



UNSW
THE UNIVERSITY OF NEW SOUTH WALES

Never Stand Still

Faculty of Medicine

Digital Global Health Governance

Interoperability, quality & capability maturity

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Global Health & Welfare Forum 08 Nov 2023



What I will present

1. Digital Global Health Governance

- *Interoperability*
- *Stewardship, governance & provenance*
- *Access, equity & human rights*

2. Digital technologies & AI in governance

- *Networked multilateralism in a multicultural world*

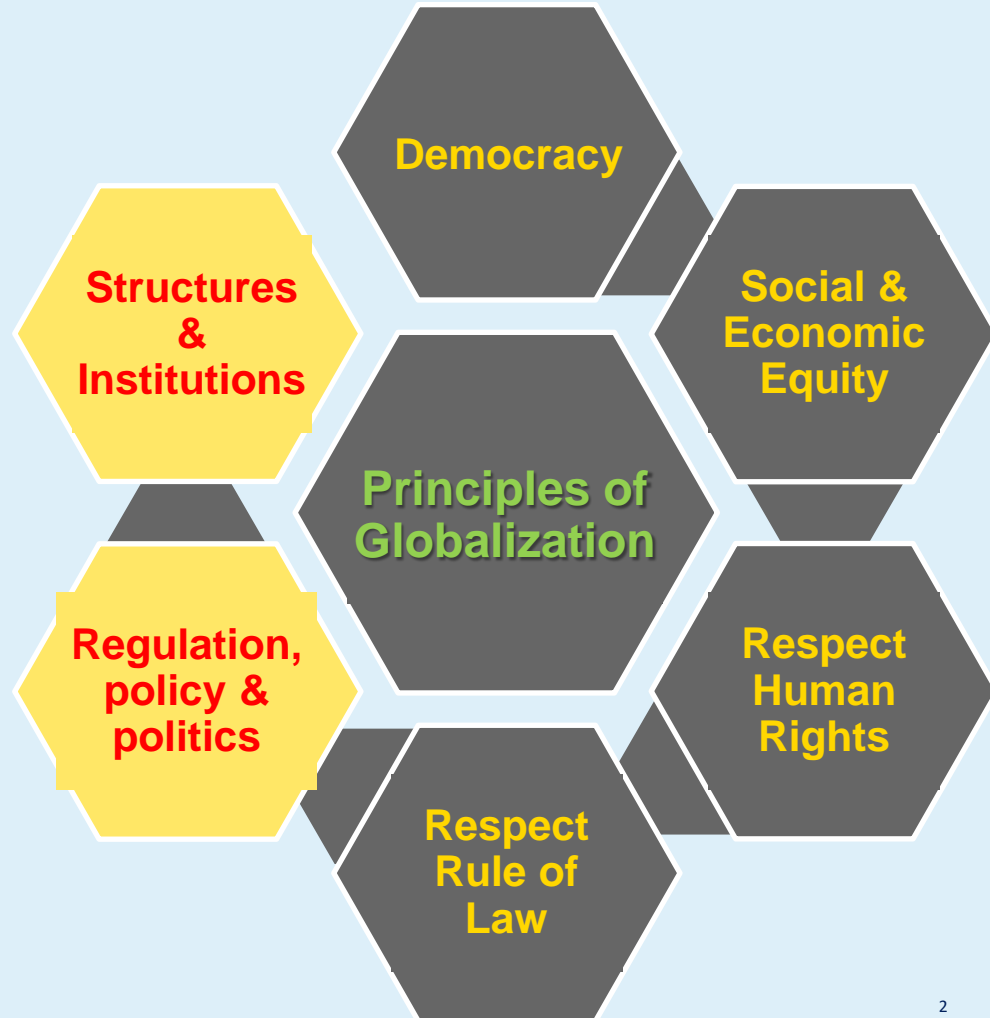
3. Ethical Digital Global Health Governance

- *Data networks, Software agents, Virtual Reality and Digitally enhanced models of care*

4. Capacity building and Diplomacy

Global health governance

“the use of formal and informal institutions, rules, & processes by states, intergovernmental organizations, and non-state actors to deal with challenges to health that require cross-border collective action to address effectively.”



