



## TOWARDS A USE OF “LEGAL DESIGN THINKING” TECHNIQUES IN TAX LAW STUDIES

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### KEYWORDS

*Legal Design  
Tax Law  
Legal Visualization  
Legal Design Thinking  
Taxpayer  
Human-centered design  
Digitalization*

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### ABSTRACT

*To build a relationship between Tax Administration and taxpayers based on trust, law science must provide the necessary information related to policies or institutions but also inform taxpayers about their rights and obligations. This information must be known but, above all, understood.*

*The objective is to introduce a paradigm shift in the way legal studies are approached through Legal Design thinking techniques. Specifically, starting from the need for the jurist to study the law, collaborating with other disciplines to design mechanisms that allow the communication of complex information that helps both the understanding of the law and decision-making process.*

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### PALABRAS CLAVE

*Legal Design  
Derecho Tributario  
Legal Visualization  
Legal Design Thinking  
Contribuyente  
Human-centered design  
Digitalización*

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### RESUMEN

*Para construir una relación entre la Administración Tributaria y los contribuyentes basada en la confianza se debe proporcionar la información necesaria relacionada con las políticas o instituciones, pero también informar a los contribuyentes sobre sus derechos y obligaciones. Esta información debe ser conocida pero, sobre todo, comprendida.*

*El objetivo es introducir un cambio de paradigma en la forma en que se abordan los estudios jurídicos a través de técnicas Legal Design. En concreto, para diseñar mecanismos que permitan la comunicación de información compleja que ayude tanto a la comprensión del derecho como a la toma de decisiones.*

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Recibido: 15/ 10 / 2022

Aceptado: 23/ 12 / 2022

## 1. Introduction

Legal Design is a movement that has gained strength, fundamentally, between different US Law Schools, such as Stanford Law School, but which is also beginning to be a reality in various EU Universities. The main objective of this methodology or legal application movement is to advance towards legal systems that are understandable and useful for all the subjects involved.

In this sense, these techniques seek to improve the legal system in multiple spheres: 1) Achieve a more accessible system for citizens regardless of their knowledge or situation so that they can resolve legal issues that influence basic day-to-day issues. 2) Improve the provision of services by the provider (law firms, consultancies, etc.) 3) Integrate in the design of public policies and legal procedures issued by government agencies to establish standards and facilitate compliance with the obligations of citizens and public authorities and the exercise of their rights.

More specifically, and for the purposes of this project, they have the potential to be used, on the one hand, in processes that seek to improve people's ability to deal with legal problems, human services, information designs and AI-powered decision making. In other words, integrating this methodology in the design of new digital applications and the digitization strategies of public administrations. And, on the other hand, when the fundamentals of this methodology are incorporated into the processes aimed at changing the system itself so that, for example: it reduces the burdens of the citizens who have to apply it and benefit from it; be fairer or more supportive of people trying to navigate it or simplify legal processes. In other words, it can also be used to strategically improve the results of people in a system, to solve complex problems or to provide a service in a way that considers the recipient of the service. (Hagan, 2019)

As Hagan (2020) pointed out, Legal Design has been developed from results obtained in visual and human-centered design, civic technology, and participatory policy formulation. It is a method that "brings a lawyerly focus on abstract complexities (e.g., what rights we have, what risks we face, what rules constrain us) with a designedly focus on lived experience (how we do things, how things look and feel to us, how things serve us)".

According to the aforementioned author, the purpose of Legal Design is "to develop a human-centered, participatory approach to reforming the legal system". Specially, one that "recognizes the importance of new technology but that does not privilege it as the main way to innovate. The approach weaves"

Precisely, this project attempts to defend the need for the digitization process, in which the tax administrations of our environment are immersed, not to focus exclusively on the use of the digital component to consolidate reactive models aimed at the fight against tax fraud, but also take advantage of these tools to develop proactive models aimed at facilitating compliance with tax obligations. And, consequently, that the introduction of Legal Design techniques in the design of new digital tools can help achieve these objectives.

The above is based on the premise that to build a relationship between Tax Administration and taxpayers based on trust, law science must provide all the necessary information related to process, policies or institutions but also inform taxpayers about their rights and obligations. This information must be known by citizens but also must be understood (Antón, 2020).

Bearing this in mind, the objective is to help introduce a paradigm shift in the way legal studies are approached, specifically in the tax field, through Legal Design thinking techniques. Specifically, based on the need for the jurist to study law in collaboration with other disciplines to design mechanisms that allow the communication of complex information that helps both the understanding of law and decision-making.

