David Ramiro Troitiño *Editor*

E-Governance in the European Union

Strategies, Tools, and Implementation

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Editor
David Ramiro Troitiño (iD)
Tallinn University of Technology
Tallinn, Estonia

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Introduction

This publication emanates from the endeavours of the Jean Monnet Chair on Digital Europe and Future Integration, presently overseen by Professor David Ramiro Troitiño. Prof. Troitiño also assumes the role of Deputy Director within the Jean Monnet Network on E-Governance and Digital Development. Additionally, he holds the position of Senior Researcher in EU Politics at Tallinn University of Technology (Estonia) and serves as a European Union specialist at Turku University (Finland).

His scholarly pursuits encompass European Union integration, digital policies, and e-governance. Prof. Troitiño has curated volumes in reputable journals such as IDP Revista de Internet Derecho y Política (Vol. 34, October 2021: 'Europe Facing the Digital Challenge'), CIBOD (Vol. 131, September 2022: 'The Digitalisation of the European Union: Repercussions and Expectations'), Revista Ayer (Vol. 129 (1), January 2023: 'Luces y Sombras de Europa Central y del Este en la Unión Europea'), and the Brazilian Journal of International Law (Vol. 20 (2), September 2023, 'The Digital Transformation of Mercosur: Influence and Cooperation of the European Union').

With a prolific academic output, Prof. Troitiño has authored 169 articles and chapters in international journals and high-quality monographs. Noteworthy among his contributions are publications in CIBOD, Revista de Occidente, and the Journal of European Studies. Furthermore, he has authored or co-edited seven books, including 'The EU in the 21st Century: Challenges and Opportunities for the European Integration Process' (Springer, 2020) and 'Digital Development of the European Union: An Interdisciplinary Perspective' (Springer, 2023).

Prof. Troitiño's leadership extends to the coordination of eight international projects, including 'Digital Single Market as a New Core of European Union Studies' (Jean Monnet Module) and 'Digital Single Market as a Key Element in EU-oriented Georgian Higher Education' (financed by the Estonian State). Presently, he serves as Deputy Director for four international projects, namely 'Digital Europe and Future Integration' (Jean Monnet Chair), 'Legal and Regulatory Governance of Artificial Intelligence Systems' (Jean Monnet Module), 'Baltic Chain' (Europe for

Citizens), and 'E-Governance and Digital Transformation in the European Union' (Jean Monnet Network).

The Jean Monnet Chair on Digital Europe and Future Integration directs its focus towards emerging technologies and their anticipated impact on the European integration process. Recognizing the digital future, the EU must adequately prepare for the transformative implications of digitization, which holds substantial societal development opportunities. Integration within the digital sphere assumes significance as it often transcends national sovereignty, offering avenues for deepening Union ties while mitigating potential opposition from stakeholders.

The Chair's project delineates three primary objectives:

1. Digital Single Market and EU integration.
2. E-governance and the EU demos.
3. Digital ethics.

Complementary to these priorities, the Chair includes two additional areas of teaching and research:

4. Cyber-security and EU integration.
5. New Technologies and Common Defence Policy in the EU, incorporating various complementary facets.

The Chair's analytical approach evaluates the positive potential consequences of integrating these new areas concerning the further development of the European Union. The Digital Europe and Future Integration (DEFI) initiative encompasses five courses, the establishment of five research groups aligned with project priorities, and an ambitious plan of activities, ultimately aiding the EU in its digital transformation.

Contents

e-Governance as a Future Option

David Ramiro Troitiño (iD)

Abstract The world is facing a new social revolution: digitalization. It will affect the whole socioeconomic structure and change the social paradigm of our societies. Therefore, we are facing a world change with such an influence as the implementation of agriculture in the Neolithic, the evolutions implemented by ancient Greeks, or the Industrial Revolution. It is a major change in humanity and those who evolve will succeed in a highly interconnected world. Consequently, the European Union must embrace digitalization in order to lead a new era. This publication presents different fronts where digitalization is a priority within the European Union.

