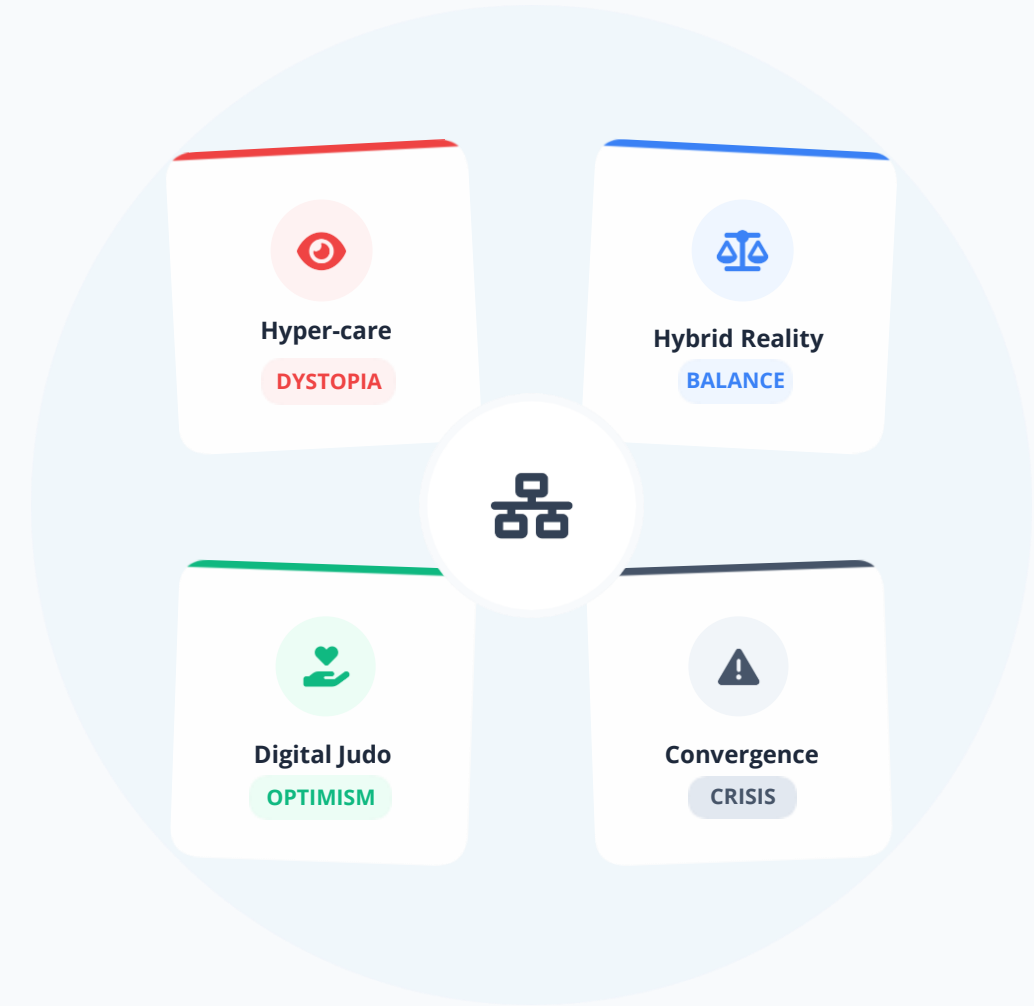


Polish Digital Resilience Agenda 2040 - a model of strategic preparedness for the antinomies of digitalisation.

Impact scenarios

automation and digitalisation on social and health policy



Technological foundation

7 key pillars of transformation (2025-2040)



Energy crisis

Transformation catalyst and power prioritization for IT infrastructure in 2025-2030.



AI and automation

The dominant medium for providing services. Reduction of service costs by 60-70%.



Blockchain

Securing the integrity of medical data and service history (immutable register).



Platformization of services

Integration of distributed public services into coherent digital ecosystems (GovTech).



Predictive diagnostics

Moving from reactive to preventive medicine based on data from wearable devices.



Telemedicine

Remote consultations and mobile medical teams as a standard of basic care.



Citizen's digital wallet

A central hub integrating identity, medical records, social benefits and payments. Key UI in all scenarios.

Transformation mechanisms

Three-phase evolution (2025-2040)



Main transformation risks

5 critical challenges for society and the state



Erosion of interpersonal relationships

Replacing direct contact with a doctor with digital interfaces, leading to the dehumanization of care.



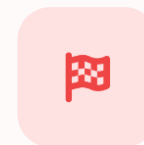
Algorithmic discrimination

Risk of bias in AI models that may replicate or reinforce existing social inequalities.



Vendor lock-in (Addiction)

Permanent dependence of state infrastructure on closed technological ecosystems of global corporations.



Loss of data sovereignty

Taking control of strategic citizen data resources by external entities.



Two-class system

Deep stratification of access to health services: premium for elites vs. automated standard for the masses.



