Legal Systems of the European Union (EU) Countries What about the challenges of Artificial Intelligence? (from Theory to Practice)

José Rascão

University Polytechnic of Setúbal Graduate School of Business Sciences Setúbal (Portugal)

*Corresponding author: José Rascão

University Polytechnic of Setúbal Graduate School of Business Sciences Setúbal (Portugal)

Abstract

We do not intend to deal exhaustively with this subject, because it is broad and complex for the space of a text. Our intentions, which are much more modest, refer to documentary research for the understanding and development of the study on the impact of Artificial Intelligence on the Legal System of EU countries. It contemplates the theoretical and conceptual discussion of information, object of study of Information Science, in its different approaches, especially cognitive, economic, management and political.

Artificial Intelligence poses challenges to several sciences, including legal sciences, through the analysis of various hypothetical scenarios. It seeks to identify the main gaps and uncertainties, within the existing legal framework, with regard to fundamental human values, such as freedom, autonomy, privacy, dignity, diversity, equality and social and economic well-being. Constitutional and civil rights, it seems, may not provide sufficient protection by AI.

The European Union (EU) has its own legal order and rights – the fundamental rules and principles are laid down in the founding treaties. The EU can adopt legal and legislative acts, which Member States must respect and implement. The two main sources of EU law are primary law and secondary legislation. Primary law is made up of treaties that establish the legal framework of the European Union. Secondary legislation is made up of legal instruments based on these treaties, such as regulations, directives, decisions and agreements.

In addition to these, there are also the general principles of EU law, that of the Court of Justice of the European Union, which is distinguished by the fact that it can be applied directly by the courts of the Member States ('direct effect') and that the laws of the Member States can be considered inapplicable in the event of a conflict of laws ('primacy' of EU law).

It is a radical change in the Structure and Functioning of Legal Systems, of organizations (public and private), from which technology starts to play a central role, and not just a superficial presence. This change becomes complex and turbulent, and in itself, poses challenges, which need to be understood its impact.

Keywords: *B Human Values, Interdisciplinarity, Legal System, Human Rights, Artificial Intelligence, Digital Society.*

1. Introduction

Information is traditionally related to printed or electronic documents, when in fact the information dealt with by Business Sciences, Information Science and other Sciences, can be either in the dialogue between managers, scientists, lawyers and people in formal or informal communication, in an innovation for an industry, in a patent, in a photograph or object, in the electronic record, in a virtual library, in a repository or on the internet. All fields of knowledge feed on information, including knowledge itself, but there are few who take it as an object of study and decision-making. Information moves in a multifaceted "territory", it can be information in a certain area, or under a certain approach.

The information depends on the context (scientific, technological, business, artistic, cultural, among others) and corresponds to the applications, so called in the literature, in the transversality, in the quality of the information, to permeate all areas, or specialized information, such as in Medicine, for example, or in a sector, such as the industrial, or serving the inhabitants of a city, a neighborhood or a participating individual, in some social movement or in personal terms. This characteristic is distinct from interdisciplinarity, which has an epistemological character and can be translated, synthetically, as the "dialogue between the Sciences" or the mutual appropriation of methodologies, principles, theories, concepts and constructs between two or more disciplines. The cognitivist focus relates information to knowledge, administrative or managerial, in which information is related to decision-making; the economic, when information is a commodity and acquires added value and is used for action, in a more political and social vision, or in the formation of citizenship.

The academic literature on human and ethical values makes a clear separation between them, in personal and organizational terms. The plurality of values and ways in which human beings relate to nature has brought new insights into the dynamic interconnections between people, places, organizational and technological processes, all of which are highly relevant to the world's sustainability challenges.

However, many concepts of personal, organizational and economic practices and values are still predominantly dualistic (simultaneous existence of two things, principles, contradictory sensations in the same person, for example the existence of spirit and body, good and evil) and anthropocentric (the human being is the center of the Universe, being surrounded by other things, e.g. natural resources).

To overcome this man-nature divide, we propose a conceptual integration of relational values, as sets of more than human relationships, illustrated with examples from the literature and ongoing empirical research. These concepts offer a way to represent meaningful and dynamic interrelationships, including human beings, physical and material elements (e.g., technologies, tools), immaterial entities (e.g., sounds, lights, colors), and other non-human beings.

Conceptual integration provides a useful framework for rethinking various aspects, such as the processes through which humans and non-humans coexist to ensure interrelated livelihoods. With this, we extend the relational shift to research on human-nature connections, following the call of many scholars in the field of ecological economics to unveil human and ethical values in the Digital Society, considering multiple organizational and economic aspects.

Globalization emerged during the 1980s, but the phenomenon began much earlier, in the period of the Great Navigations of the fifteenth and sixteenth centuries. This period was marked by the establishment of new trade routes in the world and intense movement of goods and people between countries on different continents. Cartographic discoveries and the development of new navigation techniques are at the origins of this event. The transformations in the international economic system and the improvement of communications and transportation have enabled the evolution of this process.

Globalization is **the name given to the phenomenon of integration of the world space through information and** communication technologies (ICTs) and also means of transport, which have been rapidly modernized and have provided, in addition to greater dynamization of territories, acceleration and intensification of the flows of capital, goods, information and people, all over the planet. This process is also known as **globalization**.

The technical-scientific, technological and informational development has led to global globalization, that is, it has resulted in an integrated economic, social and cultural world space through global communication networks. **The** integration of the world space was only possible through technological advances in the communications and transport sectors. This process intensified with the Third Industrial Revolution, in which there was an increase in international flows of capital, goods, people and information.

2. Scientific Method

It is the method of research and teaching, capable of making two or more sciences interact with each other. This interaction can range from the simple communication of ideas to the mutual integration of concepts, epistemology, terminology, methodology, procedures, data, and research organization.

This is an exploratory study that seeks to clarify and organize the concepts about Artificial Intelligence, presented in the literature of Legal Sciences, Information Science and other Sciences. It is not a proposal of new terms and concepts, but rather an organization that allows the identification of a common denominator between the different concepts already indicated in the literature, in a way that enables their grouping by identity, application/use and pertinence/aggregation of value, in the context in which the terms are inserted. The data collection is characterized by bibliographic research, on the terms and concepts, as well as the main challenges faced by the Legal Systems of the different EU countries with the introduction / adoption / implementation / use of AI, and its impact, on the Universal Rights of European Citizens and respect for human values with ethics. The data collection is characterized by bibliographic research on the terms and concepts related to the different scientific fields.

It is a descriptive and analytical approach seeking to know and analyze the existing cultural and/or scientific contributions on this subject, based on the literature review. The research was structured based on the systemic approach to understand the main challenges that citizens face in the Digital Society, seeking in practical, operational or application terms, the solution of the "real life" problems of organizations (public and private) and people.

Research Theme and Problem

Human and ethical values, in our opinion, are the most acceptable and practical in the Digital Society, since they allow the active relationship of people with other people and with nature, through Information and Communication Technologies (ICTs), but the problem is that many people do not know exactly what this means. what types/models of participation, ways of working, the limits and the path of the future of the Digital Society.

It would be ideal if people mutually agreed and created the general (global) rules on equal social, economic, political and responsible conditions that would be valid for the whole of world society. However, in society (countries, governments, public and private organizations) and individual people, it entails many decisions and all people cannot decide everything, whether due to lack of interest, knowledge or time.

A distinction must be made between decisions that have a global, national, family and personal impact and that affect the different people in the digital society. People can't do it either, because they hardly agree on everything and as such, general (global) rules/norms override individual decisions, as long as individual freedom of choice and opinion is respected.

People by "accepting" the change to the Digital Society, through a direct or indirect way of electing government representatives (decision-makers), using ICTs. The candidates (political parties, civic or individual associations), who present the best choice for the people, win the most votes at the ballot box, are given the mandate to represent the people and govern on their behalf, for a given period. Today's democracy has many imperfections. Some of them are:

I. **Will the Legal Systems of European Union (EU) Countries Be Ready for the Challenges of AI?**

II. **Do the Artificial Intelligence Systems (software) adopted by the Legal Systems of the countries of the European Union respect Human Values?**

Goals

Information, Humanities, Social, Economic and Political Sciences seek a solution to the challenges of the Digital Society, that is, to define the main paths and rules that allow the citizens of the world to be guided, where rights and duties (responsibilities) are equal, for all, without exception. These paths and the rules to be implemented by elected officials require a commitment from them and from the people in their implementation.

The Digital Society, in democracies, is based on the choice of the most competent, responsible, transparent, supportive citizens (change projects), in Freedom and in the continuous and permanent evaluation of the results of their decision-making. To do this, people need to have equal powers in assessing legislative, judicial and executive powers, regardless of whether they can evaluate other people. The power of permanent evaluation in the hands of the people encourages the other powers to fulfill their mission, with the commitment to improve the social and economic conditions of the populations and not in their own interests or those of a few. This kind of democracy will be simple, fast and efficient, and will completely change the basis of the social and economic policy of the rulers, in the Digital Society.

This article seeks to alert citizens to the main challenges of human and ethical values that people face in the change to the Digital Society and the importance of the units of measurement for evaluating the decisions of the different powers and meanings, within the scope of the different sciences, from a theoretical framework. The objective is a debate on the challenges identified by scientific research, developed by the different Sciences, in their global matrix of use and preservation of natural resources, in the Digital Society. The theoretical discussion of the different units of measurement and the meanings of empirical research constitute the basis for the outline of its structure, presented at the end, bringing together the units of measurement and the meanings according to their nature.

Methodological Approach

As for its nature, the research is qualitative, since it does not privilege statistical study. Its focus is to obtain descriptive data, that is, the incidence of topics of interest in fields such as Information Sciences, Humanities, Ethics, Social, Economic and Political Sciences, as well as other Sciences. With regard to the extremities, the research is exploratory and descriptive, insofar as the technique used is categorized, consensually, as a direct documentation study, which provides for the consultation of sources related to the study, in different *media,* printed or electronic. The complexity and turbulence of the digital society have led to the globalisation of research, as essential processes for the development and innovation of science and technology. Information is the source of the energy that drives the "*engines*" of the Digital Society, but in order to use it we need to convert it into a usable form: **knowledge, (Murteira, 2001).**

The digital society is a complex society of technological innovation and communication, in which new environments are created and changes occur in the dynamics of people, in the way they understand reality, modifying the way, how they relate to the environment, to other people and how they conceive themselves in the face of their own reality. Both meanings can be understood as a result of the informational revolution, promoted mainly from the attempts to understand human intelligence, via computational bases. As a consequence, the pre-modern notion of information, as the *information* that shapes or shapes the human mind, is gradually being replaced by information, as a "data structure", Boland, (1987), representing intangible realities too large to be directly experienced by people's senses.

The research method is likely to cause two or more units of measurement and meanings to interact with each other. This interaction can range from the simple communication of ideas to the mutual integration of concepts, epistemology, terminology, methodology, procedures, data and research organization. This is an exploratory study that seeks to clarify and organize the concepts presented in the literature of the different sciences. It is necessary to understand, through a theoretical revision of the concepts, through the historical reference documents; of a psychosocial analysis of the concepts of units of measurement and the meanings, applied to the Digital Society, in the context of people's social and economic life. The research was structured based on the systemic approach, to understand people's problems and possible improvements. This conceptual model is represented as follows:

Figure 2 - Model for the Operationalization of the Functioning of Justice
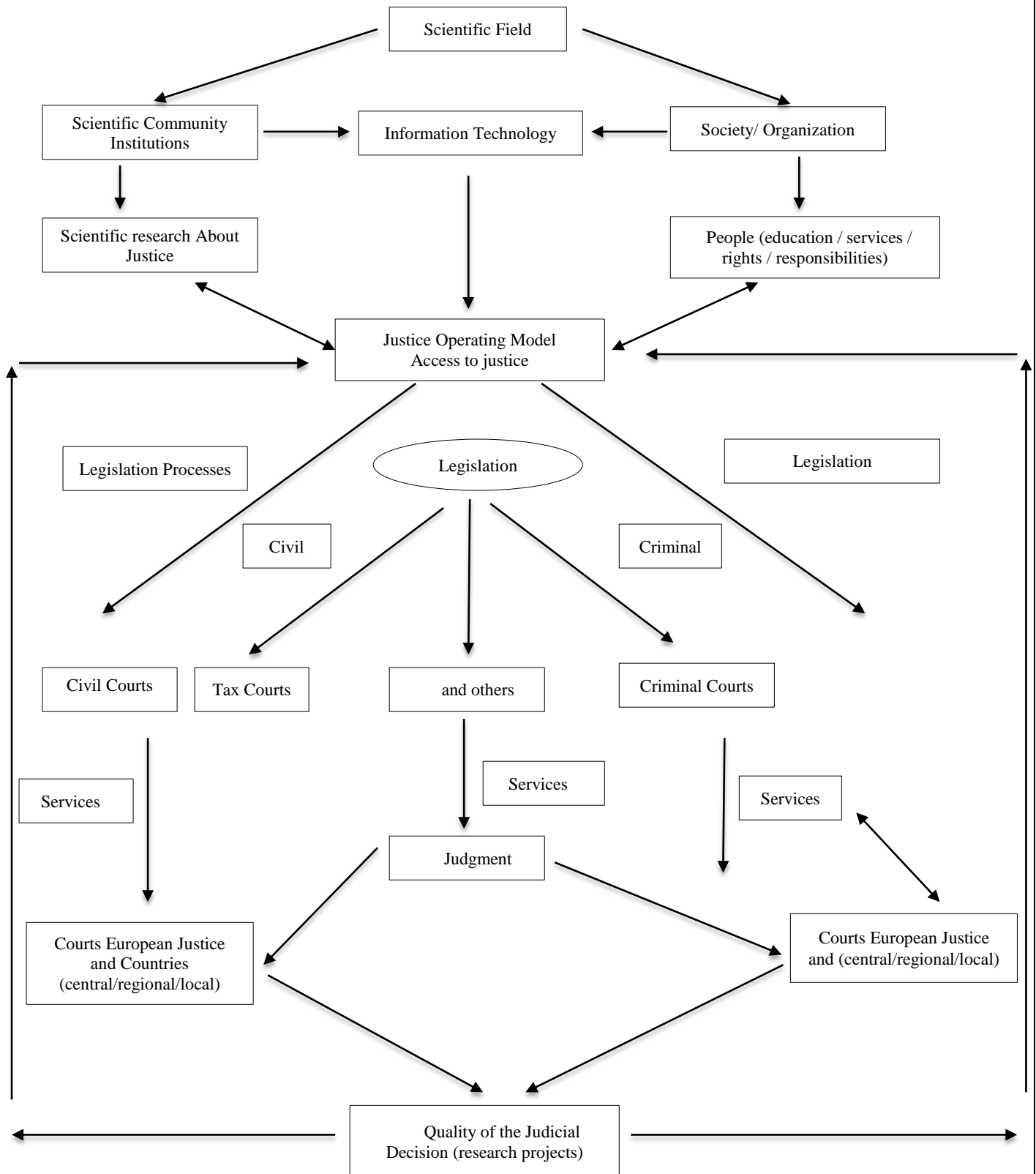
Source: author's elaboration

The Justice Management Model is presented for intervention in debate actions in the political, academic and governmental space, with the purpose of producing and sharing information and knowledge among participants, in addition to promoting the development of skills in searching, retrieving, organizing, appropriating, producing and disseminating relevant information for scientific researchers, political managers and other interest groups in society.

3. THEORETICAL-METHODOLOGICAL FRAMEWORK OF THE RESEARCH

3. 1 HUMANITIES

The human sciences are a set of knowledge that has as its object of **study man as a social being**, that is, it is the human sciences that carefully gather the organized knowledge about the creative production of man and knowledge, based on specific discourses. Its

aim is to unravel the complexities and turbulences of society, its creations and its thoughts. It is important to keep in mind that everywhere, human beings establish relationships with each other, whether they are of friendship, affection or power. The human sciences seek to understand how these relationships are formed and how they evolve over time.

Thus, as a human condition, they have a multiple character, so they address theoretical characteristics, such as philosophy and sociology, while also addressing practical and subjective characteristics. As it is an area of knowledge that has as its object of study the human being, in sociability, the social sciences are based on disciplines such as philosophy, history, law, cultural anthropology, science of religion, archaeology, social communication, psychology, art theory, cinema, management, dance, music theory, design, literature, letters, philology, among others.

Humanism was a **philosophical and cultural movement that emerged in Europe during the 14th century**. He was inspired by Greco-Roman culture and philosophy, prioritized reason over faith, and was interested in the concept of the human being as the center of the universe. Although there have been various "humanisms", such as those of the Middle Ages or the humanism of the court of Charles the Great. But **when we talk about humanism we usually talk about the Italian Renaissance,** which is known, as Renaissance humanism. In general, any study devoted to the reading and interpretation of classical texts is a humanistic study. Philosophical works that emphasize the human being, above all else, are also called humanistic. Examples of this are the works of Werner Jaeger, (1943), Erich Fromm, (2021), Erasmus of Rotterdam, (1466-1536) and Jean-Paul Sartre, (1943).

Humanism from this anthropocentric perspective, inspired by scientific studies during Greco-Roman Classical Antiquity, diminished the cultural relevance of the theocentrism that had dominated European society since the Middle Ages. As an intellectual movement, Humanism disregarded the claim of the scholastic method as critical thinking, valuing rationality. According to humanistic thought, human beings are the supreme Divine creation, and are thus capable of synthesizing knowledge by themselves. In this way, the human being was at the same time a creature and a creator of the world, and thus could act as the architect of his existence.

The multifaceted nature of the term, and its breadth, has compelled academic studies on humanism to treat the term with care. Although they share some general characteristics, **it is not the same to talk about Renaissance humanism as it is to talk about existentialist humanism**

Humanistic thought prioritized the human being before the religious. Humanism was **a European philosophical, intellectual and cultural movement that emerged in the fourteenth century** and was based on the integration of certain values considered universal and inalienable of the human being. This current of thought arose in opposition to theological thought, in which God was the one who ensures the fulfillment of the duties and obligations of others and the center of life.

Humanist thought is **an anthropocentric doctrine** that tries to ensure that the human being is the measure, from which cultural parameters are established. This group favored the sciences and was interested in all disciplines, whose purpose was to develop the values of the human being. Great thinkers of antiquity (e.g.

Aristotle and Plato), **argued that knowledge gave power to people, giving them happiness, freedom, and as such, through classical works expanded knowledge** and created a more cultured society.

In 1945, the philosopher Jean Paul Sartre gave a lecture on the postwar climate, and what he said had a profound impact on all philosophical thought from that time on. This conference was called "Existentialism is a Humanism" and was a milestone in presenting a new conception of man and humanism. The Paris Conference after the Second World War set the tone for the search for a new human horizon, the **moral horizon that incorporates man's responsibility and his existence**, beyond progress and the devastating consequences of war.

Characteristics of humanism:
- He developed an anthropocentric notion of the world and **set aside the theocentric idea.**
- It is **a much purer model of knowledge** than existed in the Middle Ages.
- **He defended the idea of using human reason** as an engine in the search for answers, leaving aside the beliefs and dogmas of faith.
- **He reformed the existing teaching** model, giving importance to the study of the classics of Latin and Greek and opening new schools that promoted the study of other classical languages and letters.
- **He developed the sciences**, such as grammar, rhetoric, literature, philosophy, morals and history, intimately linked to the human spirit.
- **It sought to eliminate any closed system** that did not allow for the multiplicity of perspectives of thought. It was thought that with this change the total development of man would be achieved: physical and spiritual, aesthetic and religious.

Humanism and the Renaissance
The Renaissance was a historical period that stretched from the fourteenth century to the sixteenth century, which sought to leave the Middle Ages behind and give way to the Modern Age. This period was characterized by a great artistic and scientific development and by social, political and economic changes that sought to bury the vestiges of the Middle Ages (which they considered a dark phase) and led to the development of the bourgeoisie.

Humanism was an intellectual current that developed in this historical period and promoted an anthropocentric view of the world, leaving aside the theocentric tradition and highlighting the capacities of man and human reason. Humanists did not see man from a theological perspective. **They valued the human being for what he is: a natural and historical being**. Unlike the men of the previous age, the humanists ceased to see man from the theological point of view. They were men of religion, mostly Christians, but they looked for the answers to their questions about the world and things in ancient thinkers. **They invalidated religion, but considered it to have a civil function** and to be a tool for maintaining the peace of society. Among the most prominent scholars of this era are:

- **Leonardo Bruni (1370-1444) -** Italian historian and politician, of notable performance in the rescue of the classics of Greco-Roman literature.

- **Giovanni Pico della Mirandola (1463-1494) -** Italian philosopher and thinker, his most representative work "The 900 Theses" is a compendium of the most resonant philosophical ideas that existed until then.
- **Erasmus of Rotterdam (1466-1536) -** Dutch philosopher and theologian, he was a critic of the institutions, the power of the time, and the abuses of the members of the Catholic Church to which he belonged. He defended his "adages" (sayings), freedom of thought, and Greco-Roman traditions. In addition, he sought that all people could have access to the gospel and with it, to the teachings of Jesus Christ. His work: "In Praise of Madness" had a great impact.
- **Thomas More (1478-1535)** - English theologian and politician, he devoted much of his life to practicing law and the study of Greco-Roman theology and culture. "Utopia" was one of his famous works, written entirely in Latin. He was beheaded in 1535 for refusing to sign the act establishing King Henry VIII as the leader of the Anglican church.
- **Juan Luis Vives (1493-1540) -** Spanish philosopher, he was a precursor of the idea of applying reforms in the academic field and the need for social assistance to the most needy.

Types of Humanism
- **Christian Humanism -** A religious movement in which man can be realized in principle from a Christian framework.
- **Evolutionary Humanism -** A current of thought that oscillates between philosophy, epistemology and anthropology and places the human being at the center of the Universe.
- **Secular humanism -** A movement that relies on certain philosophical currents and the scientific method to discard those supernatural explanations, such as creationism, that exist about the origin of the universe and humanity.

Importance and impact of humanism

Humanism is considered one of the predominant ideologies during the Renaissance, first and foremost, because **its anthropocentric ideas represented a paradigm shift**. This current focused on the development of the qualities of the human being and conceived rationality as a way of understanding the world.

