UNIVERSITÀ DEGLI STUDI DI PADOVA

DEPARTMENT OF POLITICAL SCIENCE, LAW, AND INTERNATIONAL STUDIES

**Master's degree in**

**European and Global Studies**

**Global Communication Policies**

# DIGITAL SINGLE MARKET AND WORK SURVEILLANCE: THE ROLE OF THE EUROPEAN UNION

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Matriculation No. 1242620

A.Y. 2021/2022

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# Introduction

This project springs from a one-year-long collaboration with Professor Claudia Padovani: crossing the master course 'Global Communication', the winter schools 'Next Generation of global studies' (organized in partnership between Universities of Padua, São Paulo and Leiden) and 'Quality of European news ecology' (organized by Jean Monnet Network European Media and Platform Policy) and formal and informal reflections with the professors of 'European and Global Studies'. Moreover, this research is grounded on my personal working experience since it was characterized by the overwhelming presence of precarious contracts and remote surveillance tools. These personal experiences created the awareness of the role that trade unions should develop in improving the working conditions of the citizens. Indeed, technologies such as GPS localization of workers and performance monitoring are spreading in the whole work market and trade unions should play a central role in struggling for right-based use of technology. This research tries to understand the European normative framework about the digital single market and the real implication in workers' life. Due to the short amount of time that a one-year-long project allows, this research opens different trajectories but it carries out only the qualitative one. Trying to provide empirical reflections to trade unions and policymakers for promoting norms and laws based on the dignity of workers.

This work wants to analyse the links between technology and labour. Technological development is an element that constantly introduces tools able to influence the quality of life of social communities and individuals. Analysing the trajectory of technological development is necessary since it allows us to understand if technology is respecting the fundamental rights of the citizens. Challenging technological determinism is challenging the idea that establishes a unique possible direction of development. Moreover, proposing different trajectories can empower the democratic environment since it returns to the citizens the capability to determine their lives. To challenge technological development workers should develop class-based knowledge since it is fundamental to move technical and specific political claims. This research is established on this necessity

of producing class-based knowledge and it tries to analyse the possible case of workers' exploitation through technology. The research questions of the thesis are: ***'How does digital surveillance impact workers' rights and dignity? How is the European Union intervening to protect workers' rights and dignity in the digital context? What's the role of trade unions in this context? In the end: Is it possible to make use of data in the respect of the dignity of workers to increase their quality of life, instead of adding surplus-value to capitalists?***'.

The theoretical framework of the research questions is grounded on the reflections of Karl Marx and Friedrich Engels, the fathers of the critical and Marxist approach of social sciences. Furthermore, the academic analyses of Christian Fuchs and Vincent Mosco were an inspiration to critically develop the analysis on policies of the digital market of the European Union. This Marxist theoretical framework tries to critically analyse the inequalities that plague our society since analysing work is analysing the whole society. Moreover studying the surveillance technologies applied in the production process is studying the unequal distribution of resources among different social strata. The theoretical framework of this project tries to analyse technological development and though it the whole society.

Chapter 1 develops the analytical framework of the thesis, it is set on the idea that the unequal distribution of global power in the market creates an unequal, and asymmetrical, exploitation of workers through digital tools. According to Fuchs and Mosco, in our capitalistic society technology is used to maximize the profit of the owner of the social platform through a process of extraction of value from the daily activity of the users. This process characterizes both the voluntary actions of the users on the social network and working actions towards the establishment of processes of labour surveillance. For the first time in history, technological innovation gives the capability to dislocate the process of production on the whole planet, scientifically checking the efficiency of every single step. This process shall be distinguished in two different macro elements. The first one is the production of digital services and commodities done in different parts of the planet at the same time. These are microelements of smart working that each individual can do voluntarily or for a small amount of money. The second is the production of physical services and commodities, organizing the production process toward the

use of surveillance technologies as the localization and the performance analyses of the workers.

Chapter 2 focuses on the role of the European Union since it is becoming central in regulating the digital single market. Moreover, the research tries to map European policy activities related to data protection, criteria of application of artificial intelligence and the establishment of a right-based digital environment. By analysing European selected documents and provisions, the thesis stresses the trajectory that the European Union is following in its attempt to regulate the digital, focusing at the same time on the rights-based improvement of the European policies, and on possible legislative gaps.

The same rights present in the physical world should also be applied to the digital one. Furthermore, the digital world needs its own additional rights, which better represent identities and virtual bodies. Digital constitutionalism as a theoretical and analytical proposal could be used to promote these kinds of democratic goals. Digital constitutionalism is an analytical framework in which is possible a collective interaction between institutions, states, NGOs, companies and communities. This framework could be used to promote the setting of collective regulations, restoring democratic power on the market. We want to underline how a fair use of data is possible and how it can be not based on the exploitation of users, rather it can be based on participation in public life. The different chapters show how digital constitutionalism creates a cohesive mechanism that is able to catalyze responses from collectivity. Trade unions are founded on the idea of promoting collective necessities and on representing workers' needs. Toward these organizations workers could find the capability to participate in the political democratic debate. European Union should empower these political subjects involving their presence in the processes of decision-making and of the single market evaluation. Indeed, European Institutions should catalyze the foundation of European trade unions able to monitor the market and sit at European institutional tables.

The last part of the research is based on a comparison between the European policy and the real experiences of the workers that are subject to remote surveillance. Chapters 3 and 4 highlight that academic research could produce

knowledge that may be useful to legislators and politicians since they could base their policies on concrete cases and on the necessities of the workers. These two chapters - the first methodological, the second based on fieldwork research - analyze how remote control devices are implemented to establish the positions and performances of workers, analyzing the mechanisms of exploitation of the digital Taylorism while offering elements of reflection that could be used to create subsequent European policies.

My personal political experiences create the possibility to intercept different forms of collective organization of workers to which I tried to give a voice through the research project. I think that the academic knowledge is fundamental to move coherent political claims. Actually, I'm working as trade unionist in the biggest Italian workers union. This working experience gives me the possibility of having a privileged position in the analysis of the phenomena of workers' exploitation. This research aims to show the experiences of those who work in precarious conditions. Trying to provide tools for the struggle for workers' dignity.

The next step of this research should be based on collecting dozens of testimonials to describe more precisely the relationship between technology and citizens. Creating the empirical base to ask for policies based on citizens' dignity and on efficient mechanisms of welfare distribution.

# 1.0 Time, Users and workers

The theoretical framework that inspires this thesis derives from the analysis of Christian Fuchs and Vincent Mosco, two Marxian political scientists. Furthermore, the theoretical structure of the analytical framework is also based on the reflection of Karl Marx. The other authors that inspired this project are: José van Dijck, Pierre Bourdieu, Stefano Rodotà, Edoardo Celeste and Claudia Padovani.

The critical Marxian analysis aims to follow the path of digital constitutionalism: critically analysing the fracture of modern society and proposing an international process of constitutionalization, creating new rights and new possibilities. The research questions of the thesis are: *'**How does digital surveillance impact workers' rights and dignity? How is the European Union intervening to protect workers' rights and dignity in the digital context? What's the role of trade unions in this context? In the end: Is it possible to make use of data in the respect of the dignity of workers to increase their quality of life, instead of adding surplus-value to capitalists?**'*.

The Marxian analysis is a critical perspective that points work at the core of society; analysing work is analysing society. This approach can improve the debate of digital constitutionalism by proposing class-oriented regulations and suggestions. Work has always been a fundamental activity used for the construction and the comprehension of reality: only work can transform the raw materials into the commodities daily used in each aspect of society. Work is both social and material production since it gives sense to the interaction of the individuals into our capitalistic society. The ruling class tries to hide the process of production as much as possible since only production highlights the process of unequal distribution of resources among different social strata. Indeed, according to Karl Marx, the final result of the process of production always appears in the society itself (1938, 712). In other words, production is always present but is structurally hidden. Society is grounded in human practice and social production since humans constantly produce and reproduce the social structure in which they live. A capitalistic society is only

one of the possible outcomes of this process of production, and different trajectories can be achieved through macro and micro struggles for an alternative social life.

## 1.1 The digital communication society

The communication society is an international context in which operates multiplicity of actors. There is no single regime since the global environment is characterized by different infrastructures, televisions, servers and telecommunications tools (Krasner, 1991). This huge international environment is composed of interconnected structures and mechanisms that work across different contexts and countries: social life, culture and economy are related to each other in the global dimension. Contents that come from the communication society embrace each sector of society: music, films, culture industry, organisational structures, e-health app, e-education platforms since this content is a mandatory tool for personal and public communication (Padovani, Raboy, 2010).

Communication has always been a core element of the socio-economic structure and social media are an important component of global communication society (Fuchs, 2021). The digitalization of the society completed the process of the primacy of information since '*the term digital does not simply refer to digital machines and processes but to the entire political, social and economic context and infrastructure within which they have emerged. This is how we now live in the digital age*' (Burston, Dyer-Witheford and Hearn 2010, 215). The conceptual framework used to define the global dimension of the digital communication society comes from the elaboration of Christian Fuchs that defined the new dimension of labour: the digital one.

The definition of digital communication society is a fusion of the above definition since it lays in the idea that the digitalization of the whole communication society: digital media and digital technology are no longer a piece of the mechanism since digitalization converts the entire organisational process and the entire social product of the communication society. The digital communication society creates the capability to collect and analyse unprecedented dimensions of data and information since it tries to map each sector of the society.

The digital communication society is the organisational and political structure that daily controls the reality, from the production to the consumption. The (digital) society we live in is firmly structured on data: information that each individual, institution and company produces in the moment of interaction on the internet. This huge amount of data constantly allows companies to in-time understand the necessity of market organizing and controlling the production phases. The digital communication society can be defined as a consequence of the third industrial revolution in which there was an unprecedented development that has led to the birth of personal technological devices: accessible operative systems and the first proto social networks. In the digital communication society, the user is both the customer, to whom the goods are sold and the commodity, from which the data are extracted.

Communication is the key point of this process of production and reproduction of the social order since the dialectical interaction among groups defines who and what are legitimate to operate inside a cultural context. Communication is and always has been a tool used for the legitimation of reality: through communication, the community can have a dialectical debate and can decide the perimeter in which to exercise individual and collective rights. This process can be defined as the cornerstone of democracy as without a dynamic debating model there cannot be a participatory process. Raymond Williams (1977, 744) affirmed that culture and communication are realms of social production and therefore they are material: social production and material production shall be considered as two sides of the same coin. In the digital communication society, online and offline realities are usually shown as separated parts of reality in which the first one represents the progress of society that springs without borders developments and the second represents a material chain of the aspiration of the individuals since the digital environment appears always free and the material one look as blocked by state restrictions and social inequalities. Instead, the digital environment is deeply connected with reality and digital citizenship is strictly connected to the material one: digital inequalities are social inequalities.

Affirming that communication is a process of production as the material one highlights the centrality of the theme of collective control over the process of

communication. A pure democratic digital environment can be possible only when there is a collective responsibility for the machines and the algorithms used for the process of communication. The digital communication society is characterised by the neoliberal paradigm of *laissez-faire*, which comes from the application of the neo-Keynesian model of economic development of Stanley Fischer (1977) and Frederick Taylor (1979) to the digital market. According to the neo-Keynesian model, companies shall be free to provide services and the digital environment shall be less regulated as possible to obtain the total freedom of the users. The privatization of the digital sectors (such the research and development one) put under the control of the companies the direction of digital development, which created a deterministic ideology of digital welfare: digital innovation seems to always bring positive innovation in our society, and seems to constantly increase the material conditions of the individual. Through this ideological legitimation, that comes from the neo-Keynesian paradigm, the citizens and the states lose the capability to democratic direct the technology, to influence the decision-making process of the big techs and to create a concrete safe space for digital debating. The ultimate goal of this economic framework is to increase the global capability to manage resources and capital without juridical limitations.

In this chapter, the state of the art of the digital communication society is analysed. Particularly the concepts and realities of work, machines and technological development are analyzed: technology does not always proceed in one direction, workers and citizens should refuse a deterministic approach to technology.

## 1.2 The digital communication society through Marx's lenses

Karl Marx developed the critical sociology of technology that poses the context of analysis of modern society. Following Christian Fuchs, we argue that the concepts proposed by Marx of dehumanization, alienation, fixed constant of capital and surplus-value are still useful to describe the antagonism of the productive forces into the relation of production (Fuchs 2018). Indeed, studying the communication

society implies analysing if and how the antagonism, that is embedded in the division of labour and the in process of production, is still present.

Critical theories are materialist theories (Fuchs, 2020). Materialism studies reality: analysing the contradictions and the fracture lines of society, stressing the legitimacy of an unequal system. According to Fuchs '*All forms of matter have a beginning and an end. The matter is eternal because it is being's form of being and there must always be something. Matter is the world's process-substance. Matter is universal: It has no beginning and no end.*' (2020, 29). The economic model is not eternal since it has a form of matter; it has a beginning and an end, but the necessity to organize society is eternal since this necessity is based on material resources. The difference between the form of matter and matter itself underlines the fact that social inequalities are not eternal and that an economic model always can be overturned. The matter is dialectical and ever-changing.

Marx's works pointed out the importance of the means of communication in the organization and in-time acceleration of global capitalism (Fuchs, 2018). The globe is becoming increasingly interconnected since this process is fundamental for the reduction of labour costs and the increase of the rate of productivity. Moreover, using this interpretative lens is affirming that the digital communication society only partially delocalized the social inequalities that systematically emerge from capitalism. In the digital communication society, computers do not only organize the circulation of commodities, but also they are the means of production for the creation of social commodities: hiding this part of the production is hiding the control on the surplus-value. The example that can be used to explain this process is the daily voluntary interaction on Facebook: users daily share posts and express opinions and these practices allow Facebook to store and elaborate an amount of unimaginable data. These data are sold directly into the market. The process of hiding production is the core of the analysis since the digital communication society is based on voluntary activity that the users do every day: the process of extraction of value and data from the interaction between users is veil into the capability of free instantly sharing information in the whole planet.

Globalization can be understood as the capitalistic capability to control the production and the consumption on the whole planet, controlling at the same time

the process of extraction of raw material, the production and the consumption (Fuchs, 2021). The global communication society embeds this global connection and puts the users into the capability to freely interact across the planet and this capability is represented both as a free service to stay in touch with loved ones and as a possibility of the total, horizontal and democratic information. Digital society extracts value from the global interaction and the interest of citizens of the whole planet: citizens do not pay for the service since they are the commodity.

## 1.3 Digital society and the challenges of undemocratic digital control

The organisational structure of the digital communication society derives from the interactions of different private global subjects that control the digital market (Fuchs, 2021). These private entities as Meta, Alphabet, Amazon and Microsoft developed different ecosystems in which individuals can interact, share information and data. These companies' controlled ecosystems are called platforms and the platforms are the core structure of the daily interaction of the users on the internet. Platforms are an expression of the organizational structure of the digital communication society.

Platforms can be defined as a structured ecosystem that brings to the individuals thousands of different services: social networks, webmail services, smart or online payment, forums, browsers, search engines, instant messaging apps, virtual reality interaction and lots of other facilities. The core of the digital society is to create a perfectly integrated model that keeps the users on the internet creating a dynamic of dependence that leads to the creation of new services and new needs.

According to Van Dijck and colleagues, platforms are the gatekeepers of the digital environment (Van Dijck et al., 2018) and through them all the data traffic flow on the internet: they own messaging, social network, digital marketplace, news websites, browsers, operating systems. The core of the western infrastructure is completely privatized (Van Dijk et al., 2018). Public institutions and NGOs do not have the capability of developing their environment without interaction with the big 5 platforms: Alphabet, Meta, Amazon, Apple and Microsoft.

The datafication model is the process of transforming aspects of real-life into data (Mayer-Schönberger, Cukier, 2014). As just seen, this process of the total conversion of material life into the digital one is the core difference between the communication society and the digital communication society. The datafication model is useful to describe the challenges of our modern society since it considers as central the process of in-time clusterization of individuals that characterizes the big data/digital society. This in-time elaboration enabled the big tech companies, understood as the capacity to immediately elaborate data aggregates, thus creating a precise definition of the audience of a specific service: allowing companies to control production and to avoid a crisis of overproduction, selling the right amount of merchandise in perfect time. The whole process used at the same time personal information and macro dataset aggregations. In this model information generates other information through a continuous process of elaboration: the core of the system is the data itself, and it can be used as a constructive component of the digital society.

The elaboration process is out of the control of institutions and citizens since the algorithms are covered by the policy of industrial secrecy. The output of this reality is a creation of a black box system, in which no one knows how this elaboration operates and if this data processing respects the standards of dignity that shall characterize modern society (Rodotà, 2004). At the same time institutions (both local and supranational), due to this black box system, are not completely able to verify if the basic protection of personal data and consent are respected. Moreover it should be always possible for the re-identification of the single users and the single content through the same data black box processing.

