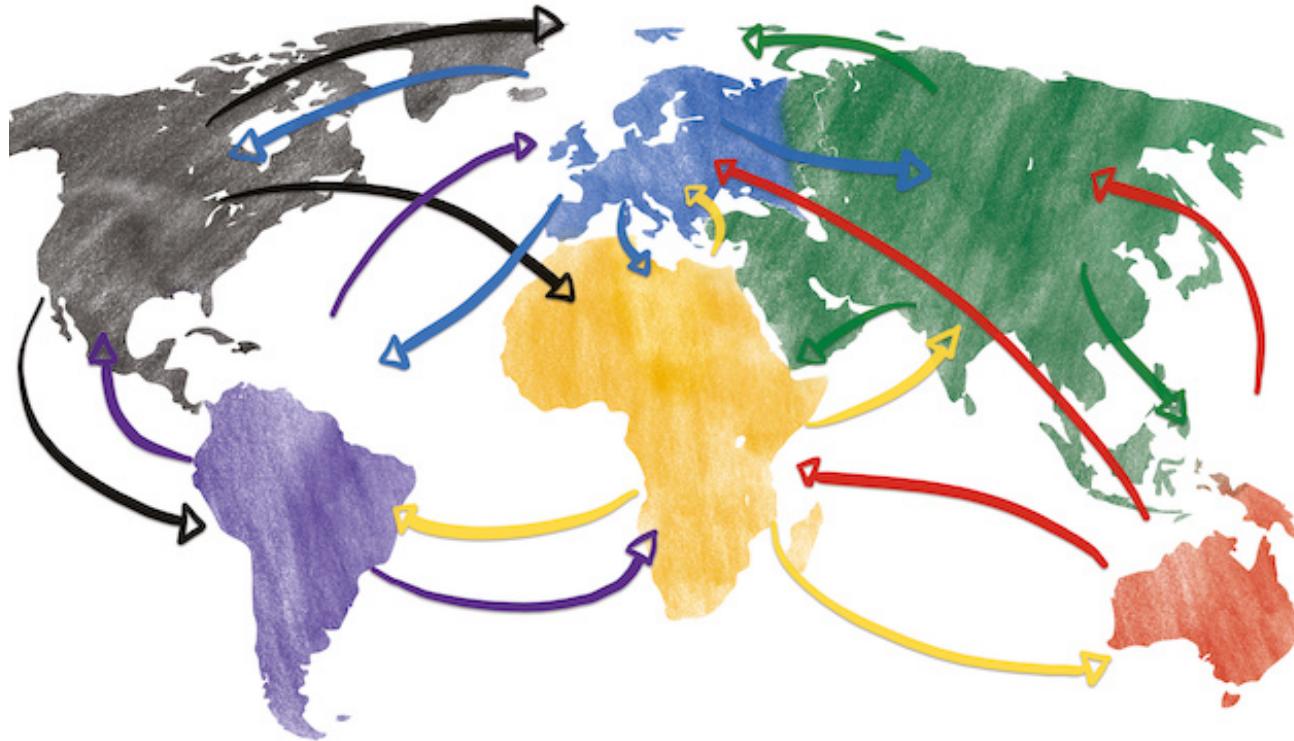
| November 2019 | | | | | | |
|---------------|----|----|----|----|----|----|
| S | M | T | W | T | F | S |
| | | | | | 1 | 2 |
| 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| 10 | 11 | 12 | 13 | 14 | 15 | 16 |
| 17 | 18 | 19 | 20 | 21 | 22 | 23 |
| 24 | 25 | 26 | 27 | 28 | 29 | 30 |

Sunday, Nov 17th 2019

VUCA

Volatility
Uncertainty
Complexity
Ambiguity





Slowed down
economies

Affected financial
markets

Disrupted value-
chains

What's next for
globalization?



What
happened?