### 1.1 Legal Design to advance towards models of voluntary compliance with tax obligations

Modern tax administrations have established among their strategic objectives, in addition to the fight against tax fraud, its prevention. This requires the design of a comprehensive assistance strategy that manages to reduce the administrative burdens that taxpayers must face and favor cooperative or voluntary compliance with tax obligations and, thereby, prevent non-compliance.

To consolidate a model of voluntary compliance with tax obligations, clear, regular and open communication is required between the two main subjects of the legal tax relationship: the taxpayer and the tax administration.

Communication in the tax domain has already been validated as a key treatment tool for influencing behaviour (Walhs, 2012). According to these studies, there are two types of communications that can be used to influence behaviour:

Direct approaches target specific taxpayers, for example using a letter to individuals or taxpayers' groups. Direct approaches can also be more passive, for example, providing information to specific taxpayers on a particular issue.

Indirect approaches are measures that impact on large numbers of taxpayers (or even all taxpayers) in a relatively indiscriminate fashion, for example, an advertisement placed on television.

A correct (accurate, coherent, and professional) communication facilitates the implementation and acceptance of normative changes and processes. Implementing effective communication strategies is, therefore, a challenge to define a new approach based on the idea of service to the taxpayer.

To achieve this goal, the digitalization process of the administrations that we have been observing in recent years plays a fundamental role. Specially, due to the use of technologies such as Artificial Intelligence, virtual assistants, chat bots or the use of algorithms.

In this line, the Tax Administrations, making use of high digitization tools, might to consolidate a new comprehensive assistance model during, implementing measures that favor voluntary compliance and carrying out an intensification of actions to combat the most complex fraud.

For example, in its 2021 Annual Tax and Customs Control Plan, the Spanish Tax Agency recognizes the need to continue reinforcing all actions aimed at improving tax compliance, through information transparency, actions aimed at filtering and census assistance to taxpayers, the improvement in collection prevention and management measures with the implementation of new electronic and telephone assistance mechanisms in the Collection area in order to promote adequate voluntary compliance, or the development of Codes of Good Tax Practices, seeking, in this way, way, guide their actions through the use of preventive actions prior to or simultaneously with the filing of self-assessments.

However, the digitalization process in Tax Administrations is not always aligned with the communication strategies and, consequently, are not always efficient to transfer those changes to the rest of agents. Moreover, to achieve a voluntary compliance model it is not enough to offer more information or improve access to it: the real challenge is the understandability of the content. And this, because it is possible that the citizen has access to the information but cannot decode or realize its importance (Haapio and Passera, 2013). In this sense, it must be considered that the legal discipline is a text-oriented universe and, therefore, in the legal context the “verbocentric paradigm” continues to be dominant.

For this reason -and considering the development of new Information and Communication Technologies (ICTs), the progress in digitization and the proliferation of visual digital media-some jurists have begun to question this paradigm, considering that e-Government offers a great opportunity to display legal content, that is, legal information online (Brunschwig, 2014) but also to design communication strategies that consider the taxpayer within the framework of a “service” relationship and, in a certain way, considering the taxpayer a customer (Antón, 2021).

Specifically, various researchers have been defending the need to introduce greater elements of the so-called human-centered design (putting the person at the center) in the digitization processes of administrations. The concept of human-centered design is a practice aimed at designing products that are useful, usable and link their users. It is based on the idea that products, services, organizations and systems must be built with the needs, behaviors and preferences of the agents who are going to use them in mind.

In that line, some studies have evidenced that the knowledge of the tax compliance behavior can help not only to delineate strategies and interventions that affect the drivers and thus their behavior, but also to increase the effectiveness of communication (e.g., Cialdini, 2009).

Specially, the behavioral insights literature of the OCDE (2018) suggests that consumers are subject to a number of behavioral biases that influence their ability to benefit from information disclosures when shopping online. Specifically, consumers can be subject to information overload, meaning they might focus on the wrong information, put off a decision or make the wrong decision if confronted with long or complex information. Thus, information overload is one reason why consumers rarely read online terms and conditions in full”. Hence, information disclosures need to be as simple as possible.

Although the OCDE report is not a specific study in the tax field, it does include some conclusions aimed at valuing the use of behavioral insights that might be transferable, *mutatis mutandis*, to the specific case of taxpayers, particularly through the following hypothesis: Through digitalization is possible to build a new paradigm in the administration and taxpayer relationship that is understood within the framework of a “service” relationship.

Thus, on the one hand, the report highlights the need to identify, test and measure biases such as the one we have indicated previously and which also it could occur in the context of the administration-managed relationship and, on the other hand, the need to use this information to improve design policies and processes, specifically regarding improving online disclosure.