The second aspect that creates instability in the democratic systems is the infrastructure through which citizens access the internet and the whole information system. Véronique Wavre (2018) in her work about telecommunication regulation in the Global South shows how totalitarian governments control access to the internet to compromise the democratic freedoms of the citizens. The researcher highlights how, during the elections, authoritarian governments shut down or radically reduce the velocity of the internet connection to hit the capability to obtain pieces of information. This kind of project shows us how the capability to access

the digital environment is strictly connected with the quality of democracy and to the capability to develop democratic citizenship. The most important document related to internet freedom is done by the freedom house and its 2021 report underlines how in the largest part of the planet there are still present liberty limitations: managing internet infrastructure is managing the whole society.

## 1.4 Technological determinism

Technological development is strictly connected with the theme of freedom, democracy, political participation and correct information. Indeed, the theme of the correct development of innovation underlines how the same technology can be developed both for catalyzing liberties and for imposing oppressive regimes. Challenging the idea of innovation can be challenging the whole structure of societies.

Technological progress seems like a self-acting subject that brings development to each member of society. Technological determinism can be defined as an ideology that describes progress as always neutral and positive: reducing the fatigue of workers and citizens, making available more and more precise services and more and more automated machines. This ideological perspective shifts the attention of citizens from the essential element of the democratic environment since there is no dialectical discussion over the trajectories of technological development. In reality, technology is not always positive, democratic and good and citizens should establish a collective control over the direction of development: considering both the algorithms and the infrastructural constructions.

In the last decades, the production process is characterized by an exponential improvement of machines and technology in all the steps of the system. Factories are becoming more automated and machines more sophisticated. However, this technological development seems to improve the capitalist and not the workers since each step of technological innovation increases the productivity of work but reduces the volume of workers employed. Challenging the direction in which technological innovation is developed should consider the production

process too since machines should reduce illness and injury and not replace workers.

Fuchs suggests that production processes, in the digital communication society, can be divided into *'resources'*, the objects of work, and *'technologies'*, the instruments of work (Fuchs, 2020). It can therefore be affirmed that controlling the tools of work is controlling work itself: determining the time, the actions, the methods and the actors who must be involved. Capitalistic societies are based on full control over the instrument of work by the dominant classes since only capital has the power to define what kind of machines to use. The capability to collectively determine the instruments of work is removed from the workers.

Marx (1938, 709) introduced the concept of the general intellect, a concept that predicts promptly the idea of the internet and machines applied into the information society. The general intellect should be the social knowledge that can have the power to break the chains of an unfair production system: social and technological knowledge that can be used to improve the working conditions and not to exploit the workers. Marx argued that social intellect and technological expertise are central to the production process: capitalistic social intellect can amplify the value of time since technological development is increasingly crucial in refining the production process. General intellect should be a social tool for overcoming technological determinism. Through the general intellect shall be possible the interactions among different subjects: workers shall establish a new knowledge that develops new roads for the technological developments, improving the necessity to protect the humans and the whole planet.

Technological relations are class relations that define who controls the ownership of the means of production (Fuchs 2020); in other words: controlling technological development is controlling social relations. Machines can be developed with the idea to reduce work-related illnesses rather than to replace workers, GPS technologies can be used to better improve the security of the drivers instead of monitoring worker productivity. Humans can reverse this process through mechanisms of political protest and struggle for the recognition of their role: eliminating the political, economic and cultural alienation that comes from the

capitalistic technological development. Technology does not determine society since technology is not the cause, but it is a result of social change (Fuchs 2018).

## 1.5 The concept of time in the digital work

Time is the key element for the capitalist process. Controlling time is controlling both the production and the logistic process; controlling time is controlling all the processes from the raw materials to the commodities. Throughout capitalistic development, there is a history of space-time compression that generated a new level of capital accumulation (Fuchs, 2020). Marx argued that '*Capital by its nature drives beyond every spatial barrier. Thus the creation of the physical conditions of exchange – of the means of communication and transport – the annihilation of space by time – becomes an extraordinary necessity for it.'* (1938, 524). Indeed modern industry works by placing different localities in contact with each other, organizing at the same time profiling, marketing, advertisement, logistics and production. Into the era of digital capitalism, a further revolution is underway which leads to the inexorable reduction of communication times and workspaces: productive processes can be controlled live and in-time decisions can be taken to reorganize industrial (or commercial) assets.

The reduction of time does not describe only the reduction of the travelling time of the commodities through a logistic process. It also presupposes a reduction in the time required to work to produce the same unit goods: technological innovation allows us to be more efficient and to optimize the production process. Time efficiency is not mandatorily a negative aspect since it can potentially reduce reaction times in response to emergencies, the working time, the fatigue of work and can lead to timely management of production that allows avoiding waste. However, in the capitalistic model, the improvement of work productivity can only bring an improvement of the surplus-value owned by the dominant classes: no worker, therefore, benefits from a reduction in working hours, as this time is kept constant to increase the wealth of the company. Surplus labour could create the condition to create diffuse welfare in the whole society and this different use of the

surplus-labour is built on the struggle of the worker class: overcoming the antagonism between necessary labour time and surplus labour time.

Information is a particular commodity and computers are machines that are simultaneously a means of production, circulation and consumption (Fuchs 2018). The moment in which data is extracted from the activity of the users can be elaborated and compared in the datafication system. Information has initially a high cost of construction and extraction but at the moment in which they are owned, in aggregate form, from the companies they can be used thousands of times in simultaneous places.

The increase of availability of surplus labour time and the reduction of necessary one bring an unequal distribution of time in the society. Precarious labour and unemployment seem to structurally affect the production process: they are symptoms of the presence of overwork or undeclared work in different sectors. This presence of overwork affects the whole system eliminating the capability to create new occupations: the time that should be used by two workers is used by only one and that one is exploited for the constant creation of surplus-value. The reduction of the time of the necessary work does not bring full employment since the technology is developed to exploit as much value as possible. Indeed, it can be affirmed that the capitalist use of machinery contributes to social problems such as overwork, unemployment, stress, workplace injuries, precarious labour and work surveillance since machines are designed to optimize the production process and not to respect human dignity.

## 1.6 Clouds and data

Data are at the same time the commodity and the raw material. The storage and the management of data are the instruments in which big tech can have a huge amount of surplus value. Through data, companies can obtain perfect profiling of the citizens, knowing their relations, interactions, tastes, passions, ambitions, professional careers and any other personal or sensitive information.

The instrument used to make possible this massive action of profiling is the cloud, a huge amount of global storage of data that can enable the owner of the

server to make any actions of analysis, statistics, accumulation and categorization of the aggregate element of it. Clouds are memories distributed in a global dimension. Clouds provide different services, often paid, which can be archiving and data processing. The estimated dimension of the global clouds is in the order of the tens of zettabytes (Mosco 2014), one zettabyte is on a tilliard of bytes ($10^{21}$ bytes), and in the next year, the global cloud is going to exponentially increase its dimension. The computers we use every day have an average of 500 Gigabytes, 1 Gigabytes is one billion bytes ($10^{9}$ bytes). These computers, with average use, are rarely filled and reach maximum capacity only if they are maintenance-free and after seven/ten years of use.

Data is used to organize the production process since through targeted marketing activities the companies can estimate the number of products that are sold into the market. The big tech companies have two macro approaches related to the management of the data, and both cases can influence differently the capital accumulation process of companies:

- The sale to third-party companies that use it to circulate specific advertisements and organise in time the production of their specific product;
- The direct production of goods by big tech companies, as the amazon basic case. Amazon is able to control the entire supply chain, passing from production to sale, producing goods and selling it directly on its platform. The quantity, type and features of the products are established by profiling the research of the users into the platforms.

The core of the management of big data can be defined as the capability to refine the precision of the productions. Through data, companies try to avoid the crisis of overproduction that affects the capitalistic environment: having the capability to directly influence each consumer in a precise manner can always guarantee the capability of monitoring the time and the type of production.

## 1.7 The materiality of the data

The theme of the quantity of data stored brings with it the necessity of rapidly underlying the energy cost of the entire structure. Usually, the users think that data are not embedded into the physical dimension since the internet appear only immaterial: nevertheless, the internet is material since it is based on a hardware dimension that has energetic costs: 85%[1] of the global energy is produced through fossil fuel. The whole internet has a carbon footprint since each online activity has a carbon emission. Along with these emissions shall be considered the pollution created from the construction process and from the extraction of the raw materials. The Internet is material and has material consequences.

The global distribution of power and raw material reflect the internet structure since the digital communication society has a material cost and a material impact on the energy and supply system. Controlling the supply of servers and ocean cables is controlling the digital society and, as just seen, it is controlling the capability to access the information. In the material world controlling energetic systems and the raw material is controlling democracy and the life of the citizens.

A punctual reflection on the digital communication society should consider this supply dependency since developing an open and democratic digital environment should also be based on the sustainability of energy systems. Indeed energy production is still based on fossil fuel and it is still subject to international political and economic interest. Overcoming digital exploitation should be overcoming fossil dependency since over the years the race for fossil fuels has been the race to create exploited countries and exploited populations. Choosing a sustainable digital communication society is choosing a production system based on renewable energy, based on work that gives dignity and not on slavery.

[1] Mezt, J. (2021, October 16). The first big energy shock of the green era. Economist, https://www.economist.com/leaders/2021/10/16/the-first-big-energy-shock-of-the-green-era;

## 1.8 Digital bodies as real bodies

Social and political control of the worker always passed through physical control and physical limitation since power is based on a material relationship of subordination. Bodies are the tool through which people interact in the world, placing limits or controls on bodies is to directly control people. Particularly, determining the tools and organisational methods of work is forcing women and men to carry out exhausted and repeated actions: it is to exercise absolute control over the mind and human dignity.

To understand the relevance of bodily presence in digital societies, we can go back to Michel Foucault and consider his definition of power: it is an active tool used to control the daily life of each human. In our society, power is not only a repressive and coercive tool, but it is a dynamic element that produces reality. Our bodies' roles are socially constructed: they are a social product in a constant process of becoming. Society, whether material or digital, prescribes behaviour and expectations. This ability to impose patterns of behaviour passes through bodies: determining what citizens can do with their bodies is determining which actions shall be codified in the social system. According to Foucault, social power lies in this construction power, creating knowledge compatible with the macrosystem - in this case, the capitalistic one. Foucault affirmed that if *'power is strong this is because, as we are beginning to realise, it produces effects at the level of desire and also at the level of knowledge. Far from preventing knowledge, power produces it. If it has been possible to constitute knowledge of the body'* (Foucault, 1980,59).

Power as a pervasive tool influences the most important element of the interactions, the bodies: controlling bodies is controlling social norms, social positions, interaction among individuals and the intellectual and cognitive freedom of the people themselves. Nothing is material, physical and concrete as the exercise of biopower in the bodies, and the consequences of this process are observables and detectable. The systematic repressions and humiliations did to women and men in our society create precise social norms that *'materially penetrate the body in-depth, without depending even on the mediation of the subject's representation'*(1980,186)

Digital bodies are the new dimension of bodies developed through social networks and the whole internet. We should consider the digital experience as a part of the life of citizens, so complete that feed process of self-determination of the self of the individuals. Our everyday activity in the digital environment can be intended as a creation of real bodies as catalysts of digital interactions. As much as the real body, this part of the self can be controlled and dominated by economic interests and powers that aims to limit the self-determination of the self and to extract as value as possible through the metadata of interactions of citizens. According to this perspective, digital exploitation is equal to real exploitation, with the real exercise of power and real consequences. Limiting and controlling the material activity done by the citizens is imposing digital biopower on our digital avatars. This digital biopower legitimizes a dimension of subordination of the users to the companies and it concretely sets the requirements for creating digital exploitation and control processes.

## 1.9 Online and offline workers of the digital society

Work is the engine that moves each sector of the planet, as seen, including the internet, but into the digital communication society only two macro-categories should be defined as work:

- Smart and remote working that each individual does voluntarily. The daily activity of the users online can be categorized in this definition since they produce data, information and digital services in different parts of the planet at the same time. (for example, the activities that users do on search engines or social networks)
- Offline and material work that is involved in the production of real services and commodities. It is controlled through digital tools. The localization of the workers, the optimization of production processes, of movements of sales, transform workers into commodities more and more efficiently in creating other commodities. (for example, the categories of production or logistics control is applied to almost all sectors of the labour market)

These two classifications of labour are not always recognised as work since the big techs do not classify the users' activity as a work activity to legitimate the capability to exploit information and data. However, the users' activity in the social networks produces – as seen above - data, surplus labour and surplus value since the aggregate data of the user are sold or managed to produce wealth to the platform owners. The activity of the users in the platforms is regulated through terms of service of each social network, which can be defined as a contract that legitimizes the subordination of the users and the capability to extract and manage information from the spontaneous interactions. The transformation into a commodity of citizens' presence online presupposes the absence of remuneration for the digital work since individuals voluntarily transfer information on the platforms. The lack of salary for this activity presupposes the sustainability of the system and a the process of exponential accumulation of value: social networks are fueled by the development of features to involve users in generating data. The social interaction is turned into commodity.

The second type of work is hidden since it is based on the systematic exploitation of the workers that are active in the production, logistic and service industry: freelancers, young precariat of the culture industry, production workers of the Foxconn who assemble technologic devices, miners workers in Africa who extract minerals necessary to fiscally create digital devices (Fuchs, 2018). To this classification, we can add the promoters, the riders, the software developers and the whole world of the exploited workers that spring from the digital media. This system of exploitation is based on a value chain that extends over the whole planet, creating a real global system of division of labour. The dimension of the exploitation and of the value extraction depends on the position of the humans across the value chain: workers of Foxconn daily risk their life while the western software developers are partially protected by constitutions and workplace safety regulations. The digital society has completely modified the surveillance technique of the process; and we can identify different strategies of increase productivity at the expanse of the dignity of the workers, like:

- The precarization (or the direct elimination) of the contract of work, creates a condition of employment only if the worker respects the production targets;
- The surveillance tech trough cameras and GPS location of the workers to remote verify the working time and the activity of the workers;
- the creation of microwork packages, divided between people around the planet;
- The mapping of the working activity through surveillance technology and the subsequent replacement of workers with machines that do the same work, reduce costs and accelerate the production process.

The surveillance of the workers and the acceleration of the process of production is becoming central for the technological development of the digital society since it is useful to maximize the surplus-value and to better control the workers. This new technologic surveillance can be defined as a new patch of development of Taylorism (Scholz, 2017). Taylorism is a scientific organization of production based on a complete rationalization of the process basing it on criteria of economic efficiency. It is achieved through the fragmentation of the production processes into the individual constituent movements, to which standard execution times were assigned (Taylor, 1979). These standard actions can be measured and the performance of the workers can be evaluated: surveillance is the key element of Taylorism since each worker shall respect the working time of the machines: monitoring time work is monitoring workers; workers who do not respect production standards must be replaced by more efficient ones.

The digital communication society improved this capability of surveillance of this scientific organization of work since it developed remote tools to monitor work activity as video surveillance or GPS locations. Amazon developed a tool for monitoring the work activity and the pause of the warehouses and drivers (Scholz, 2017): the companies can detect the non-productive time of the worker, including short breaks of five minutes. Such events are reported and disciplinary measures such as salary cuts or dismissals are applied.

## 1.10 From the macro context to the research question

Surveillance and control of the working activity is the key to the process of compression of time in capitalism: workers have to produce faster and machines shall reduce the time of workers inactivity. The big techs and the global entrepreneurial fabric developed a huge amount of technology to maximize production or to directly substitute human activity with machine one. Labour agencies, factories and companies have developed remote surveillance systems that give the possibility to hire tens of thousands of workers and monitor them at the same time.

Trade unions such as the European confederal, post-communist, organizations such as the CGIL and institutions such as the European Union started a process of studying, limiting and regulating this compression process since it always produces borderline cases that challenge the safety of work and the human dignity. Studying the process of digital surveillance is studying the new phase of Taylorism: digital Taylorism is the organisational structure that manage the production process from production to distribution. The research questions of this thesis have the core in this concept and can be fully developed in this sentence: '**How does digital surveillance impact workers' rights and dignity? How is the European Union intervening to protect workers' rights and dignity in the digital context? What's the role of trade unions in this context? In the end: Is it possible to make use of data in the respect of the dignity of workers to increase their quality of life, instead of adding surplus-value to capitalists?**'. Through these research questions, we want to generate empirical data useful to discuss the theoretical framework outlined in this chapter. Analysing how European legislation is structured and at the same time focusing on what outcomes it produces: this comparison could be a way to understand if European policies are moving in the right direction. The research questions are designed on:

- The role of the European Union in regulating digital activity. The creation of the European digital single market is the cornerstone of the idea that the online environment is an essential part of the European Single Market and

that it contaminates the labour of millions of European Citizens. Analysing the European regulation allows considering both the legislative aspect and the policy outputs on the life of the individuals since the experience of workers have to be analysed to correctly understand how the policy operates.

- The role of trade unions, through different and not fully coordinated actions among the states, in developing awareness about algorithms and technological development. From riders to factory workers is becoming central to the labours participation in the decision about technology and digital investments. The workers' organizations should develop new instruments of ethical use of data that overcomes the capitalistic acceleration process.

Building on studies inspired by the Marxist tradition, this chapter has analysed the concept of digital communication society in its relation to digital capitalism and labour conditions: technology is a tool that springs from cultural and political legitimation, in this case, the capitalistic one. Instead of improving the working conditions, technological development is based on increasing the surplus-labour and consequently the surplus-value of the capital. The digital Taylorism is the new phase of development of the traditional one since improved GPS location, video recording, target controlling, and improving the surveillance technique on the laborious.

