

35 PROPOSALS

TO MAKE THE EUROPEAN

DATA STRATEGY WORK

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The new data strategy of the European Commission aims to make the EU a leader in a data-driven society. Creating a single market for data will allow it to flow freely within the EU and across sectors for the benefit of businesses, researchers and public administrations.

Combining the benefits of data-driven innovation with the interests of individuals, the ambitious data strategy has the potential to shape our lives and well-being far into the future. Aiming to ensure that the strategy works for all of us, this paper proposes realistic steps for policymakers and companies to take in the coming years.

Targeted at the EC, member states, industry, data sharing initiatives and research, the proposals approach the European data strategy through four main topics: managing the cross-sectoral use of data, creating a scalable infrastructure for viable data markets, activating individuals and businesses to share data, and developing data spaces.

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Sitra working paper

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35 proposals to make the European data strategy work

This working paper is the result of a combination of a literature review and workshops. It also draws on previous work carried out by Sitra in this area. This publication was compiled by Sitra's fair data economy project in collaboration with a New Governance initiative.

ISBN 978-952-347-169-6 (PDF)

www.sitra.fi

Sitra working papers provide multidisciplinary information about developments affecting societal change. Working papers are part of Sitra's future-oriented work conducted by means of forecasting, research, projects, experiments and education.

INTRODUCTION

The European Commission has published an ambitious new data strategy that aims to allow the EU to take full advantage of data-driven innovation while prioritising the interests of individuals in accordance with European values, fundamental rights, and rules. The strategy is commendable, but the challenge lies in its implementation. The way in which the strategy is realised will shape our everyday lives and well-being far into the future.

This paper proposes realistic steps for policymakers and companies alike to take in the coming years in order to make the vision outlined in the data strategy work for all of us. The proposals in this document are grouped according to the strategy chapter in the European data strategy. The proposals are targeted at specific actors: the European Commission, the Member States, Industry, Data Sharing initiatives and Research.

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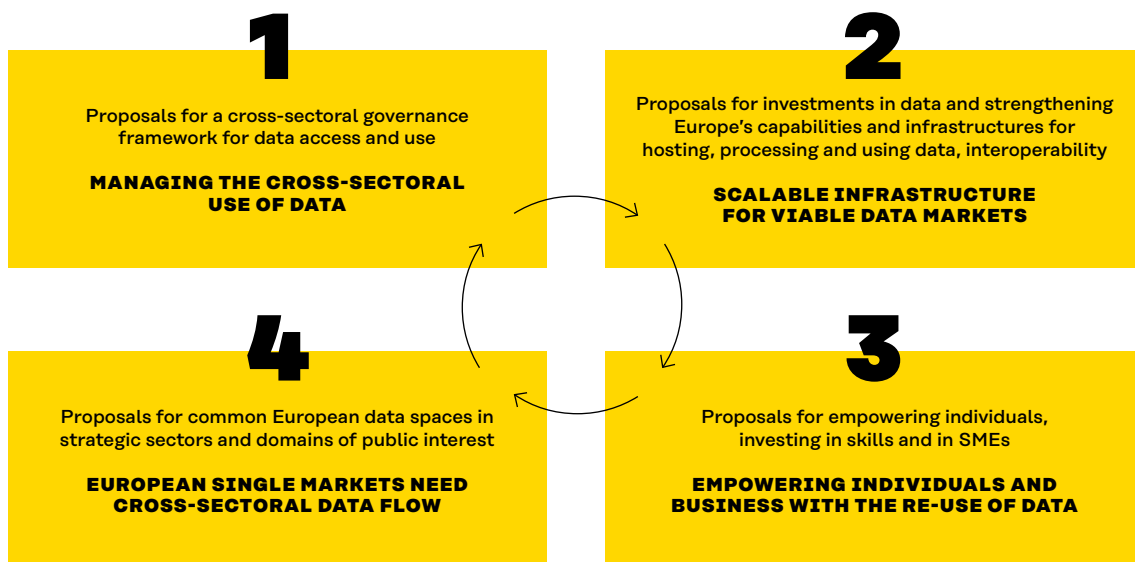
These proposals are only the beginning of a discussion that invites participants not only among digital policy experts, but from a wide-range of stakeholders across society. We hope that they will inspire you and your organisation to consider how the European Commission data strategy could be put into place and to act on it.