NOTE: These risks are common to all scenarios, but their scale and effects vary depending on the adopted policy (the strongest in the "Crisis Convergence" and "Hyper-protective system" scenarios).

System Hyper-protective

"Evolution towards corporate totalitarianism under the guise of security"



Privatization of the state

Takeover of key public functions by BigTech. Corporations are becoming the actual providers of social and health services.



"Data for service" model

Privacy is becoming a luxury good. The majority of the population pays with data for access to basic services.



Social bonus system

Citizenship score (Social Credit) determining access to treatment and benefits. Gamification of obedience.

Major system players



Psychic surveillance

Real-time monitoring of biometrics and emotions. Psychiatrization of nonconformity.



Energy police

Strict control of resource consumption. Penalties for "irresponsible" life choices.



Chilling effect

Widespread self-censorship for fear of algorithmic evaluation and lower ranking.



Threat level

CRITICAL TO INDIVIDUAL FREEDOM

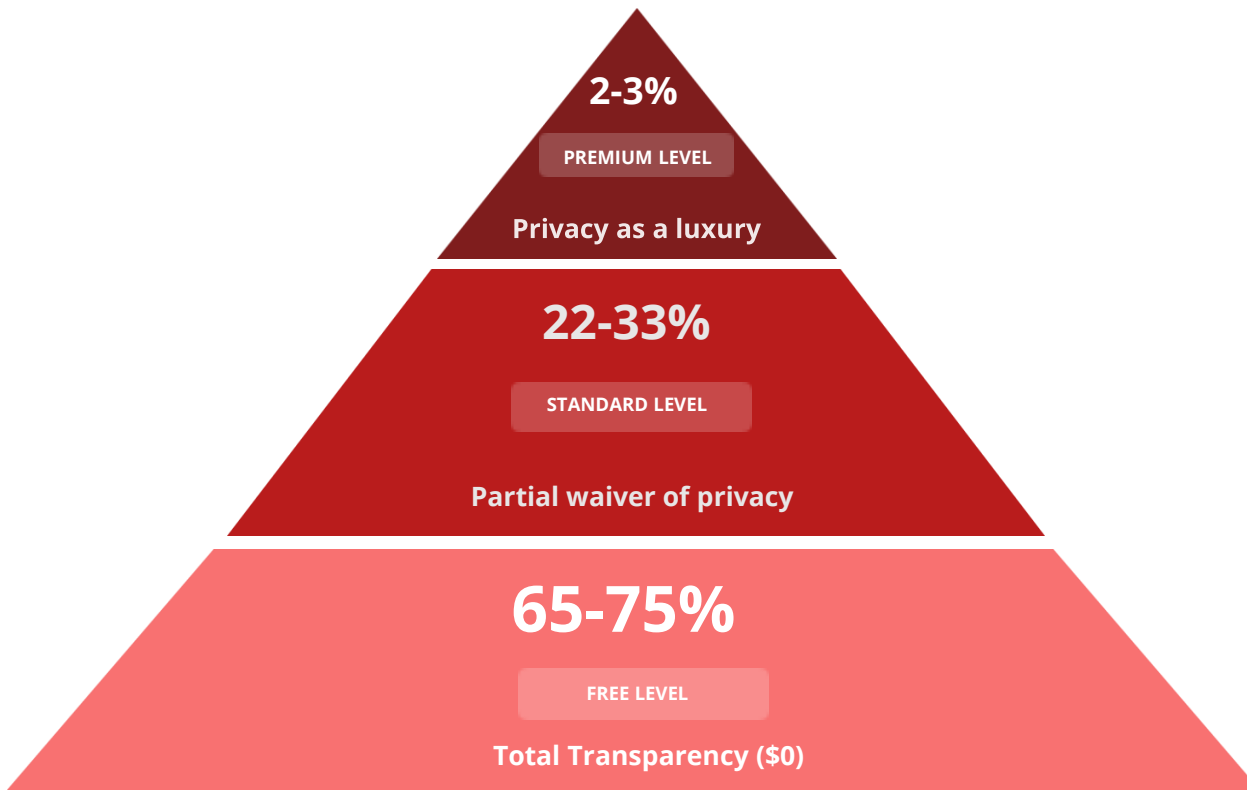
SCENARIO 1: HYPER-CARE SYSTEM

Social stratification and conformity

Dystopia

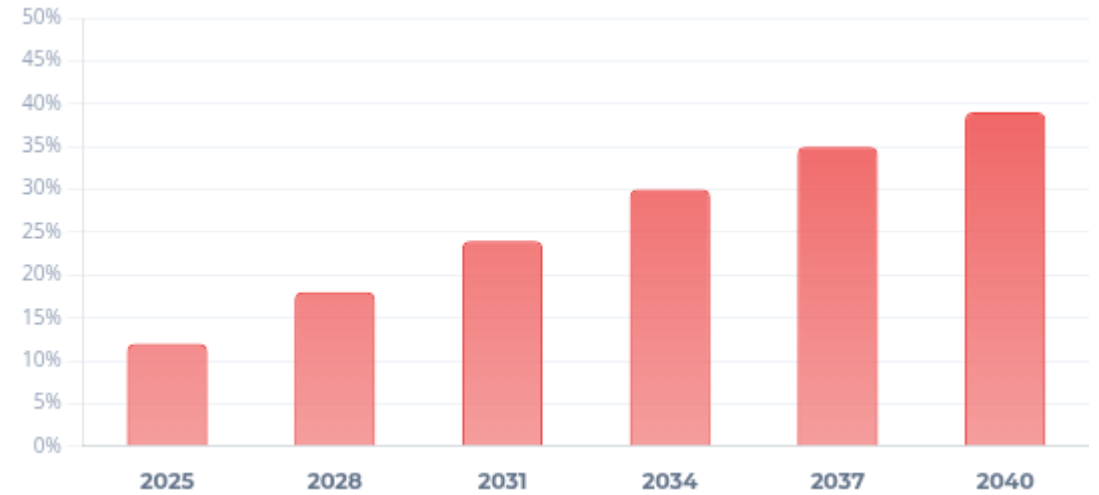
Three-level access hierarchy

The pay-for-service model creates rigid social classes based on wealth.



Pharmacological conformism

Increased use of psychotropic substances as a tool of social control.



2025: The crisis begins

2040: Full control



Social bonus system

Integration of access to public services with algorithmic citizen assessment.

- ✓ Scoring for behavioral conformity
- ✓ Punishment for "irresponsible choices"
- ✓ Gamification of citizenship

▲ Critical risk:

Loss of individual subjectivity

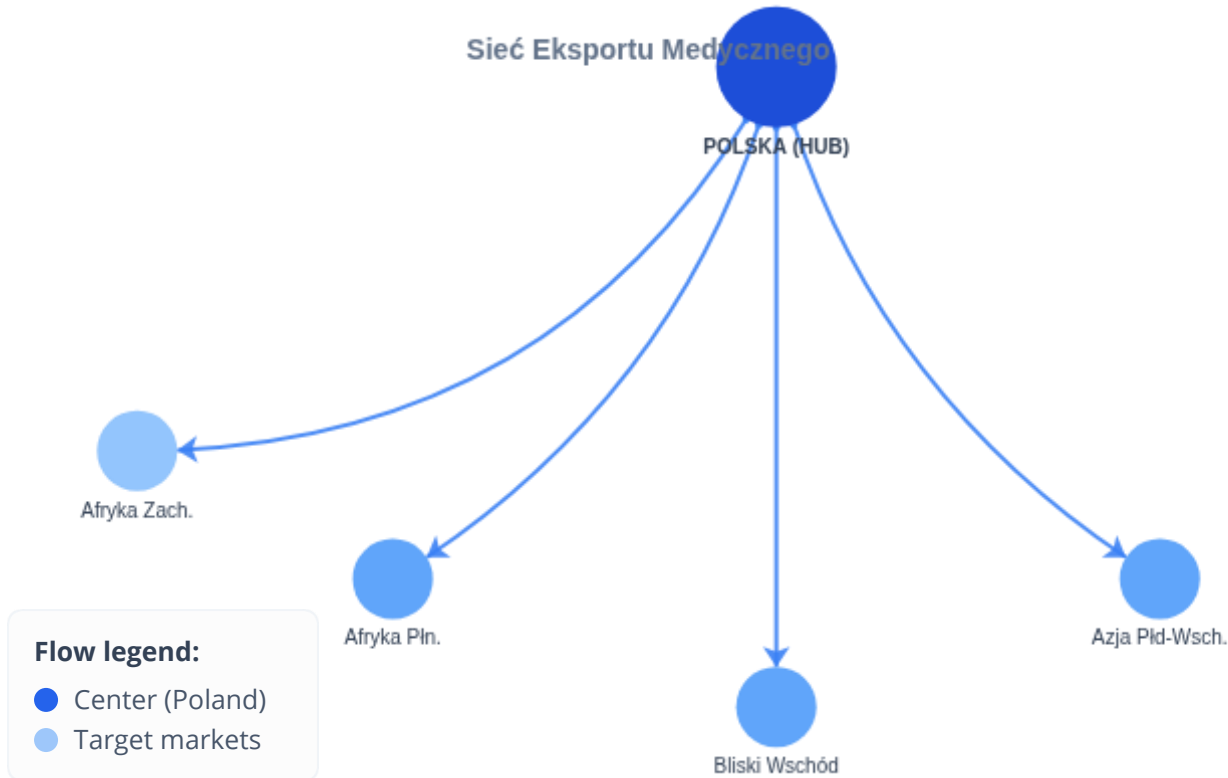


Poland as a Crisis Medicine 2.0 hub

National specialization and technology exports (2030-2040)

Technology export directions

Poland uses the "middle-country niche" as a neutral supplier of medical systems for unstable regions. The subscription model ensures a constant inflow of capital.