Analysing the European regulation of the digital communication society should promote a collective debate on the necessity of creating regulations and constitutional moments developed between the interaction among different actors of the society: European institutions, national states, trade unions, non-governmental organisations and private corporations. Digital constitutionalism should be a process of interaction between different necessities and solutions.

## 1.11 Digital constitutionalism: new perspectives of democracy

Digital constitutionalism should be a network for the creation of bottom-up global solutions. This kind of global debate about the internet is a tool used as a social and normative counter-reaction to the rapid change of the daily life of the citizens on the whole planet. The core of this normative movement is stimulating cross sectors and cross-national debate, focusing the attention on the idea of respecting the fundamental rights and amplifying the material possibilities of the individuals. According to Celeste '*Over the past few decades, digital technology has affected the equilibrium of the constitutional ecosystem. Consequently, a series of normative counteractions have emerged to face the challenges of digital technology and restore a condition of relative equilibrium*'(2019,4). The huge amount of interactions and networks of the citizens in the digital environment opened a window of possibility of the full realization of the self on the individuals, creating a new path of expression and new possibilities of social realization. At the same time, this new framework of possibilities opened the necessity of rebalancing and reconstruction of normative safeguarding of the fundamental rights since the new liberties are followed by new possible forms of violence, surveillance and discriminations. The final goal of this normative project is to correctly use digital tools not only to defend the actual fundamental rights of the citizens, but to create new rights based on the dignity of the digital environment.

Balancing power in this new environment is the second necessity that springs from the aim of digital constitutionalism. Celeste argued that:

> '*Considering the power in a general sense, as the ability of a constitutional actor to direct the behaviour of another actor, it is possible to observe that private corporations producing, selling and managing digital technology products and services worldwide are emerging in the constitutional scenario as a new dominant actor beside nation-states*'(2019,5).

We have just analysed how the private corporations increased exponentially their influence in society through the pervasive and overwhelming presence of the

digital communication society. This conception brings the necessity of rebalancing the power of the democratic institution through international constitutional frameworks. The normative counter-reaction of the states should aim to fully protect the citizens in the digital environment.

Digital constitutionalism is based on the idea of full collaborations of cross-national actors as international institutions, NGOs, public and private actors. Indeed these collaborations should be a step by step process that should present a constant fusion of the different heritages of these subjects. The interaction among international agreements, European directives, national norms, NGOs manifestos and private (self)regulations shall create a concrete global constitutionalization of the digital space.

In this chapter we discussed the centrality of the digital communication society in the working process. The theoretical framework is developed to structure the research question to better develop the thesis. In the next chapter we are going to analyse the regulation of the digital single market of the European Union since the core is comparing the ideological framework with the structures and the outputs of the policies.

# 2.0 The European Union and the digital single market

The theoretical framework defined in the previous chapter is essential to correctly analyse and develop observations about the state of the art of the policy in force into the European Union. Different macroeconomic theories can create drastically different contexts. In the last years, the global context and the global necessities changed sharply: the creation of the ‘platform society', the evolution of the social network, the economic and climate crisis and the spread of COVID19. These sudden changes in the global scenario impose a change to the policy framework of the European Union, shifting the policy context from a liberal economic perspective to a constitutional-based approach (De Gregorio, 2019).

The works of Edoardo Celeste, Dennis Redeker, and Giovanni De Gregorio are central to the development of this chapter since it will analyse the European normative framework with the interpretative lenses of the Digital Constitutionalism approach. This chapter will analyse the history of the policy development of the digital single market of the European Union. The idea of the regulation of the digital market comes from the 90s with the creation of the single market and the introduction of the directive 95/46/CE. The directive is related to the protection of individuals concerning the personal processing of data and the freedom of circulation of such data. To better analyse the historical development of the European regulation this chapter will focus on four legislative actions:

- the e-commerce directive, adopted in 2000;
- the general data protection regulation, adopted in 2016;
- the digital service act package, which is currently under discussion;
- the artificial intelligence regulation, which is currently under discussion.

The description of each European provision is followed by a critical perspective, to interconnect this chapter with the previous one.

The final part of the chapter focuses on the possible outcomes of the new regulations, analysing the policies' outputs since they can concretely affect the lives of millions of workers and citizens. These final considerations are entangled with

the process of digital constitutionalism: highlighting the possible scenarios that should allow researchers and communities to participate in institutional debates and decisions also through a bottom-up process.

## 2.1 The regulation of the digital single market

The creation of the digital environment creates new opportunities for the exercise of individual freedoms giving to the citizens the capability of limitless interaction and discussion. As just seen, these features that are part of the digital communication society can bring, at the same time, interference on human rights and dignity: this possible interaction stimulates the role of the Union, imposing the necessity of creation of a harmonized process of digital constitutionalization (De Gregorio, 2019).

The approach of the European Union about the necessity of the regulation of the digital single market has gone through different stages: passing from a passive liberal one to an active constitutional phase. However, the passage through these different phases is not clear cut since in the European dimension the directives continue to contaminate and to interact with each other. The constitutional process of implementing rules in the digital market is therefore based on mechanisms of constant integration and synthesis of previous directives. The liberal phases can be highlighted in the legislative approach of the directive 95/46/EC and of the e-commerce directive. These two directives were developed in the early stage of development of the digital market in which the role of big tech in technological development was beginning to be decisive and to arouse the interest of Western countries. Amazon, Google, Facebook, Microsoft and Apple started their process of organisational development in this not controlled and not limited context, promising innovation and widespread wealth for all users. During the 1990s and the early stage of the 2000s, the digital environment was perceived as a separated part of reality, although previous researchers such as Raymond Williams demonstrated that the digital field should be considered as real and concrete as the offline one. (Williams 1977, 744). This perception catalyzed the idea of the possibility of spreading free knowledge without being anchored by concepts such as property and

copyright: an idea that, as seen in the previous chapter, was simply a process of legitimizing the creation of a free market, without controls and based on the accumulation of capital (Fuchs, 2021). This ideological legitimation set the idea of a deterministic digital development that affirms the necessity of avoiding regulation to protect the extraordinary possibilities and growth that big techs create for the whole planet.

The constitutional phase, the actual one, becomes central due to the huge amount of personal information and data that can be stored, exploited and sold by the digital communication society (Fuchs, 2018). The introduction of the complex processing system developed by the platforms highlighted the necessity to create a model of transparency and accountability of the digital subjects (De Gregorio, 2019). The creation of algorithms and the application of artificial technology in the field of labour, economy, logistics, and law, impose a reflection on the high risk that technology can have in destabilizing the democratic systems and the role of the European countries. The total absence of a European regulation creates a puzzle-type situation in which each platform regulates according to its interests and these self-regulations are challenged only by single-member states that can only partially impose control on the digital environment.

The liberal approach to the digital environment created an unequal structure of the global context in which platforms apply different regulations for each country: according to the different laws of each member state, platforms have found the possibility to profit from the lack of coordination of the single market. Data was therefore exploited in an uncontrolled and non-transparent way due to the lack of a solid framework of European regulations. This situation catalyzed the necessity of normative constructions that aim to regulate the platform's online activity: this normative counter-reaction tries both to create new rights in the whole digital environment and to establish existing rights also for the digital domain (Celeste, 2019). The institutional control of the digital environment should be established through the creation of a process of accountability in the digital single market. The accountability process should comprise the mechanism of storage, exploitation and diffusion of data. Data protection is a social necessity and a social right since personal data should not escape from the regulation and the authority of the

European legislative framework. Data protection can be read as a form of human rights protection since there is an intersection between digital technology and human rights (Redeker, 2018)

### 2.2 Digital Rights as part of the Human Rights

Starting from the theme of human rights is fundamental for analysing the evolution of European policy towards critical frameworks. Asking for the application of the same rights both online and offline catalyzes the constitutional moment of the internet: raising awareness of political activists, journalists, academics and institutions. This right based framework could be applied as a cornerstone to develop the critical analysis of the European documents. To make specific criticisms both of the liberalization period and of the first phase of constitutionalization of the digital market

The European Declaration on Digital Rights and Principles for the Digital Decade[2] is a communication from the European Commission about the urgency of developing principles for a human-centered digital transformation. The communication was published on 26 January 2022.

In the proposal of the European Declaration on Digital Rights and Principles for the Digital Decade, it clearly appears the necessity to regulate the digital environment as a fundamental link of the physical one. The European Union wants to empower the rule of the law by embedding digital rights into the EU legal framework (Redeker, 2018). Article 1 of the proposal affirms:

> '*The digital transformation affects every aspect of people's lives. It offers significant opportunities for a better quality of life, innovation, economic growth and sustainability, but it also presents new challenges for the fabric, security and stability of our societies and economies. With the acceleration of the digital transformation, the time has come for the European Union (EU)*

[2] European Commission (2022)European Declaration on Digital Rights and Principles for the Digital Decade,https://digital-strategy.ec.europa.eu/en/library/declaration-european-digital-rights-and-principles#Declaration;

*to spell out how its values and fundamental rights should be applied in the online world*'(2019,1).

Human dignity, equality, sustainability, and democracy are some of the constitutive values of the European Union. In the last decades, it was highlighted that fundamental rights shall be respected in online activity too. The necessity to apply human rights-based regulation to the private sector's activities is a recent element since only recently the institution developed the idea that private actors have a key role in developing human rights (Van Geelen & West 2018). The approach of this proposal is affirming that the rights of European citizens must always be guaranteed and that it is up to the Union to verify if these rights are enforceable in every place, whether physical or digital. This capability of controlling and implementing rights should be followed by the digital sovereignty that the European Institution should develop: the awareness of the control of the digital market passes from total freedom to a controlled market based on dignity and rights. The proposal of the European Declaration on Digital Rights and Principles for the Digital Decade considers this necessity on article 4, affirming that:

*'The Union way for the digital transformation of our societies and economy should encompass digital sovereignty, inclusion, equality, sustainability, resilience, security, trust, improving quality of life, respect of people' rights and aspirations and should contribute to a dynamic, resource-efficient and fair economy and society in the Union.'*

According to the proposal, improving the European digital sovereignty is improving the life quality of the citizens since digital sovereignty can be followed by a human right based control. Putting people at the center of the digital transformation is the interpretative framework that European policy is adopting. The European citizens interact daily in an international and global dimension since the whole European market involves actors among the planet. The constitutional approach that contaminates the work of the European Union tries to underline how

this digitized transnational economy should empower everyone and that it should empower the lives of those who live inside of the European Union.

The proposal affirms two other macro concepts entangled with this cultural framework:

- The right to high-speed connectivity is a right to correct information and active citizenship. The European Union considers a human right to access excellent connectivity in whatever position in the single market. The proposal affirms that the European Union shall promote a neutral and open digital environment.
- The right to have a healthy and safe working environment without being subject to systems of exploitation and digital surveillance. Workers shall have the capability to disconnect from the digital dimension and institutions should guarantee the appropriate protection of the workers.

This constitutional, human right based normative environment is highlighted also in the 'European pillar of social rights' (2021). The European pillar of social rights[3] is a manifesto, a policy roadmap developed by the European Commission that tries to analyse the problems of the single market and to empower legislative solutions.

This action plan is based on the idea of the dignity of citizenship as dignity to have social and political rights: according to the European Union promoting stable, right based and well-paid work is a fundamental element to empower the citizen. The European pillar affirms that:

'*Europe enters a new decade, progress still needs to be made to reach high levels of employment, skills and employability, and robust social protection systems. In December 2020, 16 million people were out of work and youth unemployment was at 17.8%, considerably higher than general*

[3] European Commission (2021), European pillar of social rights action plan, Publications Office of the European Union, https://op.europa.eu/webpub/empl/european-pillar-of-social-rights/en:/;

*unemployment. Low-skilled, low-paid workers and temporary workers were the first to be laid-off due to the COVID-19 outbreak*'(2021,9)

According to the European Union there are 91 million citizens at a concrete risk of social and economic poverty, and there are 700.000 people estimated to sleep across the street[4]. The European Commission defined 3 main goals:

- At least 78% of the population aged 20 to 64 should be in employment by 2030
- At least 60% of all adults should participate in training every year by 2030
- The number of people at risk of poverty or social exclusion should be reduced by at least 15 million by 2030

The European pillar analysed how the digital environment can concretely influence the working activity of the citizens of the European Union. According to the Union, obtaining full employment of the citizens is central to improving the working conditions and focusing on sectors that are the challenges of the future: fighting climate change and promoting social protection. Improving the working conditions should pass through improving the wage and free time of the workers. Through the European pillar, the EU wants to structure a European industrial plan and to improve European industrial relations among private and public: grounding it not only on the profit but also on the capability of developing safe and sustainable social outputs. This creation of a stable industrial relation should empower the role of the union in defining the instruments of work, defining the correct application of the use of the tools that come from digitalization. The European pillar affirms that:

'*the accelerated digitalisation of workplaces also puts the spotlight on issues related to surveillance, the use of data, and the application of algorithmic management tools. Artificial intelligence (AI) systems are often applied to guide recruitment, monitor workloads, define remuneration rates, manage*

[4] European Commission (2021), European pillar of social rights action plan, Publications Office of the European Union, 9;

*careers or increase the efficiency of processes when performing high-exposure tasks. Addressing the challenges of algorithmic decision-making, notably the risks of biased decisions, discrimination and lack of transparency, can improve trust in AI-powered systems, promote their uptake and protect fundamental rights'*(2021,15).

In this sentence, the European Union recognizes the role of technology as crucial for the life of the workers: as previously analysed the technology is not a neutral element, and it should be addressed and changed according to the necessity of the democratic institution and of the workers. In this phase, for the first time, the European Union set the base for a concrete possibility of creating a constant negotiation on the technologies and algorithms that are applied within the single market of the union.

Smart working and telework are other aspects linked to this proposal since due to covid they have become new and central elements in the life of all citizens of the European Union. Through these instruments, the workers should have the capability to develop a better organization between public and working life and the companies should have the possibilities to reduce the greenhouse emission and improve productivity. However, this organization of work raises new challenges, for example, as the definition of the working conditions, as the right to be offline of the workers, and as the technology used to monitor relative surplus-value that comes from the working activity. The European Union is developing awareness on the fact that it has become necessary to set constitutional requirements, which go to uniformly regulate the functioning of the single market.

Below are analyses of the main directive: the e-commerce directive and the GDPR. This analysis tries to understand how and through which phases the Union went to develop the actual constitutional awareness.

## 2.3 Liberal phase: the e-commerce directive

The e-commerce directive[5] was developed by the European Parliament and the European Council of the European Community. The directive was approved on 8 June 2000. The political aim of the directive was the one of catalyzing the development of the European digital market without setting both supranational and national restrictions. From 1999 to 2004 the European Commission was chaired by the President Romano Prodi.

The e-commerce directive is the best expression of a liberal approach to the digital single market developed by the European countries in the first stages of the 2000s. This directive aims to catalyse the development of the digital environment across the whole single market. The liberal approach of this directive comes from the 'Data protection directive' (95/46/EC) which establishes the forms of processing of personal data and the right of free movement of such data. The objective of the European institution was to promote the full development of the newborn single market, perceiving each form of regulation as a potential barrier. The role of private enterprises is clear and central in the conceptual framework of the directive since they are the vector that stimulates development and investment, by guaranteeing universal access to the internet through competition in the single market. One of the foundational pillars of the European environment is the right of providing services across the whole market. In this phase, the internet is perceived as a tool for a correct and competitive spread of borderless services. According to this aim, the directive does not set regulations on the fiscal aspect of the e-commerce sector since underlines that posing regulation and establishing community fiscal instruments can be an obstacle for the correct development of the digital market.

Article 1 of the e-commerce directive affirms that the aim of the policy is contributing to the proper functioning of the internal market by ensuring the free circulation of information and services in the whole European context. In this

[5] E-commerce directive 2000/31/EC of the European Parliament and of the Council (2000), Official Journal of the European Communities, https://eur-lex.europa.eu/legal-content/EN/ALL/?uri=celex%3A32000L0031;

article, it is established that companies shall be able to provide: services, commercial communication and electronic contracts in cooperation with member states, but without being subject to national controls or nation limitation. The only limits to the freedom of the digital market can be exceptionally taken by the member states, only for the following issues: public policy about prevention, investigation and prosecution of criminal activity, protection of public health, public security including national defense and protection of the consumers from activity that limit the freedom of the market itself. Concretely, the unique possible limitations aim to protect the public orders, the power of the member state, and the freedom of the single market itself.

Article 5 and Article 6 of the directives establish the general and minimal information that providers shall transmit to the member state, these sets of information are described as mandatory to promote a correct and transparent trade among the market. This information is related to: the name of the service provided, the geographic address at which the service provider is established, the description of the services and '*where information society services refer to prices, these are to be indicated clearly and unambiguously and, in particular, must indicate whether they are inclusive of tax and delivery costs*'(2000, 11). Moreover, the e-commerce directive affirms that commercial communication shall be identifiable.