Enjoy reading!

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Project Director

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The Finnish Innovation Fund Sitra initiated a project titled IHAN® to build the foundation for a fair and functioning data economy. To define the fair data economy and vision for the future, Sitra published a Roadmap for a fair data economy policy brief together with the Lisbon Council. The roadmap is still valid, and we encourage you to read it in relation to this document. The last chapter of the roadmap offers concrete proposals aiming for a functioning EU data economy framework. Proposals offered in this paper provide an update to this chapter.

Proposals for a cross-sectoral governance framework for data access and use

MANAGING THE CROSS-SECTORAL USE OF DATA

The European data strategy recognises the need for cross-sectoral governance of data markets. Cross-sector data use is where cooperation and common rules matter the most, and interoperability is not something that is nice to have but a necessity.

In this section, we propose concrete actions that help to avoid the harmful fragmentation of the internal market. Starting off by creating a governance body for the personal data infrastructure could help to avoid inconsistent actions in data markets and ensure a human-centric flow of personal data. The proposals rely on a plural and open governance body that bridges the top-down standardisation process with bottom-up initiatives, enabling an adaptive and iterative approach to structuring the European Data space strongly embedded in European values.

Can be started now

EUROPEAN COMMISSION

- 1. Governance body.** The EC should look into establishing a governance body for the cross-sectoral data infrastructure to administer the market with various actors. The governance body would represent multiple stakeholders and sectors (public and private stakeholders, academia, NGOs, institutions and individuals). It could have a role in coordinating sectoral data spaces and the coordination of multiple data sharing initiatives in the use of standards for personal data flow under the individual's control. The governance body for the cross-sectoral data infrastructure would be in close cooperation with the European standardisation bodies, providing knowledge of what standards are needed from bottom-up data sharing initiatives and making recommendations, providing incentives and helping organisations to implement the standards.
- 2. Data economy principles.** There is a need to ensure trust in the management and use of data. This need can be met through a set of high-level principles that cut across any data governance attempt, helping to ensure confidence in the data economy. The EU commission should support the implementation of the data economy principles recommended by Finland during its EU presidency in 2019. As effective data governance strongly resists a one-size-fits-all approach, grounding efforts in underlying principles will provide a source of clarity and trust across application areas. The governance body could have a role in ensuring the application of the data economy principles across all areas and data sharing initiatives.
- 3. Data policies.** The European Commission should identify, analyse and compare the national and EU-level data policies to identify gaps or overlaps that create unnecessary challenges and obstacles to Europe's digital transformation in the current regulatory framework. When drawing up new regulation, the Commission should use the better regulation policy process.

MEMBER STATES

- 4. Access to government data.** Member states should make government data available. Access should be subject to compliance of the recommendations made by the governance body and/or participation in data sharing initiatives inside the governance body.

Prerequisite actions needed**EUROPEAN COMMISSION**

- 5. Individual representation.** At each level of decision making of the governance body, the individual should be represented. Organisations which represent the individual could be, for example, consumer associations, PIMS and data initiatives.

EUROPEAN COMMISSION AND MEMBER STATES

- 6. Funding and procurements.** Public funding or public procurements related to data access and reuse should be subject to compliance of the recommendations made by the governance body.

DATA SHARING INITIATIVES

- 7. Project funding.** Data sharing initiatives could participate in the work of the European governance body by presenting their projects. If accepted, the initiatives could receive funds and access to the network created by the governance body members.
- 8. Shared principles.** The principles and open standards recommended by the governance body can be used by all data sharing initiatives, even without being part of the governance body.

Needs legislative or other complex action first**INDUSTRY**

- 9. Code of conduct.** At present, there are too many conflicting and non-interoperable proposals and standards. Industry should align their codes of conduct with the recommendations made by the governance body. Only organisations that have an aligned code of conduct can take part in the governance body, be certified and receive funds for their data sharing initiatives.

Proposals for investments in data and strengthening Europe's capabilities and infrastructures for hosting, processing and using data, interoperability

SCALABLE INFRASTRUCTURE FOR VIABLE DATA MARKETS

Currently, there is not enough data available for data sharing. Initiatives to facilitate data sharing and create tools and best practises for data markets have fallen short in creating the necessary critical mass. The proposals in this chapter aim to provide maturity and uptake for the critical infrastructure needed for the data markets for personal data and data sharing.