✔ Data Sovereignty model

✔ Technological neutrality

Key performance indicators

42

Countries supported



\$12.4 Billion

Export Value

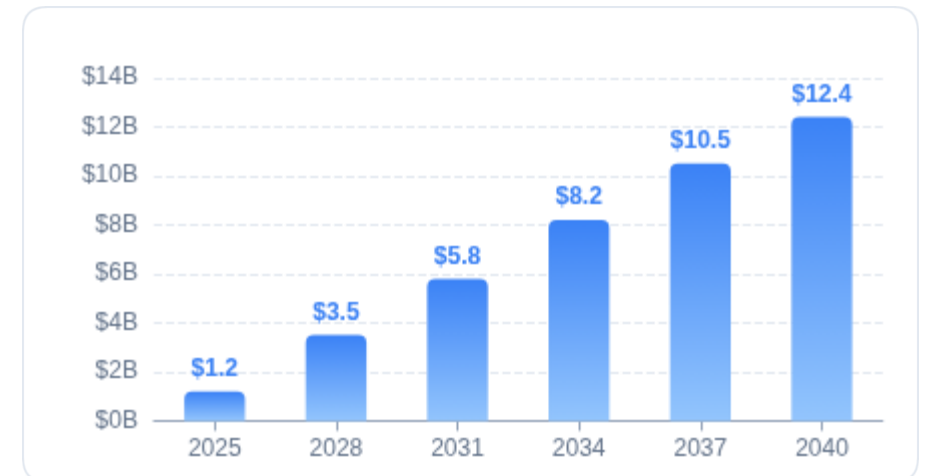


850+

Mobile Teams



Revenue growth (Subscriptions)

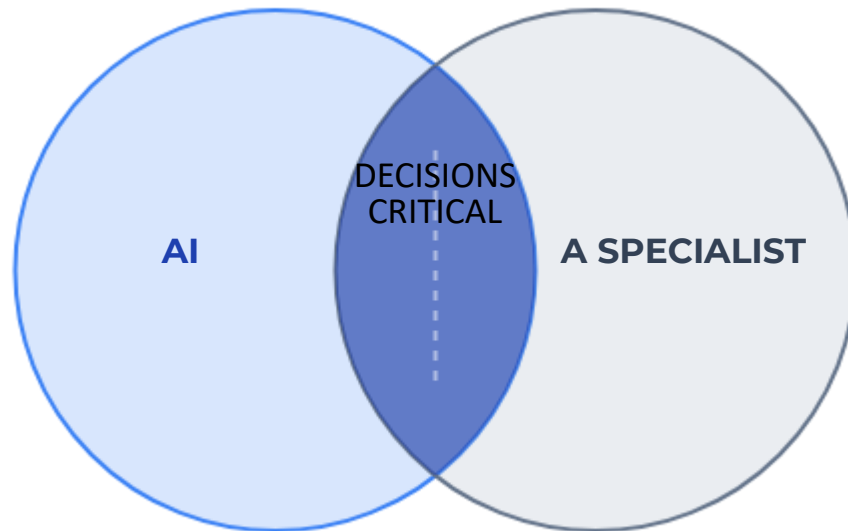


Hybrid model and standards

Balance

Synergy: AI + Human Supervision

A cooperation model where technology supports, but does not replace, the expert in key moments.



"The doctor as the final decision-maker in complex cases"

Poland as a "digital health broker" and technological mediator

Key to success: Open standards prevent Vendor Lock-in

Interoperability standards



FHIR (Fast Healthcare Interoperability Resources)

A modern standard for the exchange of medical data



HL7 (Health Level Seven)

Communication protocol for hospital systems



DICOM

The standard for medical imaging and communication



Regulatory pillars

Data sovereignty

Citizens' data stored on servers under national jurisdiction.

Transparency of algorithms

The obligation to explain AI decisions (XAI) and the patient's appeal path.

A dynamic right to privacy

The citizen may change the scope of data provided at any time.

Mechanism for financing the development bonus

A self-reinforcing cycle of investment in human capital



i Key difference vs UBI

Unlike the Guaranteed Income, the Development Bonus is not "free money", but a dividend from digital efficiency, requiring reciprocity (activity) from the citizen.

✓ Effect: Transforming technological unemployment into social capital



A new social contract

Platform economy with a "human face"

Pillars of the new economy



HaaS marketplace

"Health as a Service" in a competitive model. Platforms connect patients with providers based on quality, not just price.



Platform cooperatives

Employees and users as co-owners of digital platforms. Profits reinvested in the community.



Democratization of algorithms

Social control over the code that determines access to services. Transparency of the principles of AI operation.