The final obligations that are enshrined in the digital platform are related to the non-modification and correct maintenance of data in a non-alternating form. Article 13 of the directive sets the obligation to the provider to not modify information and to not interfere with the lawful use of technology since it is mandatory to industrial and productive progress. Furthermore, the directive affirms that the digital provider shall collaborate with the European institution to fight digital criminal activity and each unlawful use of technology. The directive, therefore, forces the platforms to grant data and to collaborate only and exclusively in cases of illegality. The general objective, therefore, remains non-interference and the defense of market freedom.

This directive is one of the foundational elements of the European approach on the digital communication society. The liberal framework was developed in the late phase of the 1990s and the early stage of the 2000s. It is perfectly evident how

it profoundly influenced the first directives related to the digital single market, where the internet seemed an immaterial dimension and disconnected from the physical one. The criticism that should be developed in this approach is that it allows the development of a very asymmetrical market, in which the power of the platform is not counterbalanced by any public institution. The normative framework of the e-commerce directive catalysed the minimization of the economic risk instead of a right based approach (Tushnet 2008). As just seen, an unlimited and undirected technological development is a legitimate condition of development of technological determinism in which the technology is based on exploiting profit and resources from the users (Fuchs, 2021). The free market has proven to be a threat to democracy and the European Union has already taken the first steps towards market regulation based on rights and respect for personal data.

## 2.4 Constitutional Phase: The General Data Protection Regulation (GDPR)

The General Data Protection Regulation[6] was developed by the combined actions of the European Parliament and the European Council. The necessity of posing common regulations on the use of data comes from the agenda of the European Commission chaired by Jean-Claude Juncker. President Juncker chaired the European Commission from 2014 to 2019. The GDPR was approved on 27 April 2016.

The digital communication society raises new possibilities of global interaction and new working possibilities since users can work, chat and interact with each other from each position of the planet. However, platforms developed the unprecedented capability of storing and elaborating a giant quantity of data, underlying problems of transparency and accountability of the digital environment (De Gregorio, 2019). Daily digital platforms allow billions of users to join the internet: as gatekeepers of the digital environment, they set the rules and the

[6] Regulation EU 2016/679 (2016), General Data Protection Regulation, Official Journal of the European Union, https://eur-lex.europa.eu/eli/reg/2016/679/oj;

conditions that users shall respect to fully participate in digital life (Van Dijck et al., 2018). Concretely digital platforms determine how citizens can exercise their political and social rights since they shall respect the privacy regulations of the digital platforms. This normative void highlights the fact that the European Union should exercise power in the digital world since the rights of hundreds of millions of citizens pass through it. In the General Data Protection Directive of the European Union, whereas:

> '*The principles of, and rules on the protection of natural persons concerning the processing of their personal data should, whatever their nationality or residence, respect their fundamental rights and freedoms, in particular their right to the protection of personal data.*'(2016,2,1).

It is therefore immediately highlighted how this directive is based on a regulatory system deriving from human rights and freedoms of the citizens of the Union.

The entire normative structure of the GDPR is based on the concepts of transparency and accountability of the data controller (De Gregorio, 2019) since the European Union radically transformed its perception of the platform. Understanding them as active structures that shall prevent the risks in their environment. The GDPR established that technological progress:

> '*requires a strong and more coherent data protection framework in the Union, backed by strong enforcement, given the importance of creating the trust that will allow the digital economy to develop across the internal market. Natural persons should have control of their own personal data. Legal and practical certainty for natural persons, economic operators and public authorities should be enhanced*.'(2016, 7, 2).

The establishment of confidence in the digital market, through processes of institutional sovereignty and digital control of the European Union, becomes a tool for the promotion and development of the market. This process of establishment of

the confidence passes through the creation of an accountability system for the digital platforms that consider: the scope, the risk, the purpose of the processing of data and the possible violation of the human rights of the citizens. Indeed, the European Union underlines that mapping and preventing risk for data protection and human rights is one of the most efficient processes both for defining responsibility and for the promotion of a structured system of accountability. In the regulation is declared that:

> '*the effective protection of personal data throughout the Union requires the strengthening and setting out in detail of the rights of data subjects and the obligations of those who process and determine the processing of personal data, as well as equivalent powers for monitoring and ensuring compliance with the rules for the protection of personal data and equivalent sanctions for infringements in the Member States*'(2016, 11, 3).

In this section, the European Union underlines that it is mandatory to implement not only regulatory mechanisms but also institutional surveillance structures that give authority to member states and the European Union. The European institutions establish that a timely and effective regulation system can only be guaranteed through in-time actions of public authority.

The revolutionary concept introduced in the GDPR directive is the idea that each digital platform that operates in the European Union shall respect the European law, beyond where it has its registered office and its servers. The GDPR establishes that '*the processing of personal data of data subjects who are in the Union by a controller or processor not established in the Union should also be subject to this Regulation when it is related to the monitoring of the behaviour of such data subjects in so far as their behaviour takes place within the Union*'(2016,26,5). This normative revolution formally affirmed in Article 3 of the directive, is a counter-reaction to the global capability of providing services that the digital communication society establishes. In the last decades, the citizens of the European Union were bombed by billions of commercial services from all parts of the planet

and these services were not controlled by the European institutions. The output of this non-regulated and liberal framework was:

- a data drain from the European context to the rest of the planet. As previously seen, data are resources and commodities with an embedded value and a data drain is a real resources drain from the single market;
- Personal data violation since the citizens of the member state did not have the capability of controlling the dispersion of their data. This situation has created a dimension of systemic violation of privacy where the economic value of data and its commercial value exceeded that of the people rights;
- The absence of possibility to file complaints and get in touch with the platform offices. This global deregulation has depowered the citizens' capability to access their information since they are scattered on the whole planet.

This normative counter-reaction can be considered as the first legislative instrument developed by the Union that allows complete and direct control on the digital single market since if the platforms want to operate into the European context they should respect the European law. This principle can be the first step to keep the data of the European Union in the European Union. It creates the capability to develop a public/private mechanism for safeguarding of European citizens' data. Moreover, the European Union affirmed that explicit and clear consent is the key feature that platforms shall enstablish with the user to legally and transparently obtain data. The General Data protection directive underlines that:

> '*Consent should be given by a clear affirmative act establishing a freely given, specific, informed and unambiguous indication of the data subject's agreement to the processing of personal data relating to him or her, such as by a written statement, including by electronic means, or an oral statement. This could include ticking a box when visiting an internet website, choosing technical settings for information society services or another statement or conduct which clearly indicates in this context the data subject's acceptance*

*of the proposed processing of his or her personal data. Silence, pre-ticked boxes or inactivity should not, therefore, constitute consent*'(2016, 32, 6).

Therefore the European Union established that each platform shall respect the European digital sovereignty and it declares that data shall be used with an explicit and reasoned consent that allows the users to define which information will be shared with the platform. This normative position, declared by article 7, affirms that only the citizens can allow the platform to extract data according to their necessity and to the services that they want to obtain.

There is a direct entanglement between data and work, as previously seen in the last chapter. This entanglement is done since data are used to organize, monitor and increase the production of surplus-value through the process of exploitation of workers and users. In the General Data Protection Directive the European Union, for the first time in the digital market regulation, introduced the necessity of developing workers' rights and creating a collective agreement on the use of digital tools in the working process. The GDPR establishes that:

'*Member State law or collective agreements, including 'works agreements', may provide for specific rules on the processing of employees' data in the employment context, in particular for the conditions under which personal data in the employment context may be processed on the basis of the consent of the employee, the purposes of the recruitment, the performance of the contract of employment, including discharge of obligations laid down by law or by collective agreements, management, planning and organisation of work, equality and diversity in the workplace, health and safety at work, and for the purposes of the exercise and enjoyment, on an individual or collective basis, of rights and benefits related to employment, and for the purpose of the termination of the employment relationship*'(2016, 155, 29).

Workers' rights are human rights since they influence the life of the whole European population. In article 9 and article 88 of the directive, is established the necessity to introduce collective agreement to correctly safeguard the dignity and

the fundamental rights of the workers. This legislative action can set the bases for collective monitoring of the technology: involving trade unions, member states, and NGOs. Challenging technological determinism should be a right of each citizen since, as previously seen, technology can be used to improve the safety and the dignity of work instead of exploiting citizens.

Article 22 of the GDPR establishes the right to not be subject to a fully automated decision that can significantly affect the life of the citizens. This right can be applied to each kind of automatic decision making including profiling, reports, sanctions and working application. This first normative approach, however limited, marks the path to the directive on artificial intelligence. Article 22 affirms the normative supremacy of the European Union in defining the lawful kinds of decision making. Affirming the necessity to have a process of human validation of information constantly.

The criticism related to this proposal and the necessity to implement it with other regulations is probably related to the absence of further and more specific obligations for digital platforms. Indeed, the directive introduces a new important concept of digital sovereignty but, at the same time, refuses to pose more stringent regulations to the digital platforms. Three main macro issues can be identified:

- Platforms are not legally entangled with the European content since there is no obligation to create offices in the member states that shall be available to citizens, intermediate bodies and institutions. Regulating the activity of the platform is a first important step but the European Union should anchor the platform to the single market;
- The presence of humans in the process of decision making does not guarantee a transparent and correct judgement. The European Union should impose more transparency to the use of artificial intelligence, creating a process of institutional validation that controls the correct respect of fundamental rights;
- The absence of transparency on the structure and the algorithm of the platforms can weaken the normative capability of the Union. The

European institution should ask for more transparency about the working mechanism platforms and of the whole digital communication society.

The following section analyses the digital service act package and the European regulation on artificial intelligence. These two proposals try to overcome some of the criticism just analysed in the general data protection directive. The GDPR can be thought of as a cornerstone used by the European institution as a tool on which to implement other regulations and on which concretely to improve the constitutional framework of the digital market. Indeed, The GDPR, although limited, represents the starting point of a profound process of legislative renewal.

## 2.5 The digital services act package

The digital act package[7] is a set of legislative proposals, elaborated by the European Commission, that aims to better improve the regulation and the structure of the digital single market. From 2019 the European Commission is chaired by Ursula von der Leyen. In this new mandate, the European Commission has developed the political need to regulate the digital single market towards a ten years long policy roadmap.

This package is composed of two different proposals: the digital services act and the digital markets act. The political goal of these legislative proposals is both establishing a safer digital environment based on the respect of the fundamental rights of the users and defining the rules for the digital intermediaries to allow a correct interaction among platforms and between users in the digital environment. The acceleration of the digitization process creates a situation in which a small number of platforms controls an important dimension of the single market of the European Union. As platforms gatekeepers of the digital environment and consequently of a portion of the single market, the European Union activated these legislative proposals to improve a human-right based and competitive based institutional control on the digital single market: limits risks deriving from this

[7] European Commission (2022), Shaping Europe's digital future: The Digital Services Act package, https://digital-strategy.ec.europa.eu/en/policies/digital-services-act-package;

semi-monopolistic scenario with an institutional intervention. In this chapter both the proposals will be analysed, starting from the digital market act, trying to analyse the political context and the possible outcomes of these acts.

## 2.6 Digital market act

The digital market act[8] is a proposal of an European regulation based on the idea that '*platform providers can be deemed to be gatekeepers if they: have a significant impact on the internal market, operate one or more important gateways to customers and enjoy or are expected to enjoy an entrenched and durable position in their operations*'(2020,5). The proposal aims to integrate the GDPR directive and wants to fully include the EU charter of human rights. The digital market act tries to answer to the fragmented situation of the digital market among the Member states. Moreover, a normative fragmentation is a direct fragmentation of the single market. Indeed, to implement a reliable and stable market, the European Union starts the process of harmonisation of the policy related to the digital environment. This will be strengthened by the fact that according to the Union data, 24% of the digital trade is cross-border trade (2020,6).

Regulating the quasi-monopolistic situation of the digital market is one of the key elements to promote innovation, accountability and security in the digital environment. In the digital market act, the legislators affirm:

> '*gatekeepers might in certain cases restrict the ability of business users of their online intermediation services to offer their goods or services to end-users under more favourable conditions, including price, through other online intermediation services. Such restrictions have a significant deterrent effect on the business users of gatekeepers in terms of their use of alternative online intermediation services, limiting inter-platform contestability, which*

[8] European Commission (2020), Digital Markets Act, proposal COM(2020) 842 final, https://ec.europa.eu/info/strategy/priorities-2019-2024/europe-fit-digital-age/digital-markets-act-ensuring-fair-and-open-digital-markets_en;

*in turn limits the choice of alternative online intermediation channels for end users*'(2020,37,22).

The asymmetrical relations that create the big tech into the digital market undermine, according to the Union, the capability to catalyse innovation and to create new platforms and new services. Those big techs are the large digital platforms and large service intermediaries that daily operate in the market. In this perspective, the big techs shall promote a safer market and shall be subject to the control of the European institutions. Article 6 of the proposal establishes that promoting innovation and a competitive digital market goes through a process of empowerment of the users: citizens should be free to choose different services that are afferent to different platforms. This normative framework highlights the fact that preinstalled and blocked digital ecosystems reduce the capability to the users to choose different services in the market, concretely this normative proposal affirms '*To enable end-user choice, gatekeepers should not prevent end-users from un-installing any pre-installed software applications on its core platform service and thereby favour their own software applications*(2020,46,25). The proposal affirms that to overcome the asymmetrical situation the big techs shall not technically prevent the freedom of the users. The technical barriers that prevent the free choice of the citizens are market barriers since they create closed and watertight environments that prevent the control, monitoring and provision of quality services. Therefore, it becomes necessary to guarantee services not based on monopoly structures, but on institutional control mechanisms that guarantee the freedom of citizens.

Moreover, the proposal affirms that gatekeepers shall provide information on the profiling activities that they do in their services since:

'*To ensure a minimum level of effectiveness of this transparency obligation, gatekeepers should at least describe the basis upon which profiling is performed, including whether personal data and data derived from user activity is relied on, the processing applied, the purpose for which the profile is prepared and eventually used the impact of such profiling on the*

*gatekeeper's services, and the steps taken to enable end-users to be aware of the relevant use of such profiling, as well as to seek their consent*(2020,61,30).

Indeed, the platforms shall declare the kind of profiling action and how this profiling influences the structure, profit and income of the big tech. This proposal, indirectly, affirms that sovereignty over data is closely linked to awareness of how it is used: users and citizens should be aware of the exploitation that characterize the digital environment since they should have the capability to not share their information.

## 2.7 The digital services act

The digital service act[9] is a proposal of an European regulation based on the same necessity of harmonisation of the digital environment, but it tries to anchor the platform directly in the single market of the European Union. The digital service act tries to impose obligations to the very large platforms with the creation of physical offices into the Union and the obligation to introduce a risk management approach that considers both the possible damage to citizens and the necessary governance strategies to prevent it. The risk management approach of the digital service act is at the same time a right based one since:

'*the proposed Regulation will mitigate risks of erroneous or unjustified blocking speech, address the chilling effects on speech, stimulate the freedom to receive information and hold opinions, as well as reinforce users' redress possibilities. Specific groups or persons may be vulnerable or disadvantaged in their use of online services because of their gender, race or ethnic origin, religion or belief, disability, age or sexual orientation*'(2020,12).

[9] European Commission (2020), Digital Services Act, proposal COM(2020) 825 final, https://ec.europa.eu/info/digital-services-act-ensuring-safe-and-accountable-online-environment_en;

Introducing an obligation to a very large digital platform is regulating the place in which European citizens work, express opinions and emotions and in which they spend their free time. Platforms are the all-encompassing places in the life of European citizens, and this proposal tries to regulate them and to guarantee equal opportunity and dignity to all the inhabitants of the Union. The charter of Human rights profoundly influences this regulation since it affirms that:

> '*as protected by the Charter of Fundamental Rights, including the freedom of expression and information, the right to private life, the right to non-discrimination and the rights of the child. Such risks may arise, for example, in relation to the design of the algorithmic systems used by the very large online platform or the misuse of their service through the submission of abusive notices or other methods for silencing speech or hampering competition. The third category of risks concerns the intentional and, oftentimes, coordinated manipulation of the platform's service, with a foreseeable impact on health, civic discourse, electoral processes, public security and protection of minors, having regard to the need to safeguard public order, protect the privacy and fight fraudulent and deceptive commercial practises*'(2020,57,33).

The European Union has developed awareness of how digital platforms can be used against freedom and democracy, which are the basis of European institutions. Nowadays, the new European fascist parties and the totalitarian government around the planet developed strategies of violation of the liberties of citizens, researchers, journalists and politicians, developing hate and gender-based violent strategies (Poland, 2016). Through a mechanism of de-responsibility, digital platforms have avoided regulatory mechanisms of these hate actions against human rights. The European Union wants to implement control processes and to make the data multinationals responsible for their role in the digital market

The necessity to impose a physical domain to the digital services is developed in this proposal since:

‘*a substantial connection to the Union should be considered to exist where the service provider has an establishment in the Union or, in its absence, on the basis of the existence of a significant number of users in one or more Member States, or the targeting of activities towards one or more Member States.* ’(2020,8,20).

Article 10 and 11 of the proposal define this necessity of the creation of physical and legal domiciles in the European Union. The digital services act poses different regulations for each kind of digital activity, considering the digital platforms as not only structures that store data. They are perceived as active entities that disseminate information to the whole public of the European Union. This definition is the political reason on which is structured the necessity of physical point of contact inside the Union since the platforms should collaborate with the European institution and the citizens. Furthermore, platforms should be responsible for the information that circulates inside their environment.

