Virtual Expert Group Meeting on
"Socially just transition towards sustainable development: The role of digital technologies on social development and well-being of all"

Division for Inclusive Social Development, in collaboration with UNCTAD and ITU
4 – 7 August 2020

Socially just transition and the role of digital technologies on social development and well-being of all – regional perspectives: ESCWA

Moderator: **Mr. Oussama Safa**, Chief, Social Justice Section, Social Development Division,
Presenter: **Dr. Eng. Bakr Zade,** innovation and digital strategy expert, consulting for multinationals and government organizations in Europe, Middle East & Africa, and adjunct professor and speaker at UK, UAE and Egypt universities
Discussant: **Dr. Nibal Idelbi**, specialist on technology, innovation and development, ESCWA
Participating experts

Participant Discussants
Prof. Majd Aljamali, Director, Higher Commission of Scientific Research, Syria
H.E. Ms. Fadia Solaiman, Deputy Minister, Ministry of Communication and Technology, Syria
Ms. Nada Khater, Director, e-Gov Strategies Department, Ministry of Digital Economy and Entrepreneurship, Jordan
Mr. Ali Alassiri, Director, Yesser Program for e-Government, KSA
Mr. Mohamad Ali Al-Qaed, Director, Information and e-Government Authority (iGA), Bahrain
Mr. Salem Al-Housani, Deputy CEO, Telecom Regulation Authority (TRA), UAE
H.E. Ms. Ghada Labib, Deputy Minister, Ministry of ICT, Egypt
Prof. Mahmoud Sakr, Director, High Academy of Scientific Research, Egypt
Mr. Mohamad Idrissi Almeylani, Director, Agency for Digital Development, Morocco
Ms. Salam Yamout, former coordinator of the National ICT Strategy in Lebanon she is expert in ICT for Development
Ms. Maysoun Ibrahim, General Director of ICT for development, Palestine Presidency Bureau, Board Member of the higher council for innovation and excellence
Dr. Monica Duhem, Founder and Director of Hearcolors, Mexico, accessibility expert

Interactive discussion (facilitated by the moderator)
Guiding questions:
- What are the *progress and challenges* from your region in *promoting socially just transition to sustainable development*?
- What *impact* have *digital technologies had in social development* and *well-being of all in your region*? What is their *potential role for the future in near and medium-term*?
- What are some of the *potential risks that emerging digital technologies pose to social development and equality*?
- What are the *lessons learned from the COVID-19 in terms of the impact of digital technologies on social development* in your region, *including leveraging these technologies for the social inclusion of vulnerable social groups*?
- What are some of the plausible *scenarios of the impact of technologies on social development and the SDGs in your region*?
- What kind of *national strategies* and *policy measures* as well as regional and international cooperation would be necessary to enable developing countries to leverage digital technologies for social development?

Socially just transition and the role of digital technologies on social development and well-being of all: regional perspectives
Wednesday, 5 August – 8:00 – 10:00am (NYT)

Covid-19 is changing the world, impacting different aspects of our lives. The problem is that we are uncertain on what will the changes be, and how it will affect our lives. This paper briefly addresses three main questions (with a focus on socially just transition and the role of digital technologies on social development and well-being of all):

1. What have we observed so far?
2. Was this problematic situation avoidable? Or (a better question) can problematic situations like this be avoided/mitigated in the future?
3. What are the opportunities/challenges that emerged from this situation?

1. What have we observed so far?

- Covid-19 *exposed* not only our *health systems*, *policies*, and *strategies*, but also a range of *interconnected elements of our socio-economic systems*, and *gaps in global supply chains* (e.g. food, medicine, etc.), while
- *responses* from *decision-makers* and *policymakers* show that approaches were widely *ad-hoc* (regionally & globally), evident in changing – sometimes ambiguous policies,
- a *lack of consensus on approaches or coordinated efforts* among governments in addressing different aspects of this problematic situation,
- affecting *public confidence* (review how people behaved in early months of the pandemic and the resulting shortages in medical and food supplies)
- impacting on *public behaviour* (on individual and community levels).

Lack in envisioning the complexity of the situation (i.e. uncertainty, unpredictability and fast changes), caused a cardiac arrest-like impact, almost paralysing our health, economic, and social systems. This presents unprecedented and significant challenges to the 2030 SDGs, and the strength of impact will be determined by decisions on how we choose to move forward, and how prepared we are in weathering similar crises (e.g. climate change and food/water shortages). Digital technologies are critical in addressing these challenges.