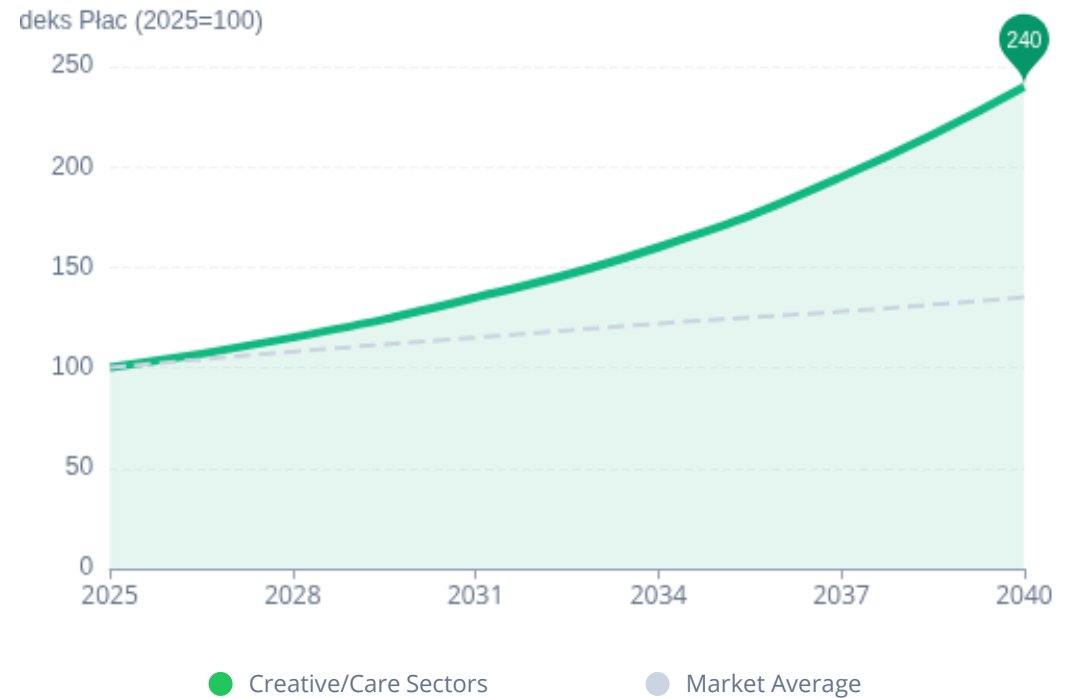


Data tokenization

Patients knowingly "sell" anonymized data for tokens exchangeable for health services.

Renaissance of care sectors

Forecast of real wage growth (2025-2040) in sectors requiring empathy vs. market average.



Application:

Automation of routine tasks increases the value of work that requires the "human factor" - empathy, creativity and care.



Systemic rupture

Three fundamental fiascos (2025-2030)

DYSTOPIA



Failure energetic

Structural failure of transmission networks.

- × "Social" failures
- × Zones A (elites) and B (rest)



Pauperization health

The loop of degradation of services and lack of medical staff.

- ↓ Quality of treatment
- ↑ Hidden costs



Doctrine "lean state"

Ideological withdrawal of the state from responsibility.

- ⊘ No social protections
- 💰 Privatization of risk



Platformization as a control mechanism

HealthOS: The network effect blocks alternatives

Digital Landlordship





Mechanisms of systemic degradation

Critical Level

Horizon 2030-2040

Crowding Out effect

License and IT infrastructure costs eat up hospitals' operating budgets, reducing resources for staff and treatment.

