

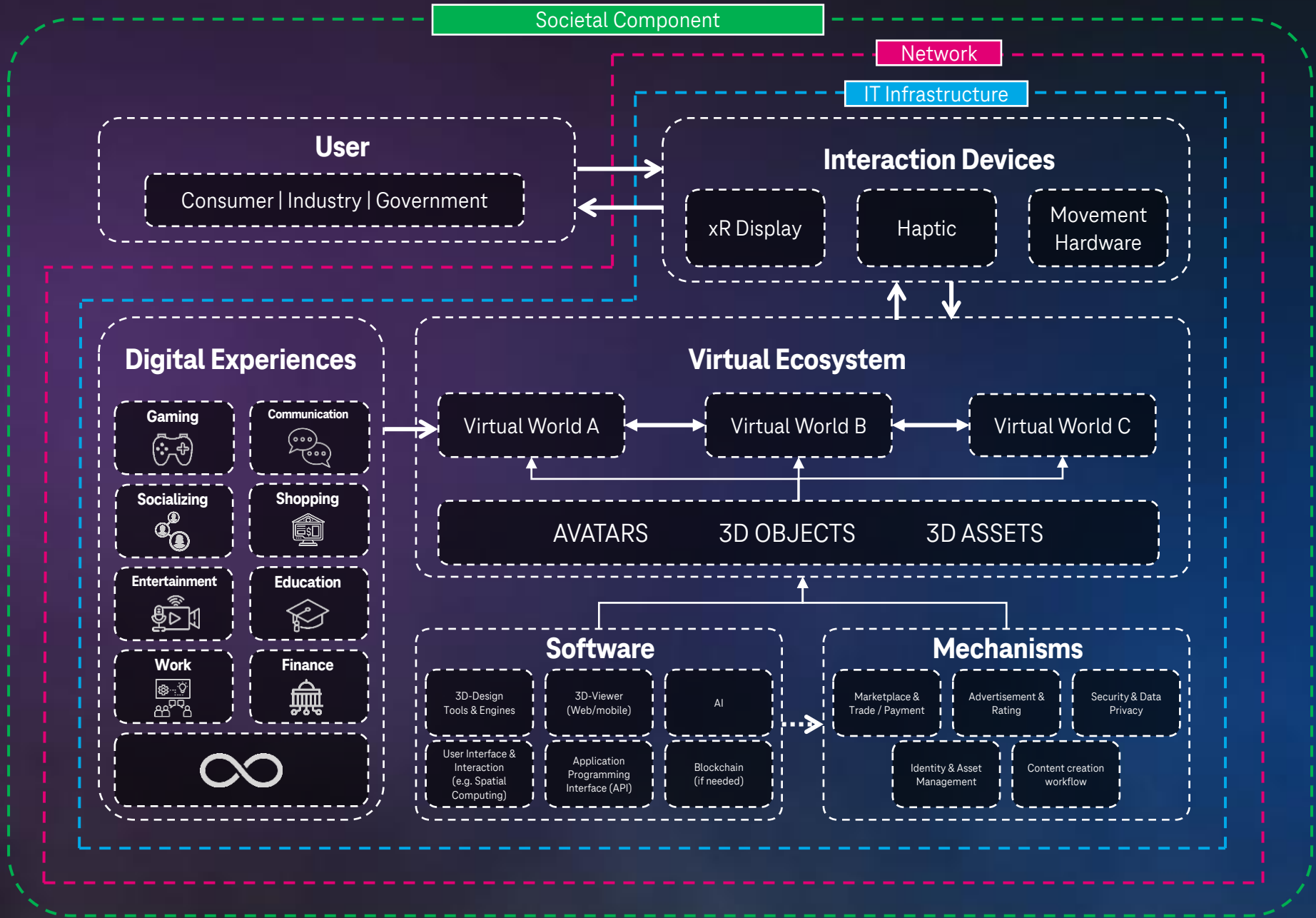


ETHICS IN VIRTUAL WORLDS AN INDUSTRY PERSPECTIVE

Virtual worlds promise immersive experiences and limitless forms of digital interactions. **But without ethical guidelines, the metaverse remains just a nice idea!**