More specifically, the study shows how form and context influence consumers’ ability to understand and use information disclosures online. For example: the visual presentation of websites, timing of disclosure, text font and size, and use of colour, images and video affect how consumers absorb information.

Based on these conclusions, the OCDE’s report makes explicit a series of recommendations that, as we have anticipated, can be extrapolated to the case of the tax administration-taxpayer relationship:

- Information disclosures should be tested to ensure they work in the best interest of consumers.
- Personalization may help to make information disclosures more relevant and salient to consumers.
- Businesses should not rely on terms and conditions to communicate material information to consumers.

- Given the potential for information overload, online disclosures should be as simple as possible - simplicity can be achieved by reducing the amount of text, using “signposts” to direct consumers to relevant information, and use of “layering” where different levels of information of increasing detail are presented to consumers as needed (for example, through active links)” (OCDE 2018 & 2017).

Once the behavioral insights that can influence the taxpayer’s behavior have been specified and detected, it would be necessary to transfer their practical application to the area of the taxpayer’s relationship with the administration.

## 1.2 Legal Design Thinking and Tax Law

Considering the above premises, we consider that a design-based approach could help to better understand the services offered by administrations and, at the same time, promote innovation to improve and/or expand the offer of existing services. Likewise, it could be achieved that the values, the organization, and the mechanics that it integrates in any solution really respond to the interests, practices and possible limits or restrictions of all the parties involved (Hagan, 2021).

Specially, the main methodologies to apply this approach would be those derived from Design Thinking. This last concept was initially understood as a mentality, process, and attitude exclusive to the field of design and its processes. However, it has evolved to include a set of techniques aimed at increasing efficiency and innovation beyond the scope of traditional design and is currently considered as a way to boost the capacity to innovate. In other words, the signifier “design” no longer limits its meaning to the creation of physical products if it is limited to influencing the design of products, but also extends to services, experiences, ecosystems, and even social and political systems ( Buchaan, 1992)

Outside the exclusive field of design, the term Design Thinking describes a new and innovative process to deal with complex issues and problems (BROWN & WYATT, 2010). Design Thinking is structured in 5 clearly differentiated phases: 1) Empathize: understand and observe 2) Define 3) Ideate 4) Prototype 5) Test. (Friis & Yu, 2021) These phases allow us to clearly differentiate the search for the problem and the search for the solution.

In other words, we are talking about a methodology that focuses on the needs of the users of a product, a service, or a process -in this case, the taxpayers- and that can be used to design the digitization processes of the tax administrations in a way that takes into account the interests of both parties in the relationship. Specifically, to, on the one hand, design more accessible procedures for compliance with tax obligations and thus facilitate voluntary compliance and, on the other, present the taxpayer in an accessible and understandable way their rights, guarantees, rights and tax obligations.

It is a methodology that has been used in sectors such as services, health, or finance. There are no comprehensive models yet in the specific case of legal context, although promising approaches do exist. However, a greater integration and use of this methodology is expected, fundamentally due to two factors: 1) Digitization processes and the evolution of LegalTech 2) The development of specific methodologies for the application of Design Thinking techniques in the legal field, the so-called Legal Design (Hagan, 2020)

Specially, there is a movement within the so-called Legal Design that tries to make legal information simpler for the public through the design of communication techniques. This school of thought places a high value on clear, well-designed presentations and implicitly criticizes the often-inaccessible way legal information is shared. (Buchaan, 2001). This is how Legal Design Thinking arises, as a current of thought that tries to integrate the scope and techniques of Design Thinking -understood as search mechanisms for solutions through techniques based on design and focused on people and their needs- to the world of Law to achieve better legal systems and more satisfactory services for their recipients. It is a methodology that in the case of the USA has been incorporated for years both in the training plan of various faculties and in the public and private sector to: design strategies, new services and better legal documents. (Martha, 2020)

Considering the concept of human-centered design as a reference framework, a concrete strategy to implement its principles in the legal field is presented, precisely, through Legal Design techniques. Understood in this way, Legal Design could be defined as an emerging discipline in which the methods of human-centered design are applied to the legal field to innovate the way in which legal language is presented or legal services are provided.

Given the importance of this issue, we consider it necessary to introduce this approach in Law Degree studies. Specifically, the future jurists will study tax regulations in collaboration with other disciplines to design mechanisms to communicate information complex tax law that helps both understand tax regulations and the taxpayer decision making. For this, it is intended to apply Legal Design Thinking and Legal Visualization techniques so that the law students are able to present taxpayer’s right and obligations in a clear and understandable way.