Patient care

IT costs



Paradox: Modernization leads to degradation of services

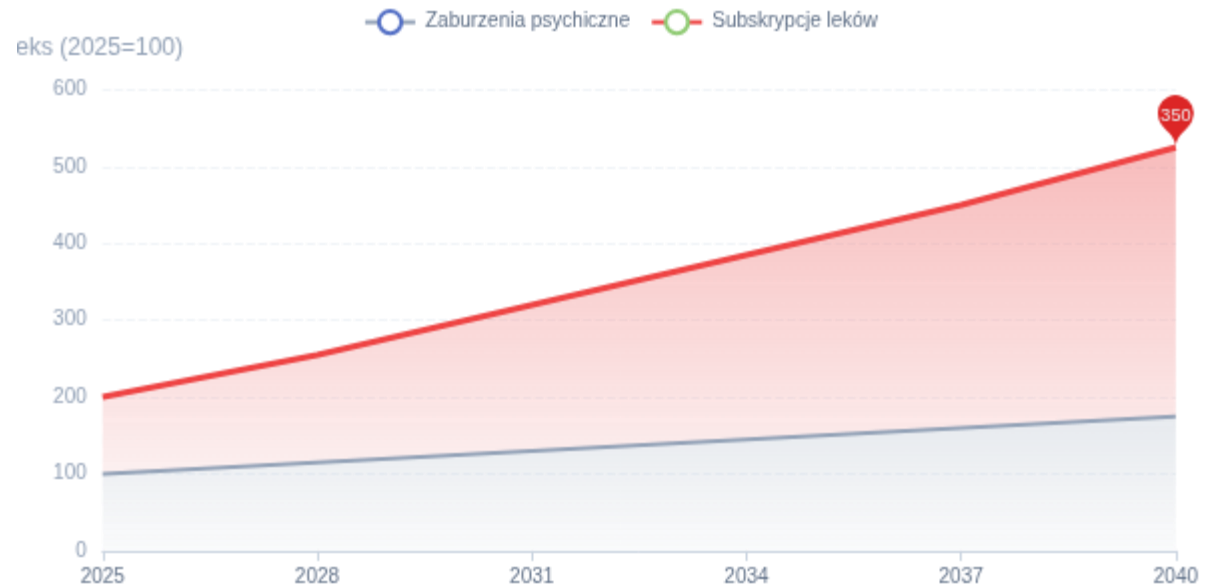
Vendor Lock-in trap

- ✗ Loss of digital sovereignty of the state
- ✗ Information asymmetry (BigTech knows more)
- ✗ Prohibitive cost of switching suppliers

Citizens' data held hostage

Soma 2.0: the medicalization of suffering

Increase in pharmacological subscriptions as a replacement for structural reforms



42%

An increase in depression

+180%

Sale of psychotropic drugs

Subscription

Employee benefits

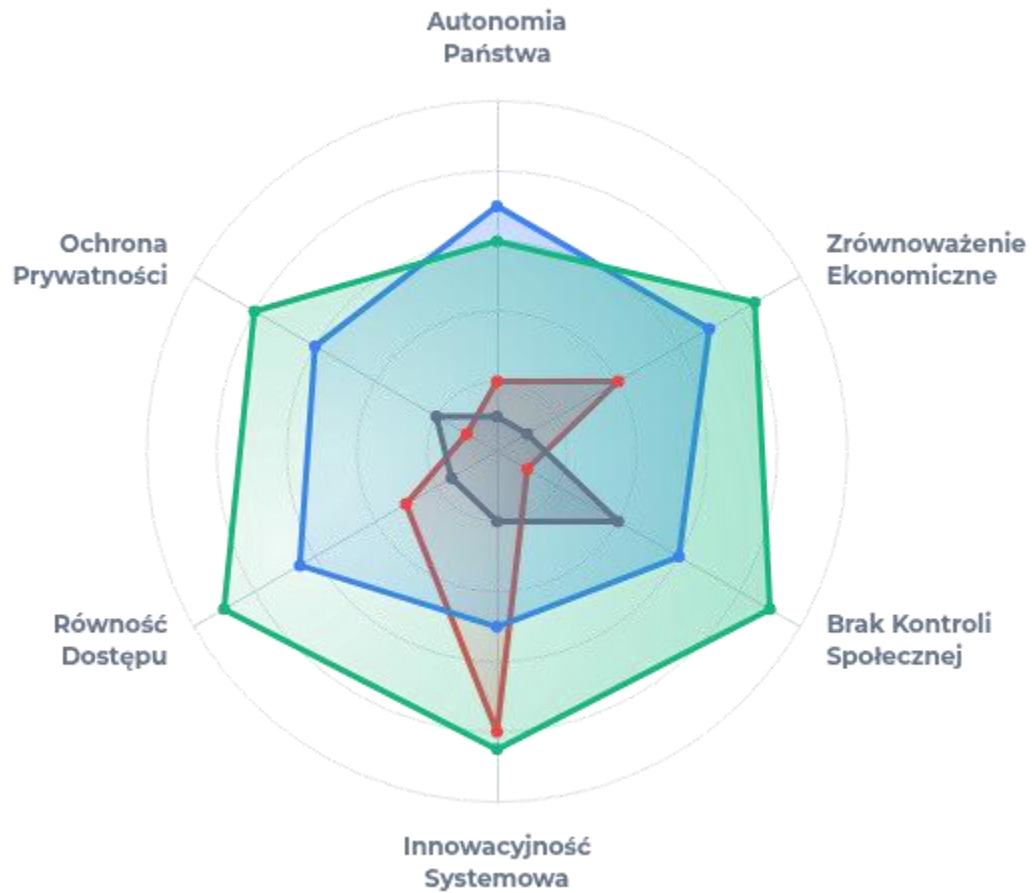
List of 4 Scenarios

Key dimensions of transformation (2025-2040)