Very large online platforms have the power to positively and negatively influence the lives of millions of citizens in the European Union. As just seen, the proposal set specific regulations and risk-based criteria for the very large platform. However, to not constrain and penalise innovation processes, the union establishes a clear system of definition of how a digital platform can be considered very large:

‘*Very large online platforms may cause societal risks, different in scope and impact from those caused by smaller platforms. Once the number of recipients of a platform reaches a significant share of the Union population, the systemic risks the platform poses have a disproportionately negative impact on the Union. Such significant reach should be considered to exist where the number of recipients exceeds an operational threshold set at 45 million, that is, a number equivalent to 10% of the Union population. The operational threshold should be kept up to date through amendments enacted by delegated acts, where necessary. Such very large online platforms should therefore bear the highest standard of due diligence obligations, proportionate to their societal impact and means*’(2020,54,32).

If the digital ecosystem or the digital platform involves more than 10% of the citizens of the union it shall develop a risk-based instrument of protection of the citizens and shall collaborate with the European institutions to guarantee a safe and democratic environment. Thanks to this definition the big techs will be accountable to the European Institution, to the intermediate bodies and to the citizens. In fact, in the last two decades, the platform developed a mechanism of self-governance not obliged to be transparent or democratic and users could not appeal against the unilateral decision of the big tech. These legislative impositions, for the first time in the history of the digital market, set the bases for a constitutional approach since big tech will be obliged to political and social confrontation with the European Union.

The significant element, present both in the digital market directive and in the digital service act, is the institutions of a board of control of the respect of this regulation (European board of digital services) and the introduction of a system of economic sanctions for the infringement of the European law. The penalties shall not exceed 6% of the annual income of the company. Sanction like this can allow the European Union to significantly hitting the platform that does not respect the regulation. Due to the establishment of these tools, the European Union will be able to actively control the correct application of the directive and the full respect of human rights in the digital single market.

These legislative proposals can be considered as the first step of constitutionalism of the European digital single market since they set criteria, regulations and control mechanisms that empower the European institution. The critical element of the directive is that it follows the path of the e-commerce directive. The role of the workers is considered only indirectly since the digital service act sets criteria for the competitiveness of the market and through those, it establishes indirect rights for workers and citizens. The creation of an accountable and transparent system of exploitation of data will not remove the exploitation itself since it is embedded in the structure of the digital communication society (Fuchs, 2020). However, the creation of a regulatory system and economic penalties should be the first step of public direct regulation of the digital single market.

## 2.8 The European regulation on Artificial Intelligence

The European regulation on artificial intelligence[10] is legislative proposals, elaborated by the European Commission, that aims to regulate the artificial intelligences that can be used in the single market. Establishing criteria for guaranteeing and respecting citizens' rights. From 2019 the European Commission is chaired by Ursula von der Leyen. As in the case of the digital services package, the European Commission has developed the political need to regulate the technologies applied into the single market towards a ten years long policy roadmap.

Artificial intelligence (AI) technology has risen in importance in the last decades since it can be applied in different social contexts: from the working surveillance in the productive system to the measurement of the quality of life of the citizens. As argued by authors like Fuchs, the technological determinism that characterizes the digital communication society promotes the development of only a specific part of technology: the one that can improve the extraction of surplus value from the working activity and from the whole production system (Fuchs, 2018). Video surveillance, GPS technologies, online reports and performance monitoring are only a few of the technological tools that are still present in the European single market and they influence the life of workers and citizens every day.

The European regulation on artificial intelligence, developed by the European Commission, tries to ensure that the AI technologies that operate in the European Union are safe and respect the fundamental rights of the citizens. Through this legislative proposal, the legislator wants to pose a distinction between:

- Artificial intelligence technologies that can positively impact the life of the users. This kind of digital innovation should be promoted and the European Union should create a harmonized regulation to promote similar technological development in the whole market;

[10] European Commission (2021), Artificial Intelligence Act, proposal COM(2021) 206 final, https://digital-strategy.ec.europa.eu/en/policies/european-approach-artificial-intelligence;

- High risk and prohibited artificial intelligence such as remote biometric identification systems, deep fakes or automatic decision making that can undermine the fundamental rights of millions of citizens.

Artificial intelligence is a wide and evolving type of technology. Better prediction, in-time operations, personalized therapy or digital solutions can improve the quality of life in completely different sectors such as social security, health care, education, working safety, public services, logistics and climate change fighting (Mosco, 2015). At the same time, artificial intelligence can raise risks of manipulation of information, exploitation of workers, citizens, nature and resources and social control technologies. Such technological development can compromise the fundamental rights of the Union as human dignity, equality, freedom, democracy, data protection, privacy and the right to non-discrimination. Biometric surveillance is considered the most dangerous one since it can directly discriminate and compromise the liberty of the citizens. According to the proposal:

> '*The use of AI systems for 'real-time' remote biometric identification of natural persons in publicly accessible spaces for the purpose of law enforcement is considered particularly intrusive in the rights and freedoms of the concerned persons, to the extent that it may affect the private life of a large part of the population, evoke a feeling of constant surveillance and indirectly dissuade the exercise of the freedom of assembly and other fundamental rights*'(2021,18,22).

Remote biometric identification should be forbidden in the whole European Union since can create the capability to monitor and categorize people for race, sexual orientation, political opinions, religions, trade union membership and other fundamental dimensions of human dignity and expression. Article 5 of the proposal empowers this analysis underlining that each kind of discriminative technology is forbidden since it can distort behaviour and determine discrimination for individual and social groups. Through this consideration, the European Union affirms that

there is a kind of technology that is completely forbidden in the single market since the social cost of it will be too expensive.

Autonomous machines can operate precise functions in a complex environment and they can bring benefits for the whole social community. Article 7 of the proposal underlines that these kinds of artificial intelligence, even if they bring benefits, should be considered as high-risk technologies since they operate in conditions of primary importance. The imbalance of power that artificial technologies can impact on the life of a plurality of persons irreversibly compromising their freedom. These technologies should have mandatory requirements, regulated by the European Union, that prevent unacceptable risk and allow constant monitoring of the correct functioning of the technology. The regulation establishes that '*AI systems identified as high-risk should be limited to those that have a significant harmful impact on the health, safety and fundamental rights of persons in the Union and such limitation minimizes any potential restriction to international trade, if any*'(2021,27,25). Therefore artificial intelligence should be able to operate in a sensitive scenario only if it can bring positive outcomes and if it can be monitored and measured by the European institutions.

AI used in the employment sectors is considered at a high risk since it may perpetuate discrimination based on gender, age groups or disabilities. Moreover, this technology applied to monitor performance and behaviour can violate both the dignity of the citizens and their digital rights. The proposal affirms that:

> '*AI systems used in employment, workers management and access to self-employment, notably for the recruitment and selection of persons, for making decisions on promotion and termination and for task allocation, monitoring or evaluation of persons in work-related contractual relationships, should also be classified as high-risk, since those systems may appreciably impact future career prospects and livelihoods of these persons*'(2021,39,29).

Worker surveillance is one of the core themes that technological development creates since capitalists want to improve the surplus labour and

consequently the relative surplus-value that comes from work. Improving the role of the European Union, in creating limitations on digital systems and algorithms, should empower a democratic control over technological development: obliging transparency about data, training, validation processes, and performance measurement. These active regulations should be intended as one of the first times that the European Union plays in the field of the work regulations: this scenario can bring to a harmonisation of the working context of the European Single markets, which eliminated contracts based on exploitation and set minimum common elements based on workers' rights.

Article 30 of the proposal institutes a notifying authority that is charged to monitor each artificial intelligence that operates in the single market. This European institution has the authority to approve the technology and to verify the correct respect of the fundamental rights of the European citizens. The monitoring of the AI systems pass through the process of analysis of the mandatory logs that each technology shall record. This obligation is established in article 20, which affirms the necessity to create automatic records of the activity of the technologies, thus making it possible to monitor the complex functioning of artificial intelligence systems.

As in the case of the digital services package, the proposal establishes the creation of a board for artificial intelligence that is charged to control the state of the art of the respect of the norms in the whole single market. Moreover, the proposal establishes the creation of a fines system that allows the European institution to directly penalise those who do not respect the European regulations. These aspects common in both proposals underline the proactive role that the European institutions want to promote in their territory.

This proposal tries to set regulations among the, still present, use of technologies of the digital single market, but there is a central criticism that should be developed to this normative framework: the lack of presence of the intermediate corps inside the mechanism of definition and regulation of risks. In fact, the regulation does not contemplate the active presence of intermediate bodies in the processes of selection, monitoring and control of artificial intelligence. The European Union should catalyze processes of activism by these subjects as they can

significantly increase the power of citizens in European regulatory processes. Trade unions and NGOs are vectors of processes of bottom-up solutions and they involve citizens and workers in communities developing social and political awareness. This observation does not refer to the process of construction of the regulation itself, but to the need to fully include these subjects in the decision-making processes of the institutions arising from the AI regulation. To promote the process of constitutionalism the European Institution shall involve these actors improving their role in the mechanism of national/European agreements. The idea that stays beyond the challenge of technological development is the capability to co-project and to create completely different technologies, including the tool of artificial intelligence. The European Union should promote dynamic and dialectical confrontation between different categories of society to fully promote a right-based technology.

## 2.9 European Union and the future of the digital labour market

In this chapter, we have seen that the European Union is improving its active role in the processes of regulation of the digital single market. It developed a right-based perspective that overcomes the liberal approach of the past decades.

The European Union has developed the awareness of how data multinationals must be vectors of human rights (Redeker, 2018), since they are gatekeepers that allow access to the digital ecosystem (Van Dijck et al., 2018). This new awareness requires a constitutional phase that allows the European Union to promote an active regulation of the market. In this trajectory, digital constitutionalism became crucial since it can catalyse different contributions. NGOs, trade unions, academics should have a central role in developing strategies that improve the rights of workers and citizens in the digital communication society. The digital services package and the artificial intelligence regulation should be only the first steps for the full development of a rights-based European normative framework. The European Union shall promote a process that eliminates the forms of exploitation of the citizens in the digital environment, overcoming concepts only related to accountability and transparency. Therefore, the European institutions should develop two main mechanisms:

- Understanding that the platforms are not only gatekeepers of the digital market, but they are active subjects that extract data, information and values from the users. An active role of the European Union should be based on challenging these platforms through developing a collective mechanism of assessing digital services. The European Union should overcome the idea of passive regulations through a process that forces big techs to respond directly to the Union about the correct use of data. Such use should not be based on profit extraction but on providing benefits to society as a whole.
- It is not enough for artificial intelligence and surveillance technologies to be registered and authorised. European institutions shall develop the process of collective construction of technologies since it is the mandatory requirement to overcome the capitalist. The creation of technologies through democratic confrontations could lead to radical changing the paradigm of technological development (Fuchs 2018). The European Union should implement moments that guarantee the possibility of a confrontation between different subjects of the single market.

The experience of the workers should be the main tool used to understand how surveillance technology impacts the life of the citizens. Indeed, political progress should be achieved through a mechanism of negotiation between legislators and the material reality of the citizens. This thesis wants to underline the possible issues and the real consequences of the directives that are still in force in the European single market. The next chapters will combine this section with a qualitative research analysis based on the experiences of the workers. These experiences could suggest possible policy interventions that should be applied to improve the quality of life of the citizens.

# 3.0 Methodology

This chapter underlines the methodology of the empirical research of the thesis. The qualitative research is based on semi-structured interviews and it tries to answer the research questions with the interpretative framework of the citizens that daily stay in the work market. The research questions are '***How does digital surveillance impact workers' rights and dignity? How is the European Union intervening to protect workers' rights and dignity in the digital context? What's the role of trade unions in this context? In the end: Is it possible to make use of data in the respect of the dignity of workers to increase their quality of life, instead of adding surplus-value to capitalists?***. Considering that the previous chapter tried to focus on the European output in defending workers' rights, the empirical part of this research is based on the analysis of the worker's perceptions of EU policies.

Qualitative research can integrate the policy analysis since it could help in understanding the real consequences of the policy outputs (Margaret W. Sallee & Julee T. Flood, 2012). Qualitative research could move the academic debate to the whole society, suggesting normative intersection and political actions. This approach could lead to a new academic framework oriented to solving issues that affect millions of citizens. Indeed, qualitative research could serve as real resources for policymakers since they should ground their policies on processes of stakeholder consultations and on structured academic research (Birnbaum, 2000). Moreover, universities should be contaminated with the presence of political activists since they could create the possibility to develop critical research and to challenges established analytical frameworks.

The strength of qualitative research is focusing on contexts (Margaret W. Sallee & Julee T. Flood, 2012). The direct analysis of the field helps policy researchers in understanding how individuals operate and how the realities of the citizens are created. This capability sets the conditions to analyze: the material outputs of the policies, the economic situation of the citizens and the expectations of those who operate in the field daily. Researchers and policymakers should create a permeable environment in which academic research could influence policy and in

which policy could be performed in response to urgent policy needs (Birnbaum, 2000).

The empirical component of this research is made of a number of interviews, conducted with workers such as promoters and drivers. These interviews are meant to analyse the working experiences of the citizens and though it evaluating the policy outputs. Mapping the concrete outcomes of the European policies, like the GDPR, is an instrument of evaluation. It could highlight the political framework used to develop the policy and its real impact on the life of the citizens.

The qualitative analysis of the interviews of the workers allow an in-depth analysis of: the working conditions, the surveillance techniques applied through the use of algorithms and the perception of the role of the European law. This research create the capability to deeply focus on: the production process and the experiences of the citizens. Moreover, the qualitative research analyses how technology impacts in the relationship between workers and companies and in the fundamental rights of the citizens.

This thesis adopts a qualitative approach. This choice is made to concretely measure how technology is deeply entangled with the life of the workers. It tries to collect the voice and experiences of the citizens that have directly tried experiences of digital exploitation. The role of the trade unions and of workers' collective actions should be measured through this in-deep analysis: understanding how and if trade unions are perceived as an important element to contrast systems of digital and real exploitation. This project analyse the response of the systems of surveillance and exploitation, also in view of suggesting political outputs and solutions to improve the daily life of the citizens.

## 3.1 Qualitative research: sampling

Surveillance technologies can be applied in different working contexts, from structured contexts such as factories to non-structured contexts as the activity of single workers. To better understand the role of technological developments in the organizational structure of the working process this analysis focuses on works that are considered typical in the digital communication society. The systematic

exploitation of the workers is still present in the production, logistic and service industry: freelancers, young precariat of the culture industry, promoters, riders, and drivers. Moreover, focusing on workers strictly related to the logistic is useful to analyse the final element of the chain of value of digital Taylorism. As just seen, digital Taylorism can be defined as a new patch of development of Taylorism in which digital surveillance technologies are embedded (Scholz, 2017). The working experiences of riders, drivers and promoters are going to be analysed:

- riders are workers that deal with food delivery on behalf of large platforms that act as intermediaries between the restaurateur and the customer;
- drivers are workers that deal with the whole process of logistics, delivering any type of gear as subcontractors of big tech companies;
- promoters are workers that deal with the direct sale to the consumers online or face to face. This category of workers sells high tech commodities of any nature, from smartphones to washing machines.

The precarization of the contract of work creates a condition of employment related to the respect of production targets. This precarization of work creates a high turnover of the working market. This has implications for the structure of the present study: due to the high turnover, the only way to obtain a direct interview of the worker is the snowball sample since it seems impossible to obtain a statistical definition of the sample. The snowball sample is chosen since it is useful to access social groups that other sampling methods could not represent. Through this sampling model, the researcher can create bridges to precarious working experiences characterized by a high turnover and a low trade union density. The core of this approach is obtaining the trust of the workers and through it obtaining the capability to contact other workmates. This sampling approach does not apply statistical criteria since it is based on asking the first subject another $k$ contact that could allow the researchers to define a framework of the field. This sampling process is established on the trust of the researchers since each subject is asked to indicate other ones (Goodman, 1961). Without trust, it is not possible to activate his chain reaction.

The planned condition is representing different working categories through the following amount of workers: 4 riders, 4 drivers and 4 promoters. This condition should guarantee the possibility of identifying common patterns and experiences. The sample size can be expanded if useful in following both possible experiences of unionization and digital surveillance experiences. Each working category should respect the gender alternation creating a dimension of equilibrium that allows mapping divergent and convergent treatments. Furthermore, considering workers of different ages becomes significant: young workers are expected to be more skilled in avoiding forms of monitoring than those over 50.

The planned conditions were not totally reached since drivers and middle-age workers did not show the aim to participate in the research project, despite contact moments. However, this element is considered as significant in the next chapter and some hypotheses are developed for the absence of interviews. Instead, promoters demonstrated a high level of willingness to participate in research. Thanks to this availability, it was possible to collect two more interviews than those planned. Moreover, the limited amount of time available to conduct field research is the other element that should be evaluated to explain the absence of the drivers and middle-age workers' testimony: following studies should be characterized with a longer presence in the field since it is necessary to obtain workers' confidence.