## 2. Objectives and Methodology

### 2.1. Objectives

As has been defended, it is necessary to move towards new ways of visualizing legal information. Specifically, proposing new formats for presenting legislation using design principles and methods to improve public access to the law. This trend goes hand in hand with the objective of advancing towards a taxpayer/client model in the relationship between administration and taxpayer, which necessarily requires clear, regular, open and timely communication with taxpayers. (Antón, 2021)

Therefore, the main challenge to improve the taxpayer service approach and move towards a model such as the one described seems to be linked to the need to implement effective communication strategies. To build this relationship between the tax administration and taxpayers based on trust, the Tax Administration must provide the taxpayer with all the necessary information related to taxes and mandatory contributions, at the same time that they are informed about their rights. But it is also fundamental that the taxpayer knows the rights and guarantees of it and above all that he understands them. Therefore, another paradigm shift that must be introduced in the way of approaching legal studies is based on the need for the jurist to study the norm collaborating with other disciplines to design mechanisms that allow communicating complex information that helps both the understanding of law and to decision making.

The objective of the developed project is to apply and integrate the techniques of “Legal Design Thinking” in the tax law studies in a first phase to be able to extrapolate them to other branches of law. The ultimate goal is to include techniques that allow future lawyers and legislators to understand the law that governs relations between the administration and citizens as a more citizen and service-oriented system, in the specific case of tax law, to facilitate cooperative or voluntary tax compliance models.

Legal Design Thinking might help to make legal information simpler and clear for the public through the design of communication techniques and visualization. Specifically, through visualization techniques, the future jurist will be able to produce prototypes based on logic diagram visualizing the different institutions, their compositions, their procedures and, also, law issues. These prototypes may be reflected in new ways of presenting legal information through the digitization processes of administrations and, consequently, to be used by administrations and citizens.

In this way, and in view of the robotization and digitalization of legal services, the jurist endowed with Legal Design skills would not aim to compete with robots in the field of legal information, but rather to use their human capacities, imagination, and empathy, to provide value to customers/users or, in the case of this project, taxpayers (Martha, 2020).

In this sense, it must be taken into account that in order to build a relationship between legislators and citizens based on trust, the science of law must provide all the necessary information related to its policies, institutions and, at the same time, inform citizens about their rights and obligations. This information must not only be known by citizens but, above all, it must be understood. The project aims to introduce a paradigm shift in the way legal studies are approached through Legal Design Thinking techniques. Specifically, starting from the need for the jurist to study law, collaborating with other disciplines to design mechanisms that allow the communication of complex information that helps both the understanding of law and decision-making.

To do this, we are developing an “innovative educational project” that explores new angles and different methodologies aimed at making Tax Law topics more accessible and adapted to various types of target population. In particular, we try to lay the foundations to achieve a paradigm shift in the field of law in the medium-long term: From “reading the law” to “Seeing, listening and interacting with the law”. The main approach to follow is to apply the Design Thinking methodology in the field of Law and, specifically, in Tax Law.

The law student will study tax regulations in collaboration with other disciplines to develop and design prototypes that allow complex information related to tax law to be communicated in an accessible way that helps both to understand tax regulations and to help taxpayers make decisions.

In this sense, we cannot fail to take into account the fundamental role that digital technology and technological tools already have in the legal profession, both in customer service and in the delivery of information. Precisely for this reason, more and more law schools are including the teaching of technology in their curricula. However, as he points out, the prospect of more digitally savvy lawyers, while a welcome development, amplifies a parallel imperative that new technological tools be designed to respond to evolving human needs. For this reason, it seems reasonable and necessary to combine technology instruction with training in human-centered design approaches (Jackson, 2016). According to the cited author, this combination offers legal educators a means to prepare lawyers not only capable of generating novel technological solutions, but also of fundamentally improving legal institutions and programs through those results. Furthermore, it has been argued that the introduction of design pedagogies within legal education also provides educators and students with the opportunity to approach the study and interpretation of law as a creative activity by exploring structured methods such as empathy through observation,

prototyping and acceptance of failure, with learning outcomes that have the potential to transform how lawyers approach their role.

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## 2.2 Methodology

According to Hagan (2020), the heart of legal design is the human-centered design process, which involves a basic sequence of design work. The Human-centered design perspective provides a framework for designing with communities affected by problems, allowing designers to deeply understand the people that they seek to serve when creating solutions stemming from the community's needs. "The approach is bottom-up, rather than top-down, and begins with the premise that the people who confront problems are the ones who hold the key to answering them". In that sense, when this technique is applied, designers have to closely observe not only the behavior of people; but also the psychological experiences or the interpretation and meanings that the subjects make of the environments and processes they encounter.

