

AIT LAB IN ALPBACH – DESCRIPTION

Determination

The aim of the lab is to derive guidelines from the open discourse for European and Austrian decision-makers in the field of digital sovereignty as a recommendation for the further design of the European data economy. The workshop follows the approach of a moderated, open and interdisciplinary multi-stakeholder discussion, in which different points of view, experiences and expertise are brought into a dialogue in order to comprehensively discuss the quite complex topic in a discourse. As a result of this discourse, recommendations for action for politicians and policy-makers will be formulated. The results will be documented in a 3-5 page report. At the end of the report, all participating persons will be listed by name as contributors. However, it is noted that the workshop will follow the Chatham House Rules, which state that any person participating in the workshop is free to use information from the discussion, but to do so without reference to specific individuals. Also, the report will not have any substantive passages with direct reference to participating individuals. The report will primarily be handed over to the two Austrian ministries BMK and BMF/State Secretariat for Digitization in their roles as patrons for the Gaia-X Hub Austria and will also be published and made publicly available through various media. All participants in this Lab will also be invited to publish this report in their respective networks.

DAY 1 – FRIDAY 25TH OF AUGUST, 09:00 – 12:00

“Data sovereignty – ensuring agency and control in the digital space – for individuals, companies, societies and states”

The whole world is talking about sovereignty. What does this mean in the age of digitalization and new media? It means the self-determination of the individual at the micro level and the sovereignty of companies in the global marketplace, and of states at the macro level. Seen against the background of current dependencies on global IT market leaders (hardware and software manufacturers) from other countries, or even monopoly platforms with global broadband infrastructures and the associated huge agglomeration of data, the concept of sovereignty in a digital world must be reframed as a cross-cutting task for society.

Artificial intelligence (AI) offers a clear example of the need to rethink digital sovereignty: In strictly neoliberal markets the effectiveness and functionality of AI is judged in purely economic terms, while in Europe we are striving for AI which is underpinned by ethical values.

Therefore this workshop will discuss the following key questions: What is data sovereignty and how is it relevant to companies, individuals, economies and states? What are the negative effects of declining data sovereignty? The EU Data Governance Act comes into force in 2023 – how will it be implemented in the Member States?

There are many different aspects to today's concept of data sovereignty, including power and control, privacy and ownership, inclusion and participation or self-determination. Therefore there is a need for a fundamental and thoughtful discourse about how we wish to establish data

sovereignty. This starts with the following core questions: Who has access to personal data? How and for what purpose is this data used? And how do various forms of access to this data impact the data subjects' control over their data? How can they succeed in realizing their personal goals?

However, digital sovereignty not only has a defensive dimension (right of exclusion). It also supports positive participation, in the form of a deliberate decision to surrender complete control over personal data by actively providing data or subsets of data (data donations). It is important to strike a balance between protecting and shielding data while surrendering exclusive control of this data in order to participate in data-driven innovation processes. Consequently, data sovereignty as a cipher for regaining agency and control in the digital space not only has an individual, property and data protection dimension, but also an industrial policy dimension, in the sense of reducing dependencies through the deliberate and shared use of data to control innovation strategies and processes, as well as a social dimension with a focus on the common good.

DAY 1 – THEME BLOCKS & SUBSTRUCTURE:

Block 1.1: Conceptual clarification of Sovereignty

In the first thematic block we will introduce sovereignty and clarify its terminology as well as the different levels of sovereignty such as state, company, but also the personal level.

Block 1.2: Effects of a lack of sovereignty on the economy

What are the negative consequences if we lose sovereignty? We will derive why democracy, the free market and also the state can no longer function without sovereignty.

Part i.): Effects of a lack of sovereignty for the economy

A lack of sovereignty supports the development of monopoly structures and hinders prospering free markets.

Part ii.): Effects of a lack of sovereignty for state and society - sovereignty as a human right

Through comprehensive digitization, citizens are becoming increasingly transparent and we are pursuing a desired social goal of comprehensive and full transparency, building on the assumption that as part of a society we "should have nothing to hide." But what happens when there is complete transparency? Then trust can no longer exist, because without secrecy, without privacy, there is no longer trust between people. Ultimately, a society cannot deal with that. One requires a mental retreat, a refuge for one's own ideas, a private sphere. All of this would be threatened without trust, human coexistence would no longer be possible due to a lack of space for personal retreat. That is the philosophical aspect. The right to privacy is an elementary human right.