Digital Cooperation & Our Common Agenda

Networked Multilateralism is where citizens have the digital competencies and tools to participate in “open, participatory, peer-driven and transparent systems, geared at solving problems by drawing on the capacities and listening to the voices of all relevant actors rather than being driven by mandates or institutions alone”



Digital global health governance

The digital transformation of global health governance aims to globally harmonize the ethical production, use and governance of AI & digital technologies through:

1. regulation and policy,
2. governance (& compliance) frameworks, or
3. ‘softer’ approaches such as standards and ethical guidelines and guardrails.

Digital global health governance is a “3-body problem” requiring interoperability & diplomacy among industry, governments, academia, institutions and civil society organizations across borders & cultures

Governance of the global health enterprise

Digital Health
Strategic
Priorities &
Roadmap

Legislations
& polycentric
structures

Virtual
models of
integrated
care of
individuals &
communities

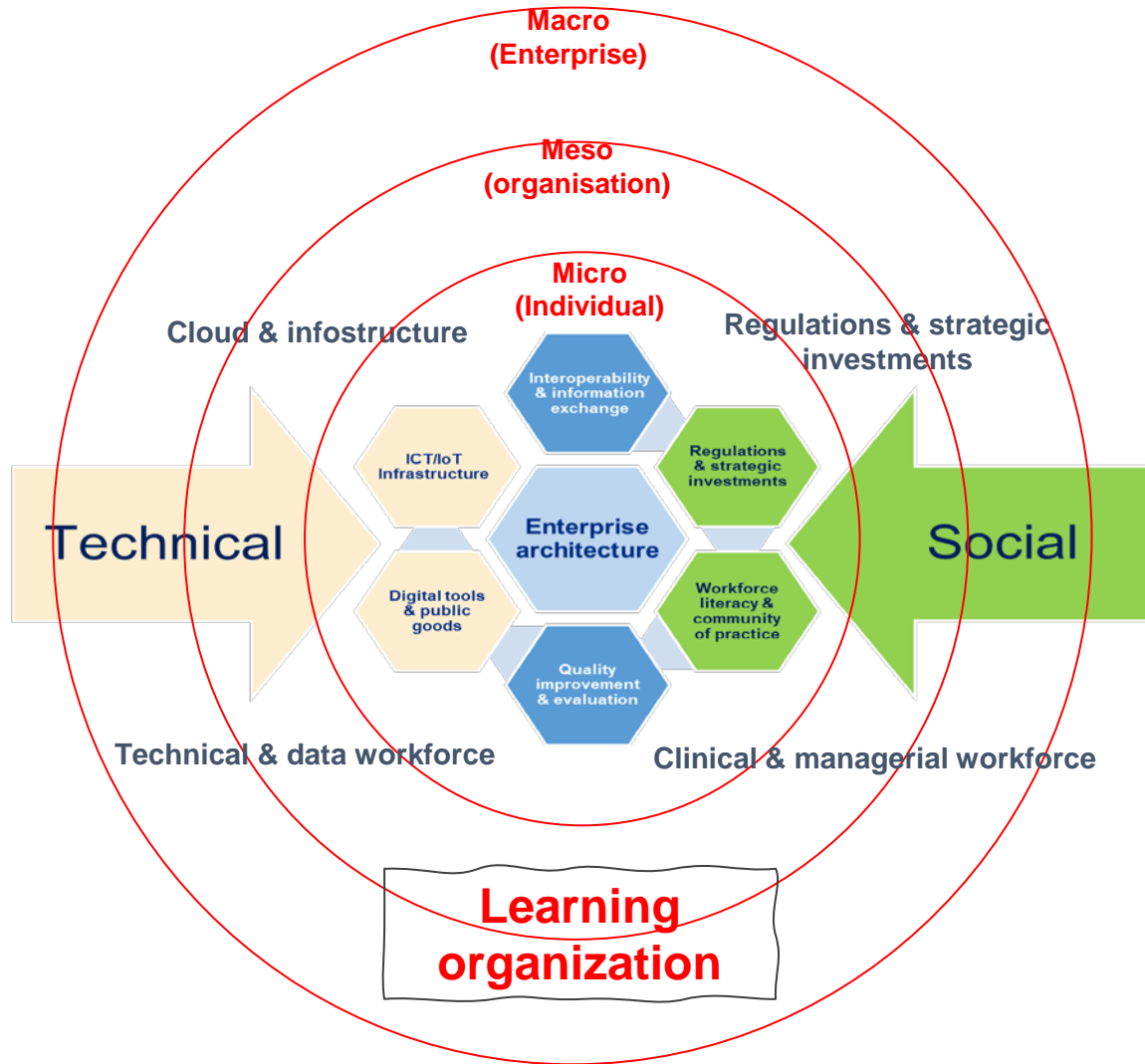
**Multilateral governance model
for the “commons”**

