HUMAN RIGHTS AND DIGITAL SOCIETY

Human rights and digital society: for a sovereign and democratic digitalisation of Europe

Simona Levi



An Ukrainian programmer at work in the outskirts of Zaporizhzhia, in Ukraine, 31th November 2022 | Photography: Alessio Mamo

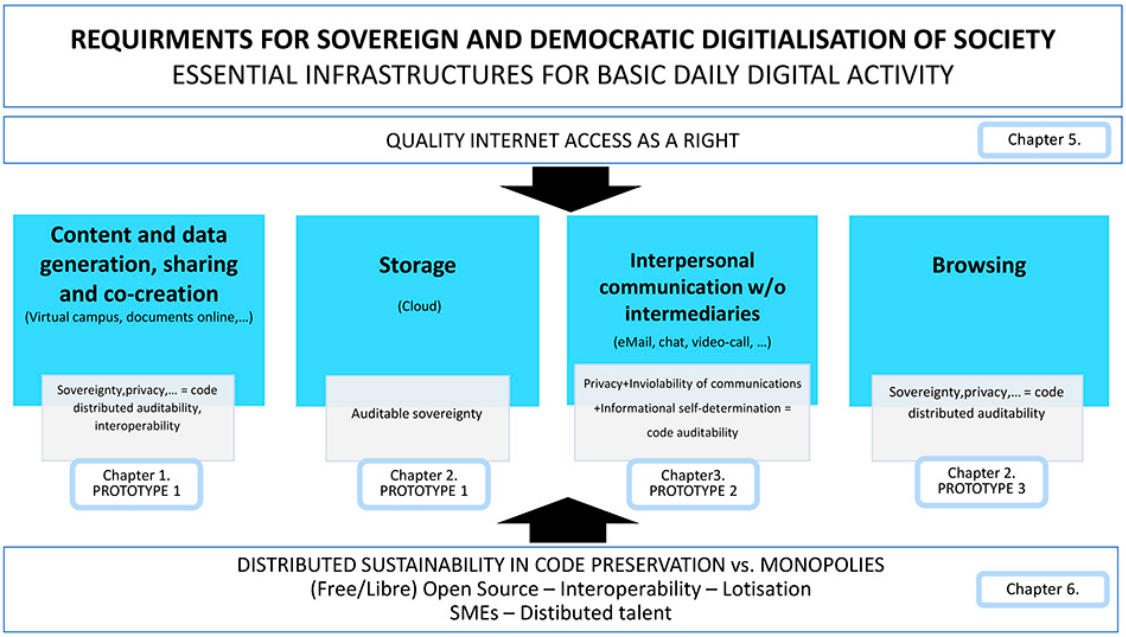
Digital transformation currently occupies a central place in the European agenda. Although digitalisation is now at the top of the European Union's political agenda, the digitalisation of societies has been ongoing for half a century. Obviously, the question is not whether digitalisation will happen or not, but whether it is democratic and, therefore, beneficial for the majority or not. [1]

The narrative around digitalisation often focuses on futuristic projects. But before that, there is an overlooked but unavoidable layer: that which enables everyday digital life in all of society's activities, from essential services to individual use, that is, content creation and storage, interpersonal online communication, browsing, etc.

	Community	Crime and public safety	Education and skills	Environment	Equality and inclusion	Finance and income	Health and care	Well-being
Email	Y	Y	Y	Y	Y	Y	Y	Y
Search engines	Y	Y	Y	Y	Y	Y	Y	Y
Information about goods and services					Y	Y		
Training and education			Y					
Online newspapers/news	Y				Y			Y
Buying/ordering goods and services					Y	Y		
Professional networking	Y		Y			Y		
Finding information about any subject	Y	Y	Y	Y	Y	Y	Y	Y
Seeking health information							Y	Y
Internet banking					Y	Y		
Social media/instant messaging	Y							Y
eGovernment service use	Y	Y	Y	Y	Y	Y	Y	Y
Telephoning or video calls (standard quality)	Y	Y	Y	Y	Y	Y	Y	Y

Source: Mildebrath, Hendrik Alexander (2021). *Internet access as a fundamental right: Exploring aspects of connectivity*.Brussels: European Parliamentary Research Service. Available online.

Our institutions commonly take this layer for granted when, in fact, serious analysis is needed to guarantee that the digital future is not built on foundations that are toxic for safeguarding human rights and sovereignty. By *sovereign digitalisation*, we mean a digitalisation in which even the smallest stakeholder of the democratic architecture – each individual – has disintermediated – that is, direct – control of the use and purpose of the content created and the data generated.