The importance of humanism lies in the **rescue and dissemination of Greco-Roman traditions**. During this period, translations of the great classical works were made that allowed access to a larger portion of the population. In addition, **he promoted educational reforms** to make knowledge more accessible and valued humanistic studies, contributing to the development of sciences, such as rhetoric, literature and grammar. Humanism stood out for having expanded values, such as tolerance, independence and free will.

Humanist **philosophy** clashed with the expectations of the Middle Ages. Although the Middle Ages had a rich cultural life, it was still strongly linked to the Catholic Church, which helped dictate social positions and behaviors, as determined by a culture that exalted the submission of human beings to God. Humanism, however, defended man's ability to shape his destiny. Thus, he shifted the social focus from collectivism to individualism, placing in the human being himself the ability to alter the reality in which he lived, without depending on the favor or Divine will, but also the inspiring axis for the achievement of new knowledge. In this sense, the ancient sages were seen as the best bases for these advances.

Some of the most significant examples of humanist thought are in the "Discourse on the Dignity of Man", a work by Giovanni Pico Della Mirandola, *(1463-1494).* Considered one of the first books of modern philosophy, in which he presents the main thesis, about creation having occurred with God, allowing human beings the special freedom to build themselves. Through this emancipation, according to the author, the human being cannot have a determined destiny, since it is he himself who will decide what he will be, finding in the process of his essence, through the rationality provided by God.

Although it is in the articulation of the themes, and not exactly in the argument used, where the originality of Giovanni Pico Della Mirandola is found, it is that he represents a new line of thought that began to be adopted by several scientists, painters, philosophers and scholars in general during the early Modern Era – even though most of the European population still lived marginalized. away from such intellectual and cultural processes. Because of this, Humanism can be characterized as the heir movement of the Renaissance as having occurred mostly in the midst of the European social-economic elite, which had the resources and time for self-improvement valued by Humanism.

An example is Leonardo da Vinci, (1452-1519). Born in a small village near Florence, Leonardo would study for most of his life, until he mastered an impressive variety of sciences such as engineering, architecture, sculpture and astronomy, teaching himself music, mathematics, physics and Latin. Gaining friends in high social spheres due to his great intellectual abilities, he became one of the most celebrated Western artists of all time, being one of the most recognized names of the Renaissance today. Among his major works are Mona Lisa (1503-1506), Virgin of the Rocks (1483-1486) and The Last Supper (1494-1497).

Human Dignity

Human dignity is the **right of every human being** to be respected and valued, as an individual and as a social, with his or her particular characteristics and conditions, for the simple fact of being a person. History shows many cases where human dignity has been subjugated. Therefore, it is a fact that the dignity of the human person is not limited to having access to education, health and housing, for example. It also includes the most diverse facets of freedom, work, politics, integrity, among others, as well as how these values relate to each other.

The principle of human dignity is the basis of practically all the law of democratic countries, since it is the realization that the fullness of the human being must be respected and preserved by the figure of the State, that is, a set of principles and values that has the function of ensuring that each citizen has his or her **rights respected by the State**. The main objective is to ensure the well-being, social and economic justice of all citizens. The principle is linked to rights and duties, it involves the necessary conditions for a person to have a dignified life, with respect for these rights and duties. It is also related to moral values, because it aims to ensure that citizens are respected in their personal issues and values.

Many basic rights of the citizen (fundamental rights) are related to the principle of the dignity of the human person, especially **individual and collective rights and social rights.** Respect for

fundamental rights is essential to guarantee the existence of dignity. It is precisely for this reason that the dignity of the human person is recognized as fundamental by the Constitution. Individual **and collective rights** are the basic rights that guarantee equality to all citizens. Some of the most important are:

- Right to life.
- Right to security.,
- Equal rights and obligations between men and women.
- Freedom of expression of thought.
- Freedom of religious belief.

There are also individual and collective rights: the protection of privacy, freedom at work, freedom of movement, and the freedom to engage in artistic or intellectual activities. Social rights, on the other hand**,** are rights related to the well-being, social and economic justice of the citizen. Some examples are:

- Right to education and work.
- Guarantee of access to health, transportation, housing, security, social security.
- Protection of labour rights.
- Protection of children, maternity and those most in need.

The dignity of the human person is **a principle of the democratic rule of law**, which is the state that respects and guarantees the human rights and fundamental rights of its citizens. Thus, it can be understood as a principle that places limits on the actions of the State. In this way, the dignity of the human person must be used to base decisions made by the State (rulers), always considering the interests and well-being and social and economic justice of citizens. This means that, in addition to guaranteeing people the exercise of their fundamental rights, the State must also act with sufficient care so that these rights are not disrespected. It is an obligation of the State, through the rulers, to make decisions to guarantee the rights and well-being of citizens. In the same way, it is also the task of the State to ensure that **fundamental rights are not violated**.

Human rights

The origin of the concept of human rights originated in the seventeenth century, and is a product of the theory of "natural rights" (Natural rights were established by God and reason, to all men, because they are all equal to each other – Principle of Equality among Men), by John Locke, defender of religious freedom and tolerance. However, in the pre-Christ era, there was already an embryonic perception of the human concept and specificity:

- Cyrus Cylinder decree of 539 B.C., - protects the right to equality and religious freedom;
- The Pact of the Virtuous (Hifl-al-fudul) – drawn up by Arab tribes around 590 A.D. is considered one of the first human rights alliances.
- No tax may be imposed without the consent of Parliament,
- No subject may be imprisoned without a demonstrated reason (the reaffirmation of the right of habeas corpus),
- No soldier may be quartered in the homes of the citizens
- Magna Carta - establishes equality before the law and the right to property;

After King John of England violated a number of ancient laws and customs by which England had been ruled in 1215, his subjects forced him to sign the Magna Carta, which lists what later came to be regarded as human rights. Among them was:

- The right of the church to be free from government interference,
- The right of all free citizens to own, inherit property(s), and be protected from excessive taxation.
- The right of widows to own property and to decide not to remarry,
- Establish the principles of equality before the law. This also contains provisions prohibiting bribery and official misconduct. (A Brief History of Human Rights - The Magna Carta (1215);
- The Petition of Right (1628), - the English Parliament passed a Declaration of Civil Liberties, safeguarding civil liberties, such as, the right of *habeas corpus*;
- The Constitution of the United States of America (1787) - defines the basic rights of citizens;

The Declaration of Independence of the United States of America "was the document in which the Thirteen Colonies of North America declared their independence from Great Britain, and it inspired human rights documents around the world." (United States Declaration of Independence (1776).

The Constitution of the United States of America (1787) "is the oldest national constitution, and it defines the principal organs of government, their jurisdictions, and the basic rights of citizens." (A Brief History of Human Rights - The Constitution of the United States of America (1787) and the Bill of Rights (1791).

The Declaration of the Rights of Man and of the Citizen (1789) marks in a broader and more significant way the historical process of Western awareness of the intrinsic value of Man. The French Declaration of the Rights of Man emerged in the context of great political and social upheaval, under the influence of the Enlightenment of natural rights and Renaissance ideas that evoked equality among all human beings, calling into question the ancient ideals

The Bill of Rights (1791) - "... protects freedom of expression, freedom of religion, the right to keep and bear arms, freedom of assembly and freedom to petition.' (A Brief History of Human Rights - The Constitution of the United States of America (1787) and the Bill of Rights (1791).

It was only in the nineteenth and twentieth centuries that significant initiatives were put in place for the international protection of human beings, namely the eradication of the slave trade; treaties aimed at improving the conditions of the sick and wounded in war; the protection of minorities; the creation of the Leagues of Nations; concern for the fair treatment of refugees; the legal status of women, and the creation of the International Labour Organization (ILO), with the humanitarian mission of eradicating poverty and social inequalities, along with concerns about equal opportunities for men.

On October 24, 1945, the United Nations (UN) was created. Its founding principle of seeking and maintaining peace was to rebuild the world on the pillars of freedom and justice, through cooperation between peoples, to strengthen human rights and to seek solutions to the economic, social, cultural or humanitarian problems that occurred after the end of the 2nd World War. A war where many atrocities were committed, 6 million lives were lost,

between soldiers and civilians, entire cities in ruins and flames in which the Holocaust is an example.

Article 55 of the UN Charter itself proclaims that the United Nations shall promote "respect for human rights and fundamental freedoms *for all without distinction as to race, sex language, or religion."* Article 55 of the Charter to the UN. In Article 56, the member states express their willingness to develop cooperation actions with the UN, both joint and individual, with a view to achieving those objectives (states with different legal and cultural origins, from all regions of the world).

The Universal Declaration of Human Rights (UDHR), signed on 10 December 1948 by the United Nations General Assembly in Paris, is a landmark document in the history of human rights. In its desire to regulate international relations, in the repudiation of violence and barbarism among peoples, in the maintenance of peace, in its opposition to discrimination and exploitation of peoples, the UDHR established, for the first time in history, the universal protection of human rights as an ideal to be attained by all peoples and all nations, in the promotion of respect for these rights and freedoms. The 14 signatory States of this Declaration were bound to accept the precepts which, although they do not have coercive value or juridical imposition, have ethical and moral value, with the commitment made, making them responsible for developing the appropriate legislation, in their countries, so that these rights could be implemented.

The United Nations Universal Declaration of Human Rights marked the twentieth century, bringing the legal and global recognition of human rights, innovating civil and political rights, namely, the right to life, the right not to be subjected to torture or slavery, the right to freedom of thought, conscience, religion and expression. and, in particular, to inspire the constitutions of states and recent democracies. Two decades later, given that the UDHR of 1948 had only the status of a recommendation (resolution) and therefore was not binding, States needed to create other instruments.

At the United Nations General Assembly on 16 December 1966, two multilateral treaties were concluded which recognised and strengthened the rights and duties of the UDHR; more articles were added extending the number of rights, giving them greater protection, surpassing the Fundamental Declaration itself. These Treaties are the International Covenant on Civil and Political Rights (ICCPR) and the International Covenant on Economic, Social and Cultural Rights (ICESCR), which have made human rights binding and binding on signatory states.

The ICCPR is a Covenant that reinforces civil rights (individual freedoms) and political rights (access to justice and political participation). The ICESCR established the human rights - economic, social and cultural - that must be realized in the long term, in a progressive and programmatic manner, whose duty to comply with them is addressed to the States themselves.

The principles of the UDHR are present in almost all humanitarian documents, such as the International Convention on the Elimination of All Forms of Racial Discrimination, the Convention on the Elimination of All Forms of Discrimination against Women, the International Convention on the Rights of the Child, the Convention against Torture and Other Cruel Treatment or Punishment, Inhuman or Degrading, among many others." (Universal Declaration of Human Rights). It was up to the signatory States to transpose them into the domestic legal order of those States, producing new legislation, adapting the existing legislation and giving it effective application in order to ensure that these rules were respected. Failure to comply with the rules, whether by acts or omissions, puts States in a position of having to justify themselves before the International Court of Justice (ICJ).

3. 2 PHILOSOPHICAL SCIENCES
Truth, Falsehood, and Realism

According to Ward, Philip (2012), **truth is** the property of being in agreement with the real fact, that is, corresponding to reality. Truth is the opposite of falsehood. It is the logical response resulting from the examination of all facts and data, based on evidence, not influenced (independent) by desire, authority, or prejudices; An inevitable fact, no matter how you arrived at it.

The use of the word truth can have various meanings, from "to be the case," "to be in agreement with facts or reality," or to be true to one's origins or a pattern. Older usages encompassed the sense of faithfulness, constancy, or sincerity in deed, word, and character. Thus, "truth" means what is real within the human value system.
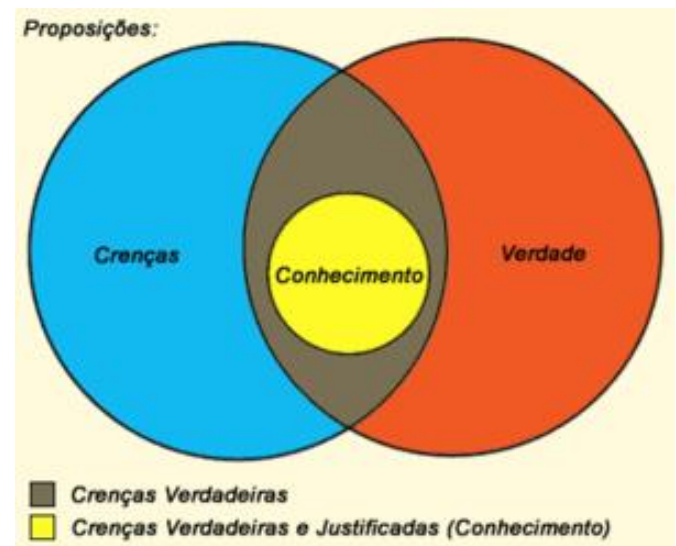
Knowledge diagram.

The first problem for philosophers is to establish what kind of thing is true or false, which is the *truth-bearer*. Truth is understood as the agreement that exists between what is said, thought and believed (belief), and the real (truth, which cannot be doubted). The word truth derives from the Latin *veritas, and* its concept is one of the great philosophical problems, the main "weapon" of religions and a key element in any political discourse.

Then there is the problem of explaining what makes the truth-bearer true or false. There are robust theories that treat truth as a property. And there are deflationary theories, for which truth is just a convenient tool of our language. Developments in formal logic shed some light on the way in which we deal with truth in natural languages and in formal languages.

Second, in the philosophy of René Descartes, (1596-1650, also called "the founder of modern philosophy" and the "father of modern mathematics"), certainty is the criterion of **truth**. Anyone who sincerely agrees with a sentence is committing to the truth of the sentence. Philosophy studies **truth** in a variety of ways. Metaphysics studies the nature of truth. Logic studies the

preservation of truth, and epistemology studies the knowledge of truth.

Truth is a mental interpretation of reality transmitted by the senses, confirmed by other human beings with normal brains and devoid of prejudice (desire to believe that something is true), and confirmed by mathematical and linguistic equations forming a model capable of predicting future events in the face of the same coordinates:

- Material truth *is* the adequacy between what is and what is said;
- Formal truth is the validity of a conclusion arrived at by following the rules of inference from accepted postulates and axioms;
- An *analytic truth is* the sentence in which the predicate is contained in the subject. For example: "All pigs are mammals";[6]
- A *synthetic truth is the* sentence in which the predicate is not contained in the subject;
- Sophistry is any kind of discourse that is based on a false antecedent, trying to reach a valid logical conclusion.

Truth as correspondence was defined by Aristotle in his treatise *On Interpretation*, in which he analyzes the formation of sentences likely to be true or false. **A sentence is true when it says that what is, is, or that what is not, is not. A sentence is false when it says that what is, is not, or that what is not, is.**

The problem with this conception is to understand what *correspondence means*. Is it a kind of *similarity* between what is and what is said? But what kind of resemblance can there be between words and things?

The scientific method, for example, establishes procedures for carrying out this correspondence. In this case, a judgment of truth V is legitimized, in such a way that the community of scientists (who share knowledge and experience among themselves) accepts/certifies as true the proposition P, arising from the correspondence between P(V) and "empirical reality", via the *scientific method*.

There are two main approaches to truth in mathematics: *the truth theory model* and the *truth proof theory*.

With the development of Boolean algebra in the 19th century, mathematical models of logic began to treat "truth," also represented as "V" or "1," as an arbitrary constant. "Falsehood" is also an arbitrary constant that can be represented by "F" or "0". In propositional logic, these symbols can be manipulated according to a set of axioms and rules of inference, often given in the form of truth tables.

Moreover, from at least the time of the Hilbert program (20th century) until the proof of Gödel's incompleteness theorems and the development of the Church–Turing thesis at the beginning of that century, true statements in mathematics were generally assumed to be provable in a formal axiomatic system.

Art of Interpreting Reality

Considering philosophical practice as the art of interpreting reality from the formulation of conceptual schemes about the human being, nature and society, will Philosophy be able to face the problems that arise from the new organizational dynamics of society today? We understand that Philosophy alone, without interdisciplinary tools of analysis, does not seem capable of facing, perhaps even formulating, the problems raised by ICTs.

Floridi (2011, p. 14) characterizes IF as follows: a philosophical area that is related to:

a) Critical research into the conceptual nature and basic principles of information, including its dynamics, use and sciences; and refers to IF as a new area of investigation in Philosophy, guided by the investigation of the content of information and not only in its form, quantity and probability of occurrence (thus differing from the proposal of Shannon & Weaver, (1949/1998). Importantly, IF does not seek to develop a "unified information theory" but to integrate the different forms of theories that analyze, evaluate, and explain the various information concepts advocated.

b) The characterization, in turn, indicates, according to Floridi (2011, p. 15-16), that the IF has its own methods for analyzing philosophical problems, both traditional and new. These methods have information as their central element, are interdisciplinary in nature and maintain the relationship with computational methods, in addition to using concepts, tools and techniques already developed in other areas of Philosophy (e.g., Philosophy of Artificial Intelligence, Cybernetics, Philosophy of Computing, Logic, among others).

Thus, IF will provide a broad conceptual framework for addressing the issues that emerge from the "new" dynamics of contemporary society, Floridi, (2011, p. 25). An example of this dynamic are the possibilities of interaction provided by ICTs which, depending on the degree of familiarity of people with such technologies, promote a sense of dependence on being online. In addition, even if people do not want to be online most of the time, this feeling remains due to the spread of informational devices in everyday life, such as cameras, credit cards, among others. In this situation, the question arises: what are the implications of the insertion of ICTs in society for people's daily actions?

Considering (a) and (b), Floridi (2002, 2011) argues that IF constitutes a new paradigm and an autonomous area of investigation in Philosophy. It is characterized as a new paradigm, as it would break with previous paradigms of Philosophy, since it is neither anthropocentric nor biocentric, admitting information as the central focus in the analysis of concepts and social dynamics. On the other hand, the autonomy of the IF would be sustained by the presence of its own topics (problems, phenomena), methods (techniques, approaches) and theories (hypotheses, explanations), according to other areas already recognized as legitimately philosophical, Floridi, 2002, 2011; Adams & Moraes, (2014).

What is Information?

Among the topics of IF, the question "what is information?", referring to the ontological and epistemological natures of information, stands out. It is the answer to this question that directs the paths to be developed by the IF and delimits its scope of investigation, Floridi, (2011). The importance of this issue is also due to the fact that, as we have indicated, there is no consensus among scholars in their proposals.

Since the "informational turn in philosophy", several conceptions of information have been developed in an attempt to respond to concerns about the ontological and epistemological status of information. Although Adams (2003) indicates the milestone of the informational turn in Philosophy with the publication of Turing's article in 1950, there are precursors of information theory in several areas, especially in Semiotics, such as the works of Charles

S. Peirce (1865-1895). Some examples can be given with the following proposals:

- Wiener (1954, p. 17): "The commands through which we exercise control over our environment are a type of information that we impose on it." In addition, for this author, information would be a third constituent element of the world, alongside matter and energy, and would not be reducible to them.
- Shannon & Weaver, (1949/1998): the authors establish, the Mathematical Theory of Communication, a technical notion of information conceived in probabilistic terms resulting from the reduction of possibilities of message choice, which can be understood objectively.
- Dretske (1981): information is understood as a commodity that exists objectively in the world, independent of a conscious mind of the first person who grasps it. The information would constitute an indicator of regularities in the environment, from which representations, beliefs, meaning, mind, mental states, among others, would be made.
- Stonier (1997, p. 21): information would be on the physical plane, objectively, and physics theorists, in turn, would have to expand their vocabulary and admit *infons* (information particles) as a constituent element of the world. «(...) information exists. It does not need to be perceived in order to exist. It does not need to be understood in order to exist. It doesn't require intelligence to interpret it."
- Floridi (2011, p. 106): «Information is a well-formed piece of data, with meaning and truth». Well-formed and meaningful data that refers to the intrinsic relationship that the data would need to possess in relation to the choice of the system, code, or language in question. These would have their aspect of "truth" and "truth" related to the proper provision of the content to which they refer in the world.
- Gonzalez (2014): conceives of information as an organizing process of dispositional (counter-factual) relations that bring together properties attributable to material/immaterial objects, structures or forms) in specific contexts.

Information and Truth

Although the concepts of information indicated are different, there is in common the naturalistic stance in relation to the objective aspect of information. Moreover, proposals such as those of Dretske and Floridi denote an intrinsic relationship between information and truth. According to Dretske (1981, p. 45), characterizing "false information" as information would be the same as saying that "rubber ducks are types of ducks". Since the information could not be false, the information would be genuinely true and would necessarily tell about its source. This source can be interpreted as the world itself, making it possible to deal with another problem of IF, that is: what is the nature of knowledge? Regarding the nature of knowledge, the theories of knowledge stand out, from which it is analyzed through the relationship between the agent, the cognitive and the world. For Dretske (1981, p. 56), the information processors of the sensory systems of organisms are channels for the reception of information about the external world.

The naturalistic stance in Philosophy consists in disregarding the supernatural in the explanation of nature and mind, conceiving reality to consist only of natural elements and laws, which are explained through scientific methods. The term "natural" would encompass other terms such as "physical", "biological" or "informational" that express a rejection of transcendent assumptions in the foundation of a priori knowledge (Moraes, 2014), the acquisition of knowledge. (Adams, 2010), in turn, argues that knowledge acquires its properties from its informational base; Thus, if someone 'knows that P' it is because he is told 'that P'. In such a relationship, knowledge is about the world, about truth, constituting the bridge between the cognitive agent and the world.

In addition to the problems about the ontological and epistemological natures of information, and the nature of knowledge, the following questions are part of the IF research agenda: "what is meaning?", "what is the relationship between mental states and informational states?", "could reality be reduced to informational terms?", "can information be the basis of an ethical theory?", among others. After presenting the topics (problems) and theories (hypotheses and explanations) of IF, we highlight two methods specific to this area of investigation: the "synthetic method of analysis" and the "levels of abstraction".

Such methods come from the influence of Turing's work in Philosophy (marked, in particular, by the informational turn). The "synthetic method of analysis" is the result of the hypothesis of (Turing, 1950), according to which the study of the mind is appropriate when carried out through the use of mechanical functions that could be manipulated by digital computers (Gonzalez, 2005; Floridi, 2012). By means of such functions it would be possible to construct mechanical models of the structure and dynamics of intelligent thought. The understanding that underlies this conception is that the ability to manipulate information in a mechanical way constitutes thinking.