| | Scenario 1 Hyper-protective | Scenario 2 Hybrid | Scenario 3 Digital Judo | Scenario 4 Crisis Convergence |
|------------------------------------|----------------------------------------------|-----------------------------------------------------------|------------------------------------------------|------------------------------------------|
| The role of the state | ↓ Erosion, takeover by corporations | 👤 Active regulator and mediator | 🤖 Transformation partner | ⚠️ Total structural failure |
| The role of the Corporation | Domination Quasi-state functions | Cooperation Service providers under supervision | Cooperation Co-creators of solutions | Extraction Predatory dominance |
| Economic Model | Surveillance capitalism ("Service data") | Regulated markets (Knowledge export) | Platform cooperatives (Sharing Economy) | Platform feudalism (Digital fiefdom) |
| Access to Care | 🏠 Three-level (Premium / Standard / Free) | ✓ Hybrid with security | 🏪 Marketplace + HaaS | ÷ Two-class (Elite / Rest) |
| Privacy | Luxury for elites (2-3%) | Law dynamic | Currency (Data Tokenization) | Lack (Total erosion) |
| Financing | Monetization of personal data | Savings + export revenues | Development Bonus from automation | Debts + extractive license fees |
| Social Control | ★ Social Premium System | 🏛️ Democratic mechanisms | 👥 Voluntary participation | 🤖 Algorithmic discrimination |
| Perspective | DYSTOPIA TOTALITARNA | SUSTAINABLE | OPTYMISTYCZNA | KATASTROFA SYSTEMOWA |
| Horizon | 2025-2040 (3 acts of consolidation) | 2025-2040 (3 phases of evolution) | 2025-2040 (3 adaptation phases) | 2025-2040 (Crisis acceleration) |

Scenario Profiles - 6D Radar

Multidimensional impact assessment



Legend of Scenarios

- Hyper-protective system**
High control, low privacy, elite access
- Hybrid Reality**
Balanced model, regulations, medium level of innovation
- Digital Judo**
High autonomy, equality and social innovation
- Crisis Convergence**
Low performance in all dimensions, collapse

Key Dimensions:

State autonomy


Privacy

Equality of Access

Innovation

Social Control (reversed)

Risk and Opportunity Matrix

 **Prioritization of Activities**

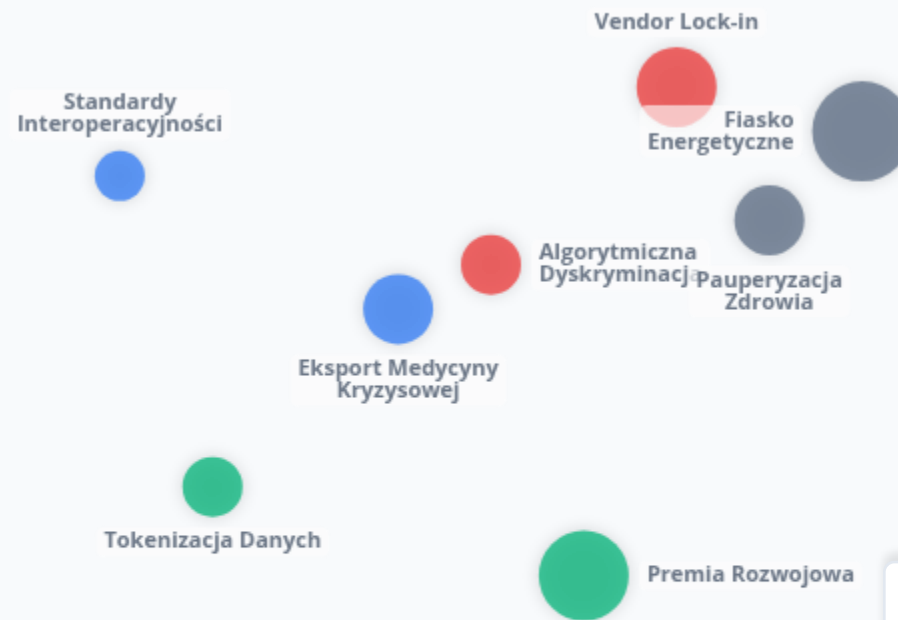
Potential Threats
Monitoring and prevention

