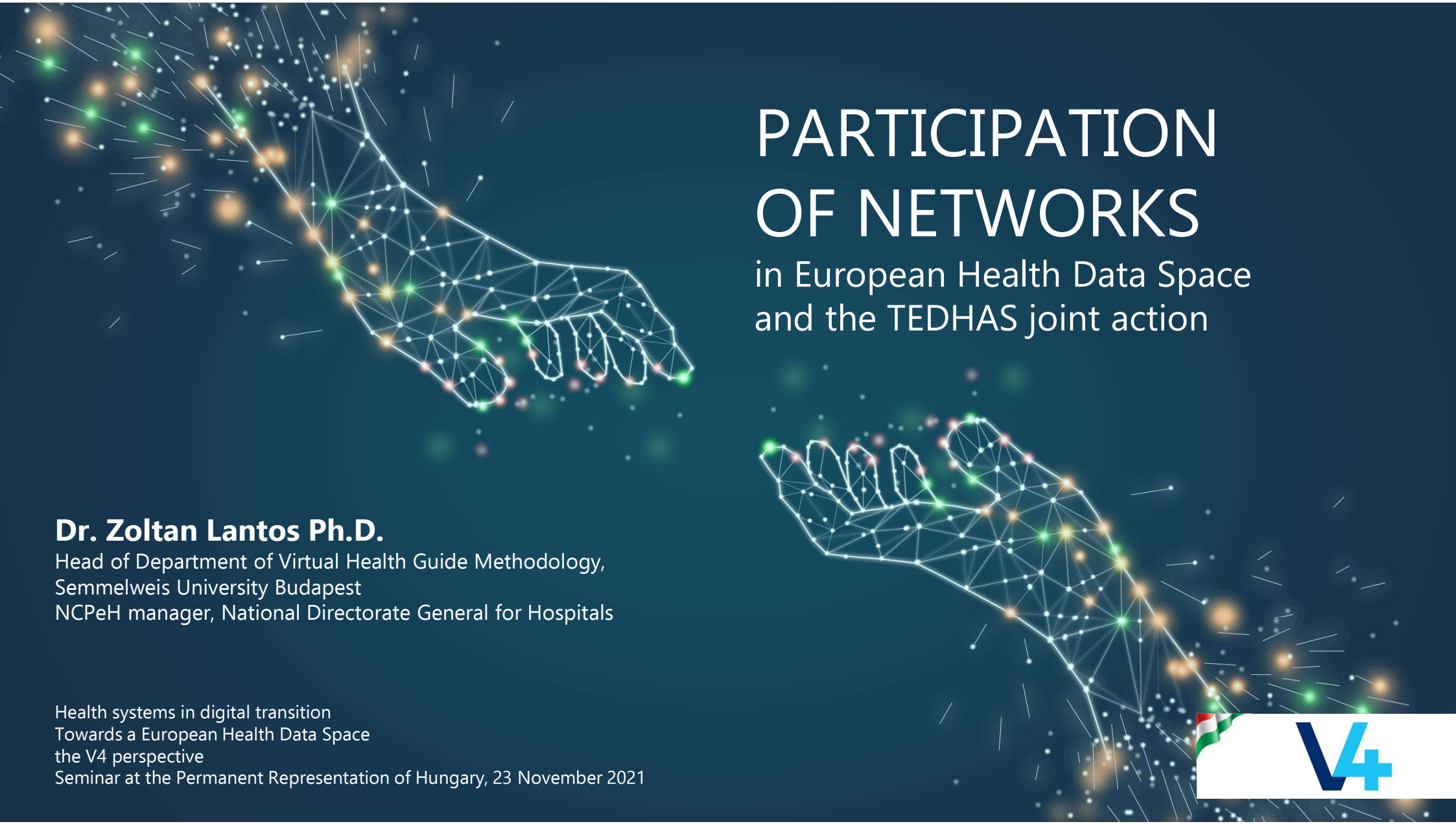


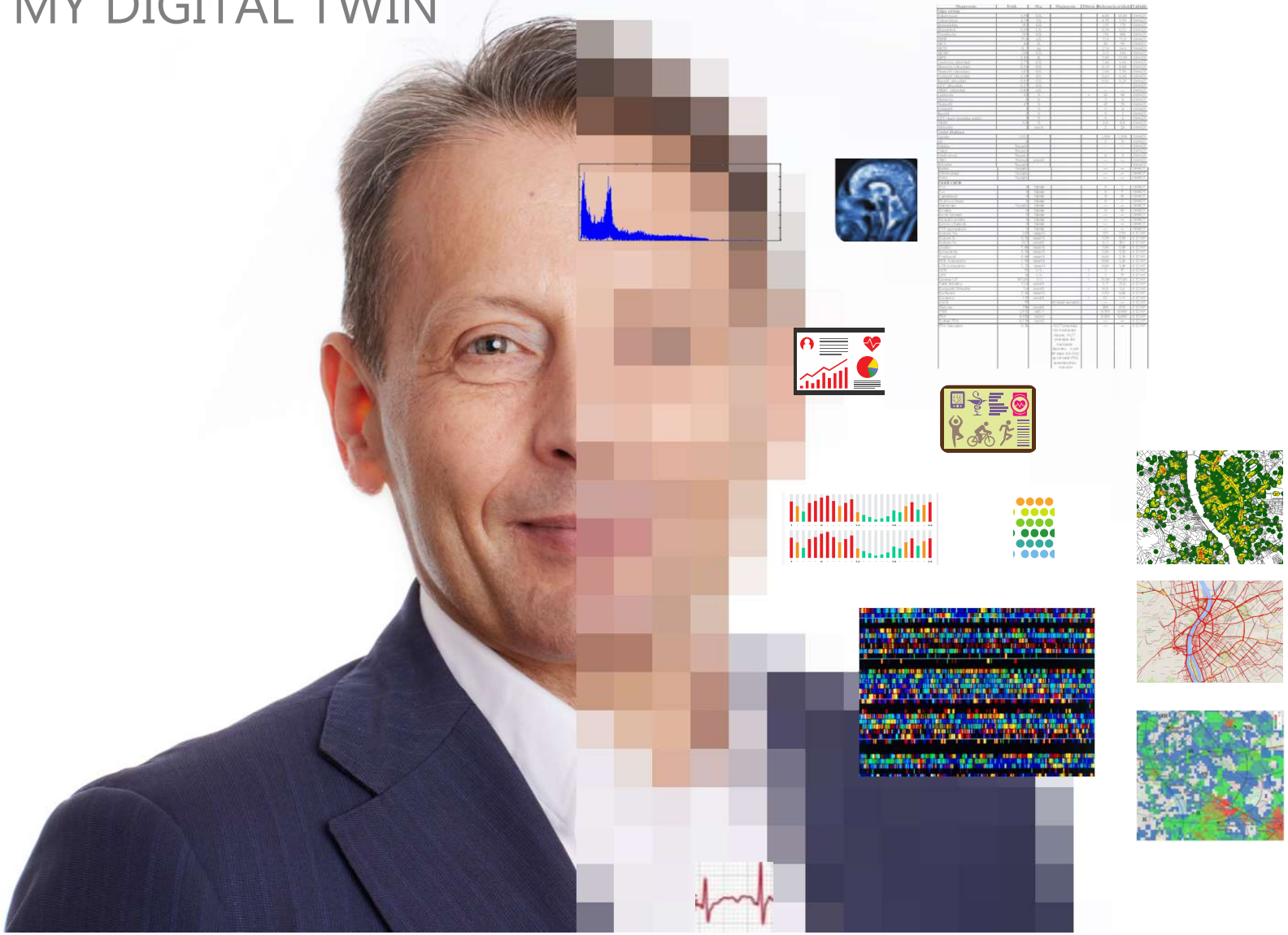
PARTICIPATION OF NETWORKS

in European Health Data Space and the TEDHAS joint action