This understanding enabled the development of mechanical models of the mind, which initially generated two strands in Cognitive Science (Teixeira, 1998): strong Artificial Intelligence, which defends the thesis according to which mechanical models of the mind, when successful, not only simulate/emulate mental activities, but explain and instantiate such activities; and weak Artificial Intelligence, according to which the model is only a limited explanatory tool of intelligent mental activity. The common point of these notions is that they both accept the thesis that to simulate is to explain, in order to attribute to mechanical models, the value of theories.

What is the relationship between information and intelligent thinking?

The "levels of abstraction", in turn, derive from Turing's algorithmic approach, which is summarized by (Floridi, 2013b, p. 210) as follows: We have seen that questions and answers never occur in a vacuum, but are always embedded in a network of other questions and answers. Likewise, they cannot occur in any context, without any purpose, or independent of any perspective. According to this perspective, a philosophical question is analyzed considering its context and purpose, which delimit the field of possibilities for adequate answers.

Considering the topics, theories and methods of IF, Adams & Moraes (2014) propose the "argument from analogy" to analyze the autonomous aspect of IF. These authors point out that, like the Philosophy of Mathematics and the Philosophy of Biology, IF has characteristics such as:

- Proximity to the scientific approach, epistemological and metaphysical problems, as well as the presence of problems of its own not previously dealt with in other areas of Philosophy. Given that IF shares characteristics present in areas already recognized by philosophical society as legitimate, it would be counterintuitive not to accept IF as an autonomous area of investigation in philosophy.

As we have indicated, the development of information studies in the philosophical-scientific sphere contributed to the constitution of IF in the academic sphere. This is illustrated with the constitution of FI, as an autonomous and interdisciplinary area of Philosophy: interdisciplinary due to its relationship with Computing, Sociology, Engineering, among other areas, generating methods and theories to deal with its problems; and autonomous, due to its own (and new) problems. In line with the development of the academic field of IF, the influence on the social sphere is also highlighted, illustrated by the growing presence of ICTs in the daily lives of people and organizations. Such presence would be influencing the dynamics of contemporary society, constituting the "Information Society".

3. 3 POLITICAL SCIENCE
Introduction

Machiavelli (1469-1527) is considered the founder of modern political science, developing his work throughout the 16th century. One of the goals of political science is, through observation, to establish a series of patterns and correlations that serve to predict what might happen in the future when a political phenomenon occurs. It is not a question of a visionary prediction, but of knowing more or less the behaviour and evolution of events.

Powers

Political science has many branches of study. Just as economics has two major branches of macroeconomics and microeconomics, political science has its own:

- **Political power**: - Many authors throughout history have studied power and its relations with individuals. There are two broad definitions, power as an instrument, as something that is maintained, and power as an effect that derives from the relationships between individuals. Some of the authors who have studied it are Marx, Machiavelli, Weber, Mosca, Hobbes, etc.
- **Authority and legitimacy**: - The author who most developed this aspect of political science was Max Weber. It developed the three types of legitimacy of political power. In the first place, the traditional legitimacy is that exercised by the patriarchs and the ancient patrimonial princes. Another is legal legitimacy, which is the belief that artificially created laws are what support the exercise of power and authority by public officials. Finally, charismatic legitimacy is the characteristic of messianic prophets or political leaders, whose authority is supported by the quasi-mystical belief that they are all-powerful and their actions are always well directed toward the realization of a common or higher good.
- **The State**: - It concerns all the forms of government that exist and the relationship between all its institutions, as well as the actors that enter the political game of the State. It also studies the relations between the three branches of the State: legislative, executive and judicial.

Depending on who controls them and how each of them works, we will be faced with one system of government or another.

- **Public Administration**: - Intergovernmental relations and the performance of the civil service between the different levels of administration are also the subject of study. These levels are international, regional (e.g. European Union), national and local.
- **Public policies**: - Public policies are studied in depth. All the phases through which a public policy passes are analysed, from the identification of the problem to its final assessment. See if the results obtained by it reduced or canceled the problem that caused the development and implementation of the same.
- **Political behavior**: - It is the set of activities carried out by people linked to the politician. According to Verba, Schlozman and Brady, the most visible political behavior is political participation. And this is the set of activities that are carried out to influence political decisions and public policies. And the modes of participation are: voting, participation in campaigns and political organizations, contact with politicians and the media, and political protest. Behavior also studies voting trends. For example, why do you vote? That is, what drives citizens to mobilise and why they vote for one option or another.
- **Political communication**: - It is the field that studies how electoral campaigns should be in order to attract the largest number of voters. But not only does he cling to the campaign, but he studies the communication of the government and the opposition. All of this is geared towards maximizing the vote and the resources obtained.
- **International relations**: - Studies how are the relations between the different States that make up the world, geographical regions (e.g. European Union, etc.) and what are the policies to be adopted in each matter, depending on the situation in which the State finds itself.

For the German sociologist Max Weber (1864-1920), what defines the State is the monopoly of the legitimate use of force. That is, within certain territorial limits, no other group or institution, other than the State, has the power to compel and charge, tax and punish. The state is an abstract entity with sovereign power to govern a people within a delimited territorial area. Thus, it can be said that the constituent elements of the State are: power, citizens, territory, government and laws.

In addition to its role as a service provider, the state is a political entity that exercises sovereign power within a given territory, and that sovereign power is generally accepted as legitimate by the people who submit to it (in the case of a democracy, the citizens). In Democracy, the State is constituted by a set of permanent institutions that organize and control the functioning of society. The so-called three branches of government (executive, legislative, and judicial) divide these functions among themselves.

Executive and Legislative Branch
The executive branch (government) fulfills the role of managing public services (in the areas of health and education, for example) and executing laws. The legislature (parliament) has the power to make laws and amend the constitution. The judiciary (whose highest instance is the Supreme Court) fulfills the role of supervising and judging the application of laws. Also designated by the word state (with a small "e") is each of the political-

geographical divisions of a federal republic. These divisions are autonomous and have their own government governed by a local administrative structure.

Government is a group of people who govern (direct and administer) the state. Therefore, the main difference between the two is that the government is an organ that is part of the State, fulfilling the functions of managing resources (natural, financial, business and people) and the various public services and executing the laws.

Generally speaking, governments are transitory in nature. This is the case in democracies, where there is alternation of power. In democracies, the political group occupying the government can be replaced, for example, every four years (when there are elections). In dictatorships, governments can last for decades. The State, on the other hand, has a permanent character – it can be said that governments pass away, but the State remains.

A nation is a group of people who are held together by "social ties" that create a kind of identification between them. A nation can be defined as a group that has a "personality of its own", united by common interests and cultural traits. The state, on the other hand, is an abstract entity that exercises sovereign power within a given territory. To exist, the nation depends on a sense of belonging. The state is linked to the question of power.

In the past, attempts have been made to define a nation based on racial criteria (a theory that does not hold water). A more accepted definition of a nation places emphasis on its cultural aspect - customs, language, beliefs, etc. However, some authors say that this criterion, by itself, does not define the term, since there are nations, made up of a plurality of cultures and languages.

Politics is the activity of governance, the state and power relations and also an art of negotiation to share interests. The concept of politics originates from the Greek politikós, a derivation of polis meaning "city" and tikós, which refers to the "common good". The meaning of politics is, in general, related to what concerns the public space and the good of citizens and their administration.

Politics is the proper activity of the city, it refers to human relations in a common space, divided and negotiated between individuals. The political system, on the other hand, is a form of organization and government that encompasses political institutions that make up a state. Monarchy and Republic are the traditional political systems. Within each of these systems, there may still be significant variations at the level of the organization. For example, Brazil is a Presidential Republic, while Portugal is a Parliamentary Republic. The term can also be used to refer to a set of rules or norms of a particular group and the way people relate to achieve a common goal.

The emergence of politics occurred in Ancient Greece, when the need to create rules for the functioning and organization of Greek cities (polis) was perceived. The first record of this type of political organization took place in the city of Athens and this system became known as "Athenian democracy".

Citizens became responsible for the administration of the city, giving rise to the public space, the common space. It was the Greek philosopher Aristotle who initiated the reflection on politics from his studies, on the forms of government and the functioning of Greek cities. According to Aristotle, human beings are political "animals", that is, they are determined by nature and to live in society and organize the forms of coexistence. The city is posterior

to the people. He who decides to live outside of society, denies his own nature, is superior or inferior to human beings, a God or a beast.

Political Systems

Political parties are made up of groups of people who come together because they have common ideals, interests, principles, goals, and ideologies. Thus, the function of a party is to represent a certain type of thinking about its political values. In Democracy, the existence of political parties is fundamental, as a form of access to public office, in elections, to represent their ideals of society, during the occupation of political mandates. The existence of political parties also guarantees the representativeness of different ideals within a democratic political system. There is no Democracy without Political Parties.

Public policies consist of actions taken by the Government that aim to respond to the expectations and aspirations of the various sectors of civil society. To this end, the rights that must be guaranteed to the citizens of a country are created and monitored. These policies are often implemented together with and with the support of NGOs (Non-Governmental Organizations) or private companies. As for their types, public policies can be:

- Distributive.
- Redistributive.
- Regulatory.

They can be implemented, for example, as an offer of services or the granting of social and economic benefits to the population. Public policies can exist in various sectors, such as industrial, institutional, agricultural, educational, health, assistance, and social inclusion.

3. 4   LEGAL SCIENCES
Introduction

The Legal Sciences , also called **legal sciences,** are those that carry out the complex and constant study of the legal order and its application in society. The **Legal Sciences**   perform the interpretation of norms relating to social phenomena. **The basis** of these sciences is conflicts between humans. In a community of people, norms set the parameters on which these relationships are based on that law and this law must be fully complied with, otherwise those who defend justice must act with discipline to apply it.

As society progresses, the Legal Sciences always seek to take a step forward with the aim of controlling the relationship between the people of the community and the foreigners with the inhabitants of the population. **The history** of Roman law shows us what life is like for that individual who wanted to conquer, dominate, and expand his power throughout an entire region. The different phases **of the Roman government (monarchy, republic and empire)** show us an interesting characteristic of the legal sciences in ancient times and comparing them with what is understood today as law gives us an understanding of the relevance of the facts that were generated at that time.

The greatest responsibility of the legal sciences is to integrate all human beings into a rational system of laws which, while true, is rooted in habitual law, must be maintained in conjunction with a standard of principles and **values such as morality, fairness, and justice.** Maintaining in society a balance between objective law (**the established norm)** and subjective law **(man's ability** to decide his destiny) can be called art, a profession that is studied every day as new situations are faced by man. The legal sciences

are studied by man in various ways, in fact, what gives so many nuances to the study of law, are **the cultures, customs** and traditions that man carries with him in community.

The science of law cannot be studied only under the abstract aspect of the norm, but with all its correlations with the world of social experience. Reale (1986, p. 62): *The science of law or jurisprudence means the system of norms or legal rules that outlines certain forms of behavior for men, giving them the possibility to act.*

The term "science" means knowledge, since it derives from the Latin word *scientia,* which comes from *scire,* that is, to know. For Tércio Sampaio Ferraz Junior (1986, p. 9), "the term science is not univocal, if it is true that with it we designate a specific type of knowledge." It is not possible to confuse legal technique with the science of law. One of the most complex and fascinating is, of course, the part of legal technique that deals with the interpretation/application of legal models. This is because, the doctrine understands that, if the Law is expressed through the law, an expression of the sovereign will of the nation, for the law to fulfill its purpose of harmonizing disputes and disputes, a specific technique, the legal technique, is essential.

The Legal Technique is the set of skills that must be observed in order to achieve goals or carry out practical tasks in the different areas of law. It is, therefore, an eminently practical or instrumental knowledge. The research of modern technology in the face of law is motivated by an ethical concern that is not alien to any philosophical current of the last two hundred years. It is, in fact, the culmination of a Western metaphysical tradition which, in the realm of scientific thought, has increasingly sought to purge the explanation of the world of theological and supernatural elements.

Physis and *techné are opposed* to each other insofar as the latter limits the former according to a man-made determination. However, they are also in a complementary relationship, since *physis* is a prerequisite for *techné.* Thus, it is observed that there is no relationship between *physis* and *techné* that points to a supersession of the former by the latter.

Let us remember, however, that technical knowledge does not equate to technique. The technique of law is an instrument of our time, but it is our time that feels the need to base legal technique on a scientific knowledge that can follow the path of understanding in many ways, thus being the task of investigating law as a legal technique, and the relations of modern technique as law, imposes itself as a way of dealing with the perplexity created by the coexistence with new forms of technologies and their applications.

In Fredie Didier's thought, the General Theory of the Process is framed by means of logical-legal concepts that determine the object of legal science. The author (2012, p.65) teaches:

(...) the science of procedural law is also a system of concepts. Much of the concepts with which processualists (process scientists) work is the product of the General Theory of Process. These concepts are the fundamental procedural legal concepts (procedural logic-legal). In addition to these fundamental concepts, Process Science also operates with procedural positive legal concepts.

In this sense, science shows itself as the rationalization of technique, which will produce a grounded clarification of

knowledge, based on theorized and testified hypotheses. Procedural Law, therefore, as a propaedeutic and pragmatic teaching, must make use of epistemology (procedural technique – procedural science – procedural theory – scientific legal criticism) so that it can move away from pragmatically imposed ideologies, seeking through criticism and the clash between theories, to eliminate errors and approach an epistem, which will guarantee a legitimate scientific production.

Centralized Databases
While new biometric techniques may in certain circumstances be legitimate tools for the identification of suspects, the issue of storing biometric data outside an identity document, such as a passport, but in a centralised database, is a cause for concern. Such practice increases the risks of information insecurity, by leaving individuals vulnerable in relation to the State. For this reason, in 2009, the United Nations was asked by several Data Protection and Privacy Commissioners to prepare a legally binding instrument to clearly and in detail set out the rights to data protection and privacy as human rights to be realized.

Since then, governments have been invited to adopt legal instruments in these terms, as well as the Council of Europe, in accordance with Article 23 of the Council of Europe Convention on Data Protection. However, they must make a serious attempt to make progress at the international level in improving universal standards of privacy protection, not only in the interests of protecting individual rights but also, although not equitably, in the interests of lowering barriers to the flow of data across borders. On the other hand, there have been some developments at the national level that have led to increased concerns, even in some of the most liberal societies. For example, the Special Committee on the Constitution of the House of Lords in the United Kingdom stated, "Surveillance is an unavoidable part of life" in the United Kingdom.

Every time we make a phone call, send an email, surf the Internet or even walk down our avenue, our actions can be monitored and recorded. To respond to crime, combat the threat of terrorism and improve administrative efficiency, successive governments in the UK have gradually built up one of the most comprehensive and technologically advanced surveillance systems in the world. At the same time, the private sector has undergone similar developments that have contributed to a profound change in the way of life in this country.

The development of electronic surveillance and the collection and processing of personal information have become invasive, routine, and almost taken for granted. Many of these surveillance practices are unknown to most people and their potential consequences are not fully known." (Sources: Peter Malanczuk. 2009. Data, Trans boundary Flow, International Protection; 31st International Conference of Data Protection and Privacy Commissioners. 2009. Standards on Privacy and Personal Data.).

Internet Privacy and Jurisprudence
According to Schreiber, (2013, p. 134), the evolution of the right to privacy is more recent than that of some other personality rights, such as honor, for example, and informs that the initial milestone for its emergence would have been the publication in the Harvard Law Review, in 1890*, of the article The Right to Privacy*, which demonstrates the relevance in the configuration of this right. It also states that "in its initial formulation, the right to privacy was identified with the protection of the intimate, family, and personal

life of every human being. It was, in essence, a right to privacy." However, the concern with the privacy and intimacy of the human person is much older, since it dates back to the beginnings of Judeo-Christian culture.

According to Leonardi (2012, p. 46), the non-uniformity in use, as well as the lack of a specific definition for the term, gives arbitrariness to the use and violation of this right. The "lack of clarity about what privacy is, creates complications for defining public policies and for solving practical cases, because it becomes very complex to identify the damage that has occurred in a given situation." Reinaldo Filho, (2002, p. 28-29), states that: [...] as there is no constitutional or legal definition of the extent of this right, there may be a differentiated treatment by judicial means, varying according to the social and political context, in which issues related to privacy are discussed; Due to the circumstances in which this issue is involved, it is difficult to predict the outcome of the judicial disputes in each specific case, and it is, on the contrary, easy to predict a tendency towards mismatch of judicial decisions, an obstacle in the face of the harmonization of jurisprudence.

At the international level, there is also no exact and unambiguous definition for the term "*privacy*", since "even the European Court of Human Rights has stated that it does not consider it possible, nor necessary, to seek an exhaustive definition for the notion of private life". Thus, the main problem encountered in the definition is the production of concepts, which sometimes end up becoming excessively restrictive or excessively comprehensive, that is, "the insistence on isolating the essential characteristics of privacy and bringing them together in a unitary concept, applicable indiscriminately, in any situation, is a task that tends to fail",

Combating Terrorism and Erosion of the Right to Privacy

States, in dealing with current counter-terrorism policies, often emphasize the existence of two new dynamics that need to be considered together with the protection of the right to privacy. First, States argue that their ability to prevent and investigate acts of terrorism is strongly related, almost exclusively, to increased surveillance powers.

For this reason, most counter-terrorism legislation since the terrorist attacks of 11 September 2001 has focused on increasing the surveillance powers of governments. Secondly, the States consider that, because terrorism is a global issue, the search for terrorists cannot be limited by national borders. The assistance of third parties, potentially in possession of extensive amounts of information on individuals, is a rich resource for identifying and monitoring terrorist suspects.

As a result of these perspectives, states that do not have constitutional or legal safeguards have been able to radically transform and expand their surveillance laws with only a few restrictions. In countries that have such constitutional and legal safeguards, governments have questioned the protection of the right to privacy by failing to apply and transform existing safeguards by virtue of cooperation with third countries or private individuals, or by replacing domestic surveillance systems with extraterritorial ones.

The rule of law requires that there be a factual basis, relating to an individual's behaviour, to justify the suspicion that he or she is involved in criminal activities. Developments in recent years have shown that there has been a disproportionate increase in communications surveillance by intelligence services and law enforcement agencies around the world. There is an undeniable

importance attached to new technologies (e.g. eavesdropping and surveillance technologies that can access the geographical location of mobile phones, technology that informs governments about the content of private text conversations, Voice over Internet Protocol (VoIP) users, or that installs spyware on suspects' computers, to allow remote access to computers). In some countries, encryption technologies have even been banned, which make communications more secure but more difficult to intercept. (Source: United Nations. 2009. Report of the Special Rapporteur on the promotion and protection of human rights and fundamental freedoms while countering terrorism).

Countries have increased their activities in identifying, examining and labelling the general public, under the guise of "counter-terrorism measures". To this end, they use a number of techniques that may violate people's right to privacy: when surveillance takes place in public places and concerns wider groups of people, surveillance measures are typically subject to weaker regimes of authorisation and judicial oversight. Existing human rights standards have been relaxed, twisted and broken through the use of interceptions and searches, through the expansion of surveillance of finances, communications and travel data, through the use of profiles to identify potential suspects, through the compilation of various lists and databases, to calculate the likelihood of suspicious activity and to identify individuals deemed likely to be subject to increased surveillance. In recent years, even more innovative techniques have been applied, such as the collection of biometric data or the use of body examiners that can see through clothing.

The general alarming trend is for countries to increase their powers to intercept, question, inspect and identify individuals, while at the same time reducing internal legal controls to prevent the misuse of these powers. These powers have given rise to concerns about ethnic profiling and discrimination in a number of countries, and concerns that these new powers will cause serious tensions between citizens and the state. (Source: United Nations. 2009. Report of the Special Rapporteur on the promotion and protection of human rights and fundamental freedoms while countering terrorism).

The use of biometric techniques, such as facial recognition, fingerprints and iris scanning, is a key component of the new identification policies. Due to the increased collection of biometric information, the percentage of errors and failures may increase. This can result in the wrong criminalisation of individuals as well as social exclusion. In addition, unlike other identifiers, biometrics cannot be revoked. Once copied and misused by a party, it is not possible to give an individual a new biometric signature. Also related to this issue is to mention that, contrary to its scientific objectivity, DNA evidence can also be falsified. The centralised collection of biometrics risks multiplying miscarriages of justice.

Vigilance

When can personal data jeopardize people's privacy? Privacy is jeopardized (or violated) when someone, or public or private institutions, obtain and use such data, without their knowledge and consent, namely for criminal, economic purposes, but also for the purposes of surveillance by the State (police, finance, etc.).

Edward Snowden in June 2013 made a revelation about the violation of people's privacy, "in the form of Global Surveillance of communications and information traffic carried out through various Programs, among them, the PRISM surveillance program of the United States". It is one of the programs of the NSA's global

surveillance system that was kept secret from 2007, until its revelation in the press on June 7, 2013. Its existence was made public through publications made by the British newspaper The Guardian, based on documents provided by Edward Snowden.

We must bear in mind that the USA is where the big Internet giants (Google, Facebook, Amazon, Apple, etc.) are located, serving the rest of the world. Europe realized that the U.S. data protection system was not as efficient as desired for the protection of individual rights, namely the privacy of citizens and European governments themselves. The processes of legislative changes then began more intensively, especially at the level of international data sharing agreements between the USA and the European Union. Data collected legally by private agents may also be used by States for public purposes, such as security policies, protection against cybercrime, terrorism and surveillance.

Surveillance of people is also a situation that is due to the practices of our digital society – always being online, and particularly through the use of electronic devices with a GPS connection (see the case of routine applications on mobile phones - Foursquare, Google Maps, Nintendo Pokémon Games, etc.) and any other that allows the location of the user, that permanently, and knowingly, make physical location data available. In this case, the permanent surveillance of people will not be violating their right to privacy.

In the meantime, the U.S. has decided that the Internet would be neutral, that is, it is the principle that guarantees that telecommunications operators that provide Internet access service cannot discriminate against access to content. That is, they should treat all online traffic as equal. These are the rules that make the Internet not like television, which limits access to some channels depending on the package you pay for. Currently, content on the network is accessible to anyone, but in the future, North American internet operators (Verizon, Comcast, AT&T, Cablevision and Time Warner) will be able to charge different amounts for access and content on the network. This amendment removing net neutrality is a step backwards in the sense that a global communication area, which is now free for all, will now be accessible only to a few, namely those with more economic power. Are the rights to freedom of expression, information, and free access to the internet being constrained? Are we giving up freedom in favour of privacy and security?