Introduction

The European Union is facing a digital transition, reflecting the evolution of the modern culture as a logical step of the institutions adapting to modern society. Therefore, the supranational organization should speed up the digitalization process in order to connect with its own citizens, who are already implementing living in a digital environment. The European Union, as an organization including many nations and national states, based on a balance of importance between the Member States (Council in its different shapes), the citizens (European Parliament), and its own process of integration (European Commission), requires a constant effort adapting to the necessities of those relevant actors involved in the process of constructing a united, wealthy, and peaceful Europe.

e-Governance is a solution for the most relevant necessities in an interconnected world, such as the lack of funds, economic resources, or labor force. Any political organization needs to generate enough money (incomes) to cover the expenditures of the services it provides to its members. The society, including private and economic agents, shares its wealth to fund the communality of public policies and

D. Ramiro Troitiño (✉)
Jean Monnet Chair on Digital Development of the EU, Tallinn University of Technology, Tallinn, Estonia
e-mail: david.troitino@taltech.ee

services (Kerikmäe & Dutt, 2014). Usually, this transfer of wealth, from the private to the public, is done through taxes allowing the members of the society to contribute according to their incomes to the common budget focusing on the common necessities. Nevertheless, if the funds are not enough, there are traditionally different options, such as lending money via public debt, reducing the quality and the extension of the services decreasing the cost, or increasing taxes to cover the expenditures. The digital tools provide a new option of cutting the cost without affecting the quality of the service, including less taxes. The digital services provided by governments can also be more effective in the use of resources available and workforce. To become more competitive means fewer resources are required and less workers involved in the services. The issue of funds in the case of the European Union goes beyond the capacity to afford quality public service because those against the European Union and the integration process usually complain about the waste of national money at the European level (Mooij, 2021). This is a common critic with not much ground to support it, but popular among those willing to stop the integration process. Therefore, an effective use of the available economic resources, increasing the quality of the public services provided by the European Union, and reducing the expenditures would fundamentally reduce nationalist criticism of the EU.

The European Union needs to make an effort to identify the fields where a digital approach will increase the satisfaction of the European citizens (Ramiro Troitiño, 2023). The mapping is a crucial task already undergoing under the promotion of the European Commission, whose priorities are:

- eGovernment for public administrations: Cross-border digital public services
- eGovernment in the Digital Single Market: Information on the EU's electronic exchange of social security information (EESSI), EU rules on social security coordination, public directory of social security institutions
- Electronic payments and invoicing: The EU's e-Invoicing directive, European initiatives on e-Invoicing, how to check for compatibility with EU rules, exchange of information on e-Invoicing
- Electronic customs: How the EU plans to replace paper-based customs procedures with electronic ones, EU legislation and initiatives related to electronic customs, strategic plan for electronic customs in the EU

European Union e-Governance: The Future of the European Integration

The publication focuses on the possibilities of the European Union to develop an efficient e-governance. The organization has a structural problem since its origins, the gap between the institutions and the citizens. The latter feel closer to their states and their level of loyalty is higher at the national level and at the European level. Nevertheless, this can change; different factors can influence a transition promoting

multilevel identity and loyalty levels, adding the European level to the current local, regional, and national levels. Among these factors, digitalization is the most promising, because it abolishes the problem of distance, it is effective in solving the problems of the citizens, and it is cheaper, allowing us to reallocate funds to other priorities of the society (Oliievska et al., 2020).

In order to implement a digital society within the European Union, it is required to understand the influence of digitalization on the most successful theories of European integration, neofunctionalism. It is a theory widely followed that shows the way of the integration, and how we can prepare for further actions, a roadmap for the creation of a solid European organization. It is not the only theory involved in the building of Europe, but is the most influential. Therefore, the first chapter of this publication is focused on the relation between neofunctionalism and digitalization, proposing different aspects to combine both effectively in the continuous process of integrating Europe. The strategy of the European Union institutions is based on their essence, and linked with theories of integration, mainly the European Commission with neofunctionalism, Council with Intergovernmentalism, and European Parliament with federalism. Therefore, their attitude toward digitalization is different as they have different priorities and different approaches on building Europe. To present and discuss these options is fundamental to understand the process of digitalization and how a compromise between the three main institutions of the Union will affect them. In addition, the Member States of the European Union have different traditions, priorities, and levels of development, influencing their position toward digitalization and e-governance in the European Union. An analysis of the internal situation of the level of digital implementation in the European States allows us to understand how far e-governance can go in the European Union (Troitiño, 2022).