Below there is the table that defines the workers who were interviewed.

| Gender | Labour | Age | Period of employment | Educational qualification |
|---|---|---|---|---|
| Woman | Promoter | 31 | 2 years | Bachelor degree |
| Man | Promoter | 28 | 1 year | High school graduation |
| Woman | Promoter | 28 | 2 years | Master degree |
| Man | Promoter | 24 | 6 months | High school graduation |
| Woman | Promoter | 28 | 2 years | Master degree |

| | | | | |
|---|---|---|---|---|
| Man | Promoter | 23 | 5 months | High school graduation |
| Man | Rider | 25 | 2 years | Master degree |
| Woman | Rider | 26 | 6 months | Bachelor degree |
| Man | Rider | 24 | 7 months | Bachelor degree |
| Woman | Rider | 24 | 2 years | Bachelor degree |

*Table 1, snowball sample.*

## 3.2 Qualitative research: structure of the interviews

Semi-structured interviews were chosen to perform this research since they created the possibility to focus on the research questions without eliminating the freedom of the respondent. The focus of the research was deeply understanding the working context and this objective was achieved only by allowing the workers to express their concepts and keywords. Understanding the typical work slang, the relationship among workmates, with the company and the mechanism of resistance to digital surveillance was the core of this research. To analyze the research questions in detail, it was necessary to divide them into thematic subsets. This thematic division was useful in articulating the questions more precisely and defining the semantic fields that need to be developed. Precisely we focused on:

- How the working context is organized. Which kinds of digital or physical relationships are established among workmates and with the company;
- The working conditions of the citizens. Which technological tool they are using and how is structured the process of extraction of value. Which criteria are used to measure the productivity of the workers;
- Which awareness the workers have about their rights and their privacy. Moreover, it is interesting to understand if they ever tried collective experiences with trade unions;

- The workers' opinion about the possible institutional regulations that the states and the European Union should implement.

Each interview lasted from 15 to 45 minutes and it was conducted in Italian since the working language of the subject was Italian. Each interview done in Italian is translated into the phase of analysis. The analytical phase was developed in English to keep linguistic coherence.

## 3.3 Qualitative research: questions

In compliance with the provisions of the GDPR, the interviewee immediately had the opportunity to be aware of both how his data are processed and about his privacy rights. The first part of the interview consisted of the following informative sentence:

> *'Thank you very much for taking part in my survey! Given the topic, I need to collect some data, some of which are considered personal data under the GDPR (age, gender, nationality, origin, level of education). For this purpose, I need your consent to collect and process these data based on Art. 6 paragraph 1 a and Art. 9 paragraph 2 of GDPR. I will use the data exclusively for my study, treat it confidentially, not pass them to third parties and, of course, delete it immediately after completing my study. I collect this data anonymously, so I cannot assign the answers themselves to your person. Therefore, according to Art. 11 (2) of GDPR, I have to inform you that I cannot delete or disclose your data prematurely upon request and that a subsequent objection is also not possible.'*

The interviews were performed both online and physically, according to the pandemic situation and to the geographic location of the workers. The interview questions are:

| Thematic subsets | Questions |
|---|---|
| Personal Data | • Introduction question: gender, age, and educational qualification |
| How the working context is organized | • What work are you doing or have you done? how long?<br>• How was/is your relationship with your employer?<br>• Have you had any physical moments of interaction with the employer?<br>• What do you think about this technology-mediated relationship with the employer? |
| The working conditions of the citizens. | • Can you tell me about your working day?<br>• How was your job performance measured? How was the quality of your work established?<br>• Have you ever had a job in which the use of a smartphone or digital device was crucial? Were these devices yours or the property of the employer?<br>• Have these digital devices ever been useful to your advantage? Have you ever managed to avoid being remotely controlled? |
| Awareness of the workers about their rights and their privacy | • How did you perceive the presence of technology in your |

| | |
|---|---|
| | working life? Do you think that institutions have played a role in improving it? Do you believe that institutions play a protective role?<br>• Do you know your rights regarding your work and your privacy?<br>• Have you ever contacted a trade union organization to enforce them? |
| Workers' opinion about possible institutional regulations | • What do you think Italy or the European Union should do to regulate this situation? Do you think they can actually do something? |

*Table 2, English version of the questions.*

The questions, translated Italian questions are:

| Thematic subsets | Questions |
|---|---|
| Personal Data | • Domande di introduzione: genere + età + titolo di studio |
| How the working context is organized | • Che lavoro stai svolgendo o hai svolto? da quanto tempo?<br>• In che modo si definisce/va il tuo rapporto con il tuo datore di lavoro?<br>• Avete avuto occasioni di incontro di persona o solo/prevalentemente da remoto? |

| | |
|---|---|
| | • Cosa pensi di questo rapporto con il datore di lavoro mediato dalla tecnologia? |
| The working conditions of the citizens. | • Puoi raccontarmi una tua giornata di lavoro?<br>• In che modo viene/veniva misurata la tua prestazione lavorativa? Come viene/veniva stabilita la qualità del tuo lavoro?<br>• Hai mai avuto un lavoro in cui fosse determinante l'utilizzo di uno smartphone o di dispositivi digitali? Tali dispositivi erano/sono tuoi o di propietà del datore di lavoro?<br>• Questi dispositivi digitali sono mai stati utili a tuo vantaggio? Sei mai riuscito a evitare di essere controllato da remoto? |
| Awareness of the workers about their rights and their privacy | • Come hai percepito questa presenza della tecnologia nella tua vita lavorativa? Credi che le istituzioni abbiano svolto un ruolo, anche in minima parte, per migliorarla? Credi che le istituzioni giochino un ruolo di tutela?<br>• Conosci i tuoi diritti riguardo al lavoro e alla tua privacy? |

| | |
|---|---|
| | • Ti sei mai rivolto ad un'organizzazione sindacale per farli rispettare? |
| Workers' opinion about possible institutional regulations | • Cosa pensi che dovrebbero fare l'Italia o l'Unione europea per regolamentare questa situazione? Pensi che possano fare effettivamente qualcosa? |

*Table 3, Italian version of the questions.*

## 3.4 Qualitative research: data analysis

The analytical phase respects the freedom of the subject since each worker remains anonymous and only the researcher knows the identity of the subjects. This anonymity is mandatory since workers should be free to express their working experience, without fearing disciplinary actions.

The workers' answers are used to develop an interpretative framework of the role of technology. Fragments of each interview are used to create a narrative that wants to establish points of contact between the different experiences. The aim of the research is trying to analyse if there are similar material conditions in different working experiences. Therefore the report tries to focus on how similar digital technology are used for surveilling different working experiences: interesting is finding that there are repetitive patterns to maximize profit and increase control over workers.

Trying to measure the collective experiences of the workers and their involvement in trade unions is central focusing on workers' awareness of their rights. The expectation is that political activism in trade unions and collective actions should be entangled with a major awareness about the fundamental rights and about the role of the institutions in overcoming forms of technological exploitation.

In the next chapter, the narrative framework is developed. This first experience of research should be considered as a basis of the following experiences of qualitative and quantitative research on the topic.

# 4.0 Qualitative research: mapping policy outcomes

The qualitative analysis developed in this chapter tries to in-deep focus on the daily experience of a particular group of citizens with high exposure to surveillance mechanisms. Surveillance technologies, GPS locations and algorithms could influence the living conditions and the working stability of millions of citizens in the whole European Union. Indeed, analysing the perception of the presence of technology in the working activity could help in mapping the political output of the actual regulation and then propose other possible political actions.

Digital Taylorism should be intended as the new phase in which there is a massive presence of tools for remote and digital surveillance (Scholz, 2017). GPS locations and algorithms that analyse the production standards could be considered central in this working process mediated by technology. Through the use of these digital instruments, the big tech and the companies can monitor the working time of workers, analysing the non-productive time (Scholz, 2017). Time monitoring is work monitoring and through this scientific organization of work is possible to extract an exponential level of resources from workers. Mapping the daily activity of the workers could be useful to monitor the policy outputs of the European regulation: trying to analyse if the European law is obtaining goals that concretely empower the life of the European citizens. This project aims to compare the theoretical political goal of the laws currently in force with the material experience of precarious workers that have to face the process of exploitation in their workplaces each day.

The interviews were conducted in Italian since they were developed in workplaces characterized by a low rate of English proficiency. The snowball sample process involved European citizens from Romania too but they used Italian as a working language. The translations are developed in respect of the original meaning, to give voice to the experiences of the workers met in the field. Most of the interviews were developed through zoom **since workers underlined the necessities of combining the work-life times.** All the workers were granted permission to manage their data, according to the GDP regulations. To respect the anonymity of each worker this chapter will report only short, anonymous,

comments pointing only to the work type as ‘promoter’ or ‘rider’ and genders. Neither the names of the workers nor the companies are reported in the testimonies.

The qualitative research involves 10 workers: 6 promoters and 4 riders. Three of the four riders are now occupied in different work sectors since the situation inside the workplace had become so unbearable that they turned to a trade union organization, which took charge of litigation and of legal aspects that are still active now. All the 10 workers are aged between 23 and 31 years and their qualifications are distributed as follows: 4 workers with a high school diploma, 3 workers with a bachelor's degree and 3 workers with a master's degree.

To compare the differences and the similarities between workers’ experiences the testimonies are going to be merged into five different types of macro domains: the experience of the workers, the relationship with the employers, the concrete impact of technology on their personal and professional lives, the role of trade unions and the perception of European and institutional regulation. Furthermore, the following chapter considers the impossibility of involving drivers and middle-aged workers in the field as significant data: moving hypotheses of possible explanations of the absence of these workers.

## 4.1 Drivers and middle-aged workers: difficult points of contact

The original aim of the research was one involving drivers and middle-aged workers. Drivers could be considered as a working category with a high presence of GPS devices used to check delivery times and the position of work vans. Moreover, the possibility to involve middle-aged workers in the analysis could be useful to map the possible technological gap between generations. The first significant data should be the absence of these types of workers in the research analysis since they were not available to give interviews and to be involved in the research project. These absences could be explained in different ways.

Drivers could be considered as workers with a high rate of mobility among the whole Veneto region. The working experience of drivers is individual since they work alone with specific amounts of stops and deliveries. These repetitive actions are based on a process of rationalization on criteria of economic efficiency: there

are standard actions with specific execution times (Taylor, 1979) and these scientific organization of work could be intended as digital Taylorism. The high rate of mobility and individuality combined with a full week labour shift could decrease the trade union density of these specific works since they could be characterized by **rare free time**. Some drivers were contacted through a worker union, but even the union delegates in the workplaces **expressed the lack of time to participate in the research despite the willingness to help**. Demonstrating availability only for short 5-minute telephone comparisons.

Middle-aged workers were present in the field since they works both as riders and promoters. Middle-aged riders and promoters did not give the authorization to participate in the research project. The possible explanation could lay in the massive precariousness that characterizes the digital communication society which involves freelancers, young precariat of the culture industry, production workers and commercial workers as the core of the production and distribution processes (Fuchs, 2018). **The contacted middle-aged workers affirmed their necessity to keep their workplace since they were scared of giving possible information that could be perceived as compromising by the companies.** The precariousness of their contracts, renewed by two months in two months, had created a condition of maximum respect for the sales targets and maximum confidentiality on the functioning of their work. Through the lens of their young workmate, this research tries to underline the structure of the system of digital exploitation that characterizes their work.

## 4.2 The relationship with the employers

**All the promoters are employed with on-dement contracts by different promoter agencies physically placed in Milano.** These types of contracts should be provided only to respond to market needs. Concretely, these contracts should be used to employ workers on a non-continuous basis since the contracts establish obligation neither for the employer nor the workers, theoretically giving the capability to occupy various work with flexibility. These contracts create a precarious working condition that empowers the employer since *'if you do not*

*answer a call once, justifying it, you may be called back, but if you do not answer several times you will not be called back for that work'* (promoter, man, 24). **The application of these contracts creates and legitimates the precarious position of these workers, creating a condition of occupational blackmail.**

All the promoters have a digital work relationship with their employer, but only one perceived it as positive affirming:

> *'I have been working as a promoter for two years and the relationship with my employer is mainly online. I have met in person only a few times with some managers. I believe that this digital relationship saves a lot of time both for me and for my managers. The digital interaction gives me the option of not moving from my city'* (promoter, woman, 28).

This worker underlined how digital intermediation could help in reducing movement across the country, showing how only this mechanism could help both her responsible and her directly in saving time and reducing the physical contacts only to what is strictly necessary.

The other promoters developed a negative connotation of this digital mediated relationship:

> '*Our relationship was mainly remote and we only met at two company meetings in Milan. Only in these moments I saw some members of my company and for the rest of the time, we only spoke by phone. This relationship is extremely impersonal, it does not allow you to associate the face with a voice: my responsible is Paola and I do not know her. The relationship is very cold and you do not understand how much you can disturb the other person. In a physical work relationship you usually understand when you are disturbing or when you have to fend for yourself, in this case, you have no idea. Very often you are groping in the dark'* (promoter, woman, 31).

The remote relation with the employer is commonly perceived as cold since **the impersonal mediation of WhatsApp and e-mails do not give the capability to live the working experience as a shared and collective experience**. Workers are placed in the WhatsApp groups and they communicate in that group only for emergencies that are rarely answered.

Each promoter is employed by the work agencies and not directly by the brand that it represents. The agency employees area managers too, the role of these managers are moving from the different shopping centers, to supervise the correct display of the products and have relationships with the promoters that operate in the shops.

> '*my labour relationship was digital, I never saw my employer, only managers who were employees exactly like me. These area managers rarely interacted with me directly in the store. Certainly, this work lacked human contact: I only dealt with these area managers, on WhatsApp and with the application*' (promoter, man, 24).

These area managers act reporting the situation of each workplace, acting like the employer: controlling the sales and performance of promoters. Furthermore, these managers interact directly with the store for any business need.

**This digital relation is avoided by some agencies that employ only through recommendations of the shops. Given the precariousness of the contracts, this phenomenon allows the shops to train salesmen and then hire them less expensively. Maximizing savings and internalizing store knowledge.**

> *'My previous work experience gave me a direct channel to be a promoter in the same store. There is a relationship between the store and the company of the promoters they trust who is recommended. I don't think it would have been difficult to work as a promoter anyway but my previous work has helped'* (promoter, man, 24).

Almost all the riders have similar experiences**: three of them were formally employed with a part-time contract, but their wages depended on the working hour effectively provided: the part-time contract became an on-demand contract since the workers did not have working time stability**. Only one rider was employed directly by the restaurant that operated on the platforms. **This rider works illegally for the restaurant since the shop does not want to pay taxes.** *'I was a rider, who worked for the pizzeria and not directly for the platform. I worked illegally because I needed it and had no other alternatives'* (rider, woman, 24).

The riders directly employed by the platforms had negative experiences too: *'the relationship with the employer did not exist, I never saw him and we only contacted each other remotely. Furthermore, the company did not respond to our requests and our problems. I have never received a reply to my emails. I don't think anything positive about this work'* (rider, woman, 26). In this case, the relationship with the employer was remote, without a point of contact and an area manager. These workers felt to be completely alone since the companies did not answer to their necessities but only communicated to provide obligations and directives.

> *'We did not have a direct relationship with the multinational, even our employment relationship was made up of subcontracts of 3 companies operating at the same time: the multinational that owned the platform, a company from Verona that dealt with logistics and the third one from Rome that was the one that had us legally hired. The relationship with our employer was that of a call center that never answered. From a trade union point of view, this system was difficult and limiting. We received directives that we were unilaterally forced to respect'* (rider, man, 25).

Moreover, the environment of these platforms involves a different working situation that could be considered **grey labour, characterized by a chain of not transparent subcontracts, or directly illegal.** These working conditions catalyze processes of exploitation of relative and absolute surplus value, creating a recessive spiral that set the workers in conditions of constant blackmail. The capability of

controlling the logistic process and the instrument of work gives the companies the capability to control workers directly (Fuchs, 2020). These workers were victims of a constant process of time and resources, due to hierarchical control mechanisms of their work.

Capital, by its natures, tries to annihilate space and time, reducing the distances and placing different points in contact with each other (Marx, 1938). The digital brokerage of work that these companies use allows them to remotely extract value from the workers that operate at the same time in different places. All these platforms operate as subcontractors of multinationals: **big global companies do not directly operate in the territory, rather extract as many resources as possible without risks. They operate indirectly through the help of national companies and agencies of work.**

## 4.3 The concrete impact of technology

Analysing the material experiences of the workers about the daily interaction of technology could be useful in analysing how the process of exploitation works. Moreover, promoters and riders have similar experiences with the mechanism of remote surveillance since both the working categories have digital relationships between workers and employers.

Promoters are subject to two macro-dimensions of digital surveillance: the first one is the **mandatory GPS check-in and check-out** at the beginning and the end of the working day, the second one is the **daily report of the goods sold.**

> *'In the morning, I have to mark my presence in the app that I have installed on my mobile phone. Once I arrived at the end of the working day I always have to check out on the same app. My productivity is measured through the goods that I have sold: daily, in the app, I have to report the products I have sold. If I meet the business requirements I can be rewarded with small productivity bonuses'* (promoter, man, 28).