Civil law
Law - is the set of legal rules and principles that dictate the rules that must be applied in judicial and extrajudicial procedures for the resolution of civil conflicts.

When a substantive right (or substantive right) is contested by one party against another, the so-called legal debate is formed, which must be conducted through a system of previously defined rules. That system is precisely civil procedural law, which dictates all the rules of jurisdiction, action and procedure necessary to resolve this conflict of interests.

Because it is extremely comprehensive, civil procedural law is also applied in a subsidiary manner in proceedings of other natures (such as tax, administrative or even criminal) supplementing any absence of a regulatory rule.

Principles of civil procedural law
Principles are notions that guide the application of the law as a whole. They are implicitly or explicitly present in the legal system and represent the values that must be observed by legal operators

in the application of norms. The principles of civil procedural law may be constitutional if they derive directly from the Constitution, and in all other cases infra-constitutional.

Principles to be applied in the processes:

I. Legal process
It is the principle that guarantees everyone the right to a fair trial, with all the steps provided for by law, including obligations and guarantees. It lays down the rules and procedures for a procedural act to be considered valid, effective and perfect.

II. Adversarial and Defense
The adversarial procedure is the right of reply guaranteed to the defendant at all stages of the proceedings. The comprehensive defense ensures that, in the presentation of the response, the respondent can resort to all appropriate procedural tools.

III. Isonomy
Isonomy is the principle that all people are governed by the same rules, the condition of equality. As a legal principle, it is equality among all citizens, regardless of class or gender.

Natural Judge
The principle that no one shall be prosecuted or sentenced except by the competent authority. This principle is reflected in the rules of jurisdiction, as well as determines the **impartiality of the judge**.

Advertising
The principle of publicity In order to meet the public interest and ensure the supervision of justice, procedural acts must be public (except those that require judicial secrecy), under penalty of nullity.

Sources of civil procedural law
The sources of law are the ways in which a norm is generated and introduced into the legal system. As in most branches, the sources of civil procedural law are: **law**, customs**,** doctrine **and** jurisprudence**.**

The law as a source of law must be understood in a broad sense. Thus, in addition to ordinary, complementary laws and other types of laws in the strict sense, the internal rules of the courts and the codes of judicial organization of the states are also sources of civil procedural law.

Right to Be Forgotten
With information as the driving force of contemporary society, the essential concern is that globalized societies must not lose sight of intrinsic and fundamental values, such as the dignity of the human person, as the supreme value of democratic society. One of the **biggest problems for the man of the 21st century is the breach of his privacy.** Today it is difficult to have privacy. Because modern society imposes constant vigilance on us. This is part of modern life. The 21st century is working and has a hard time establishing what the limits of privacy are. How long can we maintain privacy about our actions, about our data, and to what extent, this privacy ends up harming the collectivity.

The right to be forgotten has its historical origins in the field of criminal convictions. It emerges as an important part of the **ex-detainee's right to rehabilitation, that is, to start over**. It does not attribute to anyone the right to erase facts or rewrite one's own history, but only assures the possibility of discussing the use that is given to past facts, more specifically the way and purpose with which they are remembered. The right to be forgotten is fundamentally related to the right to information, as a fundamental

right of the human person. In this case, the information to be disclosed must be weighed against the right to be forgotten, including when it comes to the processing of data on the Internet. In ruling on the matter**, the Court of Justice of the European Union** issued a decision in 2014 (two thousand and fourteen) indicating its position of guaranteeing the right to be forgotten, based on the fundamental right to privacy, prevailing over the right of access to information.

The fundamental rights require that the information in question should no longer be available to the general public because of its inclusion in the list of results; those rights prevail, in principle, not only over the economic interest of the operator of the search engine, but also over the interest of that public in accessing the information in a search on that person's name. The right to be forgotten is solidified in the premise that it is not authorized that a certain event, even a true one, occurred in a certain period of an individual's life, be disclosed to the population, since it would cause suffering and inconvenience to that person, his family and his friends. It is important to note that the right to be forgotten can also be treated as the "right to be left alone" or the "right to be alone". Likewise, this right is consistent with other precepts solidified in the **Magna Carta, such as the right to privacy, honor, image and intimacy.**

Politicization of the judiciary
The politicisation of justice and popular sovereignty worries us about the reduction of democracy to the rule of law. It means that popular sovereignty is now being protected by the judiciary, crystallising the idea that the legitimacy of democracy is subject to the decisions of the constitutional courts. Citizens are irresponsible for greater participation in the country's political life; In this context, the imbalance between competences and a negative policy of general perception and even its criminalization are established.

The Constitution is a political charter of the nation, which is a purely legal charter. This means that popular sovereignty is now being protected by the judiciary, crystallising the idea that the legitimacy of any democracy comes from the constitutional courts. Judicial decisions and political decisions are distinct forms of conflict resolution.

The theme of the politicization of justice brings us to the tension between democracy and the rule of law. The politicization of justice reduces democracy to the rule of law, and we are the achiever who has reached unimaginable heights. In this context, in which the conservative idea of democracy emanates from law and not from popular sovereignty, the criminalization of politics is a consequence of politicization. This is extremely worrying because it generalizes a negative idea of politics.

The politicization of justice is not a legal problem, it is a political one. It has several causes, but it is in the social sphere that such a phenomenon gathers the favorable conditions for its occurrence. To live in a hierarchical and, in many ways, authoritarian society. Our political culture still has remnants of conservatism. In a society that does not know the idea of respect for human rights, it is easy to convince people that the solution to social and political problems lies much more in the courts than in politics. This affects popular sovereignty, as it repudiates citizens from greater participation in the political life of the country.

Politicization favors the removal of politics in democracies and affects the balance of powers, since it provides for the invasion of law in politics. It is dispossessed popular sovereignty that plays

its leading role in democracy, giving way to judicial hegemony. The depoliticization of democracy will give way to *the Juristocracy.*

The problem of the defense of ethics in politics, evaluated with purely moral criteria. There is a difference between morals and ethics. Acting in a strictly moral way requires only a certain degree of obedience; Acting ethically requires critical thinking and responsibility. Obviously, politics must be judged by the moral criterion; It is not independent of men's morals and public ethics, but there are criteria that are purely political.

Moral values preclude in the name of a prohibition. Politics is for the common good, for the public interest. That is why the criterion of morality cannot be the only one, because morality tells us what not to do, not what to do. For this reason, morality can be used by conservative sectors and the media to paralyze politics, both to prevent the debate of controversial issues in Parliament, and to demonize the adversary, turning him into an enemy to be eliminated.

The debate on politics, reduced to the problem of corruption, as a purely moral and not a political issue, gives rise to demagogic discourse and hypocrisy. This has more to do with moralism than with morality or ethics. When everything is moral, one thinks more about the virtue of individual men than about the value of a political project or the importance of some public policies, which substantially affect the notion of democracy.

Politicization occurs to protect the Fundamental Rights (freedom and equality) of citizens, directly influencing management procedures, also seeking to guarantee, in relation to public policies, fair procedure, equal opportunities, transparency, etc. This type of politicization is perhaps the most evident, as part of society, that Hirschl, Thurin (2006, p. 725) calls it "*Judicialization from below*."

Politicization is a polysemic term, taking on similar but different concepts depending on the political and legal culture of each country's population and society in general. It is clear that politicization occurs when a judicial decision interferes with issues whose decision-making would fall, in principle, within the bodies of political representation (legislative and executive powers).

3. 5 EUROPEAN UNION (EU)
Origin of the European Union
The **European Union** (EU) was originally created by six founding states in 1957 and has grown to the current 27 member states. There have been seven successive enlargements (1973, 1981, 1986, 1995, 2004, 2007 and 2013). The largest occurred on May 1, 2004, when ten states joined.

The European Union has 27 member states since January 31, 2020, with the withdrawal of the United Kingdom. Negotiations are underway with other states (Montenegro and Turkey) and other countries are pre-candidates (Serbia and the Republic of Macedonia), while Bosnia and Herzegovina and Kosovo have expressed their intention to start the application process in the future. The enlargement process is sometimes referred to as European integration. However, this term is also used to refer to the intensification of cooperation between states. Four European countries are not candidates for membership but have free trade agreements with the European Union: Liechtenstein, Iceland, Norway and Switzerland.

On February 28, 2022, Ukraine made its application to join the European Union official.[1] Soon after, on 3 March 2022, Georgia and Moldova also officially submitted their applications for

membership of the Union.[2] To join the European Union, a state needs to meet the economic and political criteria, known as the Copenhagen Criteria. According to the Treaty on European Union, each member state and the European Parliament must agree to any enlargement.

The **European Union** (EU) is the world's largest Economic Bloc, whose European population is estimated at 500 million people, which corresponds to 7% of the world's population, encompasses 23 official languages and about 150 regional languages. The objectives of the European Union are to maintain peace among its members and to promote the free movement of people, goods and capital. In addition, it seeks the development of a European financial market, increase the quality of life, health and work of European citizens and reduce social and economic inequalities and social inequalities in member countries.

Countries of the European Union

Below is the list of countries with their year of entry into the bloc:

- Germany (1952)
- Austria (1995)
- Belgium (1952)
- Bulgaria (2007)
- Cyprus (2004)
- Croatia (2013)
- Denmark (1973)
- Slovakia (2004)
- Slovenia (2004)
- Spain (1986)
- Estonia (2004)
- Finland (1995)
- France (1952)
- Greece (1981)
- Hungary (2004)
- Ireland (1973)
- Italy (1952)
- Latvia (2004)
- Lithuania (2004)
- Luxembourg (1952)
- Malta (2004)
- Netherlands (1952)
- Poland (2004)
- Portugal (1986)
- Czech Republic (2004)
- Romania (2007)
- Sweden (1995)

Map of the European Union with the United Kingdom, which left the bloc from January 2020

Norway, Iceland, Switzerland and Liechtenstein are part of the European continent but are not members of the European Union. They do, however, participate in the single market, but not in the customs union. The candidate countries for EU membership are: Republic of North Macedonia, Iceland, Montenegro, Serbia and Turkey. Potential candidates include Albania, Bosnia and Herzegovina and Kosovo.

Euro area

The Eurozone corresponds to the 19 EU member countries that have adopted **the euro as their currency**, with Estonia being the last country to adopt it in 2011. Some countries, however, such as Sweden and Denmark, preferred to keep their national currencies and not join the eurozone.

History of the European Union

The origin of the European Union dates back to the end of the Second World War, when European countries saw that they would no longer be able to face each other in a conflict, as the destruction could be total. Thus, the main purpose of the creation of the bloc was to ensure peace on the continent, especially between Germany and France. To do this, it was necessary to strengthen European countries by creating a common market to reduce export costs and boost the economy. First, the ECSC (European Coal and Steel Community) was created in 1952. This was made up of Germany, Belgium, the Netherlands, Luxembourg, France and Italy, the "Europe of the six".

In 1957, the European Common Market (ECM) or European Economic Community (EEC) was created, with the adhesion of countries such as England (1973), Ireland (1973), Denmark (1973), Greece (1981). With the end of the dictatorships in the Iberian Peninsula, Spain and Portugal joined the EEC in 1986, which became known as the "Europe of the Twelve".

In 1992, the Maastricht Treaty established the creation of a single currency, the **Euro,** in order to strengthen the economy and have a currency that could compete with the dollar. The euro would come into circulation in 2002. In 1995, Sweden, Finland and Austria joined the European Union, forming the "Europe of 15". Another important step in the construction of the European Union was the signing of the Schengen Agreement in 1997. This allowed for the free movement of people in all signatory countries, without the need for border controls.

With the end of the Soviet Union and the Cold War, Eastern European countries are asking to join the bloc. In 2004, ten more countries joined the bloc: Poland, Hungary, the Czech Republic, Slovakia, Slovenia, Estonia, Latvia, Lithuania, the islands of Malta and Cyprus. The so-called "Europe of 27" is formed with the integration of Bulgaria and Romania in 2007. Finally, the last country to sign the agreement to join the European Union was Croatia, on June 30, 2013.

Brexit

In 2016, the United Kingdom held a referendum where 51% of people voted in favor of leaving the European Union. This action was called "Brexit", a term that came about from the union of the words "Britain" and "exit". The withdrawal of the United Kingdom was formalized on January 31, 2020.

Institutions of the European Union

To coordinate the interests of the Member States, the European Union has financial, political and legal institutions. They are:

- European Parliament
- Council of the European Union
- European Commission
- European Council
- European Central Bank
- Court of Justice of the European Union
- European Court of Auditors

Curiosities about the European Union

- Despite not being a country, the European Union has a flag and an anthem, Beethoven's "Ode to Joy".
- European Union Day is celebrated on May 9.

Human rights

Human rights are rights inherent in all human beings, regardless of race, sex, nationality, ethnicity, language, religion, or any other condition. As such, rights mean that they are not merely privileges, granted by other human beings, but rather qualities inherent in the status of being human and for this reason cannot be disrespected at someone's whim. Human rights are an integral part of the essence of man, and fundamentally, as a social and gregarious being, they play a decisive role in the maintenance, harmony and safeguarding of freedom, peace and justice among individuals, so that they feel protected from abuses such as discrimination, intolerance, injustice, oppression and slavery that can arise in this coexistence. as well as, feel free and free to assume themselves with the dignity of what they are – **human beings**.

Human rights are based on the basic principle of **human dignity**, which according to Kant "is the value of everything that is priceless, that is, cannot be replaced by an equivalent. Dignity is a quality inherent in human beings, as moral beings (...)". According to Kant (2005), human dignity is much more than a moral conception, it is an anthropic principle, in which any valid theory about the universe must be consistent with the existence of the human being, that is, the only universe we can see is the universe that human beings possess.

On a legal level, dignity is also a principle of the democratic rule of law and a prerequisite for the full exercise of democracy, since the promotion of the individual as a social being extends to that of the individual with rights. Human rights have a universal and human vocation as the basis of the new universal order. This free, just and solidary society legitimizes the interference of States in the internal politics of other States; the legitimacy of a humanitarian or humanist military war, when human rights are being "vandalized". Human rights do not crystallize in time and space, since man is "adaptable", human rights also change, adapt and improve.

Protection, Rights and Justice

European citizens enjoy a large number of rights, freedoms and protections, including personal, civil, political, economic and social rights, the protection of their personal data, protection against discrimination and the freedom to travel without border controls in most EU countries.

All European citizens enjoy the same fundamental rights, based on the values of equality, non-discrimination, inclusion, human dignity, freedom and democracy. These values, reinforced and protected by the rule of law, are enshrined in the EU Treaties and the Charter of Fundamental Rights of the European Union. Every EU citizen has the right to live, work, study and marry in another EU country. The EU ensures the security of European citizens' personal data and gives them certain rights as consumers.

- Justice and fundamental rights
- Schengen area without borders
- Data Protection - Information Sheets

Citizens enjoy legal protection in any EU country and, thanks to the European Arrest Warrant, criminals can be pursued in other EU countries and repatriated. Judicial authorities cooperate with each other through the European Judicial Cooperation Unit (Eurojust) to ensure that court decisions handed down in one EU country are recognised and enforced in any other EU country.

- Summaries of EU legislation on justice and home affairs

The Court of Justice of the European Union ensures the uniform application of EU law in all EU countries and rules on legal disputes between national governments and the European institutions. In certain circumstances, citizens, businesses or other organisations may also refer an EU institution to the Court of Justice that they believe has violated their rights.

The EU seeks to improve internal security through cooperation on law enforcement, border management, civil protection and disaster management. In particular, the EU takes action against organised crime and helps national police forces to work together through the European Police Office (Europol).

EU countries are also working to develop a coherent European immigration policy that takes advantage of the opportunities offered by legal immigration while addressing the challenges of illegal immigration. Work is underway to improve security through more effective control of the external borders and, at the same time, to facilitate procedures for persons entitled to enter the EU.

- European Agenda on Migration - Factsheets
- European Agenda on Security - Factsheets

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The following text is hereby declared to be the Charter of Fundamental Rights of the European Union.

Preamble
The peoples of Europe, by establishing an ever closer union among themselves, have decided to share a future of peace based on common values. Conscious of its spiritual and moral heritage, the Union is founded on the indivisible and universal values of human dignity, freedom, equality and solidarity; it is based on the principles of democracy and the rule of law.

By establishing citizenship of the Union and by creating an area of freedom, security and justice, it places the human being at the heart of its action. The Union shall contribute to the preservation and development of these common values, while respecting the diversity of the cultures and traditions of the peoples of Europe, as well as the national identity of the Member States and the organisation of their public authorities at national, regional and local level; It seeks to promote balanced and sustainable development and ensures the free movement of persons, services, goods and capital, as well as freedom of establishment. To this end, it is necessary, by making them more visible by means of a Charter, to strengthen the protection of fundamental rights in the

light of societal developments, social progress and scientific and technological developments.

This Charter reaffirms, with due regard for the tasks and powers of the Union and with due regard for the principle of subsidiarity, the rights deriving, inter alia, from the constitutional traditions and international obligations common to the Member States, from the European Convention for the Protection of Human Rights and Fundamental Freedoms, from the Social Charters adopted by the Union and from the Council of Europe, as well as the case-law of the Court of Justice of the European Union and the European Court of Human Rights. In this context, the Charter will be interpreted by the Courts of the European Union and of the Member States, taking due account of the explanations drawn up under the authority of the Praesidium of the Convention which drafted the Charter and updated under the responsibility of the Praesidium of the European Convention. The enjoyment of these rights entails responsibilities and duties, both towards other individuals and towards the human community and future generations.

Right to Privacy

The origin of the concept of human rights originated in the seventeenth century, and is a product of the theory of "natural rights" (Natural rights were established by God and reason, to all men, because they are all equal to each other – Principle of Equality among Men), by John Locke, defender of religious freedom and tolerance. However, in the pre-Christ era, there was already an embryonic perception of the human concept and specificity:

- Cyrus Cylinder decree of 539 B.C., - protects the right to equality and religious freedom;
- The Pact of the Virtuous (Half-al-fudul) – drawn up by Arab tribes around 590 A.D. is considered one of the first human rights alliances.
- No tax may be imposed without the consent of Parliament,
- No subject may be imprisoned without a demonstrated reason (the reaffirmation of the right of habeas corpus),
- No soldier may be quartered in the homes of the citizens
- Magna Carta - establishes equality before the law and the right to property;

After King John of England violated a number of ancient laws and customs by which England had been ruled, in 1215 his subjects forced him to sign the Magna Carta, which lists what later came to be regarded as human rights. Among them was:

- The right of the church to be free from government interference,
- The right of all free citizens to own, inherit property(s), and be protected from excessive taxation.
- The right of widows to own property and to decide not to remarry,
- Establish the principles of equality before the law. This also contains provisions prohibiting bribery and official misconduct. (A Brief History of Human Rights - The Magna Carta (1215);
- The Petition of Right (1628), - the English Parliament passed a Declaration of Civil Liberties, safeguarding civil liberties, such as, the right of *habeas corpus*;
- The Constitution of the United States of America (1787) - defines the basic rights of citizens;

The Declaration of Independence of the United States of America "was the document in which the Thirteen Colonies of North America declared their independence from Great Britain, and it inspired human rights documents around the world." (United States Declaration of Independence (1776).

The Constitution of the United States of America (1787) "is the oldest national constitution, and it defines the principal organs of government, their jurisdictions, and the basic rights of citizens." (A Brief History of Human Rights - The Constitution of the United States of America (1787) and the Bill of Rights (1791).

The Declaration of the Rights of Man and of the Citizen (1789) marks in a broader and more significant way the historical process of Western awareness of the intrinsic value of Man. The French Declaration of the Rights of Man emerged in the context of great political and social upheaval, under the influence of the Enlightenment of natural rights and Renaissance ideas that evoked equality among all human beings, calling into question the ancient ideals

The Bill of Rights (1791) - "... protects freedom of expression, freedom of religion, the right to keep and bear arms, freedom of assembly and freedom to petition.' (A Brief History of Human Rights - The Constitution of the United States of America (1787) and the Bill of Rights (1791).

It was only in the nineteenth and twentieth centuries that significant initiatives were put in place for the international protection of human beings, namely the eradication of the slave trade; treaties aimed at improving the conditions of the sick and wounded in war; the protection of minorities; the creation of the Leagues of Nations; concern for the fair treatment of refugees; the legal status of women, and the creation of the International Labour Organization (ILO), with the humanitarian mission of eradicating poverty and social inequalities, along with concerns about equal opportunities for men.

On October 24, 1945, the United Nations (UN) was created. Its founding principle of seeking and maintaining peace was to rebuild the world on the pillars of freedom and justice, through cooperation between peoples, to strengthen human rights and to seek solutions to the economic, social, cultural or humanitarian problems that occurred after the end of the 2nd World War. A war where many atrocities were committed, 6 million lives were lost among soldiers and civilians, entire cities in ruins and flames in which the Holocaust is an example.

Article 55 of the UN Charter itself proclaims that the United Nations shall promote "respect for human rights and fundamental freedoms *for all without distinction as to race, sex language, or religion.''* Article 55 of the Charter to the UN. In Article 56, the member states express their willingness to develop cooperation actions with the UN, both joint and individual, with a view to achieving those objectives (states with different legal and cultural origins, from all regions of the world).

The Universal Declaration of Human Rights (UDHR), signed on 10 December 1948 by the United Nations General Assembly in Paris, is a landmark document in the history of human rights. In its desire to regulate international relations, in the repudiation of violence and barbarism among peoples, in the maintenance of peace, in its opposition to discrimination and exploitation of peoples, the UDHR established, for the first time in history, the universal protection of human rights as an ideal to be attained by

all peoples and all nations, in the promotion of respect for these rights and freedoms. The 14 signatory States of this Declaration were bound to accept the precepts that, although they do not have coercive value or legal imposition, have ethical and moral value, with the commitment assumed, making them responsible for developing the appropriate legislation, in their countries, so that these rights could be implemented.

The United Nations Universal Declaration of Human Rights marked the twentieth century, bringing the legal and global recognition of human rights, innovating civil and political rights, namely, the right to life, the right not to be subjected to torture or slavery, the right to freedom of thought, conscience, religion and expression. and, in particular, to inspire the constitutions of states and recent democracies. Two decades later, given that the UDHR of 1948 had only the status of a recommendation (resolution) and therefore was not binding, States needed to create other instruments.