Elmar Arunov

Research Lead @ Deutsche Telekom
Founder Symbol Hub

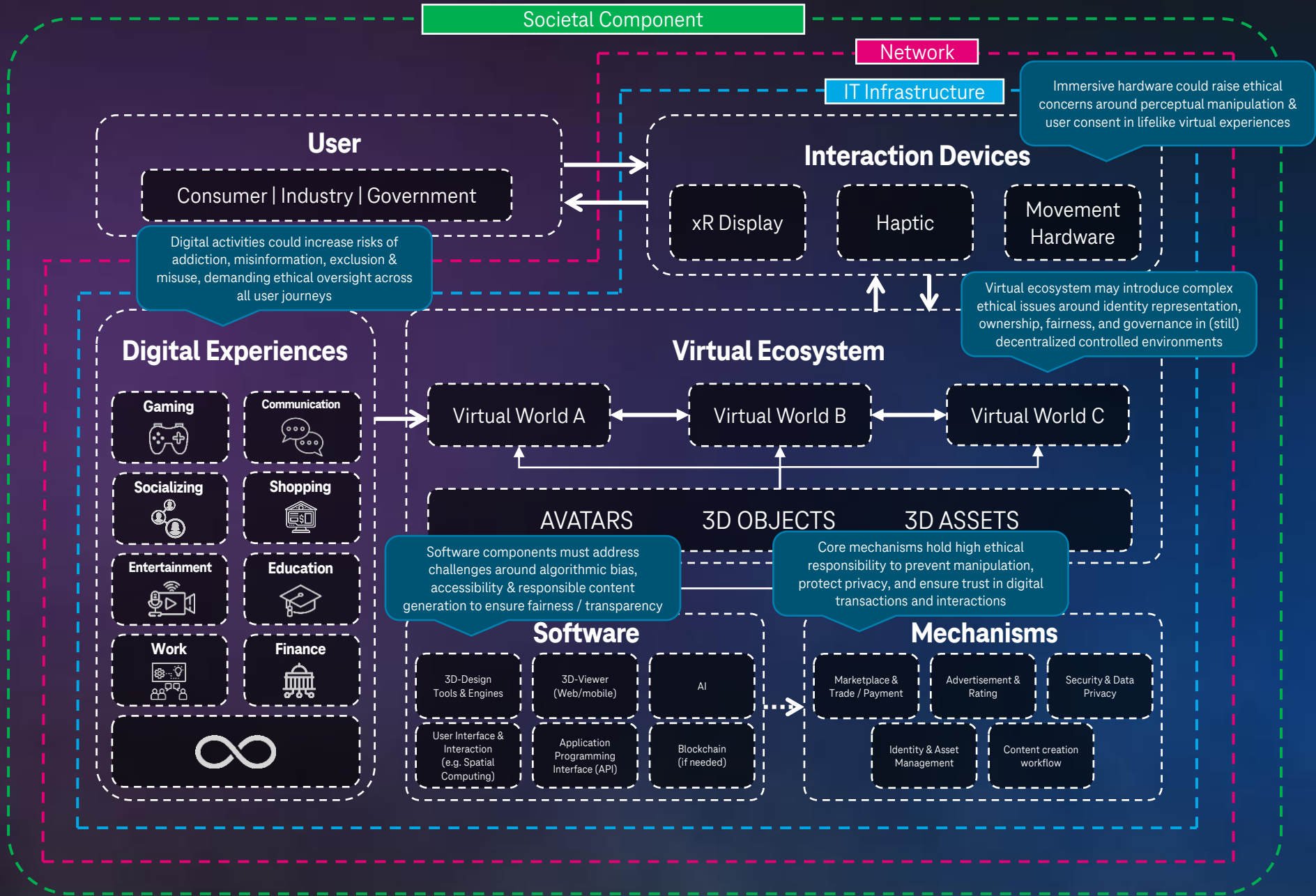


VIRTUAL WORLD („Metaverse“) FRAMEWORK

- Computing Power
- Storage Capacity
- Data Center Management
- Decentral Infrastructure

- Connectivity
- Network Virtualization
- Network Transmission Protocols
- Latency Management

- Economy
- Legal
- Ethics & Guidelines



VIRTUAL WORLD („Metaverse“) FRAMEWORK

ETHICAL CATEGORIES FOR THE METAVERSE

HUMAN-CENTRIC VIRTUAL WORLDS

Human-centric guidelines may enhance acceptance among users

PROTECTION

Problems affecting individual wellbeing in and between the virtual and the physical world

SECURITY

Security aspects within the virtual worlds that impact the physical world

RESPONSIBILITY

Aspects of environmental, social & economic responsibility within and with virtual worlds

Raising awareness through educational measures

GUIDELINE HANDBOOK AS AN IMPULSE FOR THE ECOSYSTEM (PROTECTION)

INDIVIDUAL WELLBEING



SCOPE

Protection of physical and mental health in immersive environments that may lead to disorientation or addiction

PROPOSAL

Implement self-regulation tools, training and user support to encourage healthy and balanced usage

SOCIAL INTERACTIONS



SCOPE

Respectful behavior, bullying and discrimination in virtual communities

PROPOSAL

Establish and enforce a clear code of conduct for all users and require agreement before access

TRANSPARENCY OF INTERACTIONS



SCOPE

Clarity when users are interacting with AI or real humans to reduce confusion and build trust

PROPOSAL

Clearly identify automated agents and provide transparency on roles & technologies in virtual spaces

GUIDELINE HANDBOOK AS AN IMPULSE FOR THE ECOSYSTEM (SECURITY)

DATA SOVEREIGNTY



SCOPE

Protection of sensitive and biometric user data while enabling personalized virtual experiences

PROPOSAL

Ensure transparent data use, empower users with control tools & enforce strong privacy / security laws

PRIVACY



SCOPE

Identity protection as avatars represent users more directly than traditional profiles

PROPOSAL

Offer customizable privacy settings and protective measures to respect personal boundaries and choices

FREE & BOUNDARYLESS



SCOPE

Secure and interoperable metaverse where users and assets can move safely across platforms

PROPOSAL

Collaborate to set common standards and build coalitions for openness and cross-platform mobility

GUIDELINE HANDBOOK AS AN IMPULSE FOR THE ECOSYSTEM (RESPONSIBILITY)

ACCESS FOR ALL



SCOPE

Inclusive access to the metaverse regardless of socio-economic, cultural or educational background

PROPOSAL

Provide robust infrastructure, education, and cultural initiatives to reduce barriers and foster inclusion

DIVERSITY



SCOPE

All identities are visible, respected and represented in an inclusive and culturally rich virtual space

PROPOSAL

Integrate assistive tech, prevent discrimination and promote diverse avatars and digital cultural assets

ENVIRONMENT



SCOPE

Balance metaverse's technological demands with its potential to reduce physical consumption and travel

PROPOSAL

Encourage sustainable consumption & virtual collaboration to reduce emissions



Disrupt, Make and Connect

Elmar Arunov