Each working agency has a different app but each app works in the same way: through the app, the workers have to **remotely mark their presence in the shop** and each check-in and check-out requires a photographic proof shouted toward the app. The use of the application can be understood as a technological relation that put the employer in the condition of remotely controlling the activity of the worker. In this case, technological control is social and material control (Fuchs, 2020). *'Daily, I have to upload the sales in the app. I am sure that my data are cross-referenced with those of the store to determine how many commodities I have sold in my working day'* (promoter, woman, 31). The role of the app is crucial to measure the productivity of the promoter since each sold product shall be uploaded in the app. Moreover, the companies make a second-step verification to analyse the accuracy of the report: they take data from the shops and cross-reference it with the promoters' one. This action could be understood as a real process of productivity monitoring: if the worker respects the target he/she is awarded small economic bonuses, **if not the agency immediately terminates the employment relationship, replacing the worker with a new one.** Only two promoters have company-owned smartphones or tablets in which were installed the app used for the remote surveillance. The other workers have to use their devices and install the app with full access to GPS permissions: through these settings, the **companies potentially could randomly check the position of the workers out of the working hours**.

For many companies, the role of the promoter is central to building loyalty with the clients. Each promoter should not sell directly the commodities but he/she provide gifts to the clients: the core of the process is obtaining personal data of the clients to develop targeted advertisements. *'my work was to provide sales assistance to collect personal customer data by registering them on a portal. This registration allowed the customer to get gifts and the multinational I represented to do targeted advertising'* (promoter, woman, 31). Indeed information should be intended as a specific commodity that is extracted directly by the promoters. The personal data of the clients are elaborated e compared: the relatively high cost of extraction could be understood as the wage of the promoter, but after the extraction, the information could be used for infinite purposes and in different places at the

same time (Fuchs 2018). In this case, **multinationals use their resources to extract raw materials from the clients and these data could be used to perfectly profile the interests, tastes, relations and personal aims of the citizens**. Data is used to develop target advertisements and through it in-time map both the products sold in the market and the productive necessities of the factory. Data are used to map the market and rapidly organize the production process.

According to the experience of the promoters, the use of technology does not guarantee the perfect profiling of the real working conditions of the shops.

> *'The number of registered clients was also important in establishing the quality of my work. The problem is that technology does not take into account the variables: if the weather is sunny in August, there is no travel in the shop and therefore there is no possibility to get in touch with customers. Whether it was the sun, the snow or the covid, the parameters were: sold for the days worked. It creates conditions of unrealistic expectations'* (promoter, woman, 31).

Moreover, workers highlighted how the app is not able to correctly describe the working reality and the problem that each promoter has to face in the shops. Rapid changes in the weather or issues related to the pandemic restrictions are not mapped by the apps. To overcome this situation companies try to map the activity of the competitors: some promoters have to report not only their sales but one of the other promoters too.

> *'Every day, in the final report in which I marked my sales, I also had to mark the sales of the other promoters. It was important for my agency to understand the sales of other brands. Based on these sales, my work and the business investment were planned'* (promoter, woman, 28).

This strategy of competitor analysis is useful to compare the performers of the promoter with the others. Through these comparisons, the multinationals can analyse shops' trends and monitor the performance of their workers more

efficiently. Furthermore, this brand analysis could help in defining the global performances of the shops, **evaluating if other investments in workers or advertisement are required in that specific territory**. The second element to monitor the effective activity of the workers are working figures called mystery clients. These workers operate as multinational inspectors, secretly evaluating the performances, the actions and the knowledge of the promoters.

> *'one other control tool is the mystery clients, figures paid by employment agencies that pretend to be clients. They ask you questions and randomly check if you respect the dress code, if you pose correctly and if you ask the customer the right questions. In my career, I have been checked only once by these figures and I learned about it later toward a company report. Depending on the severity of your low performance or if you are not found in the workplace, you can also risk being fired.'* (promoter, woman, 31).

To improve the level of workers' surveillance companies employ other workers that have to randomly move among the shops to evaluate the performances of the promoters. These mystery clients are agency workers that have to control other agency workers. Negative reports could bring immediately to the interruption of the on-demand contracts of the promoter. **The agencies create a "panopticon-type" surveillance model in which each client could be the mystery one and it brings the promoter into a constant state of alert**. Each mystery client develops a report based on specific indexes: dress codes, knowledge of the commodities, capability to get in touch with the clients and the correct advertisements of the services. Usually, the agency shares this report with the promoter and asks for an immediate improvement of the performance.

> *'I have been working for two years as a promoter and I believe I have met mystery clients 2 times. My scores were high but I never got 100%. The company sent me the reports asking me to improve the way I interact with customers to make it adhere to company standards'* (promoter, woman, 28).

Moreover, the control tool used by the agencies could be divided into 2 macro-categories:

- The technological tool that acts through the use of the app that establishes instruments of GPS remote surveillance and performance monitoring;
- The physical tool, as the mystery clients that have to randomly supervise the performances of the clients and to create reports on specific indexes.

Some promoters, according to their technological expertise, developed strategies to avoid the remote surveillance of the companies.

> *'I used my smartphone to sign in with the app to the store. But the system was easily fooled as there are applications, on the app store, that create a fake GPS position. You can geolocate yourself anywhere and the sign-in communicates directly with the fake geolocation. The same goes for checkout. This allowed you to have the option to enter later and to exit the store earlier. There was no one constantly monitoring you, there was a lot of freedom'* (promoter, man, 24).

This worker used the fact to be obliged to use his smartphone against the phenomenon of remote surveillance. Both in the android and ios environments, some apps allow users to create virtual GPS positions. These apps create fake GPS coordinates and users could use the other applications without sharing their real position. **The possibility to use these virtual positions is used to improve the freedom and the elasticity of work**. Toward this possibility, each promoter could reduce their working time and reduce their surplus labour. Creating, for the same salary, a condition of reduction of the worked hours. **Allowing more flexibility and fighting the low wages they are subjected to, which is around 5.50 per hour**. The second element used to fight the low wages is the work solidarity that promoters established in the working environment:

*'I cooperated with the shop assistants and I was able to create a relationship with them. Given my low salary and the need to meet the sales requirements, they helped me in two ways: the first was to sell my products together at the expense of the competition. The second was to notify me of the goods sold by the shop daily, even when I was not on my shift. This allowed me to record the sales also in my management system and make them count as mine'* (promoter, man, 28).

**This collective solidarity among workers of different categories set the condition to improve the wage of the promoter and consequently their presence in the shops**. The promoters return the favor and take care of the shop in the moments of the maximum influx of customers or moments of break of the shop assistants. **This mutual solidarity creates, for the promoter, the capability to avoid the technological rating of their performances that the apps try to develop**. Toward this mechanism, the promoters always have a high ranking and they can obtain bonuses and keep their works.

Riders have similar experiences since they use apps based on GPS positions. One underlined that:

*'once I arrived at the pre-established point, in the garage owned by the company, I took the bike or the scooter and I checked in the company app. I used the same button in the app to communicate that I had arrived at the shop and then to communicate that I had paid or directly collected the food. Finally, I went to the customer and once I had verified the type of payment I delivered the meal. Here, I made the last sign in to the app to communicate the delivery and to take new orders. The quality of my work was measured by the task of delivering food on time to the customer. In the event of a cooking delay at the shop, it was immediately communicated to avoid personal disciplinary reports to me'* (rider, man, 25).

The difference between riders and promoters is the fact that riders have ongoing GPS tracking and that they have to constantly interact with the platform. During the whole process of delivery, each rider continuously has to upload his/her

status and share the real-time position with the employer. Through the app the **employer can evaluate the roads used and the speed of the riders, evaluating the performances of the worker**. Workers have to report possible obstacles during the activity otherwise it risks being sanctioned. Promoters and drivers share the presence of GPS surveillance during their work, but this presence wants to analyse different elements. For promoters, the check-in and check-out in the app are moments to establish the start and the end of their work. Instead, riders have to be at a specific point to start their working experiences and after that, they have to constantly interact with the app, always sharing their positions.

> *'We were tracked with GPS and they used our smartphones. Very often they told me that I had to move and that I was not fast enough. The head for managing the orders sent to us from shop to shop, through the platform. The fact that the smartphone was ours was a problem for two reasons: the first is that when it rained smartphones constantly risked breaking, many colleagues got it broken for falling or for the rain. That month, they worked to pay for their the phone. The second is that the app could constantly access our data and our location, even with the GPS closed. One evening, I stopped at our hotspot because I had finished a delivery late, with the GPS off. Despite this, I was contacted and the responsible asked me for an explanation of my stay there. This made me very nervous.'* (rider, man, 24).

All the riders use their smartphones for working and all of them report the fact that the employers avoid all the responsibilities for work-related damages. Creating a critical condition in which workers have to work in any climatic conditions but they are not refunded for all the work-related damages. The use of personal smartphones creates also the problem of constantly being monitored by companies. The last testimony underlines the fact that the employer can access the position of the workers even after the end of the turn and with the GPS settings off. Probably **these apps use a combination of GPS location and network triangulation, having total access to personal information that should be protected by privacy law**. This testimony highlighted how there is a massive

presence of technological surveillance that avoids both the regulation of the collective agreements of trade unions and the institutional regulation.

> *'We have repeatedly asked to be given company phones. Both for the possible damage and because the app drained the battery very much. The GPS quickly zeroed the battery in a couple of hours and we constantly needed to recharge the smartphones. The company has never answered us about this'* (rider, woman, 26).

According to the workers, the massive use of GPS and triangulation technologies dries rapidly the battery to zero. The company was aware of these technological limits but never answered the workers' requests to buy business phones. All the work of the riders is based on this process of step by step position verification since no other indexes, rather than speed of delivery, could be evaluated.

As just affirmed, the use of personal devices, a common element for promoters and riders, enhances the power of the companies allowing a constant process of tracking of the workers. **Workers lose the right to be offline and they could produce information to the companies daily**. No notification appears when the process of tracking is started and workers can not change the permission of the app since they are mandatory for the correct working of the app. Workers have to bear mandatory constant tracking.

The apps analysed in this chapter operate as black boxes since citizens and **workers can not know how data elaboration operates and if the data processing respects the standards of dignity that shall characterize modern society** (Rodotà, 2004). Punctually workers shall use applications to allow the performance analysis of their work, but at the same time, they cannot understand the criteria of this digital performance monitoring. The life of the workers is delegated to the application of algorithms and artificial intelligence that secretly operates toward the private criteria of the employer. Capitalistic societies are based on full control of the instrument of work (Fuchs, 2020) since towards this control they can directly exercise power on the performance and the life of the workers. In

the case of riders and promoters, there is a clear class relation between those who own technology and the workers. Except for individual cases of resistance based on technological knowledge, neither riders nor promoters can collectively determine their instruments of work and understand the black box system behind the apps.

In both cases, **there is a strict link between the presence of precarious contracts and the use of technological tools to monitor the performances**. The process of constant performance analysis is the constant verification of the surplus-value produced by the workers. The structure of the exploitation system of these works allows the capitalist to fire the human resources that do not satisfy the production targets. Technological relations are class relations (Fuchs, 2020) and in both cases, workers have to bear precarious conditions since the technology remotely verifies the positions and performances. **The surplus-value of these workers is directly moved from the workers to the multinational** since workers have a standard wage of 500/600 euros each month. The goal of the application of these types of contracts and these technological tools is to reduce cost and accelerate the extraction of value from the production process.

## 4.4 The role of trade unions

None of the interviewed workers knows their rights about the application of technology in the working sectors and only four workers are aware of their labour rights and have contacts with trade unions. Only one promoter and three riders turned to trade unions organization to know their rights or to undertake collective actions. The rider with the illegal working relationship never interacts with trade unions since she is in a condition of working blackmail: *'I am aware of my condition but I need money to work. I have decided to accept this proposal and continue looking for another job. I don't want to go to any union organization'* (rider, woman, 24). In this case, the work of the rider is perceived as necessary but temporary. The worker does not want to contact trade unions since she does not want to compromise the still precarious situation.

The only promoter that has a relationship with the trade union affirmed that:

*'We were the B-grade employees inside the store. This is why I turned to a trade union organization because I wanted to know my rights. I wanted to understand what contract I had signed since I didn't have sick pay or vacation. Especially during the covid, this thing weighed. In my previous jobs, I had approached the same union to apply for unemployment benefits*' (promoter, woman, 31).

This promoter was the only one that contacted a trade union for obtaining information and services. However, these contacts were based on individual necessities and the worker never organized collective actions to improve her working conditions. The high rate of work instability could create high fragmented conditions in which promoters shall respect all the decisions taken by the company. The on-demand contract applied to these workers creates the possibility for the company to instantly fire the workers eliminating the working calls. Consequently, the workers could develop a perception of trade unions as service providers and not as collective worker organizations.

Riders have a completely different experience since they organized collective action against the labour agency and the multinational. Three of the workers involved in the project were part of a larger community of eleven labours that worked for the same agency.

*'We turned to a trade union organization because there were problems related to the wages. We had a union bargaining that lasted four months in which we asked for the adjustment of our INPS contributions and the payment of salaries'* (rider, man, 25).

They had problems related to the regularity of their working position since the company evades the payment of the wages. During the bargaining, they asked for the purchase of business phones since there were some episodes of smartphone damages in which the working agency avoided all the responsibility related to private objects during the working hours, even if they were mandatory for the working activity. *'Since we were not getting a response from the company, we*

*organized a trade union strike. From that moment until the end of the negotiation, the company sent a legal representative to discuss our requests'* (rider, man, 25). These rider unions experienced different phases of conflict with the main company, speaking in local newspapers and televisions. *'With our strike, we were able to expose the multinational, which avoided any responsibility, being our working relationship with the agency and not directly with them'* (rider, man, 25). Through this testimony, we could underline how multinationals try to exploit the procurement system **shifting the responsibility to the last component of the chain**. As in the case of promoters**, the agency of work creates a system that allows avoiding all the responsibility related to the working conditions and the wages**. This system allows the multinational to obtain economic advantages, reduce costs and eliminate criteria for the redistribution of wealth with the worker who remains trapped in a condition of precariousness.

> *'The compromises were too many and we had no response from the call center of the company. We decided to stop being a number for them and started asking for rights. At the end of the bargaining, the multinational closed the procurement system to open a new one. The organization was dismantled to be rebuilt and now we have a lawsuit and we are being followed by the lawyers of the union organization. Unfortunately, the Italian system is constructed like this: there are no rules and they can be avoided. Once the procurement was closed we all lost our jobs. I had the opportunity to reflect on it. We have achieved a lot but there is no protection for workers'* (rider, man, 24)

During the bargaining, some workers recover part of their salary and they ask for an improvement of the whole working conditions. At the moment in which the situation both risked being too expensive for the multinational, they decided to close all the systems. The trade union answered through the legal instrument, persecuting the companies and developing an action that is still in progress. The value chain of the capitalistic system of exploitation is structured in giving power and control to the entities on the higher levels of the chain since the dimension of the exploitation

and the value extraction depends on the position of the humans across the value chain (Fuchs, 2018). This testimony underlines how multinationals have the power to modify their action in the job market moving through the leak of the system. Probably the new procurement was structured as the previous one: reducing the cost of the workers without taking direct responsibility for the working relationship. The collective experience was considered significant since

> *'the union experience for me was positive and the presence of the union was felt. They made sure that our voice was heard despite the conclusions. The thing I liked confronting and taking action with my colleagues to not be crushed by our company. They are still following us legally, I hope the situation will be resolved soon. I am still in contact with my former colleagues'* (Rider, woman, 26).

This collective experience was considered as an element that raised awareness of the workers' rights since they had the opportunity to constantly interact with the trade union. These collective experiences structured positive and structured relations among colleagues.

## 4.5 The perception of European and institutional regulations

Nobody feels the presence of the institution, as labour inspectorate, in their working activity due to the massive level of precarity. **No one perceived the role of the state as an active actor that monitor, evaluate and promote the dignity of the workers and the legality of the working conditions**. This absence of data is significant since even the labour inspectorate or the judicial system are not felt as active subjects that promote workers' rights.

The last question of the research is focused on analysing proposals of possible institutional interventions that the European Union or the Member States (in this case Italy), should implement to improve the working situation of the citizens. The common opinion was that the state should improve their presence in the labour market: *'I would increase the presence in the state to improve the real*

*working conditions of citizens. Unfortunately, justice in this country is very slow and it seems to be starting all over again. I would certainly improve the presence of the institutions'* (Rider, woman, 26). The common opinion is that **the state disregards its role as a moderator of the labour market** allowing each form of exploitation and abuse. Calling back the role of the state as moderator of the marker and supporter of justice is an element that should be intended with the perception that institutions can and shall act as active subjects. *'It would be enough to put rules for everyone. The riders have always existed and technology helps, it would be enough to put some rules. For example, state servers could be used to store and protect personal data'* (rider, man, 24). Workers call for regulation that applies equally to the whole subject of the labour market. **Citizens perceive a giant disparity between workers and multinational platforms**. These subjects are felt as subjects with an unlimited power that can do whatever they want inside the single market. European and national law should harness these subjects, setting the conditions for the application of working contracts based on dignity and respect of the fundamental rights of the workers.