At the United Nations General Assembly on 16 December 1966, two multilateral treaties were concluded which recognised and strengthened the rights and duties of the UDHR; more articles were added extending the number of rights, giving them greater protection, surpassing the Fundamental Declaration itself. These Treaties are the International Covenant on Civil and Political Rights (ICCPR) and the International Covenant on Economic, Social and Cultural Rights (ICESCR), which have made human rights binding and binding on signatory states.

The ICCPR is a Covenant that reinforces civil rights (individual freedoms) and political rights (access to justice and political participation). The ICESCR established the human rights - economic, social and cultural - that must be realized in the long term, in a progressive and programmatic manner, whose duty to comply with them is addressed to the States themselves.

The principles of the UDHR are present in almost all humanitarian documents, such as the International Convention on the Elimination of All Forms of Racial Discrimination, the Convention on the Elimination of All Forms of Discrimination against Women, the International Convention on the Rights of the Child, the Convention against Torture and Other Cruel Treatment or Punishment, Inhuman or Degrading, among many others." (Universal Declaration of Human Rights). It was up to the signatory States to transpose them into the domestic legal order of those States, producing new legislation, adapting the existing legislation and giving it effective application in order to ensure that these rules were respected. Failure to comply with the rules, whether by acts or omissions, puts States in a position of having to justify themselves before the International Court of Justice (ICJ).

3. 6 COMPUTER SCIENCE
Introduction

Computer Science is the science that studies techniques, methodologies, computational instruments and technological applications, that transforms information into process data and develops solutions for processing input and output data (transformation of data into information) in the computer. It is not restricted only to the study of algorithms, their applications and implementation in the form of software. Thus, Computer Science also encompasses data modeling and database management techniques, also involving telecommunications and communication protocols, as well as principles that cover other specializations in the area.

As a science, it is classified as an exact science, although it inherits elements of Aristotelian philosophical logic, and therefore plays an important role in the mathematical formalization of algorithms, as a way of representing complex problems, i.e., those that are susceptible to reduction to basic elementary operations, capable of being reproduced through any device capable of storing and manipulating data. One of these devices is the digital computer, which is in widespread use today.

Also of fundamental importance for the area of Computer Science are the methodologies and techniques related to software implementation that address the specification, modeling, coding, testing and evaluation of software systems.

The studies from Computer Science can be applied in any area of human knowledge in which it is possible to define methods of problem solving, based on previously observed repetitions. Recent advances in Computer Science have had a strong impact on contemporary society, in particular applications related to the areas **of computer networks, Internet, Web, Data Science and mobile computing, which are used by many people on Planet Earth.**

History of Computing

The abacus, the first computing tool.

The first known tool for computing was the abacus, the invention of which is attributed to Mesopotamian inhabitants in the years 2700–2300 BC.tag. Its original use was to draw lines in the sand with rocks. More modern versions of the abacus are still used as a calculating instrument. In the 7th century BC, in ancient India, the grammarian Pānini formulated the grammar of Sanskrit using 3959 rules known as Ashtadhyāyi, in a very systematic and technical way. Pānini used transformations and recursion with such sophistication that his grammar possessed the theoretical computational power of the Guiding Machine. Between 200 B.C. and 400, Indians also invented the logarithm, and from the 13th century logarithmic tables were produced by Islamic mathematicians. When John Napier discovered logarithms for computational use in the sixteenth century, there followed a period of considerable progress in the construction of calculus tools.

Algorithms

In the 7th century, the Indian mathematician Brahmagupta first explained the Hindu-Arabic numeral system and the use of 0 (zero). Around 825, the Persian mathematician al-Khwarizmi wrote the book *Calculating with Hindu Numerals,* which was responsible for the spread of the Hindu-Arabic numeral system in the Middle East, and later in Europe. Around the twelfth century there was a translation of the same book into Latin: *Algoritmi de*

numero Indorum. Such textbooks introduced new concepts for defining sequences of steps to complete tasks, such as applications of arithmetic and algebra. Deriving from the mathematician's name, the term algorithm is currently used.

Binary logic

Around the third century B.C., the Indian mathematician Pingala invented the binary numbering system. Still used today in the processing of all modern computers, the system establishes that specific sequences of **ones and zeros** can represent any information.

In 1703 Gottfried Leibniz developed logic in a formal and mathematical sense, using the binary system. In your system, *ones and zeros **also represent concepts, such as*** true and false, ***on and off, valid and invalid*** . More than a century later, George Boole published Boolean algebra (1854), with a complete system that allowed the construction of mathematical models for computational processing. In 1801, the **punched card-controlled loom** appeared, **an invention of Joseph Marie Jacquard**, in which holes indicated the ones and undrilled areas indicated the zeros. The system is far from a computer, but it illustrated that machines could be controlled by the binary system.

Analytical ingenuity

Ada Lovelace, first programmer.

It was with Charles Babbage that the modern computer began to take shape, through his work in analytical ingenuity. The equipment originally described in 1837, more than a century before its successor, was never successfully built, but it had all the functions of a modern computer. Babbage's device was unique in that it was programmable, a must-have for any modern computer. During their collaboration, the mathematician Ada Lovelace published the first computer programs in a series of notes for analytical ingenuity. For this reason, Lovelace is popularly regarded as the first programmer.

Birth of Computer Science

Prior to the 1920s, *computer* was a term associated with people who performed calculations, usually led by physicists. Thousands of computers were employed in projects at the trade, government, and research sites. After the 1920s, the term *computational* machine began to be used to refer to any machine that performs the work of a professional, especially those according to the methods of the Church-Turing Thesis.

The term *computational machine* eventually lost ground to the reduced term *computer* in the late 1940s, with digital machines becoming more and more widespread. Alan Turing, known as the father of computer science, invented the Guiding machine, which later evolved into the modern computer.

Mathematical Fundamentals

The mathematical foundations of modern computer science began to be defined by Kurt Gödel in his incompleteness theorem (1931). This theory shows that there are limits to what can be proved or disproved in a formal system; this led to later work by Gödel and other theorists to define and describe such formal systems, including concepts such as recursion and lambda calculus.

Alan Turing and Alonzo Church, (1936), introduced the formalization of an algorithm, defining the limits of what the computer can be and a purely mechanical model for computation. Such topics are covered in what is now called the Church-Turing thesis, a hypothesis about the nature of mechanical calculation devices. This thesis defines that any possible calculation can be performed by an algorithm, being performed by a computer, as long as there is enough time and storage for it.

Turing included in the thesis a description of the Guiding machine, which has an infinite-sized tape and a read-write header that moves through the tape. Because of its infinite character, such a machine cannot be built, but such a model can simulate the computation of any algorithm running on a modern computer. Turing is quite important to Computer Science, so much so that his name is used for the Turing Award and the Turing test. He contributed to Britain's cracking of Germany's code[5] in World War II, and continued to design computers and computer programs into the 1940s.

Shannon and Information Theory

Until the 1930s, electrical engineers could build electronic circuits to solve logical and mathematical problems, but most did so without any process, in a particular way, without theoretical rigor to do so. This changed with Claude Shannon's (1937) master's thesis, *A Symbolic Analysis of Relay and Switching Circuits*. While teaching philosophy, Shannon was exposed to the work of George Boole, and realized that he could apply this knowledge to electromechanical assemblies to solve problems. Shannon developed information theory in the 1948 paper: *A Mathematical Theory of Communication, the* contents of which serve as the foundation for areas such as data compression and cryptography.

Social contribution

Despite its short history, as an academic discipline, Computer Science has given rise to several fundamental contributions to science and society. This science was responsible for the formal definition of computation and computability, and for proving the existence of computationally unsolvable or intractable problems.

It was also possible to construct and formalize the concept of computer language, especially programming language, a tool for the precise expression of methodological information flexible enough to be represented at various levels of abstraction. For other scientific fields and for society in general, Computer Science provided support for the Digital Revolution, giving rise to the Information Age. Scientific computing is an area of computing that allows for the advancement of studies, such as the mapping of the human genome (see Human Genome Project).

3. 7 DATA SCIENCE

Object of study

Data Science is the study of data to extract meaningful insights for organizations. It is a multidisciplinary approach that combines principles and practices from the fields of mathematics, statistics, artificial intelligence, and computer engineering to analyze large amounts of data. This analysis helps data scientists ask and answer questions, such as what happened, why it happened, what will happen, and what can be done with the results.

Data Science is important because it combines tools, methods, and technology to generate meaning based on data. Modern organizations are inundated with data; There is a proliferation of devices that can automatically collect and store information. Online systems and payment portals capture more data in the areas of e-commerce, medicine, finance, and all other aspects of human life. We have text, audio, video, and image data available in large quantities.

While the term Data Science is not new, the meanings and connotations have changed over time. The word first appeared in the 1960s, as an alternative name for statistics. In the late 1990s, computer science professionals formalized the term. A proposed definition for Data Science saw it as a separate field with three aspects: data design, collection, and analysis. It still took another decade for the term to be used outside of academia.

Artificial intelligence and machine learning innovations have made data processing faster and more efficient. The demand from the sector has created an ecosystem of courses, diplomas and positions in the field of Data Science. Due to the cross-functional skill set and expertise required, Data Science shows strong growth projected over the next few decades.

Type of Data Studies

Data Science is used to study data in four ways:

1. **Descriptive analytics –** Descriptive analytics analyzes data to gain insights into what has happened or what is happening in the data environment. It is characterized by data visualizations such as pie charts, bar charts, line charts, tables, or generated narratives. For example, a flight booking service may record data such as the number of tickets booked per day. Descriptive analytics will reveal peaks in bookings, dips in bookings, and months of high performance for this service.
2. **Diagnostic analysis - Diagnostic** analysis is an in-depth or detailed analysis of data to understand why something happened. It is characterized by techniques such as drill-down, data discovery, data mining, and correlations. Various operations and data transformations can be performed on a given dataset to discover unique patterns in each of these techniques. For example, the flight service can drill down into a particularly high-performing month to better understand peak bookings. This can lead to the discovery that many customers visit a particular city to attend an event.
3. **Predictive analytics -** Predictive analytics uses historical data to make accurate predictions about data patterns that may occur in the future. It is characterized by techniques such as machine learning, prediction, pattern matching, and predictive modeling. In each of these techniques, computers are trained to reverse-engineer causal connections in the data. For example, flight service staff can use Data Science to predict flight booking patterns, for the next year, at the beginning of each year. The computer program or algorithm can analyze past data and predict booking spikes for certain destinations in May. Having anticipated the future travel needs of its customers, the company could start targeted advertising for these cities as early as February.
4. **Prescriptive analytics -** Prescriptive analytics takes predictive data to the next level. Not only does it predict what is likely to happen, but it also suggests an optimal response to that outcome. She can analyze the potential implications of different choices and recommend the best course of action. Prescriptive analytics uses graph analysis, simulation, complex event processing, neural networks, and machine learning recommendation engines.
5. Going back to the flight booking example, prescriptive analytics can analyze historical marketing campaigns to maximize the advantage of the next spike in bookings. A data scientist can project booking outcomes for different levels of marketing spend across various marketing channels. These data predictions would give the flight booking company more confidence to make its marketing decisions.

Advantages of organizations

Data Science is revolutionizing the way businesses operate. Many businesses, regardless of size, need a robust data science strategy to drive growth and maintain a competitive edge. Some of the key benefits include:

Uncover unknown transformative patterns – Data Science enables businesses to uncover new patterns and relationships that have the potential to transform the organization. It can reveal low-cost changes in resource management for maximum impact on profit margins. For example, an e-commerce company uses Data Science to find that many customer inquiries are being generated after business hours. Research reveals that customers are more likely to buy if they receive an immediate response rather than a response the next business day. By implementing customer service 24 hours a day, seven days a week, the company increases its revenue.

Innovate new products and solutions - Data Science can reveal flaws and problems that would otherwise go unnoticed. More insights into purchasing decisions, customer feedback, and business processes can drive innovation in internal operations and external solutions. For example, an online payment solution uses Data Science to collect and analyze customer feedback about the company on social media. The analysis reveals that customers forget their passwords during peak purchase periods and are dissatisfied with their current password recovery system. The company can innovate a better solution and see a significant increase in customer satisfaction.

Real-time optimization - It is very challenging for businesses, especially large ones, to respond to changing conditions in real-time. This can cause significant losses or disruptions to business activity. Data Science can help businesses predict changes and react optimally to different circumstances. For example, a trucking company uses Data Science to reduce downtime when trucks break down. They identify the routes and patterns of change that lead to faster breakdowns and adjust truck schedules. They also set up an

inventory of common spare parts that need to be replaced frequently so that trucks can be repaired faster.

A business problem typically kicks off the Data Science process. A data scientist will work with stakeholders in organizations to understand what the needs are. Once the problem is defined, the data scientist can solve it using the OSEMN Data Science process:

O: Get Data – Data can be pre-existing, newly acquired, or a data repository that can be downloaded from the Internet. Data scientists can pull data from internal or external databases, the organization's CRM software, web server logs, social media, or purchase it from trusted third-party sources.

S: Data suppression - Data suppression, or data cleansing, is the process of standardizing data according to a predetermined format. It includes dealing with missing data, correcting data errors, and removing any outliers. Some examples of data deletion are: ·

- Change all date values to a common standard format. ·
- Fix spelling errors or additional spaces. ·
- Correct mathematical inaccuracies or remove commas from large numbers.

E: Explore data - Data exploration is a preliminary data analysis that is used to plan other data modeling ploys. Data scientists gain an initial understanding of data using descriptive statistics and data visualization tools. Then, they explore the data to identify interesting patterns that can be studied or acted upon.

M: Model data – Software and machine learning algorithms are used to gain deeper insights, predict outcomes, and prescribe the best plan of action. Machine learning techniques, such as association, classification, and clustering, are applied to the training dataset. The model can be tested against predetermined test data to assess the accuracy of the results. The data model can be adjusted multiple times to improve results.

N: Interpret results – Data scientists work together with analysts and organizations to convert data insights into action. They make diagrams, graphs, and tables to represent trends and forecasts. Data summarization helps stakeholders understand and implement results effectively.

Computer Systems

Data Science professionals use computing systems to keep up with the Data Science process. The main techniques used by data scientists are:

Classification - Classification is the ordering of data into specific groups or categories. Computers are trained to identify and classify data. Known datasets are used to create decision algorithms on a computer that quickly processes and categorizes data. For example: ·

- Classify products as popular or not popular·
- Classify insurance applications as high-risk or low-risk·
- Classify social media comments as positive, negative, or neutral.

Data Science professionals use computing systems to keep up with the Data Science process.

Regression – Regression is the method of finding a relationship between two seemingly unrelated data points. The connection is usually modeled around a mathematical formula and represented as a graph or curves. When the value of one data point is known, regression is used to predict the other data point. For example: ·

- The rate of spread of airborne diseases.

- The relationship between customer satisfaction and the number of employees. ·
- The ratio of the number of fire stations to the number of people injured as a result of a fire at a given location.

Clustering - Clustering is the method of grouping closely related data together to look for patterns and anomalies. Clustering is different from classification because data cannot be accurately classified into fixed categories. Therefore, the data is grouped into more likely relationships. New patterns and relationships can be discovered with clustering. For instance:

- Group customers with similar buying behavior to improve customer service.
- Bundle network traffic to identify daily usage patterns and identify a network attack faster.
- Group articles into several different news categories and use that information to find fake news content.

The Basic Principle Behind Data Science Techniques
While the details vary, the underlying principles behind these techniques are:

- Teach a machine to classify data based on a known data set. For example, sample keywords are provided to the computer with their respective ranking values. "Happy" is positive, while "Hate" is negative.
- Provide unknown data to the machine and allow the device to classify the dataset independently.
- Allow for inaccuracies of results and deal with the probability factor of the outcome.

Data Science professionals work with complex technologies, such as:

- Artificial intelligence: Machine learning models and related software are used for predictive and prescriptive analytics.
- Cloud computing: Cloud technologies have given data scientists the flexibility and processing power needed for advanced data analytics.
- Internet of Things: IoT refers to various devices that can automatically connect to the internet. These devices collect data for Data Science initiatives. They generate large amounts of data that can be used for data mining and data extraction.
- Quantum computing: Quantum computers can do complex calculations at high speeds. Skilled data scientists use them to create complex quantitative algorithms.

Type of Data Analytics

Data Science is an umbrella term for other data-related functions and fields. Let's look at some of them here:

- **Difference Between Data Science and Data Analytics -** While the terms can be used interchangeably, data analytics is a subset of Data Science. Data Science is an umbrella term for all aspects of data processing, from collection to modeling and insights. On the other hand, data analysis mainly involves statistics, mathematics, and statistical analysis. It focuses only on data analysis, while Data Science is related to the big picture around organizational data. In most workplaces, data scientists and data analysts work together to achieve common organization goals. A data analyst may spend more time

on routine analysis by providing regular reports. A data scientist can design the way data is stored, manipulated, and analyzed. Simply put, a data analyst makes sense of existing data, while a data scientist creates new methods and tools to process data to be used by analysts.

- **Difference Between Data Science and Business Analytics -** While there is an overlap between Data Science and business analytics, the main difference is the use of technology in each area. Data scientists work more closely with data technology than business analysts. Business analysts reconcile business and IT. They define business cases, gather input from stakeholders, or validate solutions. Data scientists, on the other hand, use technology to work with business data. They can write programs, apply machine learning techniques to create models, and develop new algorithms. Data scientists not only understand the problem, but they can also create a tool that provides solutions to the problem. It's not uncommon to find business analysts and data scientists working on the same team. Business analysts use the output of data scientists and use it to tell a story that the organization as a whole can understand.

- **Difference Between Data Science and Data Engineering -** Data engineers build and maintain the systems that allow data scientists to access and interpret data. They work more closely with the underlying technology than a data scientist. The role typically involves creating data models, building data pipelines, and overseeing extract, transform, and load (ETL). Depending on the layout and size of the organization, the data engineer may also manage related infrastructure, such as **big data** storage, broadcasting, and processing platforms such as Amazon S3. Data scientists use the data that data engineers have processed to build and train predictive models. Data scientists can then hand the results over to analysts for further decision-making.

- **Difference Between Data Science and Machine Learning -** Machine learning is the science of training machines to analyze and learn from data in the same way that humans do. It is one of the methods used in Data Science projects to obtain automated insights from data. Machine learning engineers specialize in computing, algorithms, and coding skills specific to machine learning methods. Data scientists can use machine learning methods as a tool or work closely with other machine learning engineers to process data.

- **Difference Between Data Science** and Statistics - Statistics is a mathematical background area that seeks to collect and interpret quantitative data. In contrast, Data Science is a multidisciplinary field that uses scientific methods, processes, and systems to extract knowledge from data in a variety of ways. Data scientists use methods from many disciplines, including statistics. However, the scopes differ in their processes and the problems they study.

AWS has a number of tools to support data scientists around the world:

- **Physical data storage -** For data warehousing, Amazon Redshift can run complex queries on structured or unstructured data. Analysts and data scientists can use AWS Glue to manage and search data. AWS Glue automatically creates a unified catalog of all data in the Data Lake, with Meta data attached to make it discoverable.

- **Machine learning -** Amazon SageMaker is a fully managed machine learning service running on Amazon Elastic Compute Cloud (EC2). It enables users to organize data, build, train, and deploy machine learning models, and scale operations.

Analysis:
- Amazon Athena is an interactive query service that makes it easy to analyze data in Amazon S3 or Glacier. It's fast, serverless, and works using standard SQL queries.
- Amazon Elastic MapReduce (EMR) processes big data using servers such as Spark and Hadoop.
- Amazon Kinesis enables real-time aggregation and processing of streaming data. It uses website clickstreams, application logs, and telemetry data from IoT devices.
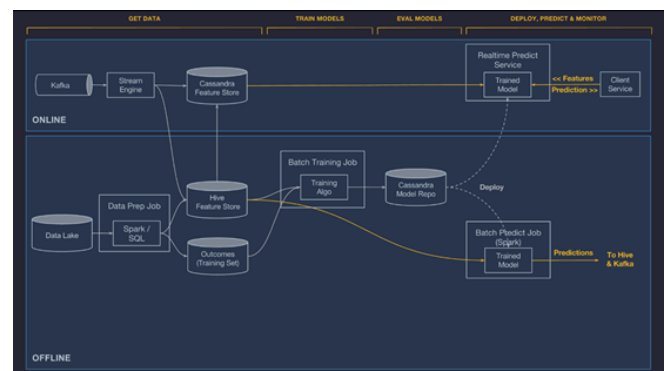- Amazon OpenSearch enables you to search, analyze, and visualize petabytes of data.

Figure 2 - Feature Store
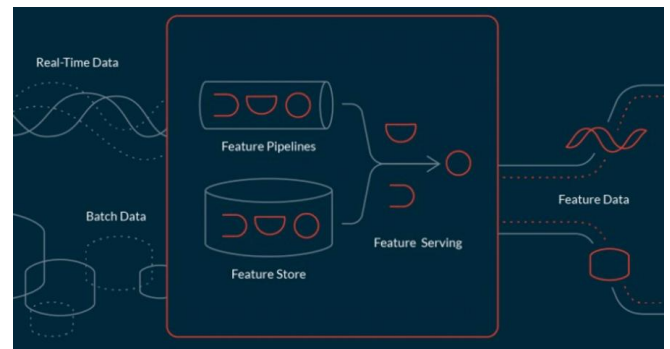
Source: Microsoft Industry Blogs

The data can be stored in memory or in a database of very fast key-values. The process itself can be carried out in various cloud services or on one platform. Here's an example of an online and offline pipeline using data storage (Feature Store). It was designed by Uber, as part of its Michelangelo platform:

Figure 3 - Michelangelo Platform of the Uber Project

Source: Microsoft Industry Blogs

Data Scientist

A data scientist can use a number of distinct techniques, tools, and technologies as part of the Data Science process. Based on the problem, it chooses the best combinations to get faster and more accurate results.

The role and day-to-day work of a data scientist will vary depending on the size and requirements of the organization. While they typically follow the Data Science process, the details can vary. In larger Data Science teams, a data scientist may work with other analysts, engineers, machine learning specialists, and statistical technicians to ensure that the Data Science process is followed end-to-end and that business goals are achieved.

However, in smaller teams, a data scientist may have more than one role. Based on experience, skills, and academic background, he may wear multiple hats or have overlapping roles. In that case, your day-to-day responsibilities may include engineering, analytics, and machine learning, along with key Data Science methodologies.