There are two fundamental issues regarding the digital revolution in the European Union, digital identity and the impact of digitalization on social policies because they are two pillars of the European spirit and what makes Europe different from other parts of the world. The European Union is the only organization in the world generating a high level of integration that embraces economy, social aspects, and politics. It has a general influence over the population and is creating a common body of citizens. Nevertheless, nationality is still the main vehicle to attract the loyalty of the people and there is no European nation as such (Rek, 2010). Therefore, the European Union has been built on the concept of citizenship, more effective to interact socially from a logical point of view, but weaker than the emotional connotations of nationality (Mulder, 2021). Nevertheless, e-Identity is a step forward to European digital citizenship because of its endless possibilities. Welfare policies are another pillar in the common identity of the Europeans and what makes Europe different from other parts of the world. Digital innovations will affect it as well and it is required to research its impact to understand the evolution of Europe. Both pillars are analyzed in this book from a wide perspective trying to find out obstacles for their digital implementation in the European Union and proposing some solutions. All these aspects have been researched by David Ramiro Troitiño and Viktoria

Mazur, in a common approach to these fundamental issues with the goal of integration in the horizon.

e-Democracy in the European Union is the next logical step after e-Identity. Once a common demos is generated by fostering the digital identity, a new structure must be created for allowing the common citizens to interact together and with the institutions representing them. e-Democracy provides the digital frame for the European Union to generate a stronger democracy in Europe, a part of its own identity. The obstacles and solutions are analyzed by Mateja Rek in an excellent work focusing on the European Union perspectives.

The digitalization and possibilities of e-governance are total, affecting all parts of the society, including economy. Therefore, it is a priority to adapt the European market to the digital economy. Consequently, Digital Single Market (Ježová, 2017) is a crucial part of this book, masterly presented by Daniela Jezova. A work complemented by the research of Pawan Dutt on "Digital competition law issues and interrelated aspects of law." Digital economic integration also requires an analysis of European Union contracts (Ayata, 2021) in digital environments, as Zeynep Ayata presents in this book. In relation to transparency and financial matters, Annelieke Mooji presents her research on "Transparency of political party financing through blockchain. Designing a blockchain system to generate transparency for EU finances," a crucial part for increasing the trust in the European system and adapt it to the modern necessities (Kerikmae and Troitiño, 2021). Data protection is a must in terms of e-governance, from the economic point of view, but from the political as well: a topic developed by three outstanding scholars from Olomouc university (Andraško et al., 2021).

In the international relations field, there is also a relevant impact in the digital revolution of the European Union. The organization can implement an effective digital diplomacy, allowing the institutions to interact with the rest of the world in a fast and secure way. There is the traditional reluctance for a common diplomacy because it is a symbol of the national states, but the current globalization and the responsibilities of the Union internationally will foster integration in such a fundamental field.

Politics, social aspects, and economy are complemented with a legal system, educational necessities, and IT systems for their digital implementations. Celso Coutela presents his research on European Education Area and Digital Education Action Plan (2021–2027): One more step toward the Europeanization of Education Policy, as a basic step toward a common digital integration (Cancela Outeda, 2010). "Europeanization the digital way and trans-European IT systems" based on the case of EESSI is developed by Evert-Jan Mulder. Finally, "e-Justice governance in the EU," authored by Elena Alina Onțanu, provides the readers and researchers with the global vision this book develops in terms of e-governance in the European Union. All the chapters are interconnected with the others but at the same time can be read independently, allowing the readers to focus on their most relevant area (Rashica, 2019), but at the same time, understanding e-governance as a global process affecting all the aspects of the European Union.

Conclusions

The priorities in terms of e-governance in the Union are focused on the Digital Single Market and areas associated with it, as payments and customs. Since the beginning of the European integration process, the implementation of a Common Market, with common customs and common trade policy, has been one of the most successful European initiatives. In addition, the economic integration has fostered integration in other fields, as the current society model based on capitalism allows an imbrication of economics with almost all the areas of the society (Hamulák, 2018). Nevertheless, the irruption of the digital economy generated a dysfunctionality between the European economy, highly integrated, and the digital economy, still nationally divided. Therefore, the EU priorities on e-governance focus on adapting the digital economy to the European Union's common economic frame, but this book presents other aspects relevant for a balance process of digital implementation.

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Digitalization, Neofunctionalism, and Integration in the European Union

Viktoria Mazur (ID) **and David Ramiro Troitiño** (ID)

Abstract This research focuses on the analysis of the general impact of digital integration in the European Union as a new way to deal with public services and public policies implementation. The perspective of the work is based on the long-term development of the European Union following the spillover effect of neofunctionalism integration theory. Consequently, the European Union is understood as a process, an initiative in progress that has not reached its final shape and requires the innovative approaches to keep the right track of development. As a result, the work explores the potential of digitalization fostering the European integration to a new level in the long process of achieving a stable integrated, wealthy, and peaceful area.