Many
independent
centres or
Epistemic
Units

Communitarian
approach that
take account of
individuals &
others

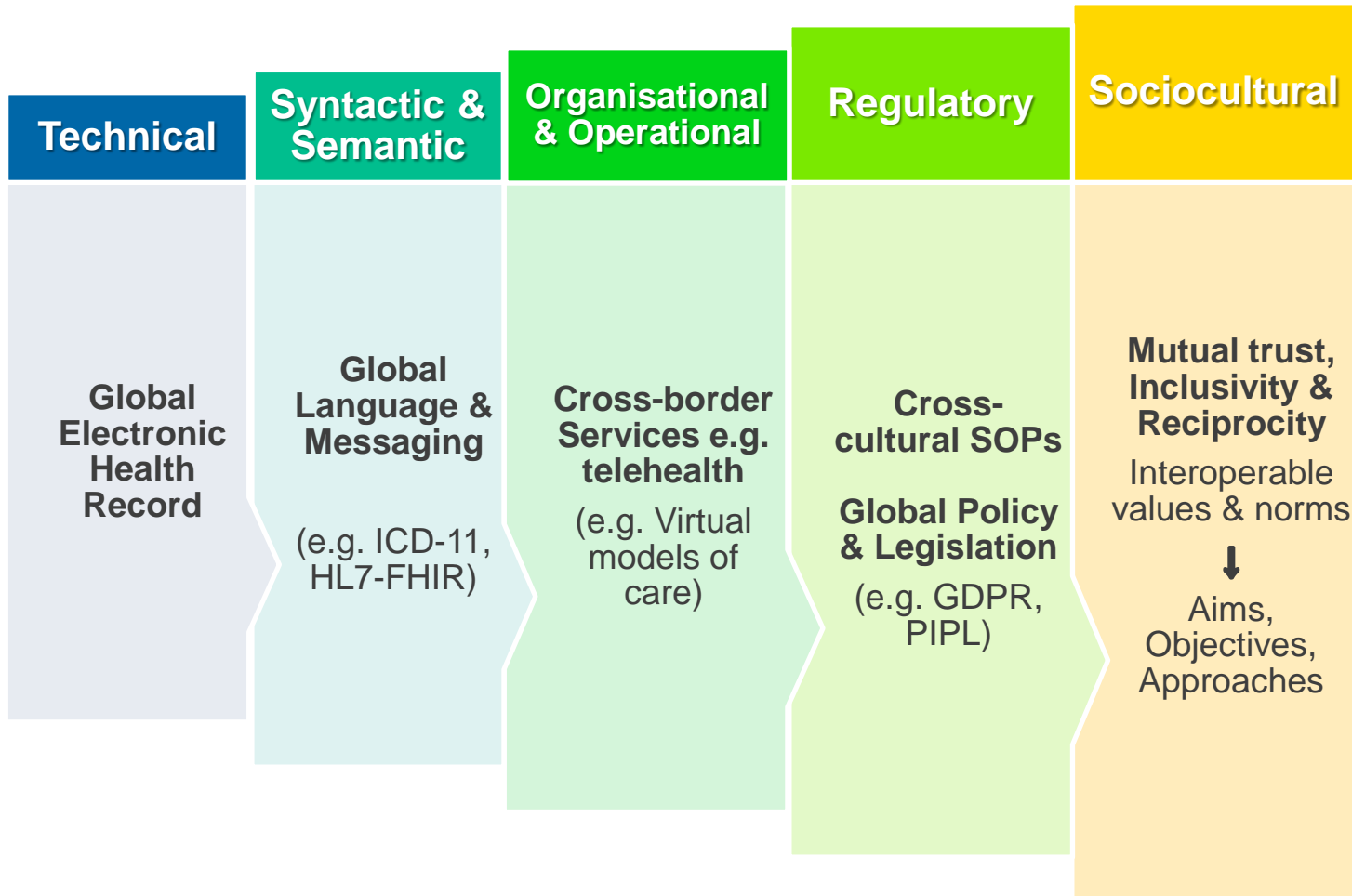
Processes:
Cooperation,
competition,
conflict &
conflict
resolutions