Key Challenges for Data Scientists

Data sources - Different types of applications and tools generate data in various formats. Data scientists need to clean and prepare data to make it consistent. This can be tedious and time-consuming.

Understand the problem of organizations - Data scientists need to work with various stakeholders and managers of organizations to define the problem to be solved. This can be challenging, especially in large organizations with multiple teams with varying requirements.

Eliminate drift - *Machine learning* tools are not fully accurate, and as a result, there may be uncertainties or drifts. Deviations are disparities in the test data or prediction behavior of the model in different groups, such as age or income bracket. For example, if the tool is trained primarily on data from middle-aged people, it may be less accurate when making predictions involving younger and older people. The field of machine learning offers an opportunity to address deviations by detecting and measuring them in the data and model.

Online and offline data have different characteristics. Behind the scenes, offline data is mostly built in frameworks, such as Spark or SQL, where the actual data is stored in a database or as files. While online data may require access to data using APIs for streaming engines such as Kafka, Kinesis, or in-memory key-value databases such as Redis or Cassandra.

Working with a data store abstracts this layer, so that when a data scientist is looking for data, instead of writing engineering code, they can use a simple API to retrieve the data they need.

One of the main challenges in implementing machine learning (computer) in production arises from the fact that the data being used to test a model in the software development environment (programs) is not the same as the data in the production service layer. Therefore, enabling a consistent set of resources (machine and software) between the testing and service layer allows for a smoother deployment process, ensuring that the tested model truly reflects the way things will work in production.

In addition to the actual data, the data store maintains **additional meta data** for each resource. For example, a metric that shows the impact of the resource on the model it's associated with. This information can help Data Scientists tremendously select the resources for a new model, allowing them to focus on those who have achieved a better impact on similar existing models.

The reality today is that almost every business is based on Machine Learning, so the number of projects and resources is growing exponentially. This reduces our ability to have a good comprehensive overview of the resources available, since there are so many. Instead of developing in silos, data warehousing allows us to share our resources with our colleagues' **Meta data**. It's becoming a common problem in large organizations that different teams end up developing similar solutions, simply because they're not aware of each other's tasks. Data stores fill that gap and allow everyone to share their work and avoid duplication.

To meet guidelines and regulations, especially in cases where the generated Artificial Intelligence (AI) models serve industries such as healthcare, financial services, and security, it is important to trace the lineage of the algorithms under development. Achieving this requires end-to-end data flow visibility to better understand how the model is generating its results. As data is being generated, as part of the process, it is necessary to track the flow of the data generation process. In data warehousing, you can maintain the lineage of data and a resource. This provides the necessary tracking information, how the data was generated, and provides the insight and reporting needed for regulatory compliance.

MLOps is an extension of DevOps where the idea is to apply DevOps principles to Machine Learning pipelines. Developing a machine learning (computer) pipeline is different from developing software (programs), mainly because of the look and feel of the data. The quality of the model is not only based on the quality of the code. It is also based on the quality of the data and the resources that are used to run the model. According to Airbnb, about 60%-80% of Data Scientists' time is spent creating, training, and testing.

Data stores allow Data Scientists to reuse resources instead of rebuilding them over and over again for different models, saving valuable time and effort. Data stores automate this process, and resources can be triggered by code changes that are pushed to Git or by the arrival of new data. This automated feature engineering is an important part of the MLOps concept.

Some of the largest information and communication technology companies that deal extensively with AI have created their own Feature Stores (Uber, Twitter, Google, Netflix, Facebook, Airbnb, etc.). This is a good indication to the rest of the industry of how important it is to use data warehousing as part of an effective machine learning pipeline. Given the growing number of AI projects and the complexities associated with getting those projects into production, the industry needs a way to standardize and automate the core of feature engineering. Therefore, it is fair to assume that data storage is positioned to be a basic component of any machine learning pipeline (computer and software).

3. 8 ARTIFICIAL INTELLIGENCE
Concept

What is AI? What is AI in Justice? What is the Democracy of the Future? These questions have generated many reflections and debates. As the term "artificial intelligence" suggests, this scientific subject aims to give robots the ability to perform tasks such as logic, reasoning, planning, learning, and perception. It is an interdisciplinary discipline that replicates human capabilities and intellectual behavior through the use of AI. Stimulating human consciousness and thought through the retrieval and extraction of relevant material, as well as providing direct and reasonable answers to our questions, is the goal of the work of this technology Marwick, (2001). Computers that can learn, plan, problem-solve,

reason, interact socially, be creative, and self-correcting are at the heart of AI Haleem et al., (2019).

In contrast to human intelligence, AI is just a demonstration of machine intellect. Robotics, machines, and programs with the ability to learn and understand on their own can be referred to as AI, according to certain definitions Van Wynsberghe, (2021). Robotics, natural language processing, expert systems, and automated reasoning are just a few of the most recent AI technologies Murphy, (2019).

Marvin Lee Minsky, one of the founding fathers of AI, describes it as the study of getting robots to perform tasks that would require intelligence if they were man-made (Sidner et al., (2005). High-level mental functions, such as perception, memory, and critical thinking, are all necessary for success. Machine learning is a broad term that includes many subfields of computer science that allow computers to perform functions traditionally performed by humans, such as problem-solving and decision-making Shinde & Shah, (2018). The term AI refers to a computer system that is able to learn from its environment and adapt its behavior to achieve its goals Sarker, (2022). In the end, its goal is to transform seemingly diverse problems into a group of generally similar problem types, after which the problem can be approached using various algorithms and eventually generalize the method to examples, in addition to those in the whole of Frey & Osborne, (2017).

According to Hobbes, (2020), the concept of Artificial Intelligence was influenced by mechanical materialism that began with the work "Discourse on Method" by René Descartes in 1637. René Descartes suggested that the animal is a kind of complex mechanism, thus formulating a mechanistic theory.

It is important to understand that mechanistic materialism differs from ancient materialism, whose views are captured in the works of Aristotle, and Hegel's subsequent dialectic, dialectical and historical materialism (Feuerbach, Karl Marx, Friedrich Engels, V. I. Lenin). The truth is that mechanistic materialism is directed to the mechanistic origin of organisms, while ancient materialism is directed to the mechanistic origin of nature, and dialectical and historical materialism refers to the manifestations of mechanism in society.

Binary System
Schickard, (1623), built the first mechanical digital computing machine, followed by the machines of Blaise Pascal (1643) and Leibniz (1671). Leibniz was also the first to describe the modern **binary system of numbers**, although many great scientists periodically took an interest in this system (Leibniz, 1671). Korsakov, (1832), presented the principle of developing scientific methods and devices to improve the capabilities of the mind and proposed a series of "intelligent machines", in the design of which, for the first time in the history of computer science, he used punch cards. In the nineteenth century, Charles Babbage and Ada Lovelace worked on a programmable mechanical computer Hammerman, (2016).

Bertrand Russell and A. N. Whitehead, (1910-1913), published the paper "Principles of Mathematics", which revolutionized formal logic. Konrad Zuse, (1941), built the first software-controlled computer. Warren McCulloch and Walter Pitts, (1943), published "A Logical Calculus of the Ideas Immanent in Nervous Activity", which laid the foundation for neural networks.

McCulloch and Pitts, (1943), in their paper "The Logical Calculation of Ideas Related to Nervous Activity", proposed the concept of an artificial neural network. In particular, they proposed a model of an artificial neuron. Hebb (1949), in his work "Organization of Behavior," described the basic principles of neuron learning. These ideas were developed several years later by the American neurophysiologist Frank Rosenblatt who proposed a diagram of a device that simulates the process of human perception, and called it a "perceptron".

Artificial intelligence (AI) is a multidisciplinary field of study that encompasses several areas of knowledge.[1] Although its development has advanced more in computer science, its interdisciplinary approach involves contributions from diverse disciplines. Some of the key areas related to AI include:

1. **Computer Science**: Computer science plays a central role in AI, providing the theoretical and practical foundations for the development of algorithms, models, and computational techniques to simulate human intelligence.

2. **Mathematics and Statistics**: Mathematics and statistics provide the theoretical foundations for modeling and analyzing AI algorithms, including machine learning, neural networks, and data processing.

3. Machine Learning: Machine learning is a subfield of AI that focuses on developing algorithms that enable computers to learn and improve based on data. This involves the application of statistical techniques and optimization algorithms.

4. Cognitive Science: Cognitive science studies mental processes and human intelligence, and its contributions to AI are related to understanding and modeling cognitive processes for the development of intelligent systems.

5. Computational Neuroscience: Computational neuroscience seeks to understand the workings of the human brain and apply these insights in the development of brain-inspired AI models and algorithms.

6. Philosophy of Mind: Philosophy of mind explores questions related to the nature of mind, consciousness, and intelligence, offering important theoretical perspectives for the field of AI.

7. Computational Linguistics: Computational linguistics involves natural language processing (NLP), which focuses on developing algorithms and techniques for computers to understand and process human language.

It is a broad concept and one that receives as many definitions as different meanings to the word intelligence.[2] It is possible to consider some basic characteristics of these systems, such as reasoning ability (applying logical rules to a set of available data to reach a conclusion), learning (learning from mistakes and successes so that in the future you can act more effectively), recognizing patterns (both visual and sensory patterns, as well as behavioral patterns) and inference (ability to be able to apply reasoning in the situations of our daily lives).[2]

The development of the field of study began shortly after World War II, with the paper "*Computing Machinery and Intelligence*" by the English mathematician Alan Turing,[3] and the name itself was coined in 1956.[4][5] Its main creators were scientists Herbert Simon, Allen Newell, John McCarthy, Warren McCulloch, Walter Pitts , and Marvin Minsky. The construction of intelligent

machines has been of interest to mankind for a long time, and there is in history both a significant record of mechanical (real) automatons and of fictional man-made characters with their own intelligence, such as the Golem and Frankenstein. Such stories, legends and fictions demonstrate man's contrasting expectations of fascination and fear in relation to Artificial Intelligence.[6][7]

It is only recently, with the emergence of the modern computer, that artificial intelligence has gained the means and critical mass to establish itself as an integral science, with its own problems and methodologies. Since then, its development has gone beyond the classic chess or conversion programs and involved areas such as computer vision, voice analysis and synthesis, fuzzy logic, artificial neural networks and many others. Initially, AI models aimed to reproduce human thinking. Subsequently, however, such models embraced the idea of reproducing human capacities such as creativity, self-improvement, and the use of language. However, the concept of artificial intelligence is still quite difficult to define. For this reason, Artificial Intelligence has been (and continues to be) a notion that has multiple interpretations, often conflicting or circular.[8]

How artificial intelligence works

Artificial intelligence (AI) is the ability of a machine to reproduce human-like skills such as reasoning, learning, planning and creativity. AI enables technical systems to perceive their surroundings, deal with what they perceive and solve problems, taking action towards achieving a specific goal. The computer receives data (either already prepared or collected through its own sensors, e.g. with the use of a camera), processes it and responds. AI systems are able to adapt their behaviour to some extent through an analysis of the effects of previous actions and autonomous work.

Importance of Artificial Intelligence

Some AI technologies have been around for more than 50 years, but improved processing power, the availability of large amounts of data, and new algorithms have enabled great strides in AI in recent years. Artificial intelligence is considered key to the digital transformation of society and has become an EU priority. Future applications are planned that could bring huge changes, but AI is already present in our daily lives.

Definition of Artificial Intelligence (CE)

Software-related - virtual assistants, image analysis software, search engines, facial and voice recognition systems. Embedded in hardware – robots, self-driving cars, drones, or applications within the scope of the Internet of Things.

Source: Internet

The presence of AI in everyday life

These are some of the apps that we may not realize are powered by AI.

- **Online shopping and advertising -** Artificial intelligence is widely used to provide personalized recommendations to people, based on, for example, their previous searches and purchases or other online behavior. AI is extremely important in the commercial area - for product optimization, inventory planning, logistics, etc.
- **Web search -** Search engines learn from the vast input of data, provided by their users, to provide relevant search results.
- **Digital personal assistants -** Smartphones use AI to provide a product that is as relevant and personalized as possible. Virtual assistants that answer questions, provide recommendations, and help organize daily routines have become ubiquitous.
- **Machine translations -** Language translation software, whether based on written or spoken text, relies on artificial intelligence to provide and improve translations. The same applies to functions such as automatic subtitling.
- **Smart Homes, Cities**, and Infrastructure Smart thermostats learn from our behavior to save energy, while smart city developers aim to control traffic to improve connectivity and reduce traffic jams.
- **Cars –** While autonomous vehicles aren't a reality yet, cars already use AI-powered safety functions. For example, the EU has helped to fund VI-DAS – a project on automated sensors that detect potential dangerous situations and accidents. Navigation is largely powered by AI.
- **Cybersecurity –** AI systems can help recognize and combat cyberattacks and other cyber threats based on continuous data entry, pattern recognition, and backtracking of attacks.
- **Artificial intelligence against COVID-19 - In the case of** COVID-19, AI has been used in the thermal control system at airports and elsewhere. In the medical field, AI can help recognise infection through CT X-rays of the lungs. It has also been used to provide data to locate the spread of the virus.
- **Combating disinformation -** Certain AI applications can detect fake news and disinformation by monitoring information on social media, searching for sensational or alarming words, and identifying trusted sources.

Other examples of the use of AI

AI will transform virtually every aspect of life and the economy. Here are just a few examples.

Health—Researchers are researching how they can use AI to analyze large amounts of health data and find patterns that could lead to new discoveries in medicine and other ways to improve individual diagnosis. For example, researchers have developed an AI program to answer emergency calls that promises to recognize a cardiac arrest during the call faster and more frequently compared to sending medical staff.

Another example is KConnect, an EU-funded project that is developing multilingual search and text services to help people find the most relevant medical information available.

Transportation - AI could improve the safety, speed, and efficiency of rail traffic by minimizing wheel friction, maximizing speed, and enabling autonomous driving.

Manufacturing – AI can help European manufacturers become more efficient and bring factories back to Europe by using robots in manufacturing, optimizing sales paths, or real-time predicting maintenance and failures in smart factories.

SatisFactory, is a research project co-funded by the EU, which uses augmented reality and collaborative systems to increase job satisfaction in smart factories.

Food and agriculture - Artificial intelligence can be used to create a sustainable food system in the EU to ensure healthier food, minimising the use of fertilisers, pesticides and irrigation, as well as contributing to productivity and reducing environmental impact. Robots could remove weeds, for example, by decreasing the use of herbicides.

Many farms across the EU already use AI to monitor animal movement, temperature and food consumption.

Government and services - By using a wide range of data and pattern recognition, AI will be able to warn early of natural disasters and enable efficient preparedness and mitigation of consequences.

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4. ELEMENTS FOR DISCUSSION ON THE LEGAL SYSTEMS OF THE EUROPEAN UNION COUNTRIES AND THE CHALLENGES OF ARTIFICIAL INTELLIGENCE

Humanism and Justice

Justice requires commitments to ethical and human principles on the part of individual, political or legal decision-makers in the exercise of their decision-making power, both in the interpretation and application of norms and rules, and which binds people to the values of justice and the humanist principles of human dignity of the person and equality. This commitment distinguishes the values

of justice from the humanist principles of the dignity of the human person, and therefore there is a relationship of addition or addition. In the interpretation and application of justice, the humanistic values and principles of the human person are always included in the values of justice.

When the application of justice is not timely and undervalues human dignity, it does not contribute to the establishment of peace. Justice carries within it the seed of peace. The development of civilization is based on the pillars of justice and peace. This becomes evident when it comes to the existence of a social justice that is incompatible with the great inequalities between people, countries and the world. These inequalities make people and society more aggressive. The exercise of judicial power in the interpretation and application of the law is linked to the values of justice and the humanist principles of the dignity of the human person. In the interpretation and application of the law, the humanist principles of the dignity of the human person are not always included in the values of justice, especially when justice: • Permits trials in the public square of persons who have not yet been tried. • Publicizes legal proceedings. **Indefinite delay in decision-making (10, 15, 20 years and more). Scrupulous application of the law in favor of the most financially powerful, (putting people on the street). It undervalues human dignity and does not contribute to the establishment of social peace.**

The pillars of justice and social peace are based on the development of humanistic societies, which is incompatible with the great economic and financial inequalities. In the face of this, justice is unable to resolve interpersonal or inter-institutional conflicts, locally, nationally and globally. This power of justice, with **the blind application of the law,** does not pay attention to the details of humanity, **which** are, after all, the humanistic principles of the human dignity of persons. **Peace is the fruit of justice**. In order to prevent conflicts and violence, it is necessary that peace begin to be lived as a profound value in the depths of each person, extending to families, the country, and the entire social community, economy, politics and the entire social fabric, as a driving factor for peace.

Human Values – are norms of conduct that determine the important decisions of the human being (man / woman), and that guarantee the peaceful, honest and fair coexistence between people. Human values are socially constructed and guide decisions, guarantee the principles that govern actions and, therefore, human life,

Examples:
1. **Respect** – the ability to be considerate of other people's feelings. (Augusto Cury – equality only grows in the field of respect for differences).
2. **Honesty** is a fundamental value for human beings that can influence all aspects of a person's life. It means acting ethically and truthfully in human relations and in the fulfillment of obligations, acting in accordance with

ethical principles. (William Shakespeare – no human relationship is as rich as honesty).
3. **Humility –** is a very valuable virtue in human life, as it allows the recognition of one's faults and difficulties (human limitations). (Miguel Cervantes, . humility is the basis and foundation of all virtues, and without it there is none).
4. **Empathy – the** ability of a human being to perceive the feelings of other human beings, "putting themselves in their shoes". (Carl Rogers – to be sympathetic is to see the world through the eyes of the other and not to see our world reflected in their eyes).
5. **Sense of justice** – having the ability/ability to assess the existence of justice or injustice in situations. To be just is to have as a principle of life to act with integrity and equality, making correct decisions, both for oneself and for others. The sense of justice can also manifest itself in the capacity for indignation. (Desmond Tutu – if he stays neutral in situations of injustice, he sides with the oppressor.)
6. **Politeness** – act in a cordial, polite and kind manner. Know how to relate to others following the principles of good relationships that should be based on mutual respect. (Pythagoras – educate the children and there will be no need to punish the men).
7. **Solidarity –** the ability to have sympathy and attention to other people, demonstrating the appreciation and importance given to other people. (Franz Kafka – solidarity is the sentiment that best expresses respect for human dignity).
8. **Ethics** – the gathering of principles that determine a person's attitudes. It means living with fundamental moral values. A set of principles that determine human behavior and life in society. According to Aristotle, ethics had three foundations: the use of reason, the decision for good behavior, and the feeling of happiness (social well-being). To be an ethical person is to be aware of the importance of fulfilling one's duties and acting justly for the common good of society. (José Saramago – if ethics does not govern reason, reason will despise ethics).

HUMAN LIFE CYCLE

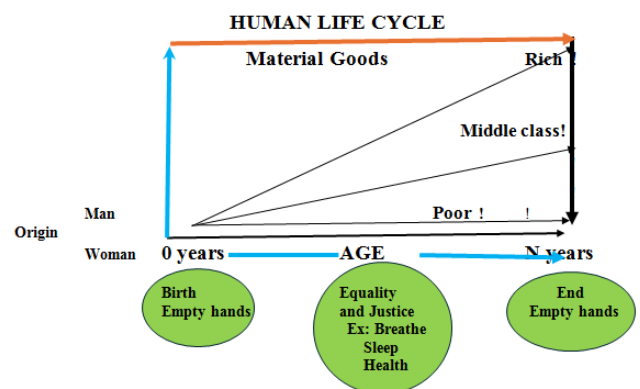**Human and Ethical Values (individual)**

Legal System of the Countries of the European Union
Without intending to be exhaustive in its characterization, a schematic synthesis of the Model of the Legal System of the Countries of the European Union (EU) is presented:
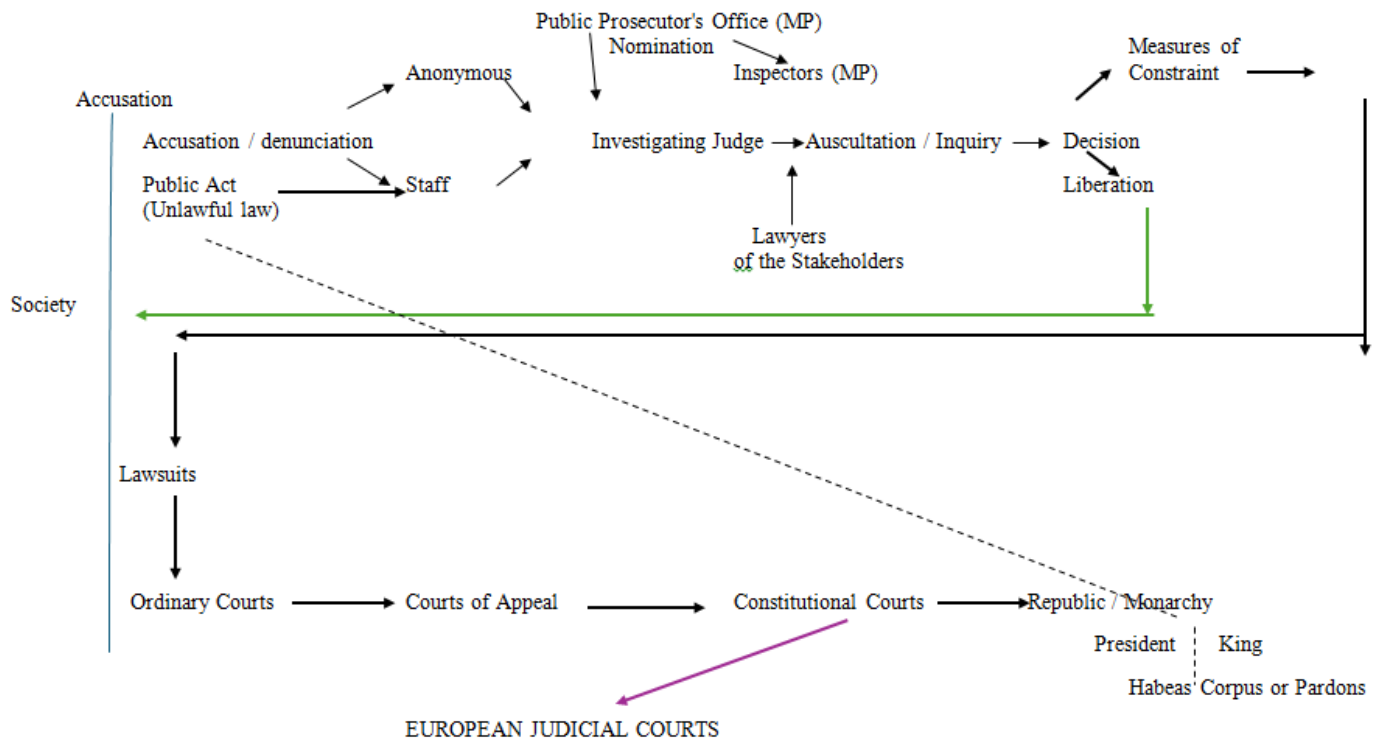
Model of the Legal System of the Countries of the European Union

1 – Investigation Procedures

Human Values and Technology
Digital Society

It will not be an exaggeration or blatant mistake to say that the current society is increasingly qualified by the adjective digital, where the new information and communication technologies (ICTs) have a constant daily influence, configuring themselves as mediators of social relations, the economy and even in the way of producing/disseminating knowledge. There are forms of absorption of knowledge about users in a ubiquitous way, in which ICTs can be seen as new forms of surveillance Lupton, (2015, p. 02; p. 189). Digital ICTs play a crucial role in the globalization process, as a phenomenon characterized by the wide circulation of people, ideas and habits, which, although it did not begin historically with technologies, develops at high speed through them De Mul, (2015, p. 106).