Introduction

The European Union is an organization in constant development founded on the idea of supranational management of common policies. The origins of the organization are linked with the Second World War and the idea of confrontation between national states in Europe. Key figures involved in the creation of the first European Communities, and leading forces in the integration process, identified the source of conflict between Europeans with the exacerbated nationalism and its monopoly over the concept of sovereignty. Therefore, to avoid further conflicts in Europe it was required to break the connection between nations and political power by creating a new entity above the nations of Europe focused on the necessities of the citizens regardless of their nationality. This was the theoretical frame for the creation of the European Communities based on integration, versus other options linked with cooperation keeping intact the concept of national sovereignty.

Obviously, it was not possible to implement this radical social change at once because of the power of nationalism among European states and nationals, whose

V. Mazur · D. Ramiro Troitiño (✉)
Jean Monnet Chair on Digital Development of the EU, Tallinn University of Technology, Tallinn, Estonia
e-mail: viktoria.mazur@taltech.ee; david.troitino@taltech.ee

identification with the nation, from a political perspective, was, and still is, very strong. It is important to outline that the focus was not on attacking nationalism, but rather weakening its connection with politics, keeping nations on cultural aspects rather than political, in order to prevent confrontations between nations with the full support of the states they represented.

The necessity to build a new socio-political model based on common sovereignty, the concept of common citizenship and entailing different nationalities, required a frame for its gradual development. The formula chosen was neofunctionalism with elements of intergovernmentalism and federalism, as the main theoretical body for a progressive implementation of a new model substituting the previous national state model. Neofunctionalism established a frame to replace the previous politics with a new supranational style. As a starting point, areas of low politics should be integrated, but ensuring that these are key strategic economic sectors, as coal and steel, the first sector to be integrated in the European Communities. The importance is not politics because it attracts the attention of the nationals willing to fight back the process of integration due to their fear of weakening of the nation. In order to avoid a strong opposition of the integration process, neofunctionalism focuses on economic areas that will bring relevant benefits for the society as a whole, connecting the needs and expectations of the citizens (Hamulák, 2018). Therefore, issues such as culture or defence are not a priority in the integration process, but a consequence of the economic integration. Economy here plays a crucial role because as the more united an economic area is, the more economic actors will lobby for common rules and common management, directing the area naturally to a common decision-making procedure, a common authority representing all of the members of the organization regardless of their nationality.

Neofunctionalism also includes institutional issues as it promotes the creation of a high authority to oversee the integration process acting as a common institution for all the members, overseeing the common wealth rather than the national interest of each participant in the process. In addition, the common high authority is in charge of sponsoring further integration from a common perspective and for the benefit of the whole organization. Therefore, the high authority should be independent from the national states and their decisions respected by all of the actors involved in the process of integration. Consequently, it should provide ideas and directives for deeper integration.

Another relevant part of neofunctionalism is the spillover effect, based on the idea of integrating specific areas with the potential to bring benefits for the partners involved, but at the same time generating new necessities that will require further integration to properly address them. It is a natural process leading to a common integrated area. As an example of the spillover effect, we see the European Coal and Steel Community that established a common market for these products. It meant an important boost for the companies of the Member States working in this field. It gave them a common market with common rules that all the actors had to respect. Nevertheless, Member States had different policies to transport raw materials, with the consequent influence on the competitiveness of the companies as there were transport subsidies involved. Those companies affected pursued competition on

equal terms in the whole market, pushing for deeper integration with common rules also in transport. It means that the actors involved in the sector that was integrated are going to become active players asking for deeper integration. Therefore, spillover effect creates a common integrated area step by step, without major conflicts with national states and nationalism, as a consequence of a necessity rather than an imposition. Nevertheless, spillover effect needs that the economies of the Member States are reasonably interdependent for its correct implementation. Spillover effect also needs political activism to give a push in the right direction because the Member States will bargain down to a lowest common denominator position (Troitiño, 2022).

According to neofunctionalism, deeper integration is a consequence of the socio-economic interest on its benefits. The greater these benefits, the more support there is for a common integration. The transfer of loyalty from the citizens of the national states to the Union will be a consequence of the search of the most effective route for the fulfilment of the material interest of the social groups. It accepts that politics are just a group-based activity, a competition between different groups to influence decision-making, and the Member States will be under pressure to fulfil the demands of these groups for deeper integration. As the integration deepens, the centre of decision-making will change gradually from the Member States to the common institutions, where the decisions for the whole organization are taken. The social and economic groups will try to influence the common institutions, changing their interest from the national to the supranational actors, shifting swiftly their loyalty from the national level to the common level. As a constant process, it includes gradually more policies, more actors, and more sectors in the integration process, and new institutions at the common level are needed. It means that political integration is a side effect of economic integration.