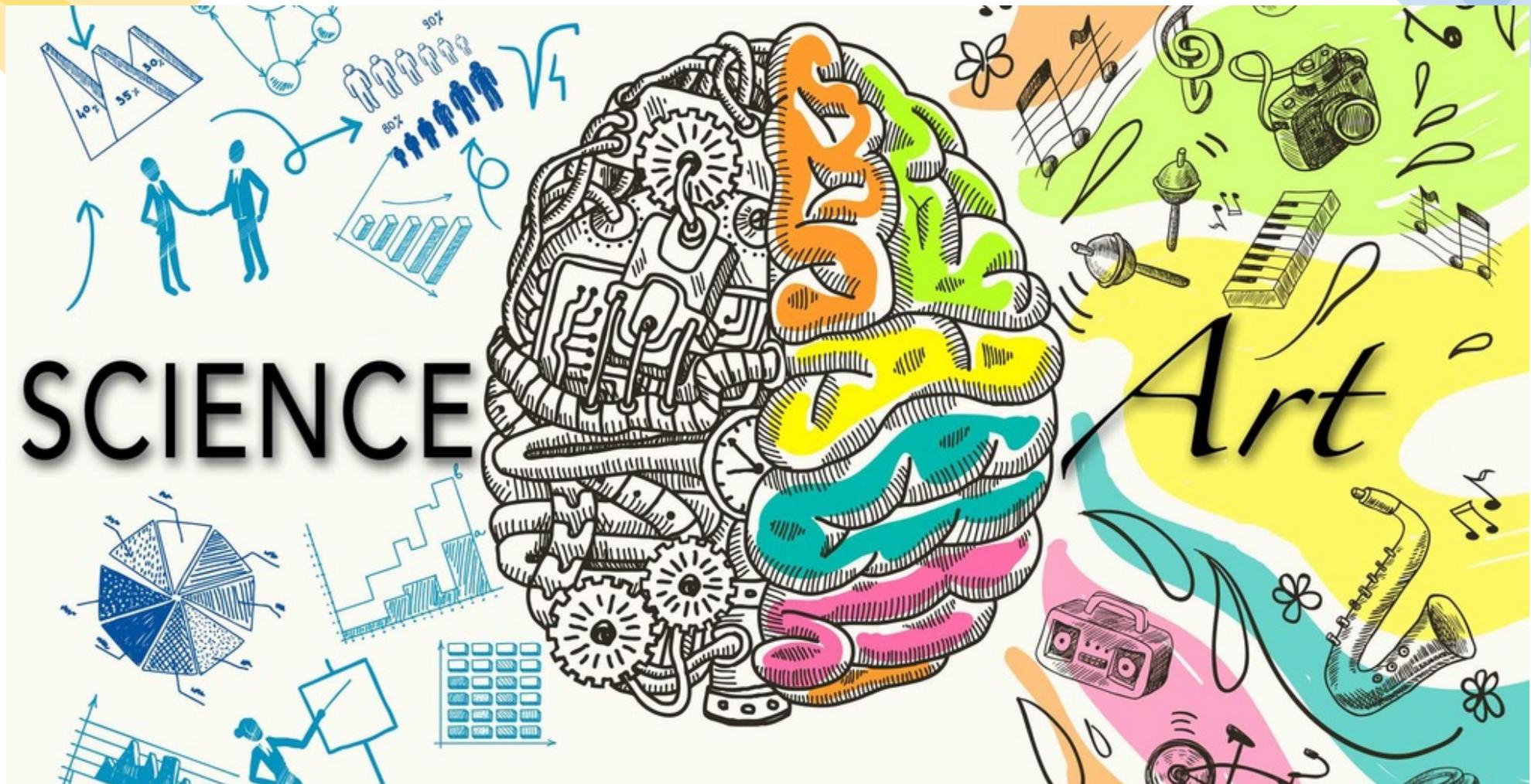
The world
was/is on
lockdown...

but **who** came
and continues
to relatively
save the day?



The same platform that **disrupted** our lives for
more than **4** decades

Digital Transformation should be perceived as...





Futurologie

How will the future look like?

