Future of Workforce (FoW)

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IEEE

Final Report, September 2022

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Executive Summary
(4 slides)

world is changing.....

technology is evolving.....

....stakeholders can help

FACTORS

TECHNOLOGIES

RECOMMENDATIONS
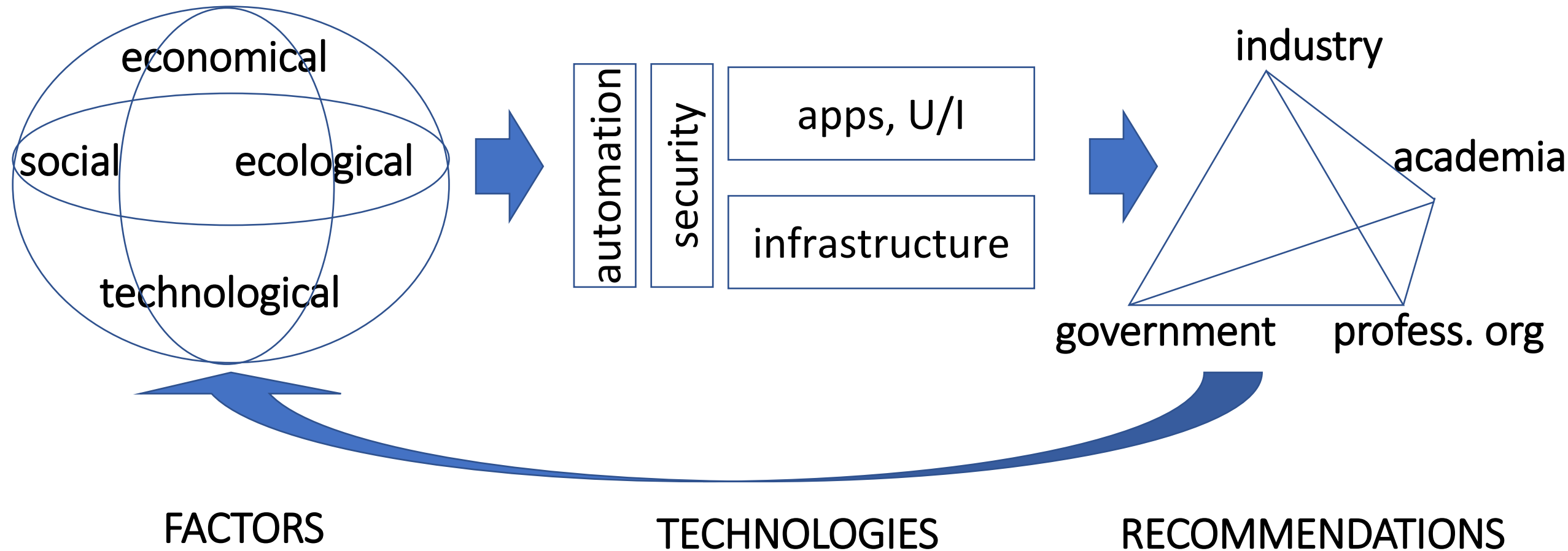
How is the World Changing?