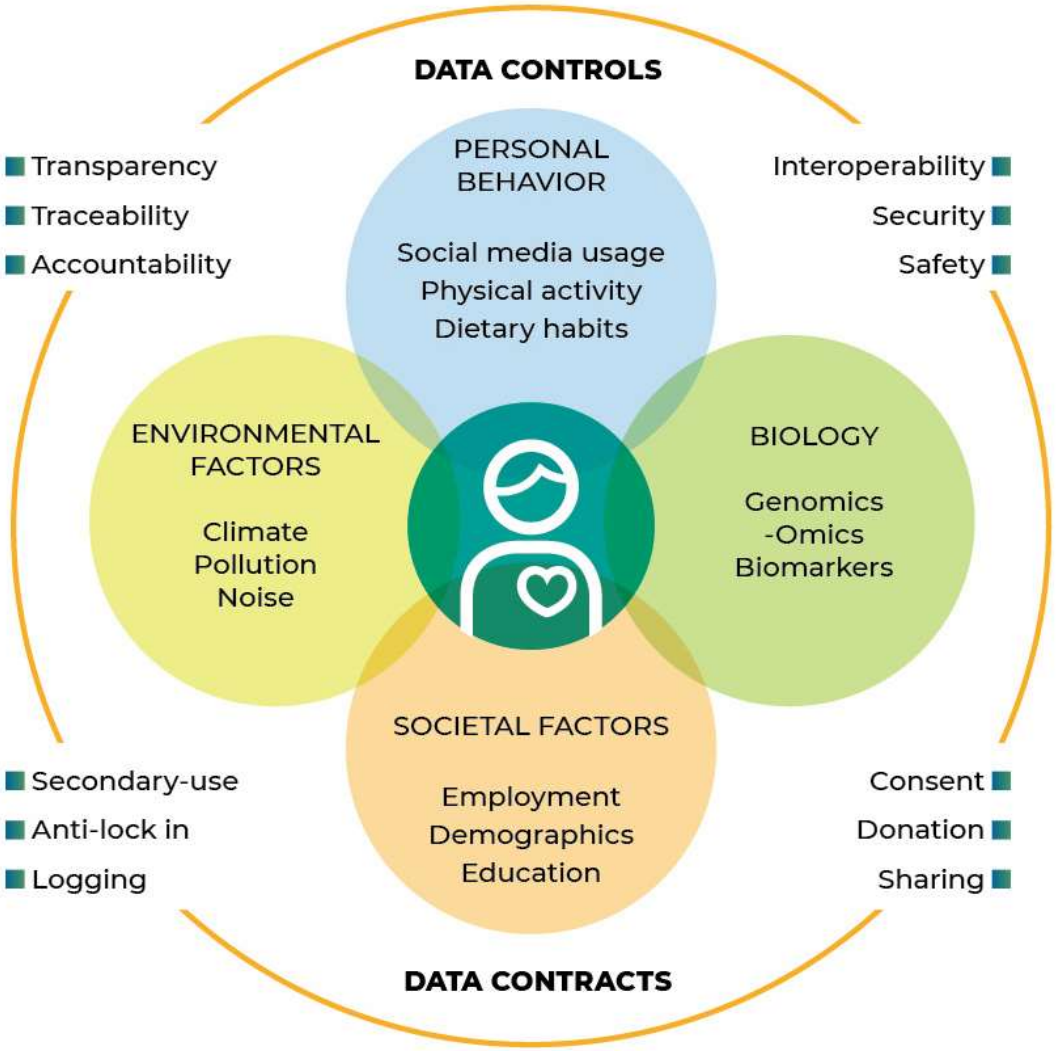
Dr. Zoltan Lantos Ph.D.
Head of Department of Virtual Health Guide Methodology,
Semmelweis University Budapest
NCPeH manager, National Directorate General for Hospitals