Work

Study

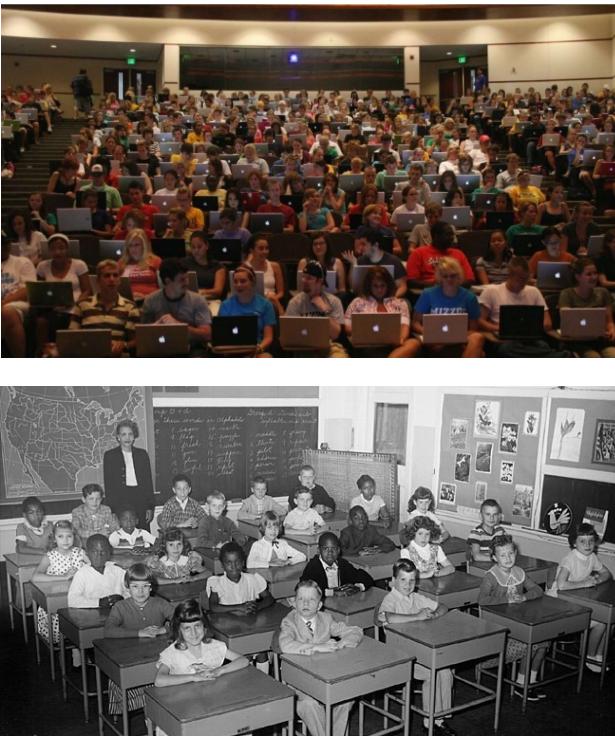
Shop

Connect

Travel

LIVE

The Future of Learning

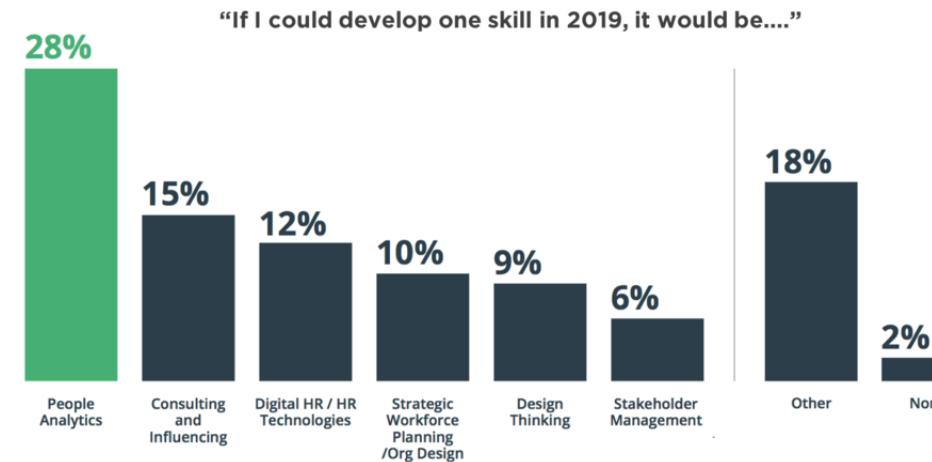
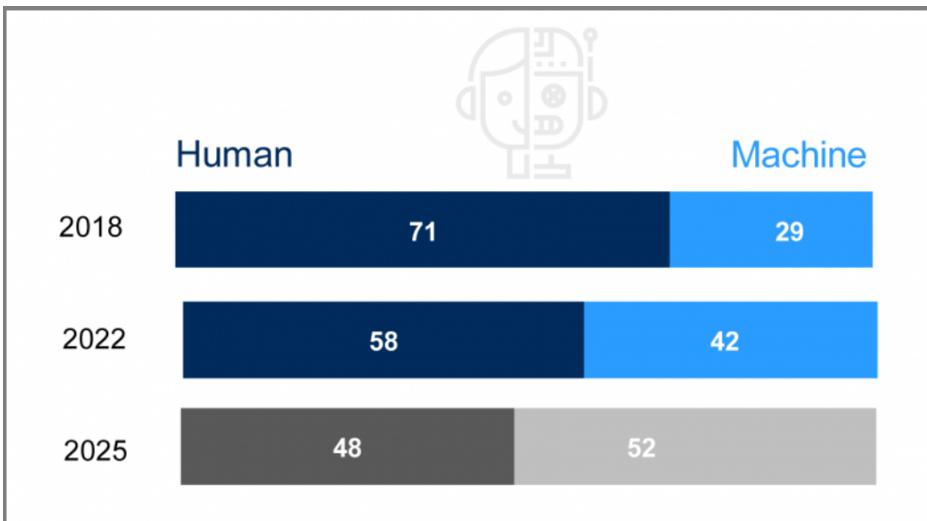
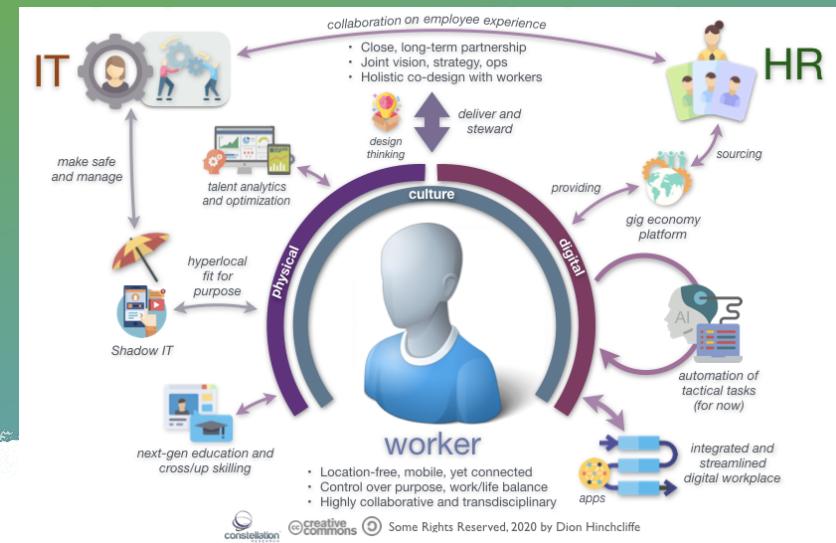


Instrumented

Interconnected

Intelligent

Future of work insights!



In the age of
acceleration,
organizations will
look for upskilling
and reskilling

...and it keeps
changing

The Jobs Landscape in 2022

emerging
roles,
global
change
by 2022

declining
roles,
global
change
by 2022

133
Million

75
Million

Source: Future of Jobs Report 2018, World Economic Forum



COMMITTED TO
IMPROVING THE STATE
OF THE WORLD

Top 10 Emerging

1. Data Analysts and Scientists
2. AI and Machine Learning Specialists
3. General and Operations Managers
4. Software and Applications Developers and Analysts
5. Sales and Marketing Professionals
6. Big Data Specialists
7. Digital Transformation Specialists
8. New Technology Specialists
9. Organisational Development Specialists
10. Information Technology Services

Top 10 Declining

1. Data Entry Clerks
2. Accounting, Bookkeeping and Payroll Clerks
3. Administrative and Executive Secretaries
4. Assembly and Factory Workers
5. Client Information and Customer Service Workers
6. Business Services and Administration Managers
7. Accountants and Auditors
8. Material-Recording and Stock-Keeping Clerks
9. General and Operations Managers
10. Postal Service Clerks

“Do you want a glimpse of the **new norm**? The next **disruption**?

Get ready with different **models** such as...

Work from Home (**WfH**)

Work from Work (**WfW**)

Work from Anywhere
(WfA)