Can be started now

EUROPEAN COMMISSION

10. Standards and guidelines. Support the creation of standards and guidelines in consent management, identity, data access and other important aspects of the portability of data / data sharing to achieve scalability and market uptake. The governance body proposed earlier – unless it has not been started by a specific coordination working group – could handle certain supporting activities.

11. Supporting deployment. Funds should be directed from research into deployment. For example, this could be implemented by supporting the public sector in procurement and offering grants to procure solutions and infrastructure that supports data sharing, such as identity and consent management solutions and building APIs to offer accessible data. The EC could also refocus the balance between basic research and the deployment of research results and allocate more funds to the Digital Europe Programme from the Horizon Europe Programme.

EUROPEAN COMMISSION AND MEMBER STATES

12. Procurements and grants. Procurement contracts and grants should include requirements on data availability, formats for data generated and the

provision to transfer data with reasonable costs to the procuring entity once the contract has ended.

INDUSTRY

13. APIs. Personal data should be made accessible by organisations through well-formed APIs. In the short term, data should be made available even without common protocols, but when available, the open protocols and formats for data sharing recommended by the governance body should be respected.

14. Co-operation. Companies are traditionally competitors in almost all actions. However, when building cloud infrastructure and data sharing capabilities co-operation is a necessity. Because of the complexity of data markets, it is unlikely that there will be a single or even a few initiatives that bring all stakeholders together, but companies large and small should join existing European initiatives to create the critical mass for the initiatives to grow and become viable.

DATA SHARING INITIATIVES

15. Test environments. Support should be offered to industry in the transition to data driven business by providing access to mock environments for testing novel solutions. This could be carried out through Digital Innovation Hubs or similar entities.

16. Common data models. Data Initiatives should focus on creating common data models for portability for specific industries and, where possible, implemented across sectors and on a global level. The data models should be tested in the European Data Spaces using life events as use cases. The chosen life events should demonstrate the cross-sectoral use of data. An example could be an individual with special needs (wheelchair/allergy) travelling and using their personal data for special services, which requires the combination of data from at least the t data spaces of Health and Mobility. Another example could be a student relocating to a city or country that requires data from the Mobility and Skills data spaces.

RESEARCH

17. Understanding business models. Business models and the value of data, when it comes to portability and data sharing, are not currently understood sufficiently in Europe. Research organisations and universities should focus on this topic, as well as on how intermediaries and data trusts could be utilised to increase data sharing and to create trust among the individuals and companies involved.

Prerequisite actions needed

EUROPEAN COMMISSION

18. Independent foundation. The Digital Europe Programme should finance an independent foundation with the aim of creating technical infrastructure for portability/data sharing. The examples of technical infrastructure being API connectors and consent management. This foundation could be an example of an implementation body for the recommendations made by the governance body.

19. Support to align initiatives. The Digital Europe Programme investments should be used to further align the European based initiatives such as Gaia-X.

INDUSTRY

20. Technical standards. Technical standards/guidelines proposed by the governance body/coordination working group for data sharing should be tested by industry in specific use cases to avoid them becoming obsolete and not used in practice.

Proposals for empowering individuals, investing in skills and in SMEs**EMPOWERING INDIVIDUALS AND BUSINESS WITH THE RE-USE OF DATA**

The European Commission wants to empower individuals with enhanced portability, thus making them a pivotal actor in data markets. A significant obstacle preventing that from happening is the lack of trust. Without it, individuals may not be ready to take advantage of their portability right.

Policymakers and businesses alike must recognise that people will need to be clearly motivated to act. People need to be offered real added value before they become interested. Businesses need to renew their business models and understand that data sharing is the key for becoming part of data ecosystems that generate growth in the future. This section presents some concrete steps that can activate individuals, policymakers and businesses.

Can be started now**EUROPEAN COMMISSION**

21. Showcase Innovative services. People will not exercise their right to portability out of sheer academic interest – they will need to be clearly motivated by services that add real value to their lives. In order to raise awareness and expectations among people, there is a need to showcase the importance of services stemming out of data portability. Innovative business models creating services through data portability should be supported in sectors where demand and regulation already exists (e.g. finance).