Health systems in digital transition
Towards a European Health Data Space
the V4 perspective
Seminar at the Permanent Representation of Hungary, 23 November 2021

MEET MY DIGITAL TWIN

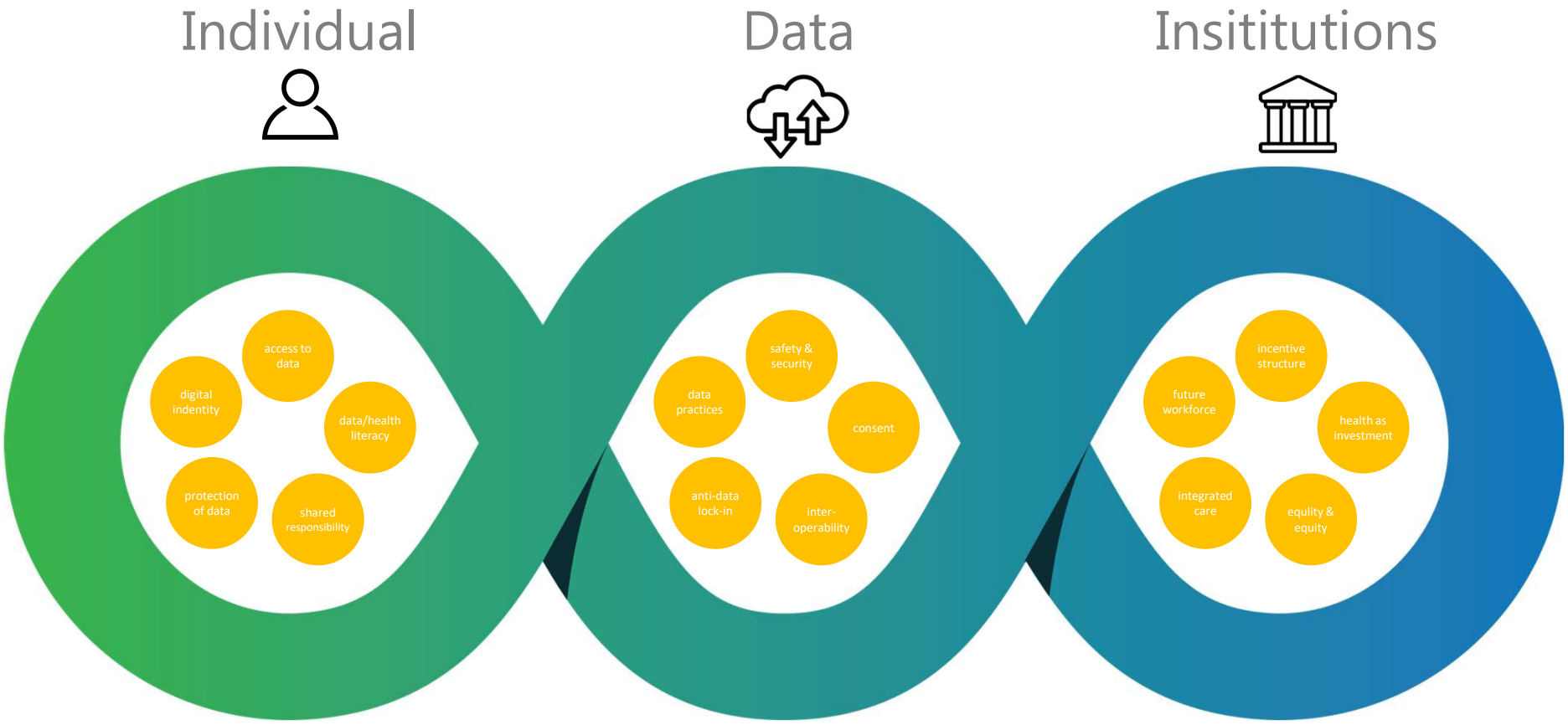


FOOTPRINT OF 750 MILLION DIGITAL TWINS



Source: Copenhagen Institute of Future Studies

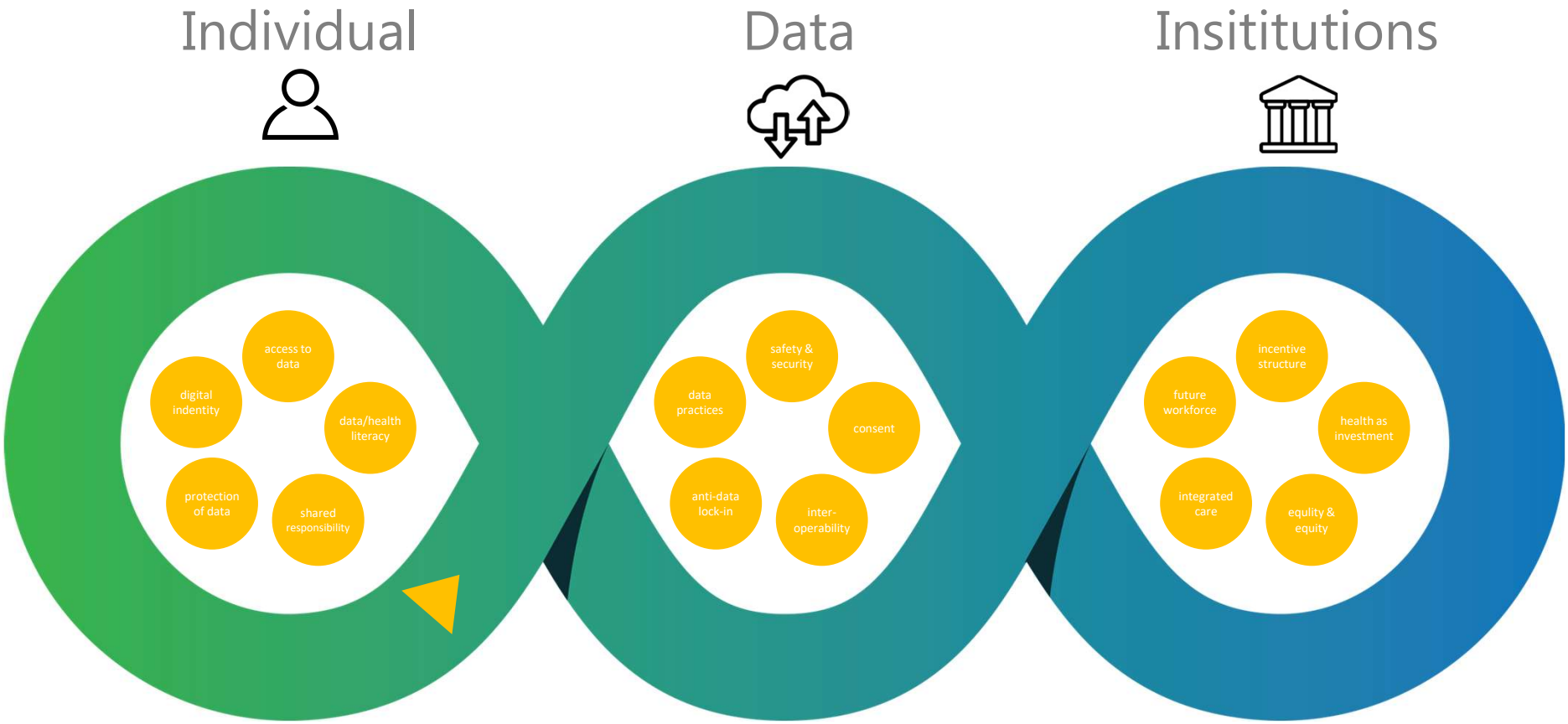
DATA ASSET



Renewable Resource

Source: Copenhagen Institute of Future Studies

DATA FLOW



Renewable Resource

Source: Copenhagen Institute of Future Studies

EUROPEAN HEALTH DATA SPACE – PRIMARY USE
EHDS1

Data Governance Act
- data sharing services
- data altruism
- reuse of certain categories of protected data held by public sector bodies
- European Data Innovation Board

AI Act
- European AI Board

Open Data Directive
Digital Market Act
Data Act

eHN – NCPeH network
eHDSI – MyHealth@EU

ePrescription/eDispensation
Patient Summary
Laboratory Results
Medical Imaging
Discharge Letters
Rare Diseases
eConsent

SMART4Health X-eHealth
InteropEHRate UNICOM

DIPoH JAseH
eHACTION JADECARE
PHIRI

HL7 FHIR standard
European Electronic Health Record Exchange Format
Ecosystem
SNOMED CT, ICNP, ICD10,, LOINC, CPT4, RXNorm
ATC, IDMP, UNI
DCAT, Ontologies

EUROPEAN HEALTH DATA SPACE – SECONDARY USE EHDS2

Sharing data for health
Operational framework and governance models
FAIR – Findable, Accessible, Interoperable and Reusable
Citizen empowerment
Common good

Towards European Health DAta Space

Outreach, Engagement, Sustainability
Dialogue with national health authorities, international stakeholders