Additionally, this model of generating new necessities by partial integration implies the impossibility to keep the organization at a standstill unless the integration is reversed. If an area is integrated, it provides benefits for the society, but also generates new necessities. There are just two ways to address these new necessities, national solutions (regression in the integration) or further integration, but there is no option to stand still because the tensions generated by the previous integration require solutions to avoid a full collapse of the system. Therefore, the options are to dismantle the integration achieved or to proceed with further integration. This scheme normally leads to further integration, as the members of the society do not want to lose the benefits provided by the already implemented integration (Twizeyimana & Andersson, 2019). Therefore, they will support further integration to protect the acquired benefits rather than for political reasons.

As a critique of neofunctionalism, it is a theory that does not provide any empirical evidence to support its claims and forgets about key values such as liberty and justice that are mainly protected by the national states. Additionally, it does not take into consideration the feelings and emotions of the citizens as it approaches the whole integration from a pragmatic perspective. Nationals will not just transfer their loyalty from the national governments to the common level just because they will get bigger economic benefit. Being part of a nation provides citizens with a common emotional frame that is not logical, but it is very powerful and includes emotional

attachment and feeling of belonging difficult to break. Finally, neofunctionalism cannot explain the different periods of stagnation in the integration process. The periods when integration halted completely cannot be explained by the spillover effect.

Digital Integration and Neofunctionalism

According to neofunctionalism, there are basic steps to follow in order to narrow down the integration in the right direction. The main goal would be the creation of common digital sovereignty shared between the Member States without any distinction or barrier because of the nationality. A common citizenship means common rights and common duties of all citizens regardless of their nationality. Therefore, neofunctionalism aims to create same rights and duties in the digital world for the citizens affected by the process. Consequently, digital rights and duties are part of the process from a theoretical perspective, but allowing national differences based on exceptions is linked with major issues, as for example environment, protection of customers, or gender equality. These concessions must be as less restrictive as possible, regulated or approved by a common digital authority and overseen by a common legal digital frame in order to prevent the members of the organization to use them as national barriers. Overall, a common judicial system must supervise the correct implementation of the digital sovereignty with supreme powers over the national judicial systems.

Common digital sovereignty from the neofunctionalism approach helps to prevent the national confrontation in the digital platforms, generating a common space with shared responsibilities and separating the concept of nation and digital world. It follows the logic of what is shared among members cannot be used against each other, preventing digital confrontations between national states that could easily lead to major problems.

In addition, the creation of a common digital framework means a more powerful integrated areas in terms of importance compared with the implementation of a separate system in each of the members of the organization. The size matters in terms of controlling the high-tech companies that operate worldwide and escape the control of single states unless their relevance allows them to impose national rules. In the current world, there are too few states with such capacity, such as the USA or China. The former serves as the headquarters for many of these corporations and is a primary market for their operations. Therefore, Washington has the capacity to impose market rules and taxes on the activities of these companies because it has the power to do it thanks to a strong federal government and a free market economy with clear regulations on monopolies or tax evasion (Rashica, 2018). China perhaps is the only state standing on a similar level to the USA and bases its power on a state control economy and a huge market with tight connections with most of Asian countries and the rest of the world. Consequently, the Government of Beijing can control the big high-tech companies thanks to an efficient authoritarian system and

to the size of the economy. Access to its market provides a huge network of clients and potential benefits (Mergel et al., 2019). The combination of a state control economy and sizeable market has led to the creation of national high-tech companies serving the national interest of the state, but it is a worldwide exception because only the Republic of China has this combination, authoritarian system–huge market, to generate its own high-tech companies competing in an intervened market with international corporations.

Neofunctionalism idea of common digital sovereignty can focus on different angles, depending on the area to be implemented, such as politics of market. The idea of common sovereignty requires a common body to manage this sovereignty, a common frame where to implement the common will. It can politically adopt many forms, as a federal structure with a common government dealing with the areas affected by the common sovereignty and leaving to each Member State the regulation and control of the areas excluded from the community. It can adopt the shape of a confederation, with a more restrictive understanding of the common interest, or intergovernmentalism based on cooperation with a very weak concept of communality beyond a common understanding of socio-economic challenges. This idea also applies to authoritarianism with an imposed communality controlled by a strong central power with the means to repress any misbehaviour (Gorwa, 2019). Nevertheless, digitalization allows a higher participant of the citizens in the political life via e-democracy and the civic participation in the public life. The control of the State can be maintained even if the possibilities provided by the digital progress are countless, but the access to information cannot be totally controlled. Therefore, in general, digitalization should lead to higher involvement of the citizens in public affairs through initiatives such as e-voting, or online consultations, reducing the controlled state policies.