The growing insertion of Information and Communication Technologies (ICTs) in people's daily lives has promoted a relationship of deep dependence between them. In this context, everyday actions have become essentially informational, given the need for mediation for their performance.

The digital society is a complex society of technological innovation and communication, in which there is the creation of new environments and changes in the organizational dynamics of people, in the way people understand reality, modifying the way, how they relate to the environment, with other people and how they conceive themselves in the face of their own reality. Both meanings can be understood as a result of the informational revolution, promoted mainly from the attempts to understand human intelligence, via computational bases

The works developed by Turing (1950) had a great influence on the studies of the second half of the twentieth century, including in Philosophy, mainly due to his algorithmic approach to the nature of thought, in which he proposed the thesis according to which "thinking is calculating" (Turing, 1950, p. 436). This is that since digital computers operate from calculations and manipulate rules

for the organization of symbols, if we consider that thinking consists in the activity of manipulating symbols according to a set of logical rules, constituting algorithms, then digital computers could, in principle, think. Once intelligent thinking is understood in a mechanical way, it would be possible to construct mechanical models of the structure and dynamics of this type of thinking. This understanding enabled the development of mechanical models of the mind, which initially generated two strands in Cognitive Science Teixeira, (1998):

- Strong Artificial Intelligence – is one in which mechanical models of the mind, when successful, not only simulate/emulate mental activities, but explain and instantiate such activities.
- Weak Artificial Intelligence is one in which the model is only an explanatory, limited tool of intelligent mental activity.

The common point of these notions is that both accept the thesis that to simulate is to explain, in order to attribute to mechanical models the value of theories, in which the computer is employed, as a fundamental tool. As for the social sphere, the development of information theory studies has promoted the social changes that we are currently experiencing and that have generated new types of problems, especially those related to the relationship between action / technology / environment. Given its impact on the academic and social spheres, the approximation between Philosophy and Information Science, and the role of computers in the development of theories, theoretical production occurred concomitantly with technological improvement.

Floridi (2008, p. 3-4) states that during the second half of the twentieth century there were events such as: the massification of the computer, which promoted the generation of the "personal computer"; the advancement of scientific discoveries due to the use of ICTs; and the emergence of new ways of experiencing the world, based on such technologies. These events illustrate the influence of ICTs in various spheres of society (sociological, economic, scientific and cultural), providing elements for the

characterization of it as an information and knowledge society. According to Floridi (2002, p. 127): "Post-industrial societies live on information."

ICTs play a central role in the characterization of the digital society, to the extent that they are present and related to the person and their well-being, and in their continuous use in everyday situations (e.g., leisure, work, etc.). It is a relationship of dependence between the person and ICTs. This relationship is strengthened, according to Floridi, by the following factors:

- Increasing the power of ICTs, while reducing their cost of production and marketing;
- Improvement of ICTs in their potential for interaction (machine-machine and human-machine);
- Emergence of the Age of "zettabytes" (dated 2010).

The indicated factors are responsible for the approximation between people and ICTs, generating a deep relationship of dependence for the performance of routine actions in today's world. Such dependence is based on the digital presence, as a mediator of common actions, such as financial transactions (home banking), the acquisition of products and services (virtual stores, e-commerce), personal and professional interrelationship (via social networks, such as Facebook, Twitter, or dating apps, such as Tinder), access to movies (via streaming, YouTube, Netflix, etc.), urban mobility (via app, etc.). Uber, Taxi 99), making calls (using the network, via Skype, Whatsapp), the practice of physical activity (Runkeeper, for example), professional activities via SOHO (small office / home office), political organization (via websites or social networks), among others. Situations in which there is no mediation of artifacts connected to the **Internet** by people, but which require technological mediation by the service to be requested, such as: payment by credit card for face-to-face purchases, biometric systems for the withdrawal of books in libraries, among others, can also be highlighted.

In order to understand the influence of ICTs on the constitution and alteration of people's self, the three types of self highlighted by Floridi (2014, p. 60) are explained:

- **Personal Identity** – refers to "who we are". We live in an era where people spend a great deal of time transmitting information about themselves, interacting digitally with other people, and this is a good example of how ICTs are affecting and shaping people's personal identity.
- **Self-conception** – consists of "who we think we are".
- **Social self** - refers to who we are from other people's thoughts.

It is mainly this third notion of self that ICTs have a deeper channel of action in the conception of people's identity, as there is a growing adhesion and overvaluation of social networks, illustrated, for example, by the intensification of a "narcissistic culture".

The Web enhances the narcissistic culture, typical of our time, by expanding the forms of self-celebration and self-promotion. Social networking sites, on the other hand, end up encouraging vanity and competition. [...] Young people strive to show in their profiles, photos and texts that value them and promote the increase in the number of people they add as "friends". [...] This type of behavior is justified by a constant search for attention and recognition. The ease of access to information about oneself generated by third parties, fosters self-understanding from others (social self),

constitutes a scenario in which people, especially those who correspond to Generation Z, feed the network with personal information in an intense way.

The greatest change of all is the transformation of the information and knowledge society into the digital society. The focus of work has shifted to 'remote working - teleworking'. In societies in developed countries, increasingly, access to good jobs and a professional career will depend on a university degree with remote work, anywhere, in a country, in the globalized world. That is, the logical result, since we stopped working in the office and in large urban centers, we went through intellectual work and arrived at telework at home or elsewhere, outside the large urban centers. This last stage represents a break with the past.

- The fact that knowledge and education have been a passport to good jobs and a career, has meant above all that in society, companies are no longer the only means for someone to progress in life and have become one of the many opportunities available.
- Knowledge has become the capital of developed economies and knowledge workers, and it is knowledge workers who determine the values and norms of society.

The great challenge for developed countries is to maintain the commitment to the economic performance necessary for organizations and countries to remain competitive. Governance and entrepreneurship contain the entrepreneurial spirit. They are not antagonistic concepts, nor are they mutually exclusive. Both are always necessary and at the same time. Both have to be coordinated, that is, both have to work together. No existing organization can survive without innovation and at the same time without being managed.

Is the problem Capitalism or Technology?
According to Gary T. Marx (2015, p. 735), surveillance is linked to verbs such as "look", "observe", "supervise", "control", "inspect", "monitor", "guard" or even "follow". Many of the examples to understand contemporary ways of obtaining information are based on cognitive skills through technological artifacts, such as software and automated processes. However, such technical means may also involve sophisticated forms of manipulation, such as seduction, coercion, deception, unambiguous information, and other special forms of observation.

Marx, (2015, p. 735-737). Surveillance has become more deceptive with the passage of time, and can be seen as something more difficult to defeat than before, after all many forms are so ubiquitous that they are generally presumed to be omnipotent Marx, (2015, p. 736). Vigilance can, succinctly, take place over the human routine, the semi-conscious "autopilot" and often even the biological instinct of our sensory receptors who are ready to constantly receive information from whoever is territorially close, Marx, (2016, p. 16). With the development of language, numerical and written, and distinct forms of social organization involving larger political entities, more complex and systematic forms of surveillance emerged, based on counting, recording, interrogation, information, infiltration, confessions, and the expanded use of tests, Marx, (2016, p. 17).

With the emergence of industrial society, new tools for surveillance and communication emerged, of individuals, groups and contexts through the use of technological means to extract, infer or create information, Marx, (2016, p. 19-20). Examples can be found in computer profiles, which have large data sets, video

cameras, data about DNA analysis, GPS, electronic monitoring, drug testing, and the monitoring made possible by social media and cell phones. The BIG data industry establishes a system in contemporary society, where the world and life are transformed or mediated by data, and this fact constitutes a fundamental paradigm shift for contemporary society, Beraldo; Milan, (2019, p. 01).

The nature of databases is inherent to any software, which basically performs data programming that can be divided into four [Write here] operations, De Mul, (2015, p. 106):

a) add; b) research; c) change; and d) destroy (which can be classified by the options of insert, select, update and delete). Together, these commands constitute the dynamics of the database ontology.

In the age of BIG data, databases are increasingly connected to each other and with connected data streams, such as Google searches, social media interactions (Twitter, Facebook, Instagram, LinkedIn, Reddit, etc.), and online commerce. These BIG data-derived connections are tracked and used for user profile configuration and real-time data mining purposes by private and public organizations, De Mul, (2015, p. 107-108). From this same logic it can be inferred that, due to data from production processes, money transfers, GPS devices, surveillance cameras, biometric measurements, and the use of smartphones and other locatable devices, an immense global database is being formed that will transform ways of living, working, and thinking.

De Mul, (2015, p. 107). It can be understood that the impact of databases is vast, since it is not limited only to the universe of computing, since they evoke acts in the material world. Examples of this are the biotechnological databases used for genetic engineering purposes, implementations in industrial robots, and the profile detection system at airports, with the aim of identifying possible terrorists, De Mul, (2015, p. 107). In theory, everything that can be identified through data becomes an object of control of such databases. Celebrities, politicians, and other public figures are subject to constant monitoring (whether in public or private) and the great facilitators of this exposure are not only the paparazzi — after all, anyone with a mobile device can make an instant live broadcast. Twenty-first-century capitalism has found a massive new raw material to appropriate: stored data, Srnicek; De Sutter, (2016, p. 106).

Through a series of developments, the electronic platform has become an increasingly dominant way of organizing business, monopolizing, extracting, analyzing, using, and selling data. The business models of the Fordist era were capable, only in a rudimentary way, of extracting data from the production process or from customer use. The era of lean manufacturing changed this slightly, as global 'just in time' supply chains required data on the status of stocks and the location of supplies.

Digital Legal System
Digital Legal System, it is common for the term to be used to talk about software. However, we can assign two different, and quite common, definitions to **the legal system**. We separate the term into "law" and "technology" so that they can understand both definitions. It is important to understand what each of the definitions of the term means. This is because they can be used in different contexts:

- **Legal system**, in law - "A set of interdependent legal norms, brought together according to a unifying principle, whose purpose is to discipline social

coexistence", that is, in law, the term refers to the structure of the legal universe. In the Roman-Germanic legal tradition, the civil law model is used as the structuring basis of the legal system. The legal system has always been based on the law, which is the most important source of law.

- **Legal system, in technology** - the term legal system refers to the software used to solve legal functionalities. Whether it's for process management, or predictive analytics. A good example of the term in the area of technology is the expansion of Lawtechs. Companies that develop software for law firms and corporate legal departments already operate in 12 different industries.

As a way to improve the way of working and reinvent oneself, legal solutions focus not only on the performance of lawyers, client flows and processes, as well as the financial and reporting part are also part of a legal software.

Global Technology Integration

Digital inclusion seeks to eliminate social inequalities, creating conditions so that everyone has the same opportunities online and so that no one is left behind. According to the International Telecommunication Union (ITU), the United Nations agency for information and communication technologies, 5.3 billion people (66% of the world's population) are online (read: they have used the internet in the last three months), and 2.7 billion are still offline.

Many of these people live in rural and remote areas, in least developed countries, landlocked countries and small island developing states. Globally, more than 1 billion people have started using the internet in the last five years. The COVID-19 pandemic has largely contributed to the increase in usage, and it is estimated that in 2020, 466 million people started using the internet for the first time.

According to the United Nations, digital inclusion is about ensuring equal, meaningful and secure access to digital technologies and ensuring opportunities, in the digital space, for everyone, everywhere, without leaving behind vulnerable or historically marginalized groups.
Adequate infrastructure, services and skills in information and communication technologies (ICT) enable individuals and businesses to participate in the digital economy, as well as contribute to economic development and increased competitiveness of countries. Among other advantages associated with digital inclusion, the following stand out:

- Connected and digitally savvy people and communities have the ability to access life-saving information, health services and disaster warnings;
- Allows payment of goods and services online;
- Makes it possible to maintain contact with family and friends;
- It boosts increased productivity and access to better jobs and higher wages.

With so many people working and studying from home due to the COVID-19 pandemic, everyone's digital inclusion has become one of today's most pressing issues. While the pandemic has boosted internet access overall, encouraging more people to connect for work or play, in some countries it has accentuated the existing

digital divides related to age, disability, gender, geography and socio-economic status.

With the migration of many services to the online channel, there is a real and imminent danger that those who do not have access to broadband internet will be left further and further behind. While virtually every urban area in the world is covered by a mobile broadband network, worrying gaps in internet connectivity and access persist in rural areas. Globally, in 2020, 76% of households in urban areas had internet access at home – almost double that of rural areas (39%).

Connectivity gaps in rural areas are especially worrying in least developed countries, where 15% of the rural population lives in areas without any mobile coverage, and 10% of the rural population has coverage of only one 2G network. Assessing the investment requirements to achieve affordable universal connectivity is important for achieving the Sustainable Development Goals (SDGs) set by the United Nations.

Human rights
Human rights are rights inherent in all human beings, regardless of their race, sex, nationality, ethnicity, language, religion or any other status. Human rights include the right to life and liberty, freedom of opinion and expression, the right to work and education, among others. Everyone has the right to these rights, without discrimination.

International human rights law establishes the obligations of governments to act in a certain way or to refrain from certain acts in order to promote and protect the human rights and fundamental freedoms of individuals or groups.

One of the great achievements of the United Nations is the creation of a comprehensive set of human rights laws – a universal, internationally protected code to which all nations can subscribe and to which all people aspire. The United Nations has defined a wide range of internationally accepted rights, including civil, cultural, economic, political and social rights. It also established mechanisms to promote and protect these rights, and to assist States in fulfilling their responsibilities.

Health
The World Health Organization (WHO) defines health as the state of complete physical, mental and social well-being. In other words, the concept of health transcends the absence of diseases and conditions. In other words, health can be defined as the level of functional and metabolic efficiency of an organism at the micro (cellular) and macro (social) levels. Among the most important elements for life on earth is health. It impacts humans all the time. And it can change over the years, or almost instantaneously.

Lifestyle, that is, the set of behaviors adopted by a person, can be beneficial or harmful to health. For example, an individual who maintains a balanced **diet** and engages in daily physical activity has a better chance of enjoying good health. On the contrary, people who eat and drink excessively, who do not get enough rest and who smoke are at serious risk of suffering diseases that could be prevented.

Soon after World War II, the World Health Organization (**WHO**) was created, and it defined health as including elements such as physical exercise and a good diet, and also included access to health systems for the population. Broadly speaking, health can be divided into physical health and mental health, although in reality they are two interrelated aspects. For the care of physical health, frequent and regular exercise is recommended, and a balanced and healthy diet, with a variety of nutrients and proteins.

Mental health, on the other hand, refers to the emotional and psychological well-being in which a human being can use their cognitive and emotional abilities, develop socially and solve the everyday issues of daily **life**. It should be noted that health sciences are those that provide adequate knowledge for the prevention of diseases and the **promotion of health** and well-being of both the individual and the community. Biochemistry, bromatology, medicine, and psychology, among others, are health sciences.

The current concept of health is detached from the biological field, since it is not thought of solely from the point of view of a disease. This concept takes into account the political and economic aspects, quality of life and also the basic needs of the human being. Therefore, it is important to understand the concept of health by analyzing the context in which the individual is inserted. Through the social, cultural, and historical relationships he cultivates with other individuals and with the environment/surroundings.

Therefore, a person can assess their state of health (whether they are healthy or not) depending on the way they conceive of what health is. An example of this is the health programs, which are developed according to the understanding of health of those who idealize and execute them. And here there is an important role for science, which is to help identify different types of diseases that can negatively influence health. Presenting both the causes of a certain disease, as well as the forms of treatment to eliminate it.

Housing
Dwelling or **domestic space** is the place where the human being lives. A dwelling is an artificial structure (although in the early days, human beings used, for the same purpose, natural formations, such as caves), consisting essentially of walls, usually with foundations and a roof that may or may not be a roof. A dwelling serves, in more pragmatic terms, to provide shelter from precipitation, wind, heat and cold, as well as serving as a refuge from attacks by other animals (or other humans).

The term home has a more affective and personal connotation: it is the house seen as the proper place of an individual, where he has his privacy and where the most significant part of his personal life takes place. This, despite the fact that many people spend much of the day at their jobs (outside the home, although media such as the Internet have increased the number of people working from home), or in places of recreation. The house also serves as a resting place. There are, in fact, those who see their home, above all, as the place where they sleep.

Justice
Justice **is the virtue of giving to each one his due**. It is a term that comes from the Latin word *iustitia* and that has different meanings according to the culture, the values of each community and the scope of the term.

In the judicial sphere, this concept is used to refer to the **rules and norms that determine the action of persons and institutions and that are usually formulated and put in writing by the members of the** legislative power of each country.???? The word "justice" is also used to refer to the judiciary, one of the three branches of the state.

Justice is one of the fundamental universal values of the human being, through which it is sought that every human person receive what belongs to him regardless of his or her conditions, which

implies full recognition and respect for human rights. Justice **puts each person in the place he or she deserves, without discrimination** and respecting his or her individual freedoms.

The whole society must be based on justice, unjust acts violate the rights of those who take away freedom . It is important that people and society as a whole fight against the injustices that can occur in areas such as social, work, family, among many others. Within a society, there are different types of justice that regulate interactions between people:

- **Distributive justice** – seeks the fair distribution of goods and resources within a society to ensure social and economic well-being and a dignified life for all citizens.
- **Procedural justice –** seeks the imposition and consequent compliance with the rules by all members of a society, without distinction or privileges of any kind.
- **Retributive justice –** intends for people to be treated the same way they treat others, so that anyone who infringes on another will have a sanction or punishment.
- **Restorative justice** - aims to repair the damage caused by a third party to a given person, with the aim of recovering their social and economic well-being.

5. CONCLUSIONS

General considerations
Justice
Justice is the particularity of what is just and right, such as respect for the equality of all citizens of the world. Etymologically, it is a term that comes from the Latin *justitia.* It is the basic principle that maintains social order through the preservation of rights in their legal form. Justice can be recognized by automatic or intuitive mechanisms in social relations, or by mediation through the courts. In Rome, justice is represented by a statue, blindfolded, which means that all citizens are equal before the law and everyone has equal legal guarantees, that is, everyone has equal rights. Justice must seek equality among all world citizens. According to Aristotle, ( ), the term justice denotes, at the same time, legality and equality, that is, just is the one who fulfills the law (restricted sense) or the one who practices equality (justice in the universal sense).

Legal Legislation
According to the classical conception, the following are sources of law:

- **The Constitutional Laws** – encompass the Constitution of the Republic/Monarchy itself.
- **The norms and principles of international law** (norms contained in international conventions.
- **Ordinary laws** – comprise laws issued by the legislative body and governments (national, regional).
- **Treaties** – acts adopted in international conventions, treaties or agreements.
- **Regulations** – aim to detail/operationalize the application or enforcement of laws.

Judicial Decision (Instruction or Trial)
The judicial decision involves two components: the facts and the interpretation/perception of the facts in the face of the legislation in force.

Example of interpretation/perception of the facts:

- **Fact – a dam (objectivity – the existing dam, built or under construction):**
1. **Farmer** – so much water that can be used to irrigate the fields and produce agricultural products.
2. **Water engineering** – so much water that can be used to produce hydropower to feed the local/national/European grid.
3. **Tourism** – so much water that can be used for local holiday resorts (_construção of houses/bungalows).
4. **Sport** – so much water for sports (pleasure boats, etc.).
5. **Fishing** – so much water that it can produce freshwater fish for human consumption.
6. And so on.
   In a judicial proceeding faced with this fact (objective – the dam) what will be / should be the judicial decision?
- **Is the Judicial Decision** in accordance with human values (impartiality, honesty, seriousness), i.e. respect for the equality and dignity of all citizens?
- **The Judicial Decision** - will be, according to the possible interests...... (installed)?
- **The Judicial Decision** - will it be influenced by the Political Power (politicization of justice) or not?
- **The Judicial Decision** – does it resolve existing conflicts in accordance with existing laws/norms or does it place new conflicts (appeals to higher instances in the hierarchy of justice?

Judicial power
The Judiciary has the capacity to affect/influence the political conjuncture of some countries of the European Union (Democracies/Monarchies). The immediate consequence of this intervention is the expansion of the judiciary in matters that would be reserved to the competences of the Executive and Legislative Branches, inspired by the theory of *checks and balances* . Thus, the study of the phenomenon called "judicialization of politics" will have as its scope, in summary, to analyze the political role of judges, notably due to the expansion of the power of the courts, in addition to verifying how the interaction between the powers has occurred, since one of the powers had its attributions expanded.

Advertising
Will the publicity given to legal proceedings be to inform people/society with rigor, impartiality, seriousness or will it be political publicity to influence the decision in a certain direction? Is the publicity given to the proceedings all in the public interest and will guarantee the freedom of citizens and the right to a good name and to be forgotten?

Accusation
Without pretending to be exhaustive in the characterization of the judicial accusation (I am not aware of this), is it always based on the non-compliance with the procedural duties (laws, norms, etc.) of the citizens of each country of the European Union?