Source: Levi, Simona et al. (2022). *Proposal for a Sovereign and Democratic Digitalisation of Europe*. Brussels: Publications Office of the European Union. Available online.

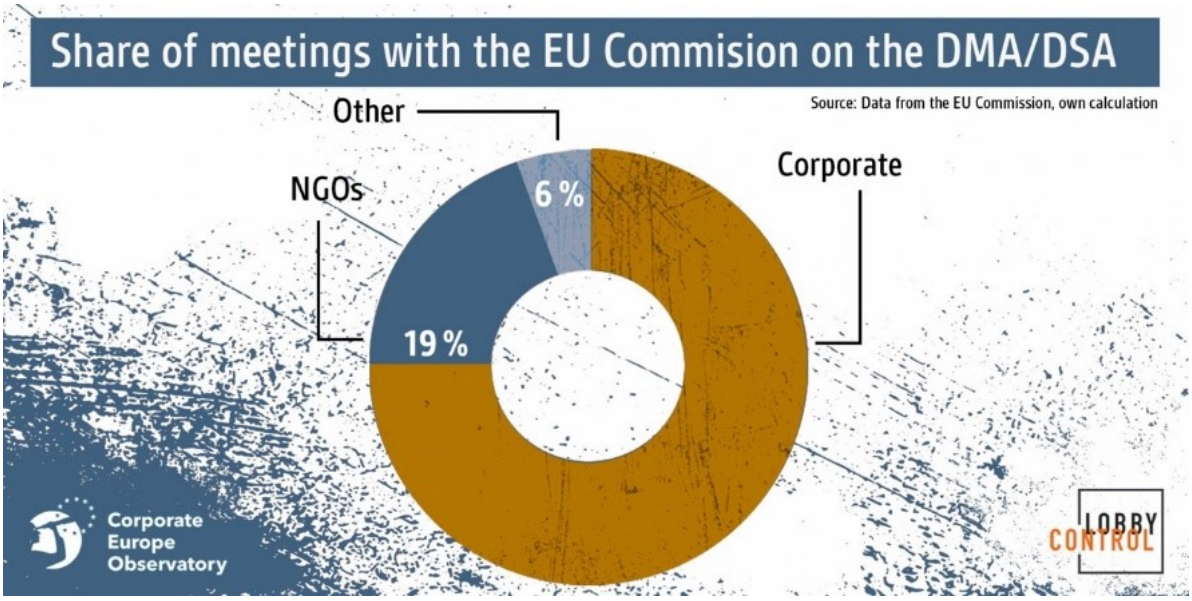
When the basic layer of everyday digital life systematically violates users' rights, everything that is done in the digital sphere takes place within a framework in which there are no democratic guarantees. The success of digitalisation should not come with the destruction of fundamental rights as collateral damage, and systemic responsibility must lie with our institutions, not with individual decisions.

Digital infrastructures with democratic guarantees

In order to guarantee compliance with democratic principles, everyday digital tools must enable users to retain control over data and content. To ensure this, the tools must be auditable in order to know what they are running, which means that their source code must be accessible and available for distributed, disintermediated auditing by anyone.

From this perspective, only free and open source software tools meet these requirements. Furthermore, free/libre and open source software (FLOSS) has another fundamental advantage: it fosters entrepreneurship, as it is available to the public and private sector alike and maximises the value of public investment.

In contrast, the dominance of a few companies – known as big tech – in providing the basic digital layer, including institutions and essential services, sends a very wrong signal to the market: that digitalisation may take place at the expense of small and medium-sized enterprises, at the expense of innovation and, often, also at the expense of human rights.



Source: Corporate Europe Observatory (2021). *The lobby network: Big Tech's web of influence in the EU*. Brussels and Cologne: Corporate Europe Observatory and LobbyControl. Available online.

The digitalisation of essential services

The digitalisation of essential services can be analysed using a number of examples and prototypes. The first prototype we propose is based on our field experience.

In 2019, a number of families in Barcelona objected to the digitalisation of their children's education, even the youngest – from the age of 4 – being implemented solely using tools where data and content were managed by big tech corporations, without any other robust options being available. In response, Xnet designed the Plan for the democratic digitalisation of education, which included a replacement digital tool called DD (digital democratic).