The approach integrates and reconciles three overlapping criteria: desirability (i.e., what meets stakeholders' needs and aspirations), feasibility (i.e., what is technologically possible within the foreseeable future), and viability (i.e., what is financially sustainable). The approach begins with humans-their needs, aims, and fears-and uncovers what is desirable, imbuing innovation and problem-solving with a human-centered ethos. The approach requires a thorough empirical understanding, through direct observation, of what people need in their lives and what they like or dislike about particular practices and institutions ( Quintanilla, 2017, 756)

The Human-centered design thinking moves through three stages when designing an intervention( Quintanilla, 2017):

1) Inspiration: The opportunity or challenge that encourages the search for solutions. This stage involves the identification of the key beneficiaries and stakeholders that, on the one hand, will contribute to identify problems or solutions. The identified subjects will be the ones whose experiences will be extracted through direct observation, ethnographic studies, surveys or other forms of perspective taking. This, in turn, will outline the needs to be covered or addressed by the project.

2) Ideation: The designers translate the information obtained in the previous phase to generate, develop and test different hypotheses and ideas. In this phase, key criteria such as desirability, feasibility and viability will have to be taken into account.

3) Implementation: In this stage the designers develop an action plan for the ideas with the best results. In this phase, the creation of prototypes will be necessary. These prototypes will be reduced versions, adjustable and less expensive than the possible final solution. The prototyping phase will serve to provide new insights or perspectives to the designers. Once the prototyping is advanced, it will be refined and it will be possible to advance towards the pilot creation phase. That is, more complex, expensive and complete tests.

The design framework presented is a methodology that uses co-design, that is, a framework in which interventionists work directly with affected stakeholders to create and test an intervention. This methodology helps overcome some of the most significant barriers and concerns tied to Legal Design methodologies by locating expertise outside of academia and within communities, with litigants, court personnel, and advocates who have a real sense of how develop possible interventions in the context. Furthermore, in an approach that allows the participation of a higher level of people with different socioeconomic levels, avoiding bias (Bernal & Hagan, 2020).

Now alongside these bottom-up co-design methodologies there are also more top-down methodologies, such as desk research, innovation landscape reviews, or rigorous evaluation techniques. In this case, the interventions are developed through models, patterns and theories of experts who have established knowledge about what types of interventions have been successful in comparable areas. As Bernal & Hagan (2020) have pointed out a research-informed methodology framework "can ensure that interventionists are building from national best practices in their local community; avoiding concepts that have been proven not to work elsewhere; and harnessing proven design patterns or behavioral nudges that have shown themselves to be successful in laboratory settings"

The system based on co-design work provides essential insight into a specific context and, in principle, the ideal would be to use both methodologies in combination. However, the possibility of obtaining results by applying the methodology based on previous studies and reports has also been defended. Precisely, this will be the approach that we will use in this case, starting, fundamentally, on the studies of behavior and compliance with tax obligations issued, among others, by the OECD. To do this, we will use some of the phases that can already begin to be considered standard in the field of Legal Design

The main focus is to apply Legal Design techniques in the subjects of the Tax Law area of the Degree in Law. Legal Visualization techniques are used within the Legal Design Thinking methodology to materialize the results achieved through the design process. Phases:

1. Training in Legal Design methodology. To bring the student closer to this methodology, training seminars and mentoring actions will be designed

2. Empathize and define. In this phase, law students will select a problematic issue or one to be improved within compliance with tax obligations by taxpayers. The improvement of this process should be considered following the principles of Design Thinking. For this, it is intended to apply techniques of Legal Design Thinking and Legal Visualization. so that students are able to present the tax obligations of taxpayers in a clear and understandable way.

3. Prototype. Carry out a workshop with the Legal Design methodology to design mechanisms that allow the communication of complex information that helps both to understand the tax law and to make decisions by taxpayers.

When moving forward in the different phases, it is essential to form "design teams". Law students will work as a team together with students from the Degree in Industrial Design Engineering and Product Development. Each group will have: a) Information providers b) Design facilitators c) Information designers. These 3 actors work collaboratively in brainstorming sessions during the different phases.