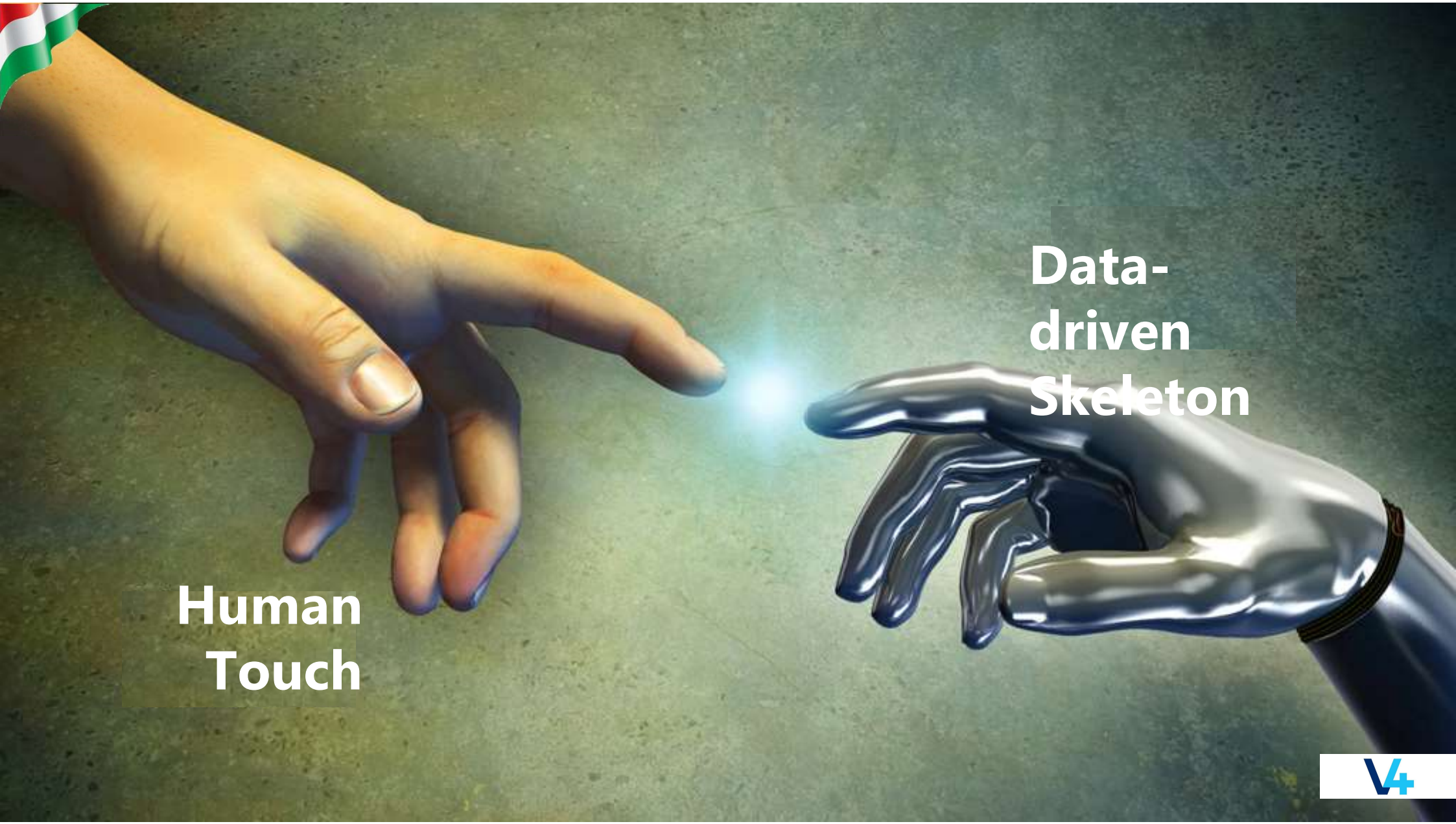
Excellence in data quality
Auditing data holders
Transparent data processing
Meta data catalogues
Connecting the dots
Data Nodes
Federated databases
Synthetitic datasets
Computation Hubs
Trusted Research Enviroment
Algorithm-to-Data
Data intermediation organizations

Human vision

Human vision
aspects of
data perception,
data sharing,
data portability,
data altruism,
ethics