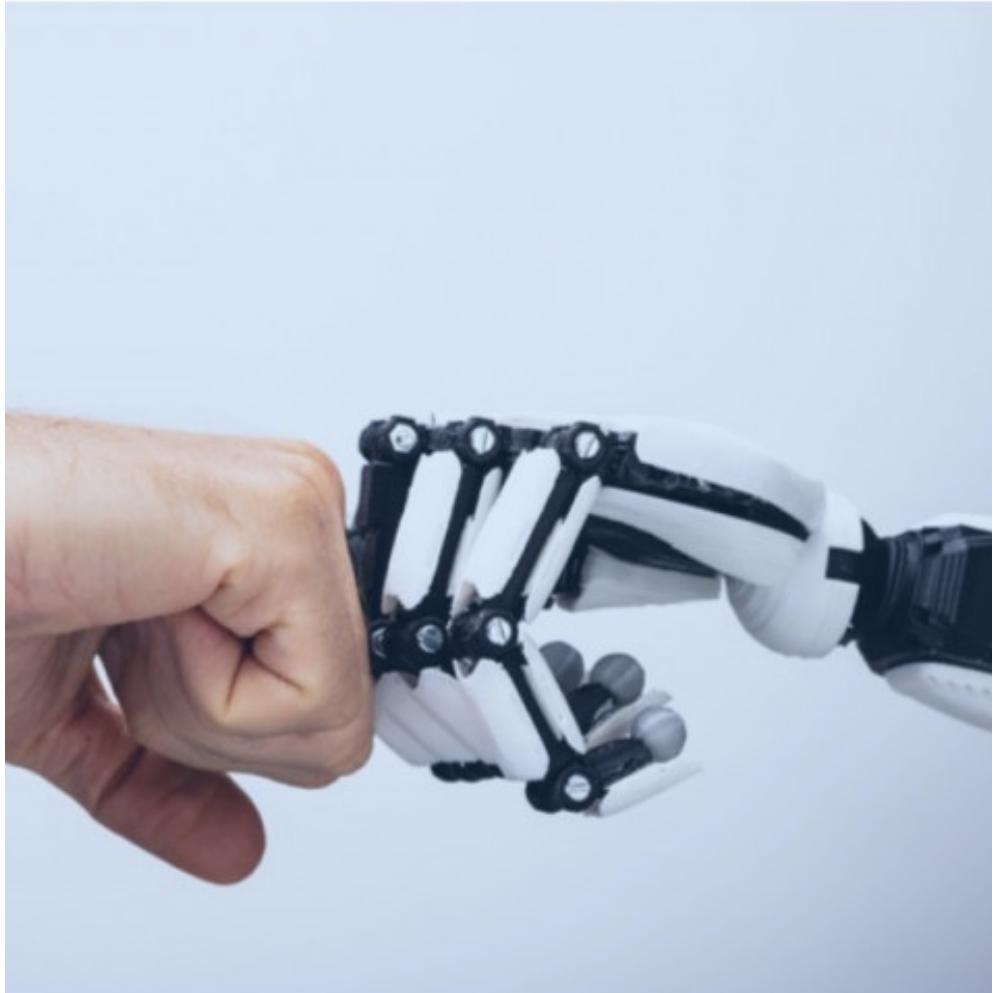


“I can’t remember—do I work at home or do I live at work?”

Keep in mind that
in the **office of**
the future...



“Technologies have decreased the demand for low-skilled **human capital** but have increased it for highly skilled ones”



“A lot of brain work cannot be codified such as, a vision, aspirations, empathy and compassion...”

...human capital will remain invaluable in any setting”



SOURCE THOMAS H. DAVENPORT AND JULIA KIRBY
FROM “BEYOND AUTOMATION,” JUNE 2015

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Interesting quote...especially in the age of
digital transformation

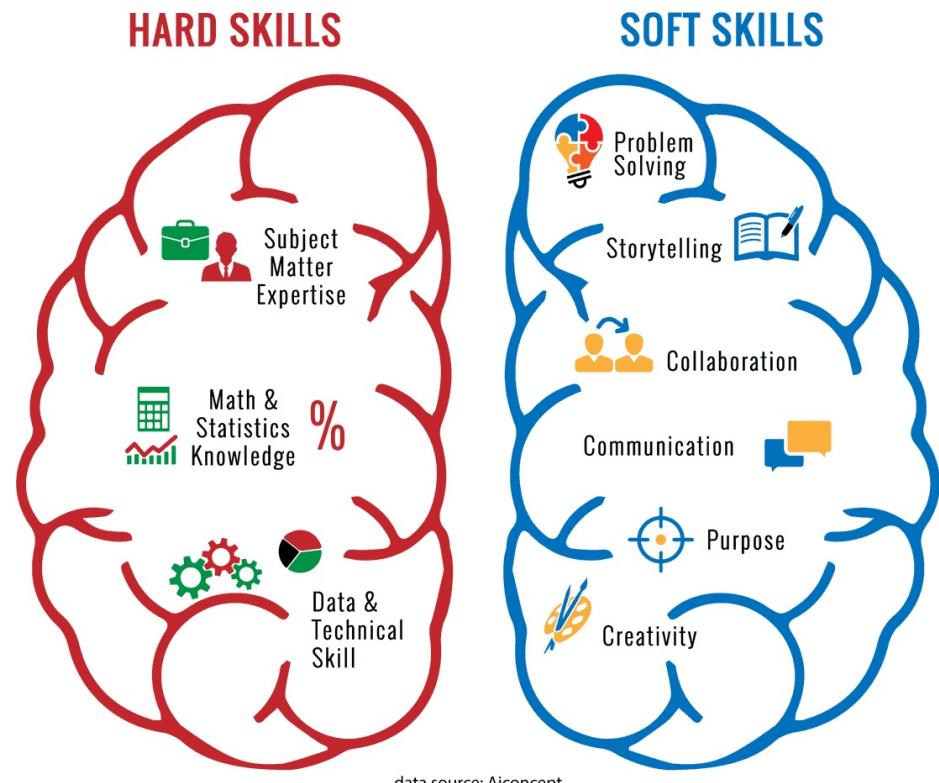
“**PEOPLE KNOW HOW TO
TAKE A COURSE, BUT THEY NEED TO
LEARN HOW TO LEARN.**”

JOHN LEUTNER, HEAD OF GLOBAL LEARNING AT XEROX

Transformation,
regardless the
sector, is a journey,
for it to succeed, it
should be **data-**
driven,
institutional and
integral to the
organizational
culture

THE MOST IMPORTANT SKILLS YOU NEED AS A PURPOSE-DRIVEN DATA SCIENTIST

@agrassoblog





Role of Collaboration and Innovation Capital in MENA Countries

Economic Outlook

In 2020...