The second pillar to achieve common digital sovereignty is the digital market. The creation of a common digital space with common rules and a reliable system to implement them and avoid any attempt to use shortcuts or just bend the rules looking for a particular benefit generates market capacity to have a strong and independent system able to face challenges from companies or even from other states and their respective models of digital economy linked with their political structure and a national interest. Therefore, the size of the market is pretty relevant in the implementation of common digital sovereignty based on domestic rules free from other international agents, being states or corporations. In order to implement a common digital market in an area wide enough, it is required to decrease gradually the national differences, create common rules, eliminate national barriers to trade, reduce the obstructive effect of national digital exceptions with the implementation of as less restrictive approach as possible, establish an efficient common management authority, and develop a common system to overview the right implementation of the common measures to protect them from national distortion or manipulation from any agent involved in the process (Ayata, 2018).

Common digital sovereignty has also an impact of the common identity of an area, as the nationals of the Member States should have the same rights and duties in the digital market without any exception based on their national background.

Most of daily life aspects are related somehow to the economy, and digital market is increasing in importance constantly (Brown & Marsden, 2023). Therefore, building a common digital market means building a common digital space where the citizens of the Member States will interact with equal rights regardless of their geolocation or any other variable. If there are no distinctions, the common digital identity will be reinforced, facilitating digital political integration.

A common digital market will increase the size of the national markets, allowing for a more competitive digital economy with better prices and conditions for the consumers, enforcing the support of the citizens to the common digital sovereignty. It facilitates a spillover effect, as the digital market brings clear benefits for companies and citizens, but generates new problems that previously have not existed, as the management of common rules, or the regulation of currently unforeseen issues. These new problems will require further integration from a digital perspective in order to solve the new issues or dismantling the digital market. The agents involved, citizens and companies, will not want to lose the benefits provided by the digital market and will accept digital integration in politics, which will take the shape of the best system for the area following the mentioned models, or even generating new models of digital political integration consequence of the innovation progress of the society (Di Gregorio et al., 2019). Therefore, the digital market will require an increasingly common management as it expands, integrating areas of low politics, such as data protection or customers rights, leading step by step to deeper digital integration, and finally the creation of a digital political communality. The new integrated areas need to have some key strategic importance for further integration, as data protection will probably lead to a common position on artificial intelligence as it is the main source for AI to work properly.

The digital integration should not solely rely on the spillover effect, without any supervision to push for the right direction in terms of benefits for the society. If the common digital market operates autonomously, it will pursue benefits that cannot be controlled by individual states with the exception for the USA or China, pushing for deeper integration but without state control. Digital geographical borders do not exist; the mobility in the digital world is almost absolute, or increasingly difficult to control. Therefore, it is required to build a common authority supervising the digital environment, economic and political to supervise the implementation of the rules decided by the Member States and to act as an independent agent in the digital integration protecting the common interest against private or national attempts to bend the rules for their own benefit. The common digital authority requires independence and autonomy to push for deeper digital integration in the right direction but requires some control from the Member States and the citizens.

The roadmap for establishing common digital spaces aligns with neofunctionalist ideas, but notable differences arise in applying this framework to analog and digital realms. Neofunctionalism advocates for integrating low politics, leaving crucial policies such as security and defense in the hands of Member States due to the expected resistance to integration in these fields. However, in the digital realm, both security and defense take precedence over low politics. This prioritization stems from the necessity in the digital economy and society for robust security to

safeguard transactions against cyberattacks. Without a high level of trust in the system, stakeholders in digital development may hesitate to adopt innovations, fearing the potential threat of cyberattacks. Therefore, cybersecurity is a field that requires a common effort, with a common agency, protecting all the agents involved in the digital integration, market and citizens, economy and politics. If there is a high risk (there will be always a risk in the analog and digital spheres) for digital economic transactions, the digital market will constrain the reduction of the digital economic benefits, a regression in the economy (Mulder & Snijders, 2022). States can trust the efforts of companies to protect their customers, as they need to be trusted in order to attract customers in the digital business, but big high-tech companies can lead to the creation of digital monopolies and consequently worldwide giants with such power that most of the world states would be at risk of becoming digital banana republics following the frame generated by American Fruit Company in Central America at the beginning of the twentieth century. Therefore, digital integration needs to prioritize security over other areas, contrary to the principles defended by neofunctionalism. The creation of a strong common security implemented in the integrated area will foster digital integration in other areas and will not face a strong opposition from the agents involved as in the analog world.