VISION – VIRTUAL HEALTH NAVIGATOR

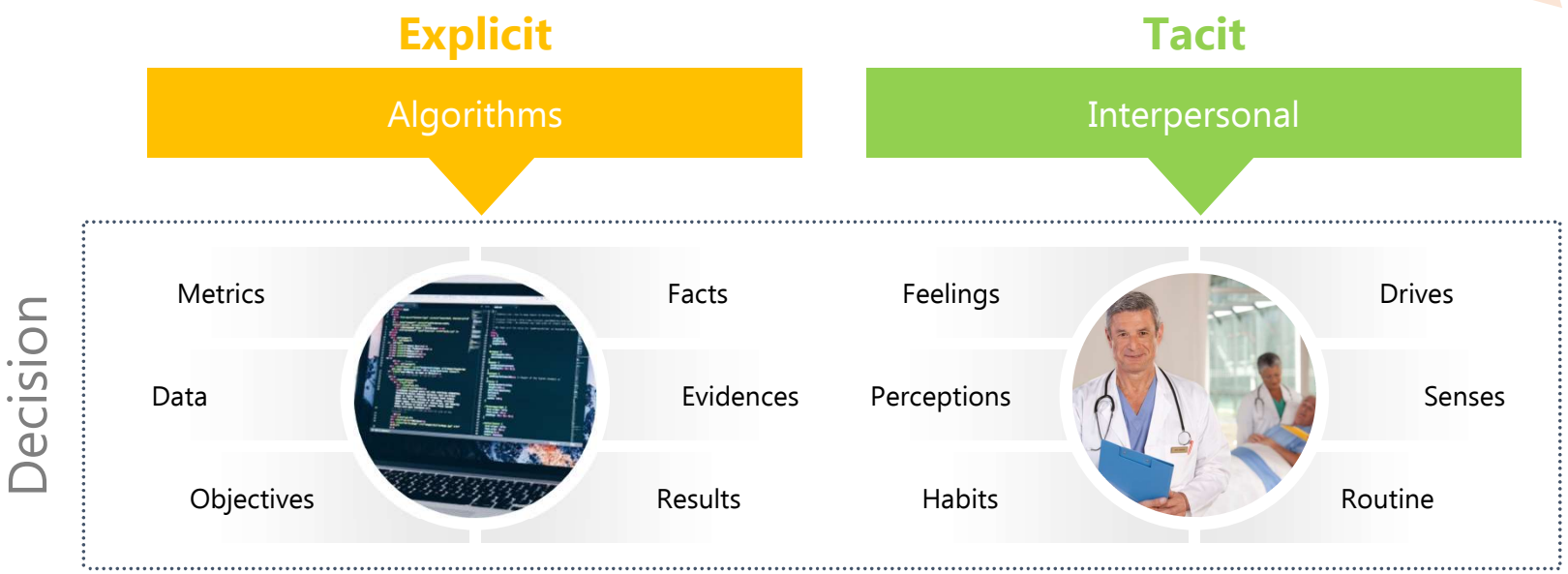
Source: Zoltan Lantos 2014


Data-
driven
Skeleton
Human
Touch

HUMAN – MACHINE COLLABORATION

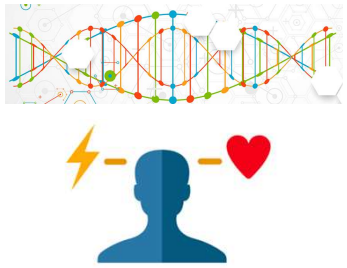
"We can know more than we can tell"

Mihály Polányi



Source: Zoltan Lantos et. al., 2006

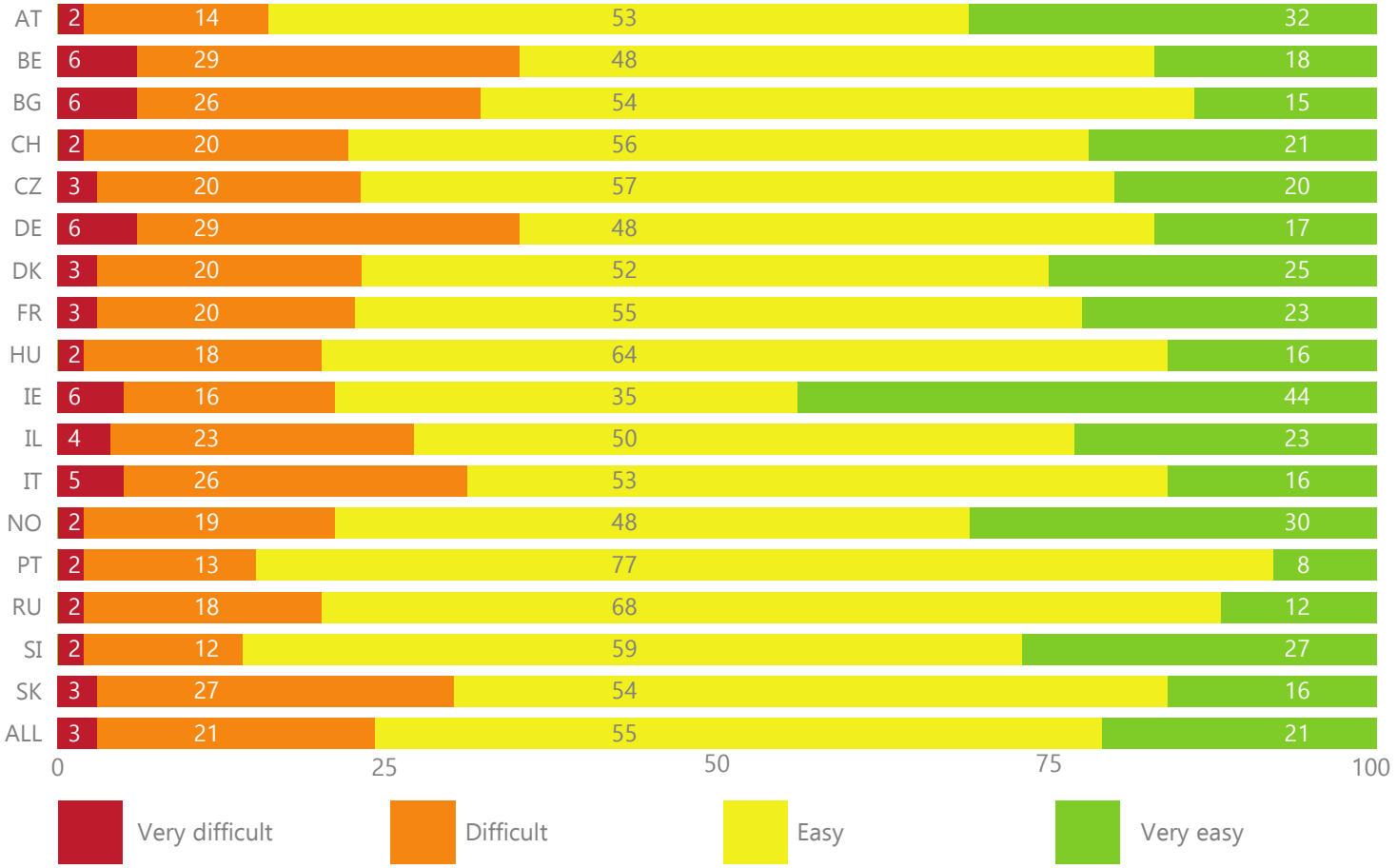
HOMEOSTASIS – SYSTEM APPROACH OF HUMAN HEALTH