With an overall fragile global economy, MENA was growing barely above **1%** with limited fiscal and policy space when Covid-19 hit

Credit to governments, for the unprecedented **fiscal** and **monetary stimulus** packages to save **lives** and **livelihoods**

Packages offered in MENA do not exceed **2%** of GDP < **3%** offered in emerging economies

IFIs, expect MENA to contract by **4-5%** (Egypt **3.6%**)



Economic Outlook In 2021...

MENA will rebound of up to 3%

According to IFIs, a few countries will demonstrate **decent** levels of growth including Jordan, Morocco, Tunisia and Saudi Arabia



MENA

Economic and
Strategic
Challenges

I. Uncertainty (global)

- Prolonged **crisis**, second wave? Others?
- Development and distribution (affordability) of the **vaccine**.
- Deficit in global **collaboration/international cooperation**.

II. Monetary and fiscal fatigue (MENA)

- Public debt will go from **45%** to **60%** of GDP in 2022 (the highest ever).
- An **encore** of fiscal stimulus, monetary measures and social policies to mitigate the repercussions of the crisis (no fiscal consolidation soon).
- Key sources of revenues will remain below average including **remittances** = double sometimes triple the annual aggregate FDI received by several countries.

MENA

Economic and
Strategic
Challenges

III. Human capital (MENA)

- **Unemployment** rates, a problem.
- Poverty to increase with **15-25 million** people falling into extreme poverty.
- **Inequality** on the rise, informal sector, youth, etc.
- Education, lifelong learning, technical education, what's next?

IV. Geopolitical landscape (MENA)

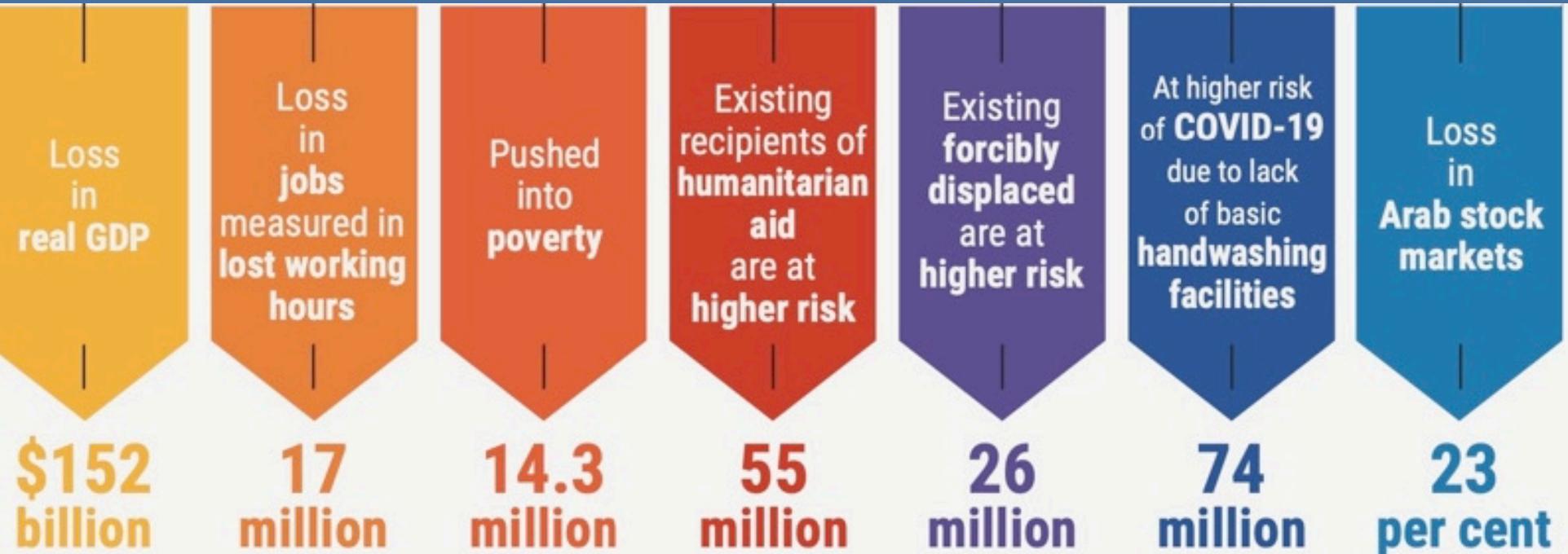
- Tensions and instability.
- Disputes.

Societal, Economic, Technology and other Implications

- Increased reliance on the Internet
- More family, friends ties – physical distancing!
- Businesses, governments, experiencing a new mode of operation?
- Blended learning, the solution not online learning
- Is the infrastructure/infostructure ready?
- How about the digital divide?
- What needs to be improved?
- How to **transform into a digital economy?**



Human Capital
The most
invaluable
asset in society



Impact of Covid-19 on MENA in Numbers

Which one are you?



1/2 FULL?

1/2 EMPTY?

...and which
way do we
want to go?



Investing in Human Capital

Demographics

420+ million (6% of the world population)

60% < 30 years old, massive young workforce

280+ million (67%) wired, connected.