Actors:

a) Information providers (law students): Specialist in the processes that are intended to be improved. Her role is to explain these processes to the rest of the team. He plays a fundamental role both in detecting possible problems and in evaluating solutions.

b) Design facilitator (teacher/trainer): Their role is to help bring together the core members of the design team who collaborate during the training phases. During the preliminary stages, its function is to train the rest of the components and review the design phases. They help define the problem and solution and provide design methods to keep conversations focused and flowing.

c) Information designer (design student): Their role is to visualize the ideas generated by the central design team. His role is to listen and observe the conversations generated in the core design team to visualize emerging ideas. The "information designer" is responsible for translating complex conversations into simple visualizations that reflect solutions and ideas that have emerged during the sessions.

The rest of the team members do not actively participate in sketches, prototypes and/or other visualization techniques. However, they do participate previously in proposing the design and, both in the process and later, in evaluating and testing the intermediate and final results.

4. Test: Establish proposals to improve compliance with tax obligations.

Elaboration of Design artefacts applying Legal Visualization techniques. Specifically, the Legal Visualization techniques are used within the Legal Design Thinking methodology in the phase destined to "Prototype" solutions and consists of the use of tools that allow them to materialize. "Information designers" try to translate complex and diffuse ideas that emerge from the equipment into an understandable visual aspect

The following guidelines must be followed during the process: 1. Understand the problem and the objective to be achieved. 2. Take a user-centric approach. 3. Work collaboratively in interdisciplinary teams. 4. Follow a disciplined but flexible process.

Evaluation of results:

1) Observation during the development of the activities carried out by the students

2) Interpretation of the surveys carried out by students.

### 3. Results, Discussion and Conclusions

#### 3.1. Results

The use of Legal Design Thinking techniques will facilitate the understanding and access to tax legislation through the design of communication and visualization techniques (eg, development of logical diagrams of functions, processes, organization chart, tax obligations).

Expected results that can be extrapolated to other areas of Law:

- Achieve progress from the interpretation of the legal text to its explanation.
- Legal design opens up the possibility of introducing the law student to skills based on creative exploration and the elaboration of design work, together with systemic thinking and the analysis of legal work.

- Integrate new methodologies into law studies to identify and develop alternative solutions and proposals that are more attractive and focused on the needs of the different actors.

- The application of this methodology allows students to recognize the value of having inclusive and interdisciplinary groups that build and test new improvements to the system.

- Greater involvement of students in the subject by introducing new visual and creative content and perspective

- Provide students with tools to design solutions to current complex problems

From a broader perspective, and taking into account the tax system, this method opens the door to the possibility of achieving a paradigm shift from “reading the law” to “seeing, listening and interacting with the law”. The possibility of using a more visual design to communicate complex tax law information will help achieve a “design for understanding” and a “design for decision making” that will facilitate voluntary compliance with tax obligations by the taxpayer.

These results could also be extended to other areas of law. In fact, we will introduce mechanisms that will allow complex information to be communicated effectively, thus helping to understand the law and make decisions.

Moreover, presenting taxpayers their rights and guarantees based on the ergonomics software guidelines will not only make tax law more understandable for citizens but it will also make it accessible for persons with disabilities (physical and sensory impairment).

## 3.2. Discussion

To achieve a better relationship between legislators and citizens, the format through which laws and procedures are presented must be continually improved and simplified. This includes the need for clear, regular, open and timely communication with citizens. Implementing effective communication strategies is, henceforth, a challenge to improve an inclusive approach to the process of elaboration and application of legal norms.

With the incorporation of Legal Design among its competencies, lawyers can count on a tool to take into account the experiences of users. Once needs are identified, they may be able to respond to them through the development and design of visual tools and design processes such as iteration and prototyping.

In the specific field of tax law, the above techniques introduce the possibility of developing a logical scheme that visualizes tax obligations, tax procedures or the consequences derived from non-compliance with tax obligations. These schemes, in turn, can be used and generalized by the tax administrations through their digital tools and digitalization processes.

As we have pointed out, this line of thought focuses both on improving and clarifying legal information and legal texts as well as the way in which they are presented in the physical or digital sphere.

Specifically, new trends defend the need for visualizing legal information by proposing new formats for presenting legislation using design principles and methods to improve public access to the law. In particular, through the so-called legal visualization techniques applied to projects related to the compression of legal content; which consist of the use of additional tools to the text to communicate complex legal content and thus ensure that it is really understood.

When content is complex, readers must understand both the big picture and the details, and often navigate and interact between these two planes. This is where visualization, understood here as the addition of graphics, icons, tables, diagrams and images to complement the text, comes into the picture. Visualization can help navigate the text, unlocking its meaning and reinforcing its message, even in the field of law.

Once again, e-Government offers a great opportunity to view legal content, that is, legal information online (Brunschwig, 2014).