Critical Risks
They require an immediate response

PROBABILITY →

Niche Opportunities
Experiments and development

IMPACT ON THE SYSTEM →

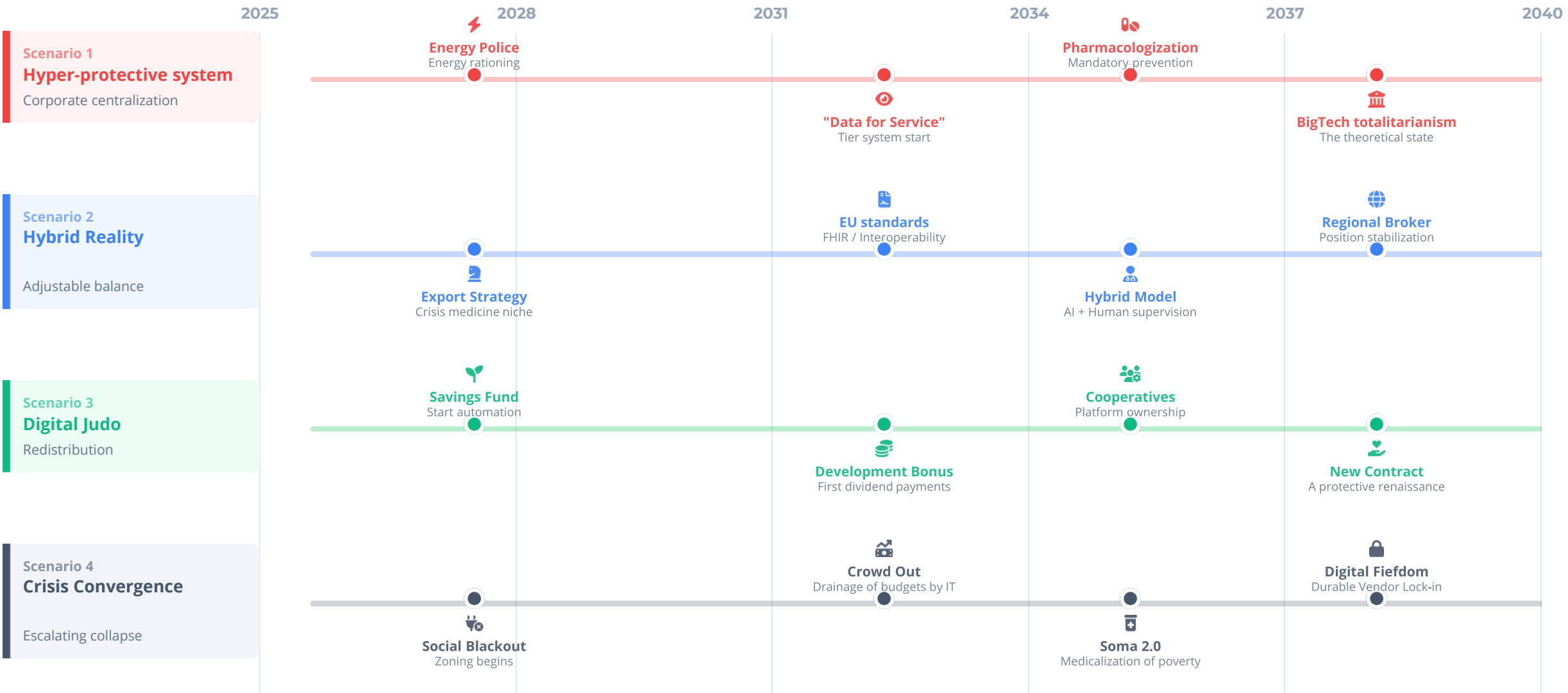


Legend of Scenarios

- Hyperprotective (Dystopia)
- Hybrid Reality
- Digital Judo
- Crisis Convergence

Evolution of Scenarios 2025–2040

● Dystopia ● Balance ● Optimism ● Crisis



Key Conclusions and Recommendations



Technology is neutral

01

The outcome of the transformation depends on political decisions, not technological determinism. Tools can serve both emancipation and control.



The Open Standards Imperative

02

Data sovereignty is critical. Interoperability standards (FHIR, HL7) are the only defense against monopolization by BigTech.



Risk of Dual Classing

03

The system requires protective shields to prevent a division between premium medicine for the elite and low-quality automated care for the rest.



Development Bonus Potential

04

Redistribution of savings from automation in the form of Premiums can effectively alleviate structural unemployment and stimulate social development.



Polish Export Niche

05

Crisis medicine and mobile teams are Poland's real competitive advantage in developing markets (Africa, Asia).



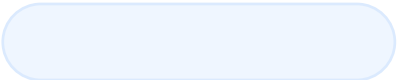
Main Threat: Lock-in

06

Dependence on suppliers (Vendor Lock-in) and the erosion of privacy are the greatest systemic risks leading to the loss of the state's subjectivity.

The key to success: Balance between the efficiency of automation and maintaining the human dimension of care.

5 Steps for Decision Makers



Interoperability standards

Implementation of FHIR, HL7, DICOM as the foundation for data exchange. A necessary condition for avoiding data silos.

AI regulation and supervision

Mandatory "Human-in-the-loop" for critical decisions. Transparency of algorithms in medicine.

Mechanisms_x000B_Anti-Lock-in

The requirement for open standards in public procurement. Legal guarantee of data transfer (portability).

Bonus financing

Redistribution of documented savings from automation into the Development Premium (human capital).

Export of crisis medicine

Building a national brand around mobile teams and hybrid solutions for emerging markets.

Strategic goal: digital sovereignty

Building a resilient system combining technological efficiency with social security.

Open questions and challenges



Privacy versus efficiency

- How to balance the necessary access to data for AI with the individual's right to privacy in the health system? 01

Scenario 1 and 2 dilemma



Measuring savings

- How to objectively measure and document savings from automation to finance the Development Premium? 02

Scenario Challenge 3



Data sovereignty

- How to secure national data sovereignty in the era of global digital platforms and BigTech pressure? 03

Scenario 4 Risk