As the hackers say, "we should never solve a problem twice"; in other words, don't reinvent the wheel: the tools needed to create alternatives already exist.

DD is a full fusion of existing auditable, widely available, free software, such as Nextcloud, Moodle, BigBlueButton, WordPress, Etherpad and Keycloak.

This is not new. What *is* new is making these tools work as one. Here is where we innovate. We propose an institutional commitment to improve them, to make them easier to use, to enable them to communicate fully with each other, and to be usable and attractive; in short, we propose to equip them so that they can compete with the big tech tools. This is not only possible but it is also profitable and an institutional duty.

Barcelona City Council agreed to issue a very small call for tenders so that a number of

companies could develop the proposed code. At present, this code is being run as a pilot project in eleven schools in Barcelona. In addition, Xnet has started to negotiate the roll-out of similar measures to the whole of Catalonia and to the region of Bozen, in Italy, and it is also in talks with other governments that are starting to opt for more democratic digital tools.

However, despite significant interest from schools, teachers, families and the IT industry, conditions are very difficult. In particular, the project is underfunded, which prevents it from progressing as much as demand requires and does not allow it to be sufficiently robust to enable other regions to test it and decide whether they want to join the project as co-developers. Legitimacy and a coalition at European level is needed so that the institutions in the territories that are willing to make the change do not feel that they will be left in the lurch.

The DD tool is necessary. In several countries, the data protection authorities have already prohibited the use of big tech in education. These countries so far include the Netherlands, Denmark and two German *lands*. They have also been banned in France, but for dumping reasons, as we will explain below.

Between 80% and 92% of European data and content are generated and stored in non-European big tech tools. Everyone acknowledges that as yet, there are no alternatives and that lobbying pressure is immense. Therefore, the challenge and the obligation facing European and international administrations is to create alliances between countries.

The DD tool is intended to be the embryo of a free, public, auditable, easily usable, interoperable, sovereign European code; a public European code for education and, later on, for all the other essential services. The European Union should protect this code, which should be governed by principles of the purpose-driven economy: economic, social and environmental sustainability.

> The success of digitalisation should not come with the destruction of fundamental rights as collateral damage: responsibility must lie in the institutions, not in individual decisions

Furthermore, the code must be open so that any government or private player who wants to contribute to it can become a co-creator. It must also be free, so that every country, institution, school, service or private individual can use it and adapt it to their needs, and so that any technology company can offer it as a service, to break with the current macro-monopoly, and also to enable the existence of a robust entrepreneurial technological ecosystem at different scales in Europe.

This is the practical basis for a sovereign and democratic digitalisation of the European Union: the public European code of essential services.

Sovereign, distributed interpersonal communication

Another example of essential digitalisation is the digital interpersonal communication system, in particular, that commonly known as e-mail.

It is estimated that 3.9 billion people use e-mail services. According to Google, about 1.5 billion people use Gmail, the e-mail service offered by Google since 2004. In addition, about 400 million users have Microsoft e-mail accounts.

CONNEXIÓ A INTERNET							
	SECTOR						
	SECTOR. PÚBLIC (PARCIALS)						
CONCEPTE	Primària, centres incomplets*	Primària, centres complets	Primària total	Secundària total	Sector públic global	Sector privat global	Sector públic i privat global
Percentatge de centres que:							
Disposen de serveis en el núvol	67,1	82,3	79,9	91,2	83,1	90,1	84,8
No en disposen	32,9	17,7	20,1	8,8	16,9	9,9	15,2
Dels que en disposen, tipus de serveis que hi tenen:**							
Google Apps for Education	84,8	93,3	92,1	93,7	92,6	74,1	87,8
Microsoft	12,6	7,9	8,5	14,7	10,4	42,3	18,7
iCloud	10,6	9,1	9,3	6,3	8,4	19,9	11,4
Altres	23,2	18,2	18,9	35,4	24,0	47,0	30,0
Dels que en disposen, a qui proveeixen serveis en el núvol:							
Centre		51,0	53,9	53,5	45,1	50,9	39,3
Administració educativa		34,4	23,0	24,5	17,8	22,4	2,1
Altres		14,6	23,2	22,0	37,0	26,7	58,6
Dels que en disposen, tenen accés al núvol:							
Professorat		100,0	99,9	99,9	99,8	99,9	100,0
Alumnat		76,8	84,8	83,7	94,1	86,9	88,8
Famílies		27,8	28,2	28,2	32,7	29,6	44,8
Percentatge de centres que:							
Usen correu XTEC		100,0	99,9	99,9	98,4	99,5	92,3
No usen correu XTEC		---	0,1	0,1	1,6	0,5	7,7
Percentatge de centres que:							
Disposen de correu electrònic propi		62,7	81,4	78,4	93,7	82,8	96,4
No disposen de correu electrònic propi		37,3	18,6	21,6	6,3	17,2	3,6
Dels que en disposen, tenen comptes:**							
Professorat		100,0	98,9	99,0	99,0	99,0	98,7
Alumnat		75,9	83,2	82,2	92,3	85,5	77,5
Famílies		13,5	12,1	12,3	11,9	12,2	17,8