22. Fair data label. Develop and market a “fair data label” to inform consumers about the compliance of services with basic principles and standards of data protection and reuse. This kind of label of trust would be an effective way of protecting, informing and empowering citizens and consumers, whilst promoting transparency, accountability and responsible practices among technology companies. This work

should be undertaken through consultation with all relevant stakeholders – including national governments, regulators, companies, and civil society.

23. Support for SMEs. SMEs need easy and cost-effective ways to renew their business models and the capabilities necessary to create new business with the help of the re-use of data. There is also a need to have kick-start money to set up ecosystems for sharing personal data and the innovation of new business models. Digital Innovation Hubs (DIHs) and common European data spaces can play a role in this and collectively provide training, prototyping and funding for SMEs in this area.

EUROPEAN COMMISSION AND DATA SHARING INITIATIVES

24. Campaigns. Regarding the complexity of the right to data portability, further marketing and educational work, possibly in the form of campaigns, is necessary to strengthen the user with regards to the essential “law literacy” and to showcase the benefits of data portability. This could be

carried out by neutral institutions or the supervisory authorities. These campaigns could be supported by European commissions and implemented by consumer associations.

25. Educational programmes. Invest in, encourage and promote the implementation of effective digital educational programmes to ensure that individuals understand their rights as digital citizens. For example, over 215,000 students have signed up for the Elements of AI course to learn the basics of AI. The same method could be used to make people aware of their data rights and the basics of the data economy.

MEMBER STATES

26. Public-private partnership. Governments can accelerate the creation of new services and ecosystems, particularly in sectors with public involvement and regulation. They should start PPP-projects based on data portability and consent management, and this way support partnership building between service providers and re-users.

Needs legislative or other complex action first

EUROPEAN COMMISSION

27. Data portability. Article 20 of the GDPR creates a right to data portability and reinforces other personal data rights necessary for giving individuals the confidence to participate in data sharing. Currently, the portability right has several limitations in the GDPR. It is highly recommendable for the Commission to include the extended portability right as part of the new Data act. Data portability should be real-time, and data should be available through well-formed and standardised APIs.

Proposals for common European data spaces in strategic sectors and domains of public interest

EUROPEAN SINGLE MARKETS NEED CROSS-SECTORAL DATA FLOW

Data spaces are critical for unleashing the real potential of Europe in the Digital Age in each strategic sector. Our recommendations aim to encourage the development of such data spaces in a coordinated way, following common guidelines for issues tackled by the three former pillars, as well as tackling both non-personal and personal data. This is especially important in the current Covid-19 crisis and its aftermath: better use, sharing and interoperability of data will enable governments and populations to respond to future challenges more efficiently and in a more coordinated way.

Can be started now

EUROPEAN COMMISSION

28. Coordination. The EU could orchestrate stronger coordination by defining a cluster of data sharing initiatives that are to play a role in executing the roadmap, for example, by providing input for formal (ISO) standards. The cluster of data sharing initiatives could also contribute to operationalising the roadmap by designing a soft infrastructure and guidelines for data exchanges, under the governance body proposed in the first pillar recommendations. The strategy seems to emphasise the industrial sector, but we advise that both non-personal and personal data must be tackled if we want to shift the paradigm towards a human-centric approach.

29. Data spaces. Cross-sector data sharing is the key to new business models and services. Therefore, it is highly recommendable for the EC to encourage the building of European data spaces, ensuring each individual data space follows common guidelines, both in terms of governance and interoperability, recommended by the governance body proposed in the first pillar recommendations.