Extended geographical space for trade and diversified collaboration, 5,145,048 square miles

One language, multiple dialects

Untapped resources

THIS
MOMENT
IS AN
OPPORTUNITY

Investing in Innovation Capital

Learning

Commerce and
trade

Agriculture

Nature and
mobility of work

Healthcare

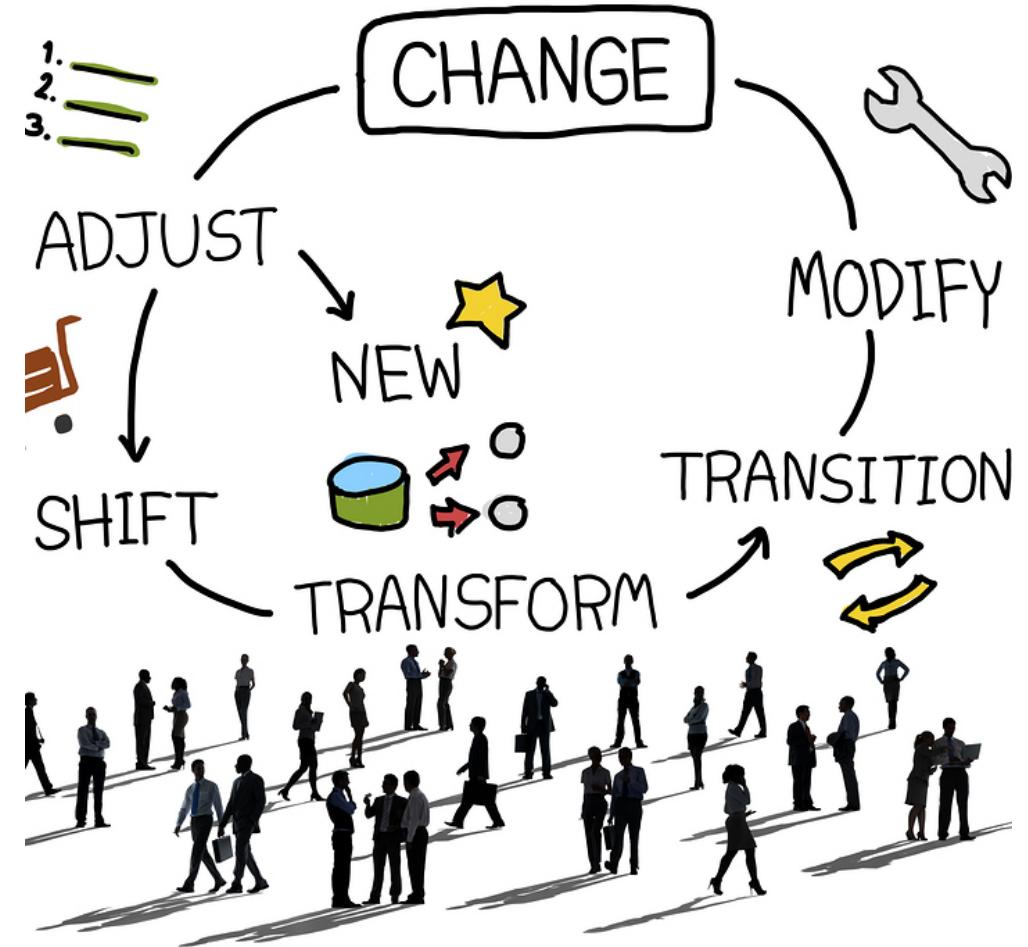
Banking and
financial markets

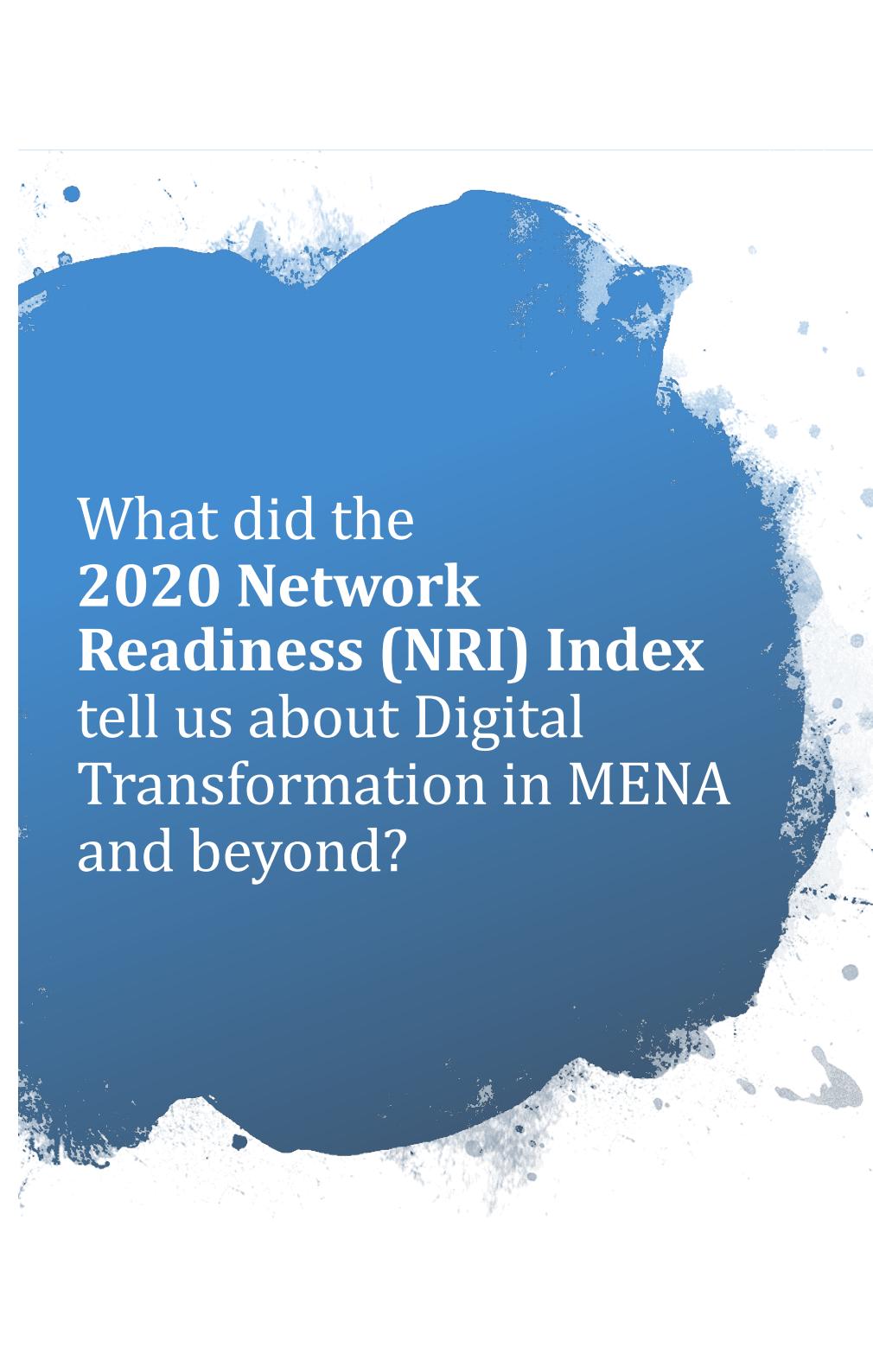
Manufacturing

Entrepreneurship

We live in a world of
constant
transformational
change

and
There is no one
formula that fits all





What did the 2020 Network Readiness (NRI) Index tell us about Digital Transformation in MENA and beyond?

- Market approach needs to be holistic.
- Some form of digital divide might be inevitable.
- Creating an ecosystem of trust and security is key.
- Achieving an acceleration that CIOs and CTOs failed to realize in 40+ years.
- Upskilling and reskilling of human capital is invaluable.
- Accelerating the implementation of SDGs should always be the priority.
- Revisiting globalization and international cooperation is not an option.