The new trends advocate the need to display and present legal information through new formats based on the use and integration of design principles and methods to improve public access to the law. As we have pointed out, this current design-based focuses on improving and clarifying legal information and legal texts as well as improving the way they are presented in the physical or digital realm. Specifically, it is necessary to explore and advance further in the study of the application of the so-called Legal Visualization techniques to projects related to the compression of legal content. The ultimate goal of all of the above should be aimed at achieving the correct integration in law studies of skills related to the use of tools that replace or complement traditional legal texts. In no case to replace the role of lawyers but to provide them with tools that allow them to communicate complex legal content and, in this way, ensure that the law is really understood.

In the specific case of Tax Law, through legal visualization techniques it would be possible to produce logical diagrams that visualize tax law issues to be used by administrations (Robinson, 2009) and transfer this information to their digital tools. However, there is still no standard and comprehensive model of Legal Visualisation, although there are very promising approaches (Čyras et al. 2018). In particular, there is a movement (Law Design Tech) that attempts to make legal information simpler and clearer for the public through the design of communication techniques (Hagan, 2017 & 2018). In this line, the task of communication and information designers is: to organize and display information in a way that maximizes its clarity and comprehensibility. It focuses on the needs of the users and the context in which they need to find and apply the information.

However, it must be borne in mind that visualization techniques would be included within what is known about information design. An area, this last one, in which it has advanced more and there are more developed models. Therefore, we are not only talking about visualization, but also about other useful tools and techniques to incorporate into the design and production of legal texts, such as: language, legibility, typography, design, color coding and white space” (Haapio & Passera, 2013)



Therefore, together with elements that help visualize legal information (for example, graphics, icons, tables, images, timetables, diagrams) we find tools to deal with problems related to the design of the text and that are related to language, readability, typography, layout, color coding, and white space.

These measures are complementary, but not inherent to one another. Thus, for example, when faced with a complex legal text, the application of Legal Design would lead us to: 1) Rewrite it in simple language 2) Eliminate jargon or excessively technical language 3) Include useful summaries 4) Add information screens: diagrams, icons and images.

In addition, there are also approaches to this technique that do not require the use of graphic elements or technology. On the other hand, to design and produce more user-oriented texts, they focus on improving the composition of the information on the page, paying more attention to the use of fonts and the size of the text, emphasizing consistent hierarchies or playing with the use of spaces. blank (Mitchell, 2020). The integration of the above techniques could lead to methods for prototyping and executing devices such as: poster-sized flowcharts and organization maps, statutes and governance documents, and policies that have new design and visual content.

The model followed by Mitchel (2020) would apply a user-centered design approach to introduce significant, but not radical, improvements to the legal field. The results produced do not deviate drastically from the status quo, but merely reinforce current skills and practices of lawyers: 1) Talk to the client to understand what type of design would be best for him 2) Prepare a document to reflect the knowledge of the lawyer that can be transferred to the client/user/taxpayer in a format that improves their understanding.

A more ambitious approach than the previous one is defended by MARTHA (2020), who advocates applying Legal Design not only to improve legal products or legal texts, but also to rethink these services and the interactions that occur in the legal field.

In any case, the application of these techniques can never be translated into a transfer of rights, but, on the contrary, they must be seen to be reinforced with the clarification and approach of their content to the lay citizen in law or with problems for its understanding.

### **3.3. Conclusions**

1. This project is based on the premise that interpreting and explaining are forms of knowledge that maintain a mutual relationship of complementarity. Thus, the process of self-understanding requires interpretation as a step prior to explanation. Based on the above, this work seeks to explore techniques that introduce new methodologies to explain legal issues and, in this way, help students understand legal texts.

2. Through creativity, design and visualization, the student will acquire skills to find innovative solutions applicable to any professional field of law. The process allows not only to innovate in the proposed solutions, but also in the development of the process.

3-With the incorporation of Legal Design among their competences, lawyers can have a tool to take into account the experiences of users. Once the needs are detected, they may be able to respond to them through the development and design of visual tools and design processes such as iteration and prototyping. Therefore, the previous techniques also introduce the possibility of producing a logical diagram that visualizes both the tax obligations and procedures, as well as the consequences derived from non-compliance. These schemes can be used and generalized by the tax administrations through their digital tools.

