

Politics and regulation

Extended digital control

Institute for Statistical Studies and Economics of Knowledge (ISSEK) HSE presents the results of a study of human potential trends. The research methodology includes methods of big data mining based on the iFORA system created at HSE ISSEK, as well as expert sessions and the Delphi survey with the participation of more than 400 leading foreign and Russian scientists in the field of human potential.

The project is implemented within the framework of the activities of the [World-Class Human Capital Multidisciplinary Research Centre](#) and the UNESCO Chair on Future Studies (UNESCO Futures Literature Chairs network). The full list of trends is available in a unique open-access database https://ncmu.hse.ru/chelpoten_trends.

Key subtrends

▶ Proliferation of digital control tools

Digital control tools are being applied everywhere: to protect infrastructure and production facilities, search for criminals, maintain law and order, monitor compliance with rules at work and public health, etc. The COVID-19 pandemic has largely legitimised the use of tracking technologies to ensure public safety: they were used to remotely collect biometric data, monitor lockdown observance, trace infected people's contacts, and detect crowds.

A notable trend driven by a number of factors is increased control over social media. The internet has made it easier for terrorists to communicate and recruit; it can be used to disseminate illegal information encouraging socially unacceptable behaviour. At the same time any person with a network connected device becomes a "reporter" in the digital environment, while not being bound by any official obligations or ethical principles of professional journalism.

Gadget-level control on a national scale was pioneered by China. Data collection and analysis technologies are at the core of the Chinese social credit system, which punishes for violations but also rewards behaviour in line with the accepted standards. India's Aadhaar is the world's largest and sophisticated ID programme, linked to SIM cards, bank accounts, social security and pension data of 1.3 billion people. The network helps to more accurately socially vulnerable populations, more efficiently

▶ Control over social networks' content and influence

allocate public spending, and build a national pan-Indian register of citizens.

This global trend has a number of local features. E.g. in Western countries such systems are more often criticised for their operational faults, and a potential for violation of human rights by law enforcement agencies. In April 2021 the European Commission presented a comprehensive bill on detailed regulation of artificial intelligence, including its application for facial recognition purposes.

Video surveillance is a rapidly growing segment of the global control systems market, driven by the progress in cloud computing technology, software improvement, and the need to step up security, especially in manufacturing, banking, financial, transport, and retail. One of the factors in rapid proliferation of VSaaS (video-surveillance-as-a-service) is increased use of IP cameras.

Authorities are expected to continue promoting the development of digital identification ecosystems to verify people's identity, provide access to public services, and facilitate seamless multi-channel interaction. By 2024 more than a third of the world's governments will use "involvement indicators" to track the extent and quality of public participation in political and budget decision-making. However, excessive supervision through the use of advanced technologies can lead to digital discrimination - violating people's rights to privacy and protection of their online identity.

▶ Compiling people's digital profiles

Key estimates

\$90.3 billion USD

could reach the global video surveillance market in 2026 (52.4 billion in 2020)

8.5 billion USD

will be the size of the global face recognition technologies market in 2025 (3.8 billion in 2020)

Trend's



Impact on human capital¹

1

2

3



Weak signal²

Social ratings and biometric identification systems



Strongest manifestation period

2026–2030 гг.



Wild card³

Total control over population



Effect of COVID-19 pandemic

Strengthened the trend



Consequences of wild card

Digital discrimination



Level of occurrence in Russia

Comparable with the global level

¹ 1 – weak influence, 2 – medium, 3 – strong.

² Weak signal is an event that has a low degree of significance (mention, popularity), but indicates a radical trend transformation in the future.

³ Wild card is an unpredictable event, which, if realized, can have a significant impact on the trend development.

Drivers and barriers



Drivers

- New formats for provision of public services and interaction with the public
- The need to maintain law and order, and find offenders
- Epidemiological control in the event of proliferation of infections
- Technological development



Barriers

- Flawed operation of surveillance systems
- Activities of human rights organisations
- Negative public reaction

Effects



Opportunities

- Improved interaction between the public and government agencies
- Improved law and order situation
- Better crime detection
- Increased public participation in political and budgetary decision-making



Threats

- Violation of human rights and freedoms
- Abuse by law enforcement agencies
- Data leaks
- Emergence of digital asymmetry between the public and authorities