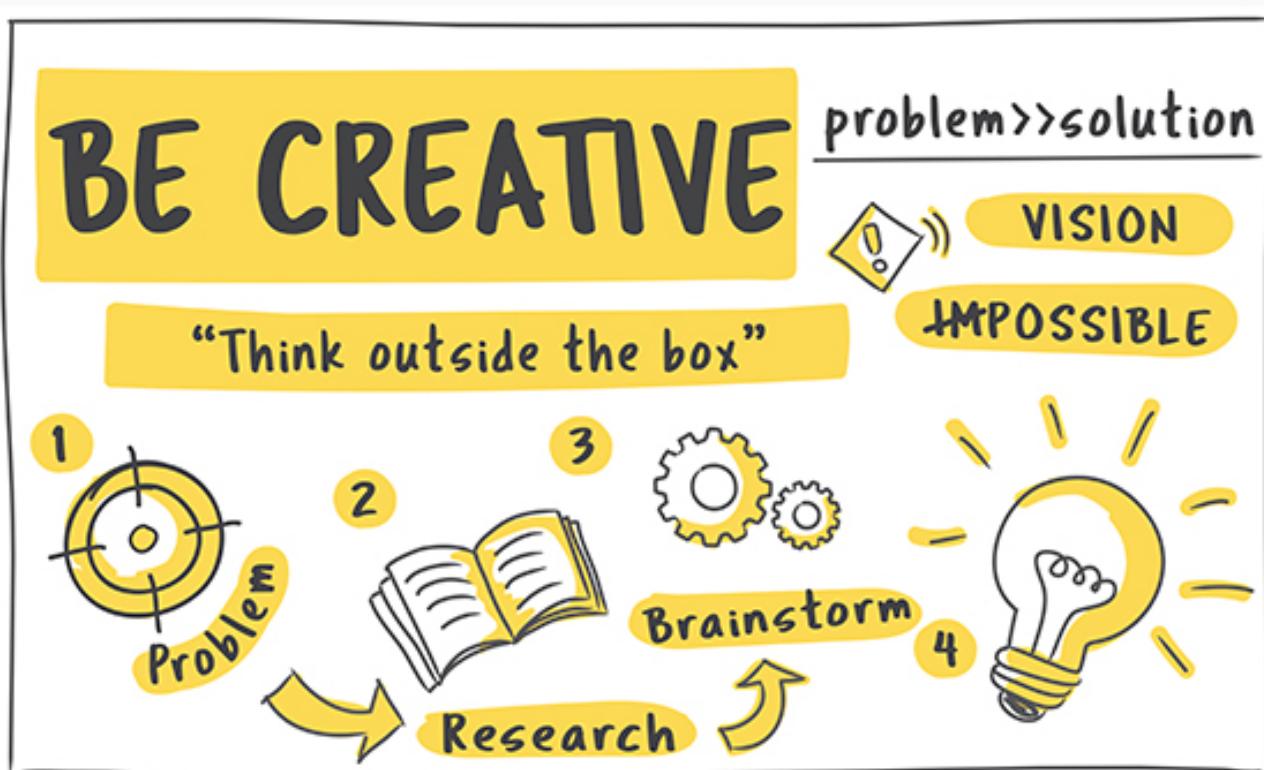
PORTULANS
INSTITUTE

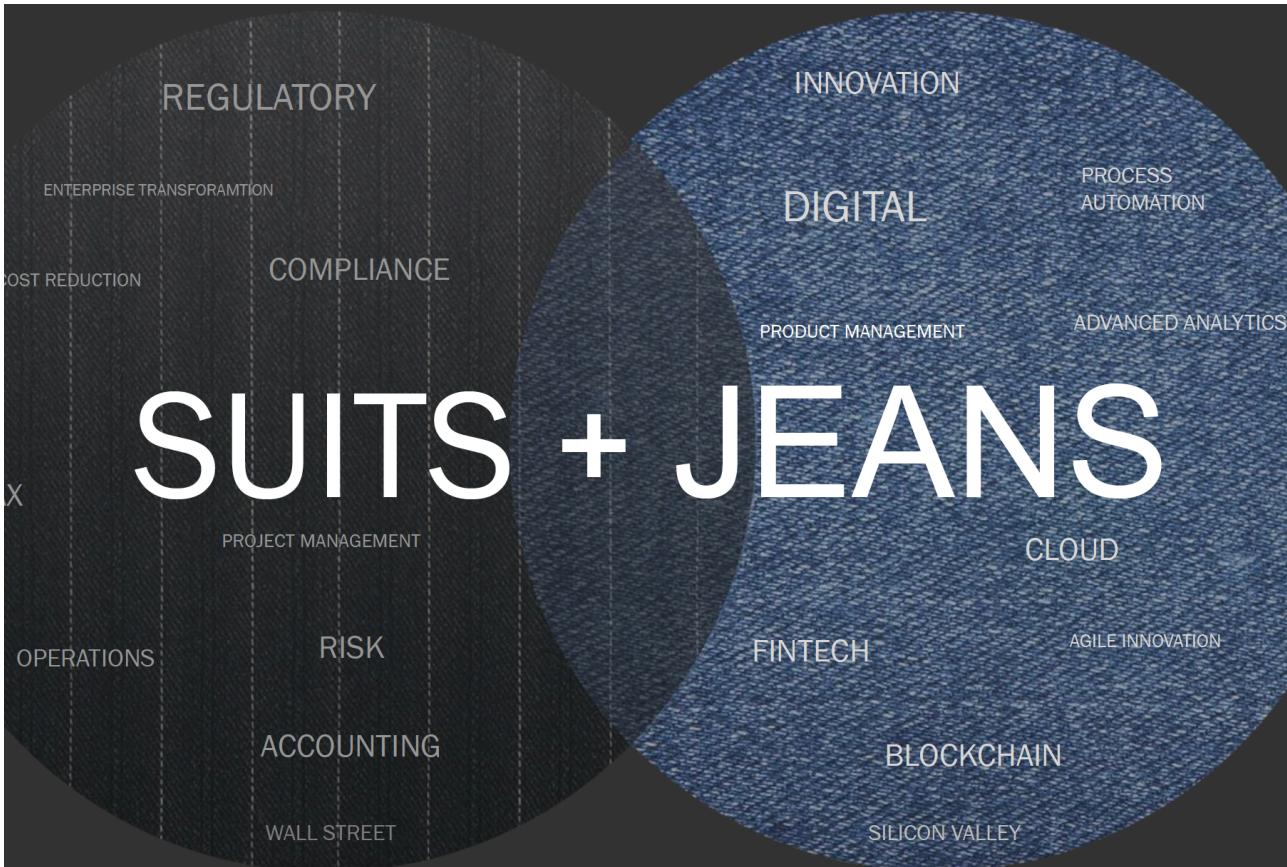
Are SDGs affected? Is there an opportunity through digital transformation?



Critical Success Factors

Intelligence
Flexibility
Creativity
Innovation
Adaptation
Collaboration
Prediction
Talent
Data





From **suits**
to **jeans**

From
verticals to
horizontals

New
normal?

The invaluable Quadrant

Leadership,
human capital,
innovation,
and
organizational
culture