Integrated governance across the enterprise

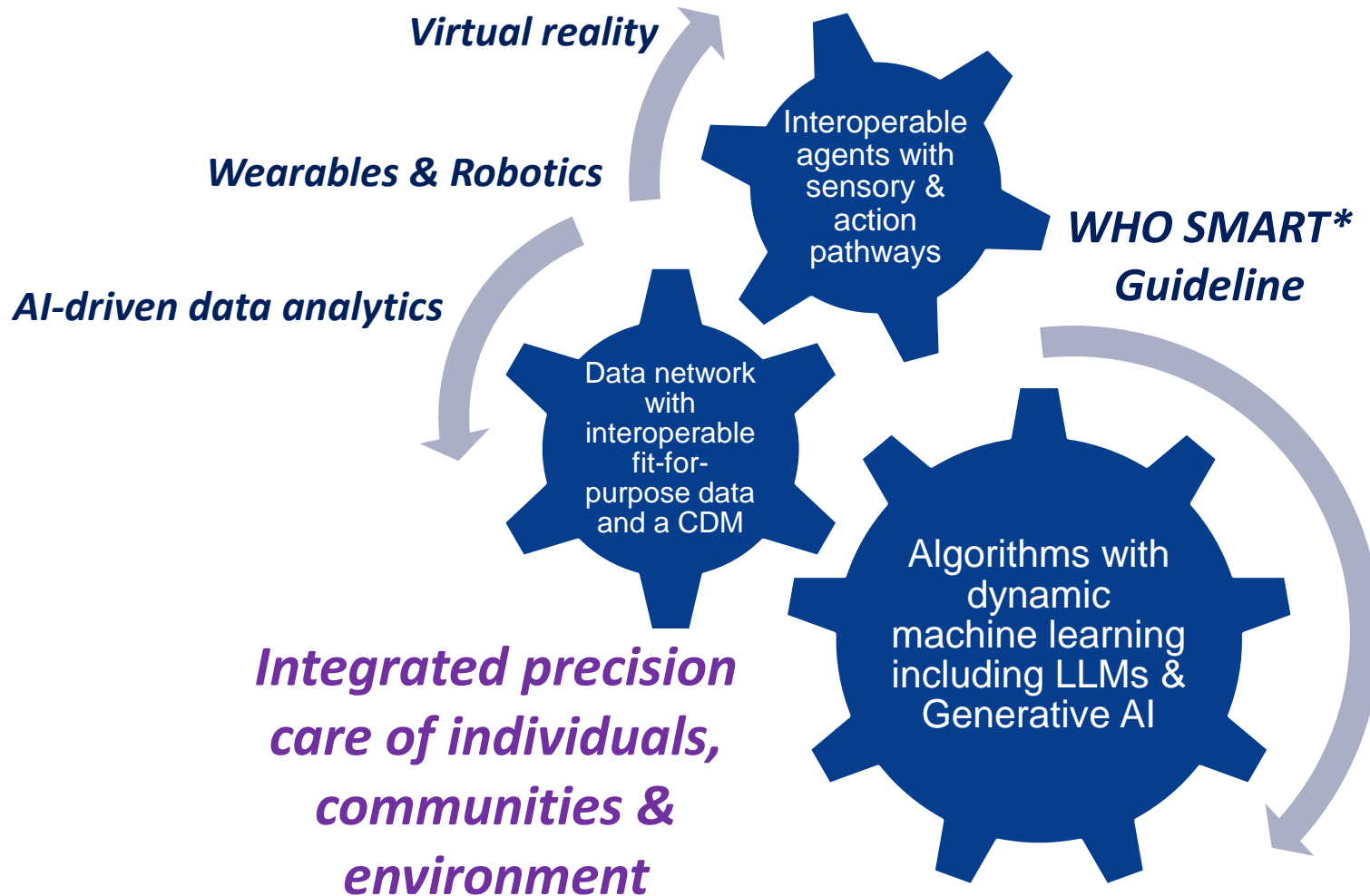


1. A sociotechnical framework & approach
2. Enterprise architecture and interoperability
3. Micro-meso-macro continuum
4. Digital health foundations
5. Quality of systems, tools, data, decisions and care
6. Learning health organisation and system
7. The digital workforce