Self-reference		Totality Place in the world	Wholeness Spirituality
Connectedness		Social network	and Society ortunities and Access
Self-regulation		Genes/omics Values/traits/pattern	Organism Behaviour

METRICS???

Source: Zoltan Lantos 2020, Based on the Assemblage Theory of Deleuze and Guattari and Schwarz Viable System Theory

HEALTH INFORMATION – ACTIONABLE?



Source: Health Literacy Survey 2019

EUROPEAN PLATFORM MODEL

Public Good

Utility

DATA
ASSET
TRIANGLE

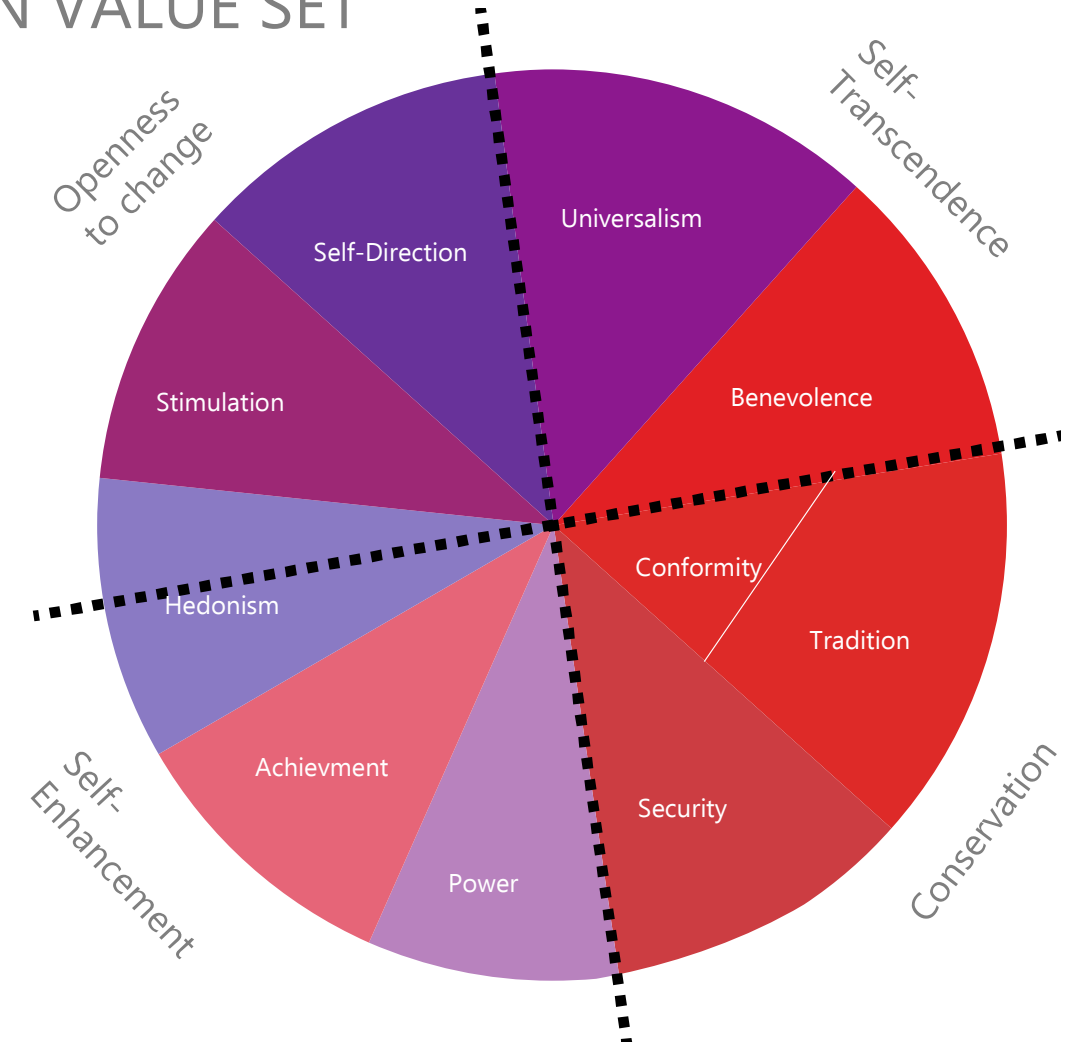
Privacy

FAIR

Findable
Accessible
Interoperable
Reusable

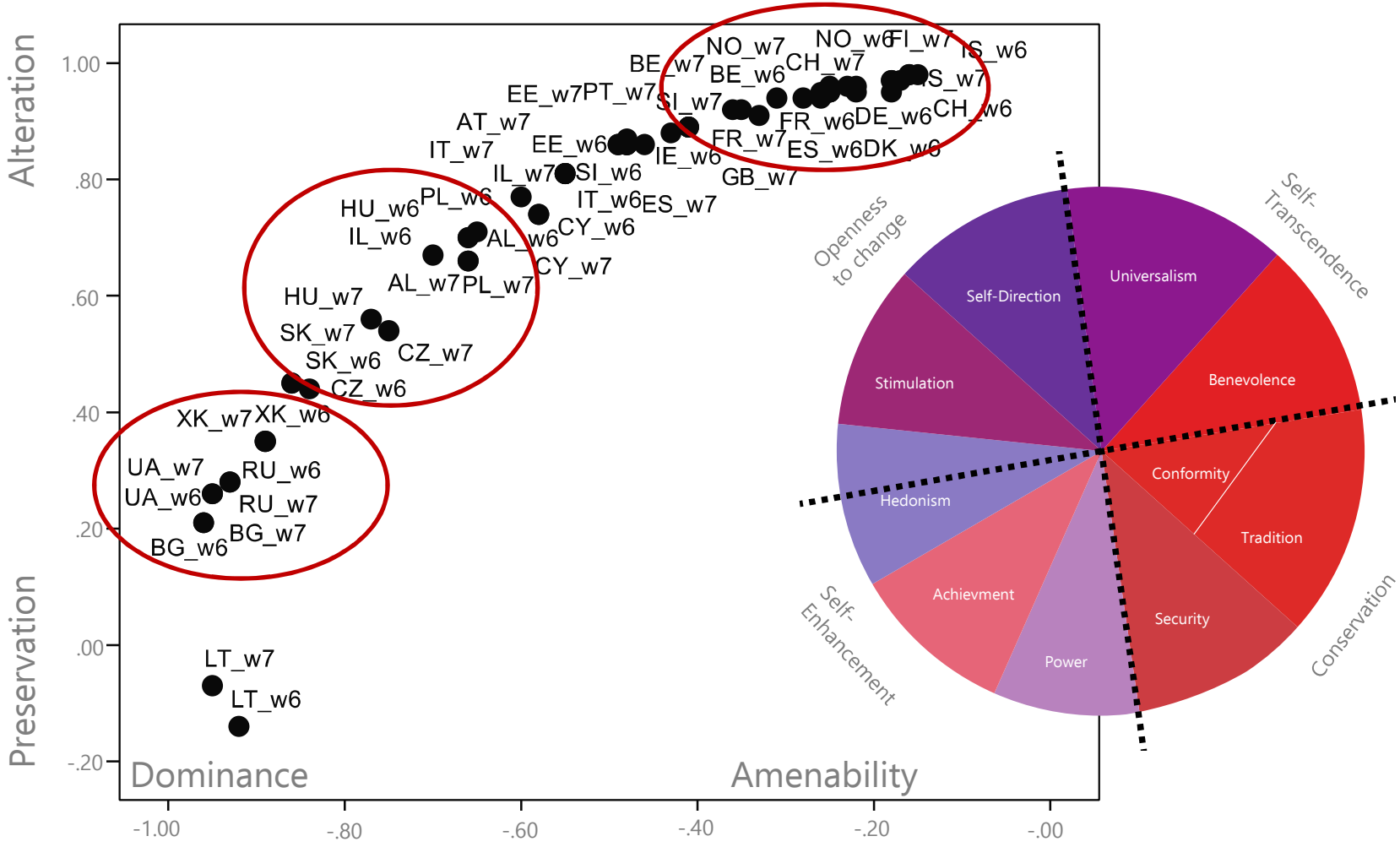
Source: Henrique Martins | Zoltan Lantos

THE EUROPEAN VALUE SET



Source: Witte EH, Stanciu A, Boehnke K: A New Empirical Approach to Intercultural Comparisons of Value Preferences Based on Schwartz's Theory. Front. Psychol. 11:1723. 2020