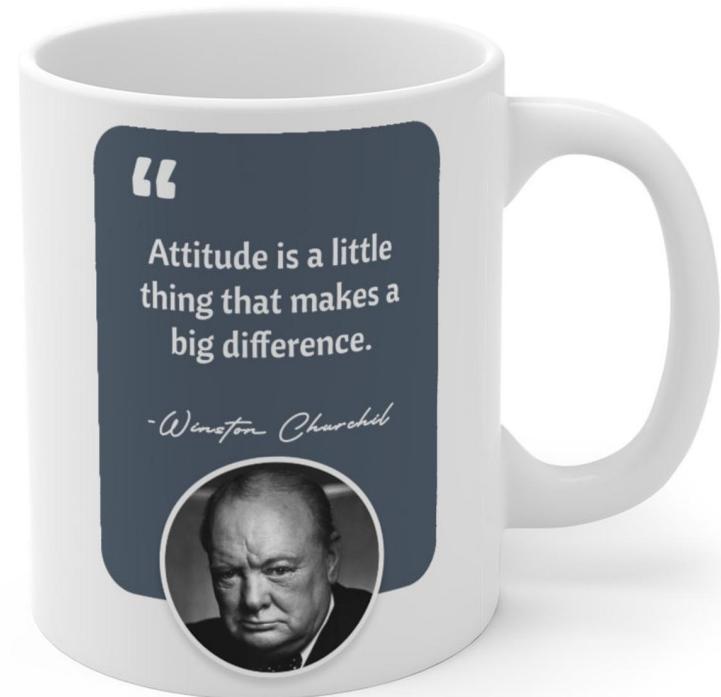
**'Culture eats
strategy for
breakfast'**

- Peter Drucker

It is all about
the
organizational
culture

A Journey of
Adaptive
Continuous
Improvement

Remember, even in
the age of digital
transformation, it is
all about **people**,
attitude and staying
relevant



Usually people...
talk about change,
promote change,
push for change,
endorse change...but...
they never want to change

We have seen
something different
in **2020**

People **do**
change
and fast