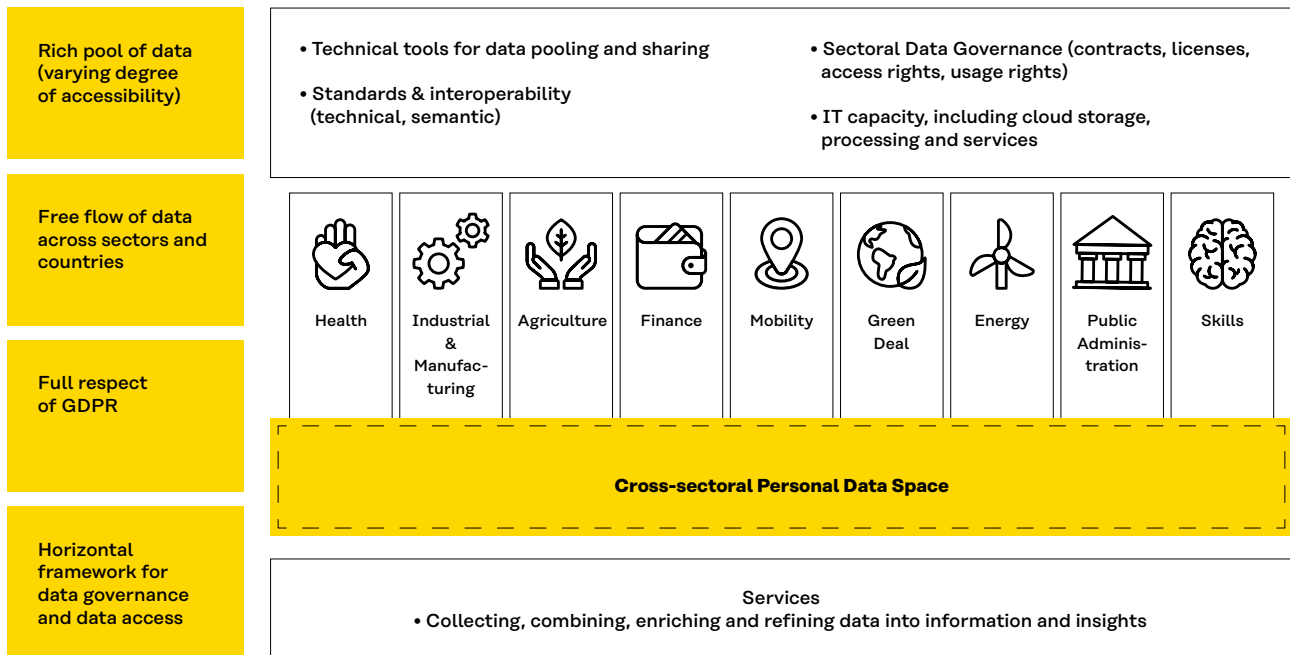
30. Personal data space. A horizontal and cross-cutting personal data space should be added to the strategy alongside the identified strategic sectors. It is hard to make a clear-cut distinction between industrial (non-personal) and personal data, but without a “personal data space” a significant amount of data is left outside European data spaces. This is important for critical activities such as Research or Retail, but also for cities: if we consider, for example, Green-Deal sensitive Mobility in cities, by handling only non-personal data, we are limited to monitoring flows and assets. Only the inclusion of personal data has the potential to assist decision makers in understanding actual data usage and in informing political and investment decisions.

31. Compliance body. Set up a compliance body linked to EDPS to supervise GDPR compliance in data sharing, especially regarding portability. This is a critical factor in building trust among all stakeholders.

MEMBER STATES AND INDUSTRY

32. Soft infrastructure. There are solid examples of soft infrastructure for data sharing. It is highly advisable to build data spaces based on these elements of industry-driven soft infrastructure.

COMMON EUROPEAN DATA SPACES



There are solid European solutions for access and interoperability. For example, Sitra’s rulebook on help for settling legal issues of data sharing and usage. These should be promoted and leveraged.

INDUSTRY

33. Soft approaches. European data spaces need industry and demand-driven soft approaches that recognise the differences sector by sector and accelerate the creation of sector-specific cross-European data spaces. There also needs to be a better acknowledgement of the role of interoperability and data portability, as technically there are limitations in moving data between platforms.

Prerequisite actions needed

EUROPEAN COMMISSION AND INDUSTRY

34. Data marketplaces. Functioning data markets are enablers for the trade of data assets. The access points to data markets are data marketplaces. They should be available to both private and public services for commercial or non-commercial services, as well as research. Data marketplaces

need a reference architecture to allow the data economy to evolve. Key elements should include, for instance:

- Certification Body
- Regulatory authority
- Liability Management
- Payment services
- Auditability
- Rating agencies or tools
- Data usage control
- Data Governance
- Payment mechanisms

Needs legislative or other complex action first

EUROPEAN COMMISSION AND MEMBER STATES

35. Data portability. The scope of data portability needs to be widened to apply to data on public registries. This is not only a matter of exemplarity, but also of unleashing new services, efficiencies and value through B2G, G2B and G2G data sharing.

SUMMARY

The new data strategy of the European Commission aims to make the EU a leader in a data-driven society. Creating a single market for data, i.e. a data space, will allow data to flow freely within the EU and across sectors for the benefit of businesses, researchers and public administrations.