In a digital world that we can no longer live without today, citizens are constantly leaving clues to their identity through their digital traces. This is acceptable as long as we handle it properly (negative example: social media). If autocratic systems and private entrepreneurs begin to misuse

this data, personal sovereignty will be restricted and an immense problem area will arise between the state, industry and citizens.

Block 1.3: Humans as data producers and part of data-driven business models

Today, we all already leave a continuous data footprint. Each and every individual user of digital systems, every company, organization or government institution produces data that is stored and processed in various digital systems. In addition, digital service providers accommodate the most psychotherapeutic plague in the process, nomophobia, the fear of being detached from mobile phone connectivity. Companies can exploit this; such abuses then reveal themselves in either criminal activity or e.g. illegitimate exercise of state power.

We must return sovereignty to the citizens. Data should be considered as possessed and owned by the citizen. This is the beginning of the data economy. At the same time, a new challenge is emerging in this context: a "digital divide" with regard to data freedom - in the future, it could be that only wealthy people are able to secure their data, whereas poorer people will be forced to sell their data and thus themselves ("digital prostitution").

Block 1.4: Digital world as a semblance of our reality - personalized data services - a curse or a blessing for us as digital users

The next block deals with the topics of the data world, freedom, democracy and human rights. The data traces we leave behind are a semblance of our being. But is this really the case? If we go by Plato, it is not, because we only believe that we see reality, but in reality we only see shadow images (allegory of the cave). As a result, wrong decisions are made, which in the context of global data networking affects the flow of digital data and has an impact on the use of data. Like global human rights, data must be protected because we have also implemented human rights in cultures and laws as well as in democratic principles. Now we need to rethink this issue in the context of the new digital world and expand its application for the digital space. What is the problem? What are the digital approaches?

DAY 2 – SATURDAY 26TH OF AUGUST, 09:00 – 12:00

“Construction of digital realities and ethical principles”

Platform curation is the platform operator’s responsibility for the content on their platforms. This involves a trade-off of freedom of expression in the context of the need to protect minorities and the dignity of individuals (human dignity). This, in turn, leads to diversity and equality. Consequently, the exchange, processing and targeted use of data must be based on trust. The challenge is that data are traded and used as part of business models. This applies to both companies and individuals, who, in turn, have the problem of acquiring the right to use this data. Therefore it is essential to clarify the ethical values, principles, rules and laws that must be considered here. How can they be reconciled? How does the EU's digitisation strategy with new regulations such as the Data Act, Data Governance Act, Data Services Act and Digital Market Act affect the global data economy?

DAY 2 – THEME BLOCKS & SUBSTRUCTURE:

Block 2.1: Economic Position of the EU in the Global Power Game

Discussion of the thesis that data sovereignty has been lost in the EU. Clarification of the current state of the global data economy and the role of the EU economic area. We only use 2% of the available data in Europe; there are only seven major global platform operators and none of them are EU companies.

Block 2.2: EU Acts - Status and Problem Areas

The need for data sovereignty has already been recognized in the EU and the EU Commission is working on corresponding strategies. Several measures have been initiated and there is a broad political discussion in the EU Parliament. There are new EU legislative projects (Acts) to recover data sovereignty, such as the Data Act, Data Governance Act, Digital Services Act and Digital Market Act. The Digital Services Act and the Digital Market Act are intended to be regulatory tools against the big platforms; the Data Act, and the Data Governance Act are in the implementation process.

We focus on Data Act and Data Governance Act and elaborate on the current problems and challenges in the current policy discussion. What are the outstanding unsolved problems, for example, created because these Acts address challenges that are too early, too fuzzy or too open? What other problems does this create?