2. Can problematic situations like this be avoided/mitigated in the future?

One model that can help us understand how to deal with problematic situations is the Cynefin Framework (Snowden, 2007)[1]
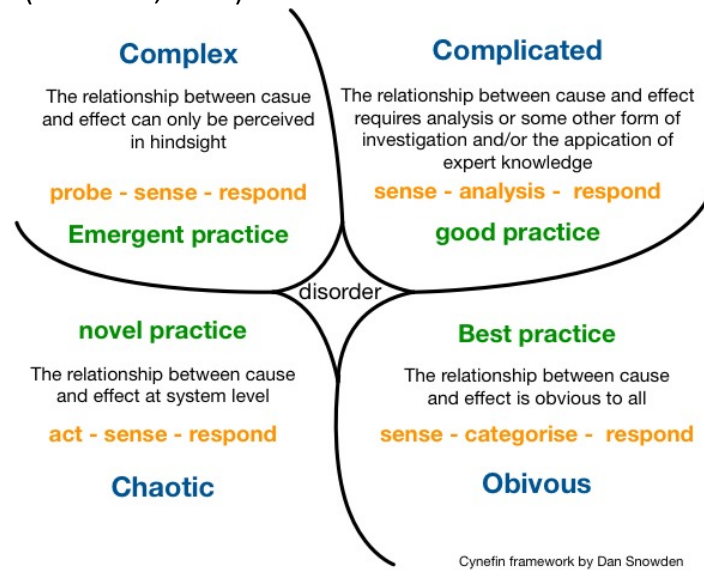

Fig. 1: Cynefin Framework (Source: Snowden, 2007)

The way decision/policy makers are dealing with the Covid-19 situation shows that they are operating by in large in the 'Chaotic' zone, when they should be operating between the 'Complicated' and 'Complex' zones. This explains why we have seen generally an 'act-sense-response' approach to the pandemic in different dimensions. In contrast, using scenario planning can help decision/policy makers with strategic foresight on possible scenarios in cases like Covid-19 (these include other pandemics, global warming related situations, food/water shortage, etc.), and hence enable decision/policy makers to 'sense-analyse-respond' or in more complex situations 'probe-sense-respond' leading to more proactive approaches.

To answer the question therefore: yes, situations like this can be avoided/mitigated in the future, by designing smart systems using *innovation and knowledge management* to *synthesize* and *synergize*:

- *Strategic foresight*: by means of horizon scanning and scenario planning to develop more proactive responses
- *Data science*: by designing early warning systems that integrate advanced analytics and AI algorithms with IoT
- *Behavioural economics*: by designing and experimenting with evidence-based public policymaking through sandboxing and RCE/RCTs

If we learned one thing from the COVID-19 pandemic, it would be that increasing complexity is becoming the norm, and we need to get better at navigating crises like this with some preparation (safe fail vs. fail safe). A *cardiac stress test* is by design, to measure a heart's ability to respond to external stress in a controlled clinical environment – a cardiac arrest is not.

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[1] Snowden, D. J., & Boone, M. E. (2007). A leader's framework for decision making. Harvard business review, 85(11), 68]

What are the emergent opportunities/challenges from the perspective of digital technologies for social development and wellbeing?

Focus on three areas: employment and job markets, healthcare, and education[2]

Employment & Job Markets: Once the crisis is contained, the focus will certainly shift to improving economic health

- **Telework**: is likely to become more common. We can observe growing acceptance for (knowledge-type) work to be done remotely (in both private and public sectors), and early evidence reveal that working from home is at least as productive as working from office. This shift in thinking about remote work (in spite of some reluctance to change especially from employers' side) brings opportunities to include some of the (pre-Covid 19) excluded members of the society (*Inclusion* and *Empowerment* on global level). For example, parents – especially mothers – of new-born and young children, and in some societies those who were not able to join the job market for cultural or economic reasons. Think also of the impact on environment from reducing the number of journeys travelled to work and demand on living in cities – smart communities
- **Work-life balance**: workers have been creatively navigating the lockdown situation (*necessity is the mother of invention*); gradually finding new ways that better suit them in fulfilling both work and family duties (including using technology to facilitate teamwork, share documents & knowledge, etc.). Learning from these experiences brings opportunities to design innovative ways and policies, for working remotely that realize better *work-life balance* (*Wellbeing*) (although we are yet to see a matching shift in employers' mindsets – distrust of telework – in realising that work is something you achieve, and hence change in employers' mindsets and *empowering* employees is key)
- **Potential for job creation**: acceleration in adopting internet technologies and applications and digital transformation is leading to fast changes in the supply-demand for jobs in some sectors/industries (compare, for example, jobs in travel and entertainment to those in eCommerce, eLearning, telemedicine, fintech, eServices, and also corresponding ICT infrastructure projects).