Combining the benefits of data-driven innovation with the strengthening of individual rights, the ambitious data strategy has the potential to shape our lives and well-being far into the future. Aiming to ensure that the strategy works for all of us, this paper proposes realistic steps for policymakers and companies to take in the coming years.

Targeted at the EC, member states, industry, data sharing initiatives and research, the proposals approach the European data strategy through four main topics: managing the cross-sectoral availability and re-use of data, creating an infrastructure for data markets, activating individuals and businesses to share data, and developing data spaces.

For the cross-sectoral governance of data markets, we propose the creation of a governance body that would help to ensure the interoperability of different data spaces and a human-centric flow of personal data. The governance body would work in close cooperation with standardisation organisations and offer recommendations for the developers of data spaces.

Addressing the challenge of insufficient data available for promoting innovation, we propose actions to provide maturity and uptake for the critical infrastructure needed for the data markets for personal data and data sharing. These include the creation and sharing of standards and best practices, providing investments and support, and building cloud services.

Data sharing is necessary for businesses to become part of data ecosystems generating future growth. In order to overcome the lack of trust and skills that prevent individuals from sharing data, people need to be offered real added value before they are motivated to act. In this paper, we present some concrete steps to activating individuals, policymakers and businesses, including strengthening the individual right of sharing personal data, and new types of training programmes for both businesses and individuals. Also, we propose the creation of a “fair data label” for trustworthy digital services.

In order to unleash the full potential of Europe in the Digital Age, we recommend the development of data spaces in a coordinated way. This is especially important in the current Covid-19 crisis and its aftermath: better use, sharing and interoperability of data will enable governments and populations to respond to future challenges more efficiently.

TIIVISTELMÄ

Euroopan komission uuden datastrategian tavoitteena on tehdä Euroopan unionista esikuva datavetoisille yhteiskunnille. Komissio haluaa luoda eurooppalaisen datan sisämarkkinat eli data-avaruuden, joka vapauttaa datan liikkumaan Euroopan unionissa ja eri toimialojen välillä. Tästä hyötyisivät niin kansalaiset, yritykset, tutkijat kuin julkishallintokin.

Kunnianhimoinen datastrategia pyrkii yhdistämään datavetoisen innovoinnin hyödyt ja yksilöiden oikeuksien vahvistamisen. Uudella datastrategialla ja sen toteutuksella on ratkaiseva vaikutus siihen, miltä aremme ja hyvinvointimme näyttää tulevaisuudessa. Esitämme päättäjille ja yrityksille joukon toimenpiteitä tehtäväksi seuraavien vuosien kuluessa. Näiden toimenpiteiden tavoitteena on varmistaa, että strategia myös toimii meidän kaikkien hyödyksi

Euroopan komissiolle, jäsenmaille, yrityksille, datan jakamiseen liittyville hankkeille sekä tutkimussektorille suunnatut ehdotukset tarkastelevat eurooppalaista datastrategiaa neljästä näkökulmasta: sektorirajat ylittävä datan saatavuus ja uudelleenkäyttö, infrastruktuurin luominen datamarkkinoille, yksilöiden ja yritysten aktivoiminen jakamaan dataa sekä data-avaruuksien kehittäminen.

Ehdotamme uuden toimijan perustamista vahvistamaan datan vapaata liikkuvuutta yli sektorirajojen. Tämän, sektorirajat ylittävän, dataympäristöjen luomisesta vastaavan toimijan perustaminen auttaisi varmistamaan eri data-avaruuksien yhteentoimivuuden sekä huolehtimaan siitä, että henkilöön liittyvä data liikkuu eri

toimialoilla samoilla ihmislähtöisillä pelisäännöillä. Uusi toimija tekisi tiivistä yhteistyötä standardisointiorganisaatioiden kanssa ja antaisi suosituksia data-avaruuksien kehittäjille.

Eurooppalaisen datatalouden yksi haasteista on, ettei dataa ole saatavilla riittävästi innovaatioiden raaka-aineeksi. Ehdotamme ratkaisuksi toimenpiteitä, jotka auttavat hyödyntämään myös henkilödataa datamarkkinoilla sekä kehittämään datan jakamiseen tarvittavaa infrastruktuuria. Tätä tukemaan on luotava esimerkiksi datan hallinnointiin liittyviä parhaita käytäntöjä ja teknisiä standardeja, tarjottava investointitukea ja rakennettava pilvipalveluita.