Source: Ministry of Education, Generalitat de Catalunya (2020). “Serveis en el núvol i serveis de correu electrònic” [online]. *Estadística dels equipaments i usos de les TIC als centres escolars 2019-2020*. Ministry of Education. Indicators and Statistics Service.

Information Society Statistics. Available online.

These are dominant players in the e-mail market that have achieved market penetration by offering a free e-mail service, despite its high cost.

Free provision of such services by for-profit companies is problematic in a market that claims to be competitive and democratic. The result is a situation characterised by dominant players, a de *facto* private monopoly, in an essential infrastructure such as interpersonal communication.

Moreover, these services are designed as centralised services, which raises a number of issues related to sovereignty and privacy, particularly on the right to confidentiality in communication, a right we won back in the 18th century.

In this context, it is important to analyse to what extent the right to inviolability of communications, essential for democratic societies, can be exposed by our institutions to profit-seeking interests in an unbalanced market.

To counter this, Xnet proposes a sovereign solution for e-mail and interpersonal communication in the European Union, again led by the EU. So what is it?

Until now, e-mail has been thought of as a centralised service. Apart from raising privacy issues, it is (above all) inefficient and somewhat absurd: in the age of networks, having to go through a centralised middleman in order to write to each other is simply anachronistic. It is certainly not for logical reasons; its purpose is to control.

In this case, it is also necessary to establish an intranational European consortium to generate a public code for peer-to-peer e-mail that is decentralised and sovereign for each citizen, and, of course, also compatible with the current situation.

Online browsing

Another essential everyday digital infrastructure that is in a critical situation is the browser. We are all aware of the privacy problems that arise when surfing the internet.

Again, we don’t need to reinvent the wheel. There is already a democratic browser that has been around since 2004: Firefox, which is run by a foundation in accordance with the principles of the purpose-driven economy in order to preserve digital rights and freedoms.

However, at present, 88% of Firefox’s revenues come from a default search engine partnership agreement with Google, which makes Google its main source of income.

> Between 80% and 92% of European data and content are generated

> and stored in non-European big tech tools

It is not difficult to see why it is problematic that Google, in a clearly dominant market position, is the main partner of its non-profit open-source competitor.

So, once again, Europe should act true to its values and, above all, to its needs, and rescue Firefox.

Monopolies, dumping and democratic digital economy

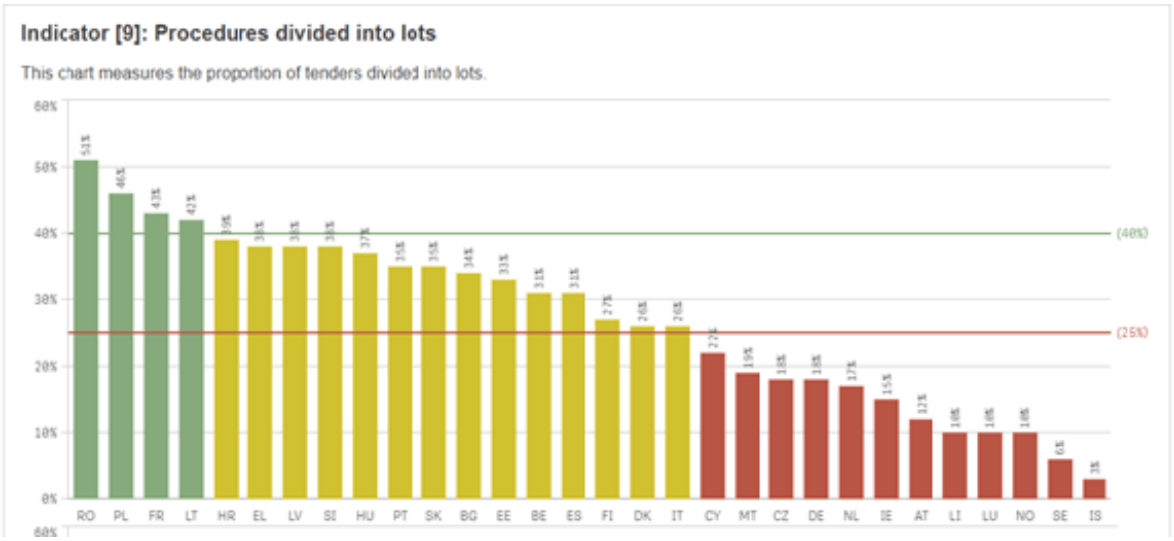
These lines of action to create an essential digital services infrastructure that is sovereign and public are framed within an endemic regulatory non-compliance problem.