Additionally, defence is a priority area for the security of the services provided to the citizens, the economic transactions and the external threats. The cyberattacks originated in Russia against Estonia during the crisis of the Bronze Soldier reflect the necessity to protect the digital environment from external attacks. This threat increases as the digital integration becomes deeper and more policies are involved. The digitalization of the society is a fact, not anymore a choice; therefore, protection is required in order to keep the system working and avoid external attacks that could lead to a crisis in the whole system and the consequent weakening position towards aggressive international actors. The case of Estonia was originated by domestic issues, moving the location of a statute of a Red Army soldier from the city centre of Tallinn, capital of the country, to another less visible location. The Red Army represents for national Estonians the occupation of the country by the Soviet Union and the repression of the local population with mass deportations to Siberia and the imposition of a Communist regime. On the other hand, national Russians saw the statue as a symbol of freedom against Nazi Germany, as Red Army fought hardly against the Wehrmacht forcing them to retreat from Estonian soil. This difference of interpretations led to diplomatic confrontation between the Russian Federation and Estonia that was mainly conducted by cyberattacks originated in Russia against the digital environment of Estonia, a country highly advanced in terms of e-governance. The country suffered a partial collapse for a few days until the situation could be reversed with the support of Western cyber agencies. It clearly shows that the benefits of digital integration can become a weakness if there is no security frame which is ready to protect the cyber sovereignty from external aggressions. Neofunctionalism approach would be inefficient in the case of digital integration as it clearly excludes defence and security from the priority areas (Kerikmäe et al., 2019).

The transfer of loyalty from the citizens of the national states to a common digital union will be a consequence of the search of the most effective route for the fulfilment of the interest of the social groups and the capacity to protect it from external and internal threats (defence and security). Therefore, the priority areas should provide relevant benefits for the citizens. The digital market is an example, as it generates synergies in a common area that provide relevant benefits in terms of quality or price for the customers, the citizens (Dutt & Kerikmäe, 2014). Other possibilities of digital integration can increase the satisfaction of the citizens, fostering further integration, as e-health. The creation of a digital health system, diverting patients to reduce the waiting time, increasing the access to the most innovative facilities, and online consultation are part of a digital policy that will increase the satisfaction of the citizens and help to increase the transfer of loyalty to the digital authorities managing these kinds of policies. Therefore, integration must focus on these areas before focusing on digital political integration.

Digital Integration in the European Union

The European Union is a process, as it has not reached its final shape and is constantly evolving from a modest origin to its current shape. Nevertheless, the process cannot stop until it presents a cohesive structure able to maintain itself, still far from now. Therefore, there is a lot to do in the European Union and theories of integration help to understand what next steps and the direction of the integration should be. The fathers of Europe, such as Jean Monnet or Spinelli, clearly were looking for a supranational organization to prevent new wars in the continent and provide peace and stability. The issue of shared sovereignty was present since the beginning following the simple idea of what is shared cannot be used against each other. Nevertheless, they had different visions on how to implement these ideas. Altiero Spinelli was an outstanding federalist focusing on the creation of a common European federation. Jean Monnet had a different vision thanks to his previous life experience, outlining his work in the League of Nations and the inoperative system based on cooperation that could not prevent the disaster of the Second World War. Despite his strong belief in a common organization in Europe, Monnet thought that the European society was still too attached to the nationalistic principles and was not ready for the implementation of a common Europe. Therefore, he initiated the integration as a process using neofunctionalism as the best frame to avoid opposition, or at least reduce it. Consequently, this theory of integration, based on the spillover effect, is a strategy on progressive steps towards a united Europe (Ramiro Troitiño, 2023).