Datan jakaminen on välttämätöntä, mikäli yritykset haluavat olla osa tulevaisuuden kasvua luovia dataekosysteemejä. Datan jakamisen esteenä olevan luottamus- ja osaamispuolan voittamiseksi ehdotamme toimenpiteitä niin yksilölle, yrityksille kuin päätöksentekijöille. Näitä toimenpiteitä ovat esimerkiksi vahvistaa yksilön oikeutta jakaa hänestä itsestään kertynyttä dataa sekä uudenlaiset koulutuskokonaisuudet yrityksille ja yksilöille. Ehdotamme lisäksi tunnuksen luomista luotettaville digitaalisille palveluille.

Data-avaruuksia tulisi kehittää koordinoitusti, jotta niistä saadaan irti maksimaalinen potentiaali eurooppalaisten hyödyksi. Tämä on erityisen tärkeää covid-19-kriisin aikana ja sen jälkihoidossa: datan nykyistä parempi hyödyntäminen, jakaminen ja yhteentoimivuus auttavat Eurooppaa vastaamaan tuleviin haasteisiin aiempaa tehokkaammin.

SAMMANFATTNING

Målet för Europeiska kommissionens nya datastrategi är att göra Europeiska unionen till en förebild för data-drivna samhällen. Kommissionen vill skapa en inre europeisk datamarknad, dvs. en datarymd som frigör data att röra sig i Europeiska unionen och mellan olika sektorer. Detta skulle gagna såväl medborgare, företag, forskare som den offentliga förvaltningen.

Den ambitiösa datastrategin har som syfte att förena nyttan med datadrivna innovationer och starkare rättigheter för individer. Den nya datastrategin och genomförandet av den har en avgörande betydelse för hur vårt vardagsliv och välbefinnande ser ut i framtiden. Vi föreslår åt beslutsfattare och företag en rad åtgärder som ska vidtas under de kommande åren. Syftet med dessa åtgärder är att säkerställa att strategin också fungerar för allas vår nytta.

Förslag som riktas till Europeiska kommissionen, företag, projekt som gäller datadelning samt forskningssektorn betraktar den europeiska datastrategin från fyra perspektiv: tillgång till och återutnyttjande av data som överskrider sektorsgränser, skapande av en infrastruktur för datamarknaden, aktivering av individer och företag för att dela data samt utveckling av datarymder.

Vi föreslår att en nya aktör inrättas för att stärka den fria rörligheten för data över sektorsgränser. Inrättande av en sådan sektorsövergripande aktör som svarar för skapande av datamiljöer skulle bidra till att säkerställa olika datarymders interoperabilitet samt att se till att data som gäller personer rör sig i olika sektorer med samma

människoorienterade spelregler. Den nya aktören skulle ha ett nära samarbete med standardiseringsorganisationer och ge rekommendationer för utvecklare av datarymder.

En av den europeiska dataekonomins utmaningar är att det inte finns tillräckligt med data som råmaterial för innovationer. Som en lösning föreslår vi åtgärder som också hjälper att utnyttja persondata på datamarknaden samt att utveckla infrastruktur som behövs för datadelning. För att stödja detta ska man till exempel skapa bästa praxis när det gäller hantering av data, erbjuda investeringsstöd och bygga upp molntjänster.

Det är nödvändigt att dela data, om företagen vill vara en del av dataekosystem som skapar tillväxt i framtiden. För att övervinna den brist på förtroende och kompetens som utgör ett hinder föreslår vi åtgärder för såväl individer, företag som beslutsfattare. Sådana åtgärder är till exempel att stärka individens rätt att dela data som samlats in över honom eller henne själv samt nya slags utbildningshelheter för företag och individer. Dessutom föreslår vi skapande av en märkning för tillförlitliga digitala tjänster.

Datarymder ska utvecklas koordinerat, så att de når sin maximala potential för att gagna européer. Detta är särskilt viktigt under covid-19-krisen och hanteringen av den i efterhand: bättre utnyttjande och delning av data samt interoperabilitet jämfört med nuläget hjälper Europa att effektivare svara mot kommande utmaningar.

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SITRA WORKING PAPER 18.5.2020

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ISBN 978-952-347-169-6 (PDF) www.sitra.fi