> *'I believe that the European Union should guarantee the same rights and the same salaries for all member countries of the Union. European employment contracts should be introduced creating the same conditions in each member state, respecting both the needs of those who want a full-time commitment and those who need to work less frequently.'* (rider, man, 25).

This worker highlighted the fact that the same work is paid in different ways in each country of the European Union. This difference inside the same single markets creates a particular situation in which **the same workers could have different wages according to their geographical position**. This testimony introduced the concept of a **European employment contract** that acts as the national one: defining rights and wages of the workers, in this case on the European scale. In this case, reducing the working disparity among the market is perceived as an element of dignity for the whole citizens of the European Union. There is the shared necessity of setting common rights and common wages among the workers

of the European Union since these workers feel to be exploited by an unequal system:

> *'workers must be protected because time and a person's professionalism have value. I think a guaranteed minimum wage for every worker is essential. We need greater protection that prevents people from being exploited and even risking their lives. there are those who seek to profit above people and this must be countered.*' (promoter, woman, 28)

Workers underlined the necessity of regulation on the use of personal data o and the employment of surveillance techniques in the workplace:

> *'There should be clear information on workers' rights and privacy rights. If I enter a place with cameras I would like to be informed and protected on how these images are used. There should be European laws for both large and small businesses. Technology is now everywhere and my data should be protected everywhere* (promoter, women, 31).

Even promoters call for equal regulations both for big and small companies. Moreover, these workers show the necessity to improve the knowledge of workers about their rights related to privacy and data. According to the promoter, surveillance technologies such as cameras are used in the whole sector of the European market and **each worker should be informed and protected from technological abuses.** Surveillance can be structured toward personal devices too since *'I don't think I've ever had the right to be truly offline for my company. Having given away, with my mobile phone, information about my habits and my position. It is something that makes me think and that it is important to regulate'* (promoter, man, 24). Installing the working app on personal smartphones is an element that could continuously allow the employer to access private and personal information. Workers highlighted that this phenomenon could violate personal rights and it requires it to be regulated through institutional interventions. Developing the right

to be offline could be an element of the dignity of the workers since this right could allow workers to reappropriate the management of their personal information.

## 4.6 The necessity to develop the policy framework

This chapter highlighted workers' experiences concerning European policies and the theoretical framework previously developed. The experience of the workers could be articulated in two different macro elements: the first one is the quality of the Italian labour market that allows the possibility to exploit workers through precarious contracts, the second one is the European level which should develop regulation related to the data protection and to the application of Artificial intelligence inside the single market.

The Italian labour market is highly fragmented since there is no harmonisation in the work market. From autonomous workers to on-demand contract workers, there are a lot of citizens exposed to constant occupational blackmail. Institutions, as labour inspectorates, should improve their presence in the labour market eliminating the phenomenon of illegal works. Moreover, trade unions should ask for the elimination of precarious contractual forms in the Italian working market. Due to the high turnover rate, these types of contracts do not allow to spring collective experience among workers. Therefore, trade unions should represent the story of these workers in the whole Italian society asking both for an improvement in working conditions and for institutional tables. These tables should establish which technologies can operate in the labour market.

Possible regulation should follow two main paths: the creation of a floor wage and the application of the same labour regulation in the whole European Union. The introduction of the floor wage should eliminate the possibility to introduce on-call contracts with an average salary of 5/6 euros each hour. The salary, as an element of dignity, is the minimum condition for the welfare of a citizen. To place such a regulation is to change people's material life. By increasing the redistribution of wealth and the economic possibilities of each worker. The economic system is material and as material, it could be changed and modified according to the necessity of the workers (Fuchs, 2020). The creation of common

ground on labour law could balance the situation across the single market of the European Union. Currently, each member state adopts different regulations and this leads to a lack of coherence of the labour market. In the actual situation, we have a common market based on the freedom of providing services and a fragmented market for labour regulations. Actually, the European single market could be understood as single only for the capital and not for the workers' dignity.

Comparing the outputs of the GDP and the possible outputs of the AI regulation and the digital services act with the workers' experiences should be useful to suggest other policy interventions. The general data protection regulation changed only partially the working life of the workers since technological tools are still used to remotely establish a performance-based control of the workers' activity. Moreover, the absence of transparency of the black box system that characterizes the digital communication society does not give the worker the capability to know how their performances are evaluated. Establishing transparency criteria on algorithms and the working of the apps could set the cornerstone to develop the possibility of collectively influencing the application and changing the index used to set criteria. Moving them from criteria of value accumulation to fundamental rights-based criteria. Putting transparency on the black box system could empower unions and NGOs to collectively monitor the quality of the European work market.

This policy criticism should be moved to the digital services act package: transparent rules are the prerequisite of a democratic environment, but transparency does not solve the problem of an unequal distribution of power in the single market. The European Union should involve the workers' Union and NGOs in the process of definitions of collective agreements related to the management of data and the application of technology in the labour market. As shortly highlighted during the chapter data still is one of the most important commodities for multinationals since data allows constant monitoring of the state of the art of market. The presence of promoters in the shops is central since towards their data collection the businesses could in-time organize the production.

The proposed Artificial intelligence regulation tries to establish which kind of Artificial intelligence should be implemented inside the European Union. The regulation underlined that there are two main types of AI definition: the forbidden

which is related to the remote bio-surveillance, and the high risk that could create damages to the fundamental rights of the citizens. The huge risk that stays behind this directive is the regulation of all the other types of artificial intelligence that is considered neither forbidden nor high risk. The testimonies of the workers show that applications used for working activities require easy tasks that are mandatory to evaluate the workers' performance. If this kind of technology will be considered low or medium risk it will not be subject to the regulation of Artificial intelligence act. Moreover, this risk could be considered as shared among different services and dimensions of the European Single Market. The European Union should establish common and harmonized regulations that consider the whole presence of technology applied in the single market. Regulating only the technology considered as high risk could create unequal conditions between different states and different companies.

This short research could enrich the debate of digital constitutionalism since basing policy proposals on real experiences could be exported as a methodological tool to improve the efficiency of the constitutional moment. Academic knowledge could empower the political debate over the necessity of setting common regulations in the European Union. Digital constitutionalism could be understood as a tool of counter-reaction to the rapid change of the digital communication society (Celeste, 2019). Policy researchers could be developed on the analysis of the material conditions of the citizens and on the real outputs of the laws. Through this material-based scenario, researchers could develop a more efficient critical digital constitutionalism: understanding efficiency not as a productivity criterion but as the possibility of developing policies with benefits for all citizens. Digital constitutionalism could be the core of a process of overcoming the workers' and users' exploitation in the whole European Union. Establishing policies that empower the role of trade unions and NGOs is fundamental for restoring the role of the democratic debate. Digital Constitutionalism should promote the creation of institutional organisms composed of collective organizations. The task of these institutional bodies should be to catalyze dialectical comparisons and discussions. The role of these institutions should be to assess the technologies and algorithms that operate in the European single market, to impose obligations to companies not

respecting the EU fundamental rights, and to suggest a legal intervention to the Member states, to the European Parliament and to the European Commission. Digital Constitutionalism could be the political tool used to collectively determine the technological development anchoring the use of technology to the dignity and the rights of all European citizens.

# Conclusion

This master thesis faces the research questions through different tools: the development of a critical theoretical framework based on digital constitutionalism, the study of the European policies on the digital single market and the empirical qualitative research that analyse the presence of surveillance technologies in the worker's life.

The combined presence of theoretical and empirical tools allows the development of a critical framework that could be used to contaminate the activity of policy-makers, raising questions about the necessity to control technological development and to challenge the role of the European Union in regulating the surveillance tools. The research questions are based on the necessity of analysing how the European Union protect the fundamental rights of the citizens through legislative actions and how the surveillance technology concretely impact the working experience of the workers since study work is studying the structure of the whole society. Moreover, the research questions of the thesis are: ***'How does digital surveillance impact workers' rights and dignity? How is the European Union intervening to protect workers' rights and dignity in the digital context? What's the role of trade unions in this context? In the end: Is it possible to make use of data in the respect of the dignity of workers to increase their quality of life, instead of adding surplus-value to capitalists?'***. The main findings of the research can be summarized in three main concepts: the new role of the European Union, the massive presence of surveillance tools in the working activity and the necessity to challenge the paradigm of technological development.

The role of European regulation is decisive in eliminating processes of labour exploitation and promoting mechanisms for the redistribution of welfare in the whole single market. The European institution is the sole political subject that can establish coherent right-based regulation among the single market. However, during the last decades, the European Union drastically shifted its ideological paradigm about the digital single market, moving from a neoliberal framework to a constitutional awareness. Since 2016, with the approval of the GDPR, the European Union started a constitutional trajectory that today brings to both the proposals of

the digital services package and of the Artificial intelligence act. These proposals are part of a ten-year plan of the European Union called ‘Europe’s Digital Decades’ that tries to pose new roles to protect citizens in the digital single market. However, the risk that the European institutions are facing is the development of policies that are not incisive and not determinant. The risk of the European institutions is focusing only on cases of evident violation of the rights without placing structured regulations on the use of technology in the whole digital single market. This risk is grounded on the neoliberal ideological legitimation about the necessity of keeping the market as free as possible. Despite this constitutional moment, the European Union is not completely regulating the digital single market, imposing only transparency criteria to digital platforms and algorithms. Indeed, transparency should be considered as the minimum criteria of a democratic environment, but transparency norms do not automatically provide for mechanisms for the redistribution of wealth and for collective control.

There is a massive presence of surveillance tools in the analysed works. Riders and promoter have to daily face digital mechanisms of performance monitoring and GPS localizations. These digital instruments are the foundation element of digital Taylorism since they allow both a remote scientific organization of the workers and a precise organization of the production process. Moreover, the research highlights the structural entanglement between precarious contractual conditions and the application of surveillance technologies. This structural relation allows the employer to fire immediately the worker that does not respect the production targets. The workers interviewed are situated in a fundamental junction of the value chain: the one that leads consumers to purchase the products of the companies. Despite this fundamental role, the salaries of promoters and riders are very low and the occupational turnover is very high. This mechanism creates processes of isolation and exploitation that discourage collective actions.

The necessity of challenging technological determinism is grounded on the idea that technology is the instrument of work and the capability to define instruments of works allows to determine work itself. The European institutions should empower NGOs and trade unions evaluating them as representatives of the collective aims of the citizens of the European Union. To overcome the workers'

and users' exploitation the European Union should promote the creation of institutional organisms composed of collective organizations. The task of these institutional bodies should be to catalyze dialectical comparisons and discussions. It shall lead to the assessment and the definition of which technologies can be applied within the single market. Furthermore, trade unions should ask for a European coherence of the labour market: eliminating precarious contractual form and making the European single market coherent not only in the movement of capitals but also in the rights of workers

The criticism that shall be raised about this research is the small amount of time that a one-year-long research project allows. Moving from the theoretical perspective to the empirical phase shall be developed without posing the temporal limitations that a master course establishes. This short research opens different trajectories and calls for a broader reflection that includes further analytical tools. Moreover, the analytical framework adopted to analyze the European policy outputs could be developed in different directions since there are different research techniques that should be employed.

There are two main empirical approaches that could be developed to analyse the European regulations introduced in the digital single market. These approaches are a quali-quantitative textual-lexicon analysis of European law and quantitative analysis of the interviews of the workers.

The quali-quantitative approach analysis of European law should be developed focusing on a textual-lexicon analysis that should highlight the political trajectory that the European Union is approaching. Applying quali-quantitative study to the EU law and to the legislative proposal should able researchers to map the political aim, the political goals and the theoretical framework utilized by the institutions. This quali-quantitative perspective could be compared to a content analysis of interviews done with workers that daily interact with the digital instruments of work. Mapping the conceptual fields that workers have created should be useful to understand the perception of the citizens about their working conditions and about the presence/absence of the role of the European Union. A combined analysis of both these two types of research should enable the

measurement of the perspective of workers and unions: analysing if they are convergent or divergent.

Finally, the qualitative analysis should be improved by collecting dozens of testimonials to describe more precisely the relationship between technology and citizens. Other categories of workers should be included in order to promote a more precise definition of the technologies applied in the European labour market. The aim of this empirical research should be to describe the surveillance systems and to suggest, through the testimonies, laws based on the respect and dignity of workers.

This master thesis concludes with the possibility and the need to develop new research to better understand the role of technology in the labour market. Using what has been analyzed up to now as a starting point for future research.

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# Ringraziamenti

Una laurea magistrale, tanto più affrontata in inglese, non era una cosa scontata per le possibilità che si sembravano prospettare ormai due anni e mezzo fa. Mi sono iscritto ad 'European and Global studies' un po' per caso, interessato dagli insegnamenti, ma senza una visione strutturata di quello che poteva essere per me questo percorso di studio. Egos invece mi ha dato la possibilità, nonostante il covid, di mettermi in discussione costantemente attraverso esperienze internazionali e di partecipare a due winter school, la cui ultima, appena conclusa, in Austria. Questa dimensione di confronto accademico e politico in chiave internazionale per me è sempre stata fondamentale. Quindi, i primi che credo debbano essere ringraziati sono i Professori che hanno costruito e dato gambe ad un progetto straordinario, che permette di confrontarsi e di stringere amicizie con persone che provengono da parti completamente diverse del pianeta.

L'inglese per me è sempre stata una lingua difficile, ma in cui ho voluto lavorare e su cui voglio continuare a migliorare. Il ringraziamento, quello più importante di tutti, va a Mara, una persona con cui ho avuto la possibilità di costruire un'amicizia al di là dei cinquanta anni di differenza che ci hanno separato. Lei mi ha dato la possibilità di amare davvero la lingua e la letteratura inglese, facendo nascere dentro di me la voglia di impararlo ad ogni costo. Mara purtroppo è stata colta da un grande male poco prima della mia laurea triennale e ci ha lasciato con una velocità atroce. Creando un grande vuoto nei cuori di tutte le persone che le volevano bene. Questa magistrale per me è stata portare con me un pezzo di lei, cosa che continuerò a fare per tutti gli anni a venire. Grazie Mara perché tutta la determinazione che mi ha portato qui passa anche attraverso di te.

Il secondo compagno e amico che è necessario ringraziare è Giovanni Zampieri, ormai brillante dottorando di Sociologia. Giovanni è stato prezioso per mettere costantemente in discussione i miei paper: passando da dei semplici suggerimenti strutturali fino ad arrivare alla completa confutazione di alcune mie proposte. Nel mondo accademico credo che sia necessario confrontarsi costantemente e mettersi in discussione e Giovanni è stato necessario in questo. Molto probabilmente senza di lui avrei letto la metà dei paper e dei libri che mi

sono stati fondamentali in questo percorso magistrale. Grazie Giovanni per essere sempre stato un punto di riferimento intellettuale e politico.

Studiare è un'operazione che richiede fatica, amore e dedizione. Studiare in questo paese non è per tutti, perché l'istruzione Universitaria di questo paese è vittima di processi di disuguaglianza strutturale. In Italia non tutti hanno la possibilità economica di studiare e migliaia di giovani abbandonano gli studi per fare lavori poveri e pericolosi, non per volontà, bensì schiacciati dal peso delle disuguaglianze. Per me studiare non è stato semplice. Ho sempre dovuto lavorare per pagarmi gli studi dato che la regione Veneto si è sempre rifiutata di adeguare le soglie ISPE. Lasciando me ed altri migliaia di studenti senza borsa di studio. Per me la chiave fondamentale che mi portato a resistere e che ha dato senso a questa fatica è stata la politica. Ringrazio quindi tutt3 le compagn3 della Rete degli Studenti Medi e dell'Unione degli Universitari che sono stat3 la forza propulsiva del mio percorso universitario. Per dieci anni sono stato accolto dalle organizzazioni studentesche e per dieci anni ho avuto l'onore di vivere l'unica esperienza collettiva presente in Italia. Esperienza che ha dato vita anche a questa tesi, che incrocia la necessità di mescolare la ricerca accademica con l'attività politica.

Ringrazio Virginia, che durante questi cinque anni di università mi è sempre stata accanto. I momenti di sconforto e confusione sono stati molti e lei è sempre stata fondamentale per supportarmi in qualunque decisione accademica, politica o personale. I suoi consigli, spunti e suggerimenti sono stati fondamentali perché lei è l'unica persona con la capacita di capirmi con uno sguardo. Ci conosciamo da una vita, da quasi più di dieci anni e sono grato di aver condiviso con lei tutta la strada che mi ha portato fino a qui. Siamo cresciuti e cresceremo insieme, con pane e tempesta.

Ringrazio infine la Professoressa Claudia Padovani, la mia relatrice, che mi ha accompagnato lungo questo percorso. L'ultimo anno per me è stato sorprendentemente pieno di esperienze, iniziative, seminari a cui sono stato invitato e che sono stati determinati per sviluppare questo piccolo progetto di ricerca. Più volte ci siamo incontrati, in presenza e online, per discutere e confrontarsi sulle

possibili traiettorie da prendere e per formalizzare pensieri che sarebbero altrimenti rimasti sospesi.

*Grazie a chi c'è stato, chi c'è e a chi non c'è più, chi ha compagni non muore mai.*