Challenges:
- **Policies**: to support a more 'just relationship' between employers and workers (evidence show that cases of changing work policies created unjust situations), necessary for a sustainable recovery, and to *empower work-life balance* (perhaps even rethinking enterprise architecture/structure - e.g. Kurzarbeit) *towards socially just transition*
- **Accessibility**: *ICT infrastructure* and *digital literacy* are key for ensuring inclusion and equal opportunity (equity) vis-à-vis new digital type jobs (not to leave anyone behind)
- **Leadership mindset:** a shift in thinking on the level of leadership and management is required to allow for *remote accessibility to corporate systems* (e.g. shifting to cloud-

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[2] Other areas may include: Green Economy (green recovery); Social Security (UBI); Tourism (community tourism); Trade; Services

based systems, while ensuring *higher cybersecurity systems*) (in some organizations – especially in government and public sector – this is not even considered an option)

- **Knowledge Management**: the debate about whether knowledge can be codified and stored is re-surfacing. The question is how organizations can facilitate knowledge sharing among teams working remotely (organizations that have been already facilitating knowledge sharing among their dispersed teams were better positioned – many lessons can be learned from these organizations)
- **Creating jobs**: jobs are affected by lockdown and digital transformation, and in the near future by emerging political directions in the world (e.g. rise of protectionism).

Healthcare:
- **Telehealth:** a shift in thinking is observed in a growing number of healthcare providers and private clinics offering remote healthcare services (consultation and medical assistance), and in a corresponding increase in patients' acceptance. For example, *patient triage and initial diagnostics* are increasingly moving online (e.g. Seed cooperation with VeeMed), while providers are commencing to use *advanced analytics*, *AI algorithms*, and *remote interaction platforms* (*Telehealth/ Telemedicine*) to support 24/7 digital health service delivery system including: medical consultation, drug prescriptions, and insurance services. This brings great opportunities for increasing accessibility to healthcare services (*Inclusion, Wellbeing & Equity*)
- **Early warning systems:** initial work on synthesising IoT/IoMT, advanced analytics and AI into monitoring and evaluation (M&E) systems. For example, larger capacity venues are creating smart networks for measuring body temperatures at key gateways (e.g. Dubai World Trade Centre), and cities are progressing towards developing sewage surveillance systems to establish early warning for future pandemics and to identify communities with higher risk or faster virus spread
- **Shared responsibility:** public awareness played a key role in reducing the rate of Covid-19 cases. Nations that were able to capitalize on social networks supported by data science in reaching out to members of different communities had better results in containing the pandemic earlier than others (e.g. 'we are all responsible' campaign in UAE). (*Wellbeing*)
- **Resource optimization**: using AI based predictive analytics together with behavioural insights to optimize operating efficiencies and resource utilization (e.g. Fujairah Hospital optimising attendance to medical appointments) (*Wellbeing*)

Challenges:
- **Policies**: related to data protection and AI governance (ensuring more 'just' and 'ethical' AI algorithms with transparency & accountability) especially as AI is gradually replacing human interface at least for initial screening and guiding patients according to their conditions and historical data
- **Accessibility**: ICT infrastructure and digital literacy are key for enabling remote accessibility to healthcare services (Telemedicine/Telehealth) platforms (many are either excluded or find it challenging)
- **Behavioural change**: to develop healthy lifestyles and enable better prevention habits. In this respect, insights from behavioural economics (nudge) supported by data science are being tried in designing evidence-based public healthcare policies,

however this needs ethical consideration concerning exertion of libertarian paternalism

- **R&D**: engage and empower researchers and scientists to conduct research, experimentation and development in priority areas, pilot/sandbox solutions and policies, to increase potential for success when rolling out at scale

Education:

- **eLearning:** observations show a relatively swift *transition to online learning* during lockdown (technology was available, the lockdown just accelerated the transition). Online/blended learning is likely to be the way forward and – designed carefully – it can provide *opportunities for better accessibility to education especially to remote areas*, and *crowded classrooms in certain neighbourhoods and communities* (*Inclusion & Equal Opportunity*)
- **Research-based learning:** learners were successful – to different degrees – at self-studying. This presents an *opportunity to incorporate more research-based learning* into curricula (*Social Development*).

Challenges:

- **Accessibility**: *ICT infrastructure* and *digital literacy* are key in enabling *accessibility* to VLEs (many were either excluded or found it challenging). However, blended learning is more likely (connection/belonging)
- **Policies**: to *govern accessibility and management of virtual learning environments (VLEs)* and *governance of blended learning in a way that ensures no one is left behind*
- **Learning styles**: *rethinking learning models* and *curricula* on VLEs are crucial in ensuring *effective learning*
- **Knowledge sharing**: evidence shows a *variation in response among different education institutions*, and hence *different degrees of success*. *Sharing lessons learned* is *critical* to facilitate more *effective learning for all*.

Conclusion

We are at a pivotal moment in our civilization where we have great opportunities for a socially just transition towards sustainable development through:

- synergizing strategic foresight & innovation, data science, and evidence-based policymaking using behavioral sciences,
- designing a roadmap for digital partnerships, while adapting to local contexts, and
- conducting periodic stress tests.