Integrated Digital Governance requires interoperability



Platform to support integrated digital governance



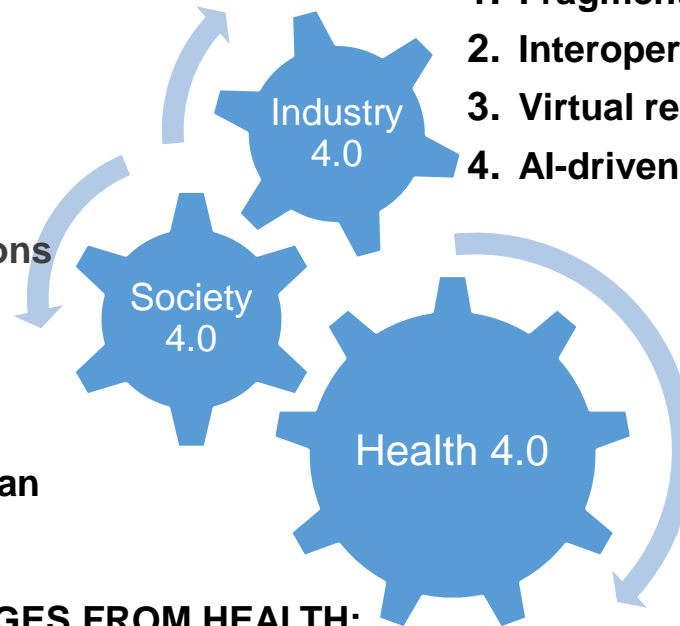
*SMART: **S**tandards-based, **M**achine-readable, **A**daptive, **R**equirements-based, and **T**estable

Challenges to Digital Health Governance

CHALLENGES FROM SOCIETY:

(civil, private, and military sectors)

1. Misinformation & Disinformation
2. Increasing social & digital inequity
3. Decreasing trust of public institutions
 - digital content,
 - security & infostructure
4. Climate change & environment
5. Geopolitical conflicts & humanitarian crises



CHALLENGES FROM HEALTH:

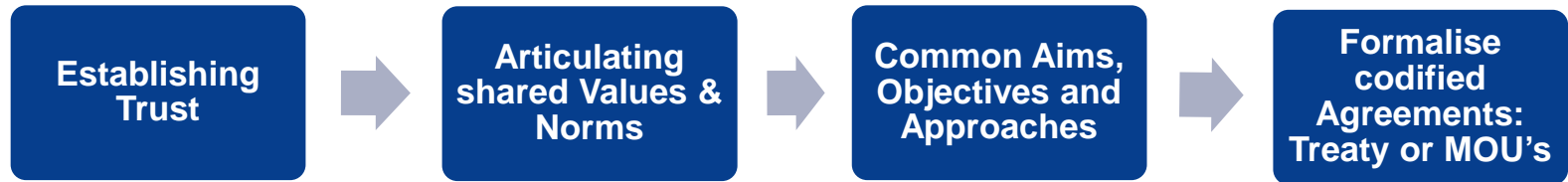
1. Fragmented services & systems
2. Pandemics & COVID-19
3. NCD: Ageing population with multimorbidity & polypharmacy
4. Lifestyle & worried well

CHALLENGES FROM DIGITALISATION:

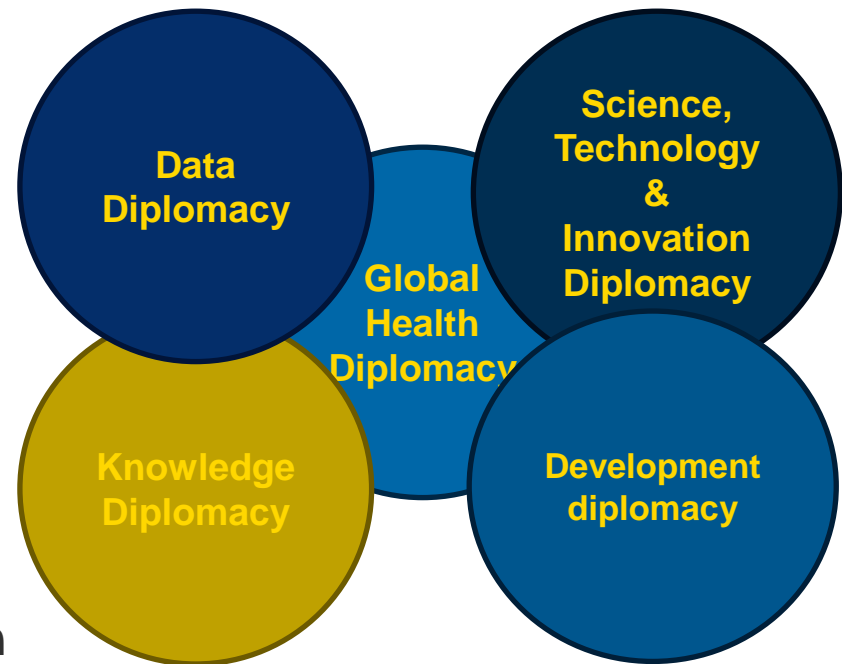
1. Fragmentation & data silos
2. Interoperability of agents
3. Virtual reality & behaviour
4. AI-driven models of care