According to neofunctionalism, there are basic steps to follow in order to narrow down the integration in the right direction. The implementation of a common sovereignty step by step, eliminating national differences in the political sphere, applies perfectly to the concept of digitalization, as distance is not anymore a problem. If we consider distance, especially in terms of cultural matters and ideas, a

fundamental pillar for a common identity, as a basic element for the creation of a community with minimum similarities allowing them to implement a common management of public affairs, a common sovereignty, digitalization allows the integration of countless communities in a single one based on their capacity to access the Internet rather than the distance between them. The transportation revolution in the nineteenth century helped to create a new social reality eliminating local differences and allowing the creation of larger national states. Previous anathemas, such as loyalty to the king, were outdated and substituted by loyalty to the nation. Consequently, the current digital revolution would have a similar impact on the society, eliminating barriers and creating larger levels of identity leading to new political forms of common managements, to common sovereignty on higher levels. The implementation of common policies, including common access, common services, or common benefits, will enormously contribute to the creation of a common identity. It will not substitute current levels of identity, family, local, regional, or national, but will empower the European level of identity. Policies, such as e-health with a common management in, for example, eliminating waiting lists according to the different capacities of the Member States of the European Union, will accelerate a common identity. Nevertheless, at the current level of integration within the Union, it is difficult to implement a common digital system, but would be relatively easy to create minimum common digital standards, and from there, deepen the integration gradually.

Nevertheless, following neofunctionalism, the first steps on digital integration should be done in the field of the Digital Single Market, eliminating any barriers to digital trade. The integration of the digital economy will create benefits for companies and consumers, increasing the economic power of the Union itself, and helping to control the fair competence and social contributions (via taxes) of the participants on the digital market. Obviously, as far as the digital economy is more integrated, new problems will arise and deeper integration will be required to address the new necessities following the frame of the spillover effect. Even the European Union has a deeply integrated common market; in terms of digital economy there are still numerous barriers to trade, using online tools and services, generating a distortion between traditional and digital economies within the Union. In addition, this distortion reduces the capacity of business and consumers to fully embrace the benefits of digitalization, slowing down the process that needs inevitably to be implemented to face the new world challenges. The governments are also affected by these obstacles as they cannot increase the efficiency of their digital policies as they cannot really coordinate with other Member States generating synergies for the benefit of their citizens. Digitalization of the economy in the European Union will increase the trade, economic transactions, and the competitiveness of the European companies, allowing them to compete in the international market with the economic giants from the USA or China (Sachs, et al., 2019).

The Digital Single Market strategy was adopted on 6 May 2015 and is one of the European Commission's ten political priorities. It is made up of three policy pillars:

1. Improving access to digital goods and services

The Digital Single Market will lead to better access for consumers and business to online goods and services across the European Union. In addition, it will increase the protection of consumers, as they will be protected all over the European Union.

2. An environment where digital networks and services can prosper

The Digital Single Market will create the right environment for digital networks and services by providing high-speed, secure, and trustworthy infrastructures and services supported by the right regulatory conditions from a stronger body, the EU, which is able to control the movement of economic agents thanks to its market power. High-tech companies will implement the common rules of the Union because they cannot afford to lose access to the European market, one of the most important in the world. The creation of digital infrastructure includes cybersecurity, data protection/e-privacy, the fairness, and transparency of online platforms.

3. Digital as a driver for growth

The Digital Single Market Strategy will foster the growth potential of the European Digital Economy, so that every economic agent operating within the EU market can fully enjoy its benefits. The digital capacity and skills are important in order to achieve an inclusive society following the European model, notably different from other areas in the world. It is a basic element in Europe, beyond even the European Union, a balanced social system. Therefore, digitalization cannot forget it, and measures should implement to reassure equal opportunities in the digital world.

The creation of the Digital Single Market can be framed with the integration in low politics to avoid opposition from the actors involved. Therefore, the areas integrated in the digital economy should be strategic and with potential to lead to further integration. Low politics include those areas not essential for a State in terms of functionality from a theoretical point of view. Consequently, the Member States of the European Union will be more open to integrate these areas on the European level. Nevertheless, as the European Union was built on a theoretical frame based on separation of nation and state, culture and politics, in order to avoid nationalistic conflicts like WWII, low politics are those neither affecting significantly the identification of nation and state nor the functionality of the national state model of the Member States of the European Union. Policies as a traditional defence, including army and the national security forces, education, communication with national channels of dissemination, diplomacy and international relations, language, constitutional frame, or relation with minorities, are those policies essentially national that traditionally are part of the relation between nation and a state. Most of these policies are under threat in the current world affecting the National State model, and the digitalization process of the European Union could help to dismiss the negative impact of globalization, and at the same time, increase the integration in Europe toward a supranational structure. The EU can protect the nations politically from an integration perspective; it is a contradiction but can easily be explained; without integration the national states could disappear; with the supranational model, the