### **4. Acknowledgment**

This project is developed within the framework of the Jean Monnet Project "Legal Design Thinking and Legal Visualization. Towards an Understandable EU Law (620987-EPP-1-2020-1-ES-EPPJMO-PROJECT)

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## Referencias

- Antón Antón, A. (2020). Legal Design Thinking and Legal Visualization. Towards an Understandable Tax Law, *Edunovatic 2020. Conference Proceedings: 5th Virtual International Conference on Education, Innovation and ICT*, 682-687
- Antón Antón, A. (2021). Principios del Human-centered Design en los estudios de Derecho Tributario: técnicas de Legal Design y Legal Visualization para facilitar el cumplimiento de las obligaciones tributarias, *Edunovatic2021. Conference proceedings: 6th Virtual International Conference on Education, Innovation and ICT*, 766-771
- Bernal, D. W, and Hagan, M. D (2020). Redesigning Justice Innovation: A Standardized Methodology, *Stanford Journal of Civil Rights and Civil Liberties XVI*, 2, 335-84.
- Brown, T. & Wyatt, J. (2010). Design Thinking for Social Innovation, *Stanford Social Innovation Review* (8), 30-35.
- Brunschwig, C. R. (2014). On visual law: visual legal communication practices and their scholarly exploration. In: Schweighofer, E. (et.al.) (eds), *Zeichen und Zauber des Rechts: Festschrift für Friedrich Lachmayer*. Editions Weblaw
- Buchanan, R. (1992). Wicked Problems in Design Thinking. *MIT Design Issues*, 20, 5-21
- Buchanan, R. (2001). Design Research and the New Learning, *MIT Design Issues*, 17, 10-11
- Cialdini, R. (2009). *Employing the Power of Persuasion in Tax Compliance*. Paper presented at the OECD/FTA Conference: Influencing Taxpayers' Compliance Behaviour, 28-29 September, The Hague
- Cyras, V. (et.al.) (2018). Introduction to legal visualization. In Schweighofer, E. (et. al.) (eds.) *Data Protection/LegalTech: Proceedings of the 21st International Legal Informatics Symposium*. Editions Weblaw,
- Friis Dam, R. y Yu Siang, T. (2021). 5 Stages in the Design Thinking Process. Interactive Design Foundation. Interaction Design Foundation: <https://www.interaction-design.org/literature/article/5-stages-in-the-design-thinking-process> (October, 2022)
- Haapio, H. & Passera, S. (2013). Visual Law: What Lawyers Need to Learn from Information Designers. Retrieved from <https://blog.law.cornell.edu/voxpath/2013/05/15/visual-law-what-lawyers-need-to-learn-from-information-designers/>.
- Hagan, M. (2017). A Visual Approach to Law. Miscellaneous Law School Publications. Retrieved from <https://repository.law.umich.edu/miscellaneous/36>
- Hagan, M. (2018). Law By Design. Retrieved from <http://www.lawbydesign.co/en/home/>
- Hagan, M. (2019). The Justice is in the Details: Evaluating Different Self-Help Designs for Legal Capability in Traffic Court. *Journal of Open Access to the Law*, 7(1), 1-16
- Hagan, M. (2020). Legal Design as a Thing: A Theory of Change and a Set of Methods to Craft a Human-Centered Legal System, *MIT Design Issues*, 36, 3-15.
- Hagan, M. (2021) Introduction to Design Thinking for Law. In KATZ, DOLIN y BOMMARITO (Eds.) *Legal Informatics*, Cambridge (pp 155-175) Cambridge University Press
- Jackson, Dan (2016). Human-Centered Legal Tech: Integrating Design in Legal Education, *The Law Teacher*, 50 (1), 82-97. DOI: 10.1080/03069400.2016.1146468
- Martha, D.F.( 2020) What is essential: Legal Design and client stories. *The Elon Law Journal* ,13, 39-46
- Mitchell, J. A. (2020). *Outlooks, Techniques, and Words: Product Design, Practicing Law, and Engaging Students in Legal Practice*. SRN: <https://ssrn.com/abstract=3521437>
- OECD (2017 ). Use of behavioural insights in consumer policy. OECD Science, *Technology and Policy Papers*, 36, OECD Publishing.
- OECD (2018 ). *Responsive School Systems: Connecting Facilities, Sectors and Programmes for Student Success*. OECD *Reviews of School Resources*, OECD Publishing
- Quintanilla, V.D. (2017) Human-Centered Civil Justice Design, *Penn State Law Review*, 121 (3), 745-806
- Robinson, P. (2009). Graphic and Symbolic Representation of Law: Lessons From Cross-Disciplinary Research. *E law: Murdoch University electronic journal of law* 16(1), 53-83
- Walsh, K. (2012). Understanding taxpayer behaviour–new opportunities for tax administration, *The Economic and Social Review*, 43(3), 451-475