SOLUTION
An inclusive transcultural learning system supported by epistemic communities

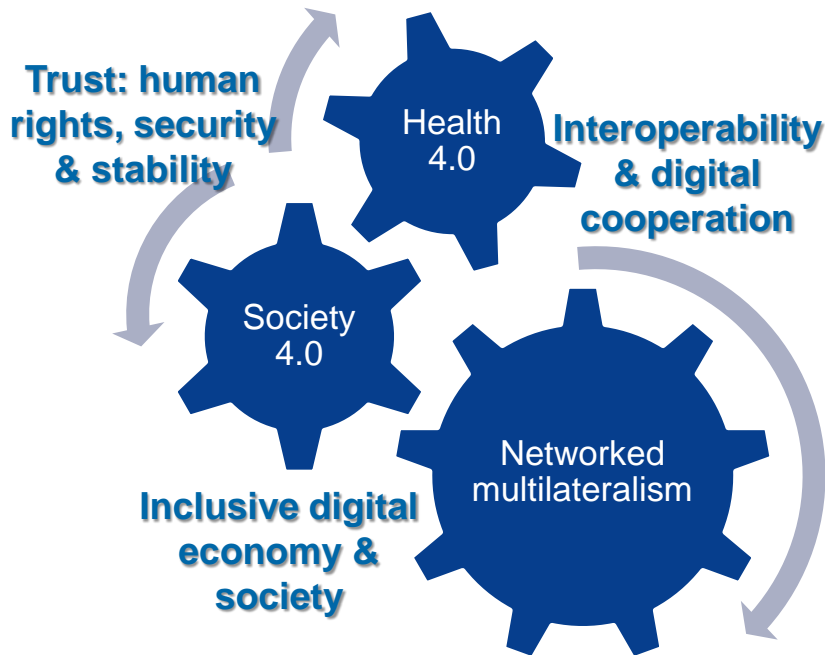
Digital Health Diplomacy



- the multilevel and multi-stakeholder negotiation processes that shape and manage the global policy environment for health...
- “a political change activity that meets the dual goals of improving global health while maintaining and strengthening international relations abroad...”
- the concentrated international efforts towards supranational interoperability in eHealth/Digital Health.