There is a recurrent malpractice in public procurement across Europe: the systematic violation of national and European legislation on public procurement which, since Directives 2014/23/EU and 2014/24/EU, requires that institutions conduct public tenders in small lots to favour small and medium-sized enterprises.

Moreover, the absence of clauses to uphold digital rights and guarantee the auditability of products makes it extremely difficult for companies, especially open source software companies, to grow.

The European Commission's own data [2] show that in most European Union countries, less than 50% of public purchases are made with SMEs. This is due to the failure to split purchases into lots.

In short, the sustainability of sovereign and democratic digitalisation depends on antitrust and investment policies that reach the SMEs and protect digital rights; in other words, they simply do what EU legislation says.



Source: European Commission (2021). *Public Procurement. Single Market Scoreboard*.

Reporting period: 01/2021 – 12/2021. Indicator number 9. Available online.

In addition, institutions are also responsible for allowing the penetration of big tech products that do not cost them money in essential services, in areas such as education, health or public administration, and in tools such as e-mail, among others.

This is basically a violation of the right to run a business, because it takes place outside of public procurement, with the excuse that the cost is zero, and it "levels" the playing field, with the result that it prevents the emergence of competitors and allows the beneficiary to grow to the point of becoming "unmanageable".

Cooperation towards democratic and sovereign digitalisation

If citizens use non-auditable software, this may be for two reasons: they have no choice or, if they do, they cannot adapt to it. However, when an institution continues to use non-auditable, non-interoperable software day after day, it is systematically violating the population's rights.

To conclude, for all the reasons given above, it is vital to work in coordination at European level to achieve two objectives:

1. Co-create a free, auditable, interoperable European code for essential public services that is accessible to institutions, businesses and individuals.

2. Guarantee correct, swift application of Directives 2014/23/EU and 2014/24/EU so that businesses of all sizes across Europe can contribute to this code and benefit from the provision of derived services based on this code.

REFERENCES AND NOTES

1 — This text is taken from the report *Proposal for a Sovereign and Democratic Digitalisation of Europe*, coordinated by Simona Levi for the European Parliamentary Research Service at the request of the European Parliament's former president, David Sassoli. Available online.
2 — European Commission (2023). *Access to public procurement. Single Market Scoreboard. Reporting period: 01/2021 – 12/2021* [online]. Indicator number 7. Available online.



Simona Levi

Simona Levi is a theatre director, playwright and technopolitical strategist. In 2017, the magazine Rolling Stone singled her out as one of the 25 people shaping the future. Since 2018, she has been responsible for developing and designing the course in Technopolitics and Rights in the Digital Age, first at Pompeu Fabra University and later at the University of Barcelona. She is the originator of Xnet - Institute for Democratic Digitalisation and 15MpaRrato, which has achieved convictions of 65 politicians and bankers for using "black cards", including the former Spanish Minister of Economy and former President of the International Monetary Fund, Rodrigo Rato. She has written a number of books, including *#FakeYou: monopolis de la manipulació informativa i retallades de la llibertat d'expressió* (#FakeYou: information manipulation monopolies and curtailments of the freedom of expression) and *Votar y cobrar. La impunidad como forma de gobierno* (with Sergio Salgado) (Vote and collect. Impunity as a form of government). She is also co-author of the book *Tecnopolítica, internet y r-evoluciones* (Technopolitics, internet and r-evolutions). She has been and continues to be an advisor to numerous organisations and institutions, such as the Secretariat of State for Digitalisation and Artificial Intelligence and the Catalan Government's Directorates of Digital Society and Digital Administration.