Global just-in-time supply chains → Regional, home-bound deglobalization, plan B

Global industry production → Customized regional products owning tech

Regional workforce market → Crowdsourcing cutting global boundaries

Supplemental gig economy → Gig economy responsible for individuals

Benefits/ Corporate → Purpose/ Ecosystem

Office WF → Hybrid WF

Cities, hub & spoke model → Support geo depressed regions

UN-driven sustainability → Social startups & global industry

Protect the Planet → Return to the Planet

Signing the treaties → act collaboratively

Reactive (to COVID, …) → Preventive

economical

ecological

social

technological

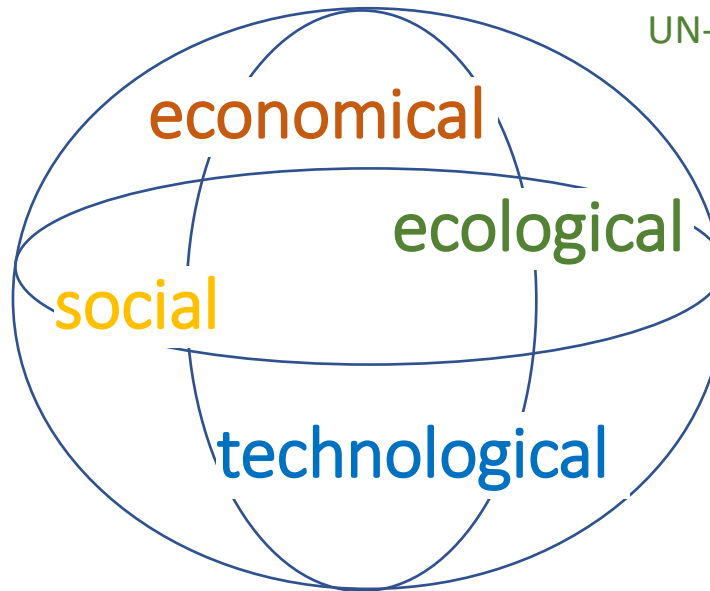White/blue collar → New collars

Diversity → Diversity, Equity, Inclusion

People ready for tech → Tech-ready people

High-tech → high-touch, high-care

Training → reskilling, upskilling, continued education

Work as a means of living → Work as a means of fulfilment

Automated → Autonomous

Technical standards → Social-technical standards

Stove pipes in technology → Interdisciplinary co-design

Social networks (humans) → Sensor networks (machines)

Technical advancement → human-centricity and ethical enablement

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How is Technology Evolving?

Robots in fenced environment → real-time responsive collaboration

AI-assisted → Explainable, mission-critical AIOps

Reusable code, patterns → Low-code no-code

Virtual and assisted reality → Metaverse

Telepresence → Digital twins

Economical divide education → digital divide education

Corporate IT, devices → CostShare, Byo*, broadband

Voice recognition → Hands-free Voice Control

Centralized data analytics → AI@edge

automation | security | apps, U/I

infrastructure
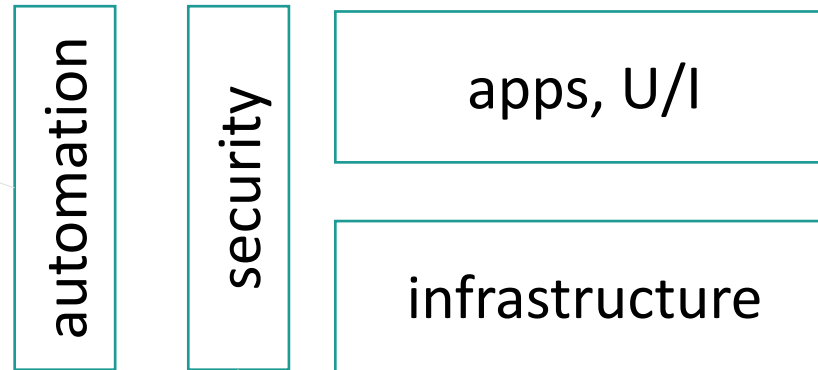
AI-assisted cyber analysts → AI/ML replacing analysts

Physical protection → Supply chain guarantees

Privacy-preserving → Privacy-driven

Bitcoins and digital currency → NFTs

5G, WiFi6 → drone satellites communication for rural

Just-in-time production → Additive manufacturing

Quantum communication → Quantum computing

Assisted driving → autonomous driving

Data analytics → Datacentric AI

Recommendations

It is all about people! Hire those who can adapt! Best people bring best people!

Office/home have advantages/drawbacks for different career stages; go hybrid

Early career employees and new tech – attractor for hiring

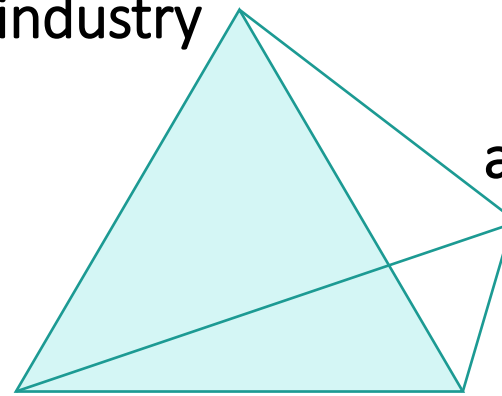Companies have a duty to give back to communities

industry

academia

Enable people to re-invent themselves multiple times throughout career

Retrain for new tech., e.g., AI, reskill, upskill, vocational

Changing demand for skills: interdisciplinary, global:

Learning never ends; train to learn how to learn

government

professional organizations

Balance properly labor markets

Look holistically at technology & society

Take advantage of remote work for geo-depressed areas

Enable reliable, high-speed communications infrastructure

Establish sustainable Workforce in a well-balanced labour system

Enable inclusive and equitable technology access for the underserved populations

Redefine concepts, define hybrid career, assist individuals and corporations

Derive principles, best practices for trust, transparency, accountability, policies

Leverage power of convening, educate legislators, technology predictions & roadmaps

Organize community responses to the issues of safety, security, and privacy when exploiting AI & Robotics; collaborate with legislators, international bodies