Governance, diplomacy & multilateralism



**Digital & AI
diplomacy at
micro, meso &
macro levels**

CHALLENGES

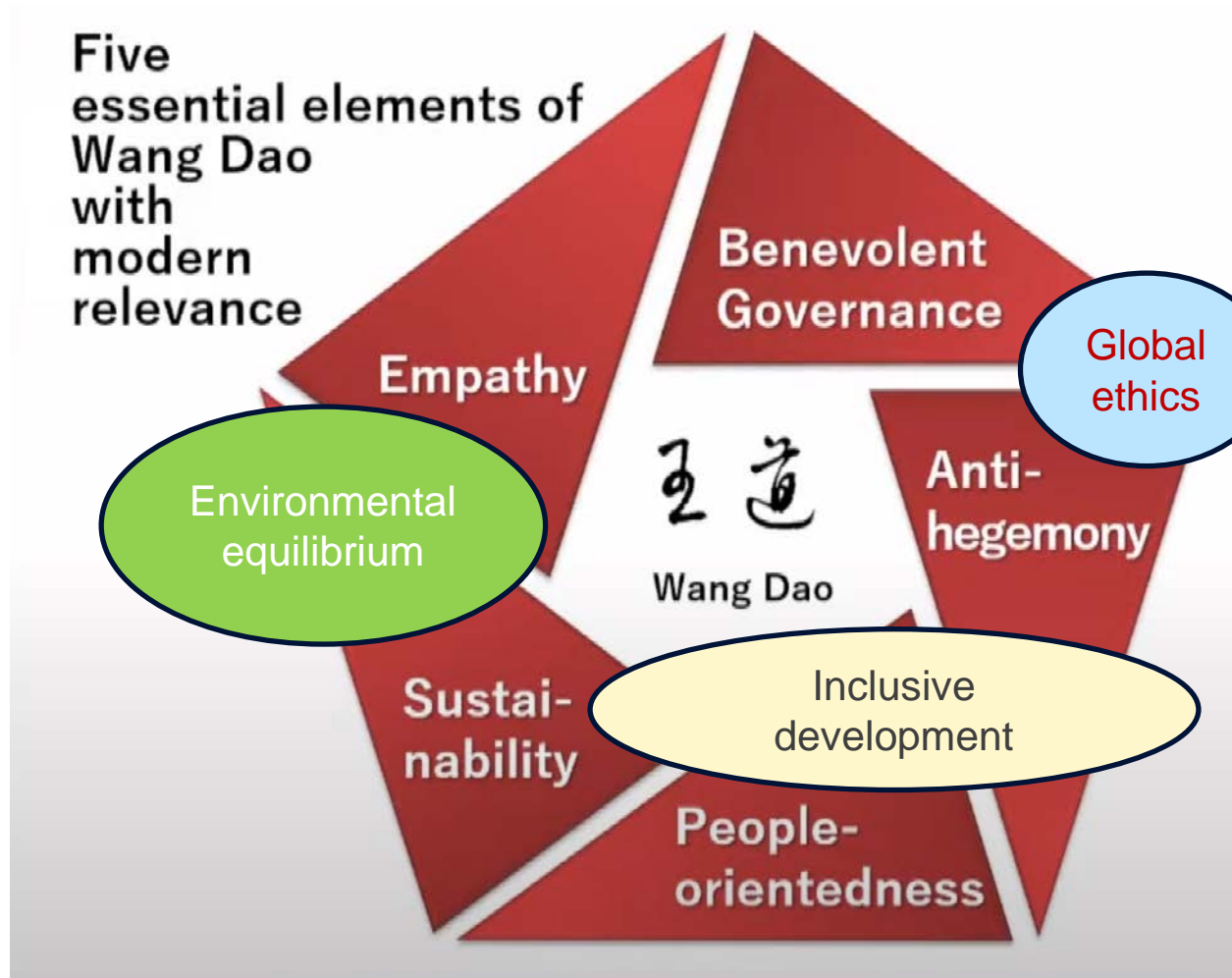
1. *Infodemic: misinformation & disinformation*
2. *Data & practice silos*
3. *The elderly & worried well*
4. *Increasing socioeconomic & digital inequity*
5. *Decreasing trust of public & political institutions*
6. *Climate change and environmental degradation*
7. *Neocolonial geopolitics and humanitarian crises e.g. wars*
8. *Pandemics e.g. COVID-19*

The digital governance & diplomacy workforce



- 1. Enterprise digital capability maturity:**
 - Micro: individual digital competencies
 - Meso: organisation & enterprise digital maturity
 - Macro: health system digital maturity
- 2. Competency & maturity indicators for the essential digital foundations**
 - Enterprise architecture and interoperability
 - Data quality and interoperability
 - Evidence-based systems, tools, decisions & care
 - Learning health organization & system
- 3. Digital global health governance & diplomacy requires a shared vocabulary & reference terminology**

Wang Dao: a multicultural cultural approach?





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Any questions?

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Case study: COVID-19 legal frameworks

- The coronavirus disease 2019 (COVID-19) pandemic required whole-of-government and whole-of-society action and collaboration.
- Legal frameworks are critical to enabling collaboration and coordination, as well as protecting against misuses of power and potential unintended consequences of COVID-19 responses.
- Strengthening legal frameworks and related regulatory capacity in responding to COVID-19 can support leadership and governance, and the achievement of universal health coverage, beyond the COVID-19 crisis.
- Legal frameworks can ensure government accountability and transparency, support evidence-based decision-making, provide for the engagement of the community and regulate engagement with private sector actors.