REGIONAL DIFFERENCES



Source: Witte EH, Stanciu A, Boehnke K: A New Empirical Approach to Intercultural Comparisons of Value Preferences Based on Schwartz's Theory. Front. Psychol. 11:1723. 2020

HUMANIZATION

Károly Polányi (Carl Polanyi) – The Great Transformation
Decommodization of “Human Resource”
Deterritorialization of Money/Capital driven society

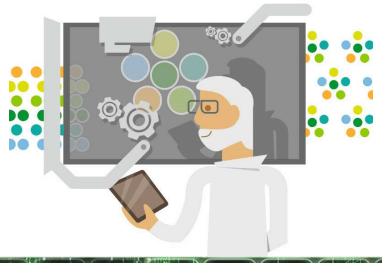
Mihály Polányi (Michael Polanyi) – The Tacit Dimension
Tacit Knowledge (Human) vs. Explicit Knowledge (Machine)
Experience Based Practices

Sustainability by Design – Bauhaus goes Digital
Value creation in everyday life
László Moholy-Nagy, Marcell Breuer

V4 DIGITAL HEALTH HUB

User Experience
Positive Psychology
Csíkszentmihályi

Computation
Data Science
Barabási, Lovász, Nesetril



Data
Research Teams

SHAPE THE FUTURE