Block 2.3: Data management as the foundation for a functioning AI

To implement the goal of the new EU data economy, the new Acts encourage data to be used and traded more widely and intensively for new business models. But what ethical problems might this

raise? Here, a reference to Day 1 with the poor/rich divide fits as well as other ethical problems: if data is not properly selected and maintained, fundamental problems arise, for example, in artificial intelligence applications. Without high quality data, without accurate data, there can be no trustworthy AI – the problems of prejudice and unfair treatment by data driven systems leading to "bias". If AI becomes ethically objectionable, we need a reasonable data regime, otherwise AI cannot really work.

AI is often a black box. After it's trained, you do not know what it is doing. If I do not understand the training data, then I have an AI that is potentially unethical by definition. This is where we need to work against it: such as through testing labels and quality labels for AI. We need to create mechanisms to better assess and understand underlying data for algorithms, and to manage the handling of big data. How to do that someone should tell, also why this data is so important for AI algorithms.

A prosperous AI economy does not only consist of collecting data, it also has to be used and controlled in an effective and goal-oriented manner, for it to function ethically and responsibly (human centric).

Block 2.4: Trained AI and data models - IPR regulations and data quality

Today we have open source software, we have open data as concepts for our economy. For trained data models, we do not have a suitable concept to check quality, function, etc. Here, the topic of data management must be rethought for a truly functional AI ecosystem.

DAY 3 – SUNDAY 27TH OF AUGUST, 09:00 – 12:00

“How can sovereignty be infrastructured?”

How can a sustainable and globally competitive European data economy emerge? In what way can the new EU regulations for data sovereignty be realised through appropriate concepts and concrete IT solutions? Where does Gaia-X stand operationally and strategically to meet existing regulatory requirements? What service offerings, pilots and established communities exist? In this workshop, representatives of the European Gaia-X community will summarize the status of developments and roadmaps, and assess the status quo. They will explore everything from concepts, specifications and available open source software and services to the impact of the misuse of data and AI, using the example of the fight against fake news, disinformation and conspiracy theories. They will address the threats we face as well as the effective AI tools which are essential for protecting democracy and freedom.

DAY 3 – THEME BLOCKS & SUBSTRUCTURE:

Block 3.1: Digital infrastructures

This topic concerns infrastructure - hardware, software, cables, services, servers, TC technology (transmission and switching technology). We explain infrastructures that are required for the new data economy. What are data infrastructures, what are critical infrastructures? It is a matter of transmission technology and storage - whether the data resides at home, on a mobile device, in the cloud, with network operators or service providers, etc. It concerns the ecosystem in which our data originates and is generated.

Block 3.1: Digital infrastructures, data sources and data ownership

There are still open questions about data ownership; for example in the case of cars: who owns the data set? The car manufacturer, the car owner, the provider of the traffic infrastructure, the manufacturer of the navigation system? Here we refer to the second day, where the issue was about a few players, who through oligopolies in data collection generated a substantial advantage for themselves, which has become a societal problem.

Block 3.2: New data-driven business models

In the next block, the focus is on business: Why do I need data for future business models? What do classic data business models look like for digitally operating service providers? Are digitization and data the basis for the manufacturing industry and for all SMEs?

When every vendor and supplier has to provide their data, they start to generate a digital world at the same time. Digitalization is forcing everyone to get on board and engage with how to handle data, such as production data. The digital transformation of companies is a major problem and challenge, especially for SMEs in Austria. Among other things, this block is about understanding

digitalization and data, why this is so important for SMEs, how Gaia-X can do it and how it can help with it.

For a product and production, one can invent new data business models, for example weather data, vehicle data from public transport, machine data, etc and suddenly one can improve the operational processes through that. For this, a data marketplace rather than datamonopolies is needed. Society needs trustful data trading for a free, fair market to function properly (this is the link to the first day).

Block 3.3: Gaia-X offer

It will be explain what Gaia-X can offer, what solutions are available, as well as the roadmap, features, and how one can enable and support the new data market. Open source and services provided by the hubs in the member states will also be presented.

Block 3.4: Gaia-X and global service providers

We create an counter-thesis by inviting cloud providers to join the effort to enable interoperability on a trusted level.

Block 3.5: Gaia-X and EU Data Space Projects

LAB-CLOSING - SUNDAY 27TH OF AUGUST. 13:30-14:30

Presentation of the results from the various LABS.