- Will the accusation always be based on real/objective/existing facts, of the non-fulfillment of citizens' duties?

  or

- Is the prosecution not always based on real/objective/existing facts), but rather on the perception/interpretation of the facts (existing or imaginary) of the judge investigators?

The prosecution in the event that it gives rise to a legal process, which of the methodologies/methods will follow:

1. **Broadband** – real and subjective facts that are or are not proven during the judicial process (archiving them due to lack of evidence).
2. **Narrowband** – start the judicial process with the initial real facts and then the accusation will be extended with the facts discovered and proven in the meantime.

Right to Be Forgotten

The right to be forgotten was first established in 2014 in the European Union, as a result of a ruling by the European Court of Justice. The Court held that European data protection law gives citizens the right to request search engines, such as Google, to remove certain query results related to a person's name. When deciding what to remove, search engines need to consider whether the information in question is "incorrect, inappropriate, irrelevant or excessive," as well as whether there is a public interest in keeping the information available in search results.

In 2018, the European Union adopted the Data Regulation (GDPR). Article 17 of the GDPR establishes a "right to erasure" similar to the right that the European Court of Justice recognized under the older law that was replaced by the GDPR.

Every European citizen has the right to be forgotten, i.e. to ask for their data/files relating to them to be erased and to be able to start a new life again, not to be excluded from the society of that country and possibly from the countries of the European Union (EU). This presupposes that the legal proceedings on which the decision is based have a maximum period of 3 to 5 years. In countries where the law permits it (exclusion from the society of that country), legal proceedings take 5-10-15 and up to 20 years.

Is the Problem a Court Decision or Technology?

Technology and innovation have enormous potential to support and improve the challenges facing the judiciary, provided that the universal rights of citizens in any country of the European Union, especially the most financially vulnerable, are guaranteed.

Technological systems related to justice in terms of the management of human, material and procedural resources, as they can contribute to the significant improvement of quality, effectiveness, efficiency, procedural simplification and access to the law by European citizens, contributing significantly to inclusion (starting over life, disabled people, elderly children) and not to increasing the exclusion of citizens.

It is not enough just to modernise the traditional justice systems of the EU countries, but also to modernise and standardise and give coherence to European and country legislation, as well as to significantly increase the knowledge of those involved in judicial proceedings, so that European citizens can believe and trust the various Judicial Systems and ensure interoperability between the Systems, to increase the speed and efficiency of cross-border criminal and civil justice.

The big challenge will be the data with which the Judicial Systems are fed (evidence of the facts and prose), since the technology will confront them with the stored data (UN, EU, country laws). Technology only stores the knowledge of humans, (technology is a product of human invention). Those who make the judicial decisions are human beings, although technology can help the decision, providing the legislative basis for the decision (archiving

or panalization, according to the table of penalties to be applied by the judicial decision-maker).

Artificial Intelligence (AI) in Justice

The implementation of AI in Justice causes a cultural revolution in people, infrastructures, research methods and methodology, processes (efficiency and effectiveness, technological means and deadlines), technologies, (faster) decision-making, attitudes and perception of problems, productivity, as well as in recruitment and selection processes, of justice professionals (competence) and Human Resources Management, To do so, you just have to scour the databases of indexed scientific articles and conference materials to gather your findings.

The advancement of artificial intelligence, judicial process management, and robotic process automation, there are still many obstacles. Among the barriers, there is an increase in the level of resistance to change and the speed of implementation. This is a result of the lack of sufficient evidence or measurements to reveal the true impact of Artificial Intelligence on Justice.

According to Ghosh, (2021), the main problem is that AI will take jobs away from some of the human resources. While AI seems to transform the role of the workforce, it certainly doesn't mean a loss of jobs. IBM's latest reports revealed that 90% of senior management in multinational companies, where AI is used, have the notion that AI generates high-value jobs. This indicates that we will no longer live in a world controlled by robots or artificial intelligence.

Technologies in the field of robotic process automation, artificial intelligence and judicial process management are transforming the operationalization and control of judicial processes, as well as Human Resource Management. This is done by automating tedious and monotonous processes, which is resulting in production, evaluation by judicial experts, storage and permanent consultation, making judicial processes more effective and highly productive, freeing up human resources to do much more relevant work involving organization, planning and control.

According to Bornet, Barkin, and Wirtz, (2021), the main components of work are Artificial Intelligence, Robotics, Cloud, workflow, and automation of judicial processes. With Artificial Intelligence, the applications of Artificial Intelligence in knowledge-based operations are considered at all stages of legal proceedings. With Robotics, the greatest concentration is on software-based robotics for data collection (proof documents, IDs, declarations, fingerprints, etc.), also known as Robotic Process Automation. Finally, with the last component, the Cloud (data storage), workflows and Management of Legal Proceedings, intelligent platforms are considered, such as the management and performance of Human Resources, cloud and digital platforms.

FIGURE 5 - INTELLIGENT AUTOMATION COMPOSITION
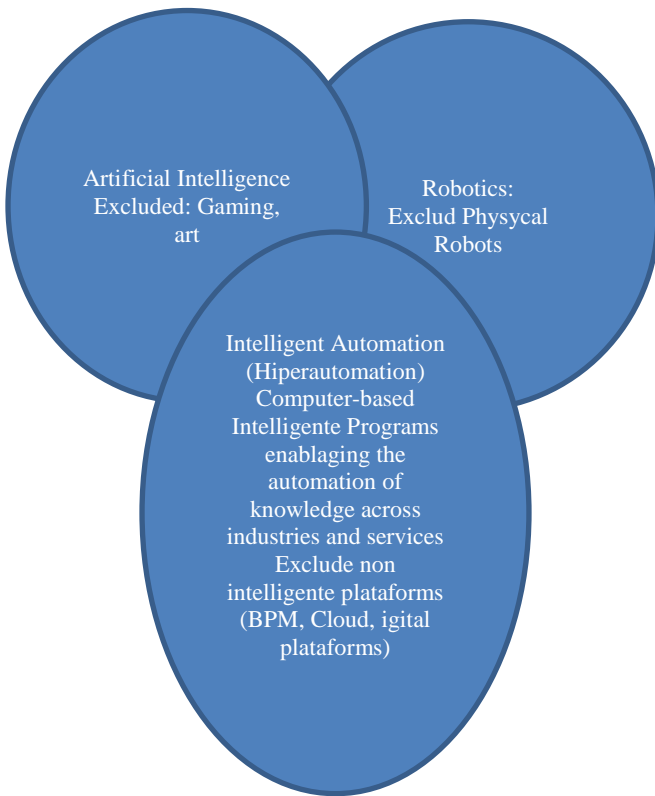
Source: adapted from Bornet, Barkin, and Wirtz, (2021, p. 43).

According to Daugherty and Purdy, (2017), AI has become appealing due to the evolution of deep learning through high-speed data processing computers (Big Data).

According to Barnard, Coombs, Hislop and Taneva, (2020), artificial intelligence can help boost increased productivity, reduce deadlines and costs in Justice. The reformulation or formation of intelligent automation work tasks should be able to consider two points of view; the tasks that automation will perform and the proper organization of tasks or operations to achieve the desired result, specifically regarding the productivity and quality of the service provided to society.

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Many governmental, justice-related organizations seek to increase their human resources at a cheaper cost than employing technology. The COVID-19 crisis shows that such an approach is ineffective. The cost of fraudulent activities and errors made by judicial human resources during investigations and other procedural stages is approximately equal to the investment made internationally in education and is becoming a major problem, Barkin and Wirtz, (2021, p. 301).

Intelligent automation is giving judicial staff the opportunity to shift from self-employment to more value-added work, as a large percentage of time is wasted on inflexible autonomous and administrative operations, unproductive meetings and a large number of emails are major obstacles to the execution of their activities. Implementing automation will save them time to perform their operational tasks, Bornet, Barkin, and Wirtz, (2021, pp. 68, 69, and 198). It is crucial for judicial organizations to consider the relevance and effects of customer and citizen satisfaction at large. Customer satisfaction has typically been the center of research and marketing projects for a long time, but very recently there has been quite extensive research linking the experience of consumers with emerging technologies, Brill, Munoz, and Miller, (2018).

According to Cai, Gursoy and Lu, (2019), artificial intelligence, as a component of intelligent automation, makes fundamental mention of the provision of robotic and digitized services made to justice employees to facilitate their services (administrative, investigation, storage, consultation and decision). Artificial Intelligence is based on technology and a component of intelligent automation that impacts the experience and retention of justice employees.

According to Mueter, Ostrom, Roudtree, and Bitner, (2000), previous studies have shown that, after employing an analytical approach, self-service artificial intelligence technologies have good experiences across the various justice systems. Good experiences range from the self-service capability of artificial intelligence to solve complex problems, offer superior services compared to human service employees, and save costs and time.

Figure 6 – Models, Programming Languages, Knowledge Representation and Use, Knowledge Production, Simulation, Robotics, Computer Creativity by Software (Computer Network, Base Software and Intelligent Systems)

Source: author's elaboration
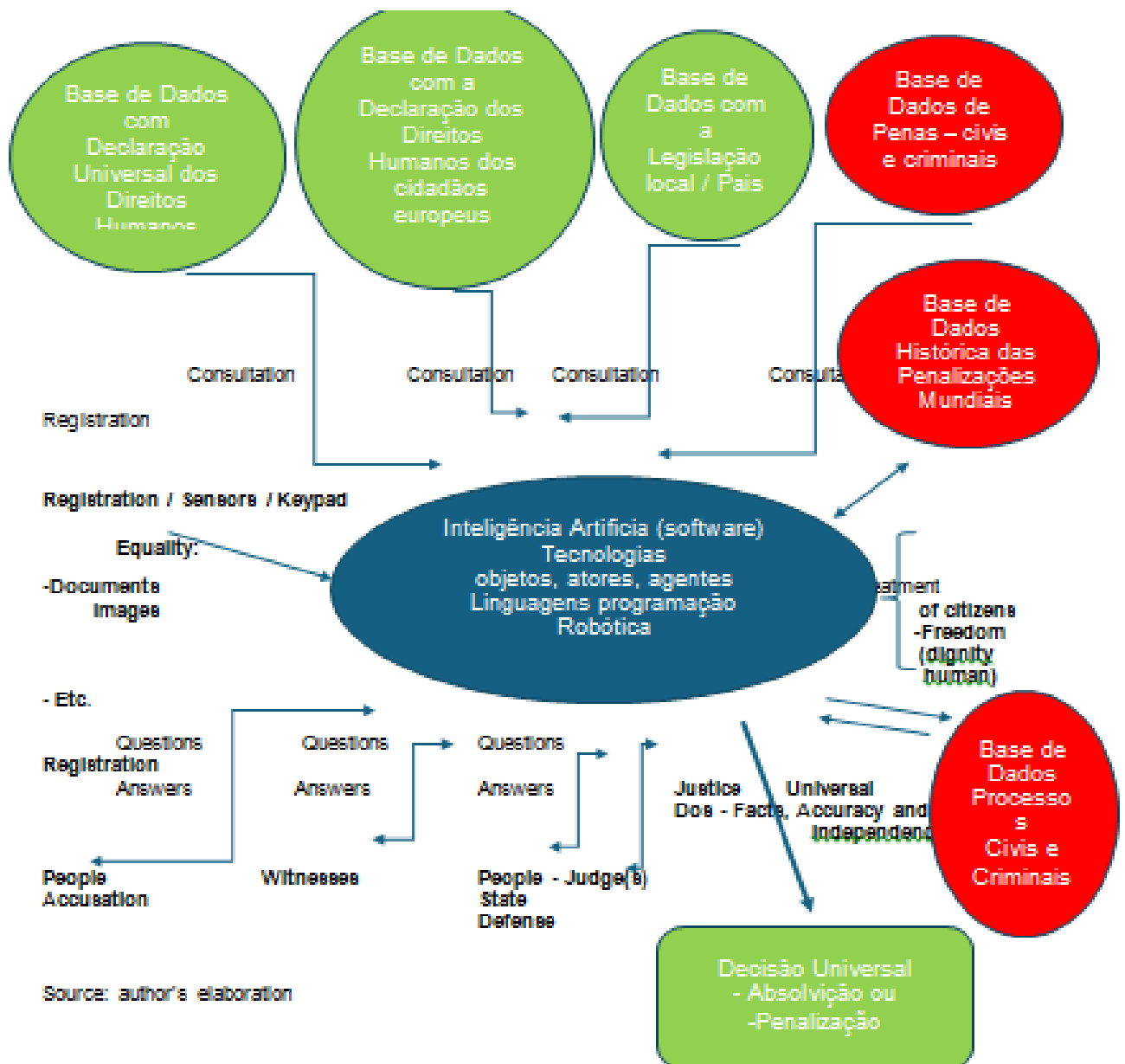
According to Dias Pereira, (2019), the estimated time for completion of each phase of a judicial process is as follows**:**

- Investigation process ➜ **1 to 2 months**.
- Judgment on 1st. Instance → **2 to 4 months;**
- Judgment in 2nd. Instance → **4 to 6 months;**
- Execution of the Sentence → **6 to 8 months;**

Impact of AI on Justice

The implementation of AI in justice
will bring about a real cultural and material revolution, in people, in the infrastructures supporting justice, in the methods and methodologies of investigation, judicial proceedings and their duration with much shorter deadlines, technologies used, rigorous and independent decision-making, based on facts and not on human subjectivity (interests), attitudes and behaviours of people linked to justice and others.

In addition to the electronic archiving of all the documentation of the judicial proceedings and the statements of the different parties involved (prosecution, defence and witnesses), the judicial decision / sentence is produced by the computer without human interference and consists of a printed page with the result of the sentence (conviction or acquittal).

This sentence is the same in any part of the civilized world, since it respects the Universal Declaration of Human Rights, the Declaration of European Rights (in the countries of the European Union) as well as the legislation of the country where the trial took place. In relation to penalties, there is also coherence in that there is a Universal Database (unique) with previous penalties.

The computer can issue a report with the assessment of all the participants in the case, including the judges. To know whether or not the research problem has been well formulated and conducted/oriented, in terms of human resources (skills involved), methodology and methods of approach. Significant increase in

productivity, efficiency and effectiveness of work, as well as in the processes of training, recruitment and selection of qualified personnel (skills) and in the Management of Human and Material Resources with a significant reduction in personnel and infrastructure.

Limitations of the research study

We are aware of the limitations of the study, as many areas of forensic science have not been studied, as well as the impact of AI on these areas of knowledge. However, the judicial system of each country is too expensive for taxpayers and as such has to be managed, as a way for the country to have an efficient and effective judicial system, at the lowest cost for taxpayers and stakeholders (parties, witnesses and judge).

Clues to Further Investigations

The debate on Artificial Intelligence in Justice, of the Democracy of the Future (from Theory to Practice), can contribute to enlighten the powers (legislative, executive and judicial) about the importance of this technology in the Judicial System, as a way to significantly improve productivity with lower costs and deadlines, paradigm shift and focus on rigor and independence of attitudes and behaviors, in decision-making in the different areas of activity, influencing all organizational levels of governance, involving politicians, technical commissions and other members of the government, and with this, providing more assertive, transparent, supportive and responsible political decision-making, at all levels of the power structure (legislative, judicial and executive). We are already asked the following questions:

- What will be the AI Model to be implemented in the economy, of the Participatory Democracy of the Future?
- Can AI in the Participatory Democracy of the Future transform the market economy (greed) into the social economy?
- Aren't AI and Globalization jeopardizing people's freedom and privacy?

KEY TERMS & DEFINITIONS

- Artificial Intelligence – is intelligence demonstrated by machines, as opposed to the natural intelligence exhibited by animals, including humans
- CAPTCHA - a type of challenge response test used in computing to determine if the user is human. The term was coined in 2003 by Luis von Ahn, Manuel Blum, Nicholas J. Hopper, and John Langford.
- Hutter Prize - a cash prize funded by Marcus Hutter that rewards improvements in data compression in a 1 GB specific English text file, with the aim of encouraging artificial intelligence (AI) research.
- **Hybrid Intelligent Systems (HIS) -** denotes a software system that employs, in parallel, a combination of methods and techniques from subfields of artificial intelligence.
- Loebner Prize - an annual artificial intelligence competition that awards prizes to software considered by the judges to be the most human.
- **Machine learning -** is the study of computer algorithms that can improve automatically through experience and the use of data
- Mechanical computer - a computer built from mechanical components such as levers and gears rather than electronic components.

- **Robotics -** an interdisciplinary branch of computer science and engineering. Robotics involves designing, building, operating, and using robots.

Limitations of the research study

Studies on the Democracy of the Future have numerous limitations, as it is too broad a topic to be addressed by a single study, and should therefore be addressed in future research. In the first place, they are often limited to partial studies, that is, on one type of democracy and not on an overall view of the problems of democracy.

In addition, previous research studies are difficult to compare with each other, due to differences in terms of systems and models of democracy, countries (European, American, Chinese, etc.), or period of research. Similarly, previous studies are often limited to just one country, which reduces the potential for generalisation of the findings.

Clues to Further Investigations

The debate on the Democracy of the Future (from Theory to Practice) can contribute to enlighten the World Leaders about the paradigm shifts and focus on their attitudes and behavior, on decision-making in the different areas of activity, influencing all organizational levels / companies (public and private), involving politicians, technical commissions and other members of governance. and with that, provide more assertive and supportive responsible and transparent decision-making, at all levels of the structure of World Power (legislative, judicial and executive). We are already asked the following questions:

- Do the (Digital) Legal Systems of the countries of the European Union contribute to the improvement of the quality of the Judicial Decision (reduction of deadlines, coherence, universality of the decision)?
- Do the (Digital) Legal Systems of the countries of the European Union contribute to the Humanization and Dignity of Judicial Decision (respect for Universal Human Rights), that is, centered on people and not against people?

Declaration of interest

The author declares that he has no financial interests or personal relationships that may have influenced the work related to this article.

Thanks

Key Terms and Definitions
Universal Declaration of Human Rights

Preamble
Taking into consideration:

- That recognition of the inherent dignity and equal and inalienable rights of all members of the human family is the basis of freedom, justice and peace in the world,
- That disregard and contempt for human rights has resulted in barbaric acts that outraged the conscience of mankind and the advent of a world in which human beings enjoy freedom of speech, belief, and will from

fear and fear, has been proclaimed as the highest aspiration of the common people,

- Whereas it is essential, if man is not to be forced to resort to rebellion against tyranny and oppression as a last resort, that human rights be protected by the rule of law,
- That it is essential to promote the development of friendly relations among nations,
- Whereas the peoples of the United Nations have reaffirmed, in the Charter, their faith in fundamental human rights, in the dignity and worth of the human person and in equal rights between men and women, and have determined to promote social progress and better living standards in greater freedom,
- Whereas Member States have undertaken to achieve, in cooperation with the United Nations, the promotion of universal respect for and observance of human rights and fundamental freedoms,
- That a common understanding of these rights and freedoms is of the utmost importance for the full realisation of this promise,

The General Assembly of the United Nations (UN), on December 10, 1948, proclaimed the Universal Declaration of Human Rights to be a common standard of achievement for all peoples and all nations, to the end that every individual and every organ of society, keeping this Declaration constantly in mind, shall strive by teaching and education to promote respect for these rights and freedoms and through progressive measures, to ensure universal and effective recognition and observance. , both among the peoples of the Member States themselves and between the peoples of the territories under their jurisdiction.

Article I: All human beings are born free and equal in dignity and rights. They are endowed with reason and conscience and must act against one another in a spirit of brotherhood.

Everyone has the right to all the rights and freedoms set forth in this Declaration, without distinction of any kind, such as race, color, sex, language, religion, political or other opinion, national or social origin, property, birth or other status. In addition, no distinction will be made on the basis of the political, jurisdictional or international status of the country or territory to which a person belongs, whether independent, trustworthy, non-self-governing or under any other limitation of sovereignty.

Article 3 Everyone has the right to life, liberty and security of persons.

No one shall be detained in slavery or servitude; slavery and the slave trade shall be prohibited in all their forms.

Article 5 – No one shall be subjected to torture or to cruel, inhuman or degrading treatment or punishment.

Article 6 – Everyone has the right to recognize everyone as a person before the law.

Article 7 – Everyone is equal before the law and has the right, without any discrimination, to equal protection of the law. Everyone has the right to equal protection against any discrimination in violation of this Declaration and against any incitement to such discrimination.

Article 8 – Everyone has the right to an effective remedy by the competent national courts for acts that violate the fundamental rights conferred on them by the Constitution or by law.

Article 9 – No one shall be subject to arbitrary arrest, detention or exile.

Everyone has the right to a fair and public hearing by an independent and impartial tribunal in determining his rights and obligations and any criminal charges against him.

Article 11 – All persons accused of a criminal crime have the right to be considered innocent until proven guilty, in accordance with the law, in a public trial in which he has had all the guarantees necessary for his defense.

1. No one shall be found guilty of any criminal offence for any act or omission which would not constitute a criminal offence under national or international law when it was committed. Nor will a heavier penalty be imposed than that applicable when the criminal offence was committed.

Article 12 – No one shall be subject to arbitrary interference with his privacy, family, home or correspondence, nor to attacks on his honor and reputation. Everyone has the right to the protection of the law against such interference or attack.

Article 13 – Everyone has the right to freedom of movement and residence within the borders of each State.

1. Everyone has the right to leave any country, including their own, and to return to their country.

Article 14 – Everyone has the right to seek and enjoy asylum from persecution in other countries.

1. This right cannot be invoked in the case of prosecutions genuinely arising from non-political crimes or acts contrary to the purposes and principles of the United Nations.

Article 15 – Everyone has the right to a nationality.

1. No one shall be arbitrarily deprived of his nationality or denied the right to change his nationality.

Men and women of full age, without any limitation on account of race, nationality or religion, have the right to marry and to found a family. They have the right to equal rights in relation to marriage, during the marriage and its dissolution.

1. The marriage will only be celebrated with the free and full consent of the spouses who wish to do so.
2. The family is the natural and fundamental group unit of society and is entitled to the protection of society and the state.

Article 17 – Everyone has the right to own property alone as well as in association with others.

1. No one shall be arbitrarily deprived of his property.

Everyone has the right to freedom of thought, conscience and religion; this right includes freedom to change his religion or belief, and freedom, alone or in community with others and in public or private, to manifest his religion or belief in teaching, practice, worship and observance.

Everyone has the right to freedom of expression; this right includes freedom to hold opinions without interference and to seek, receive and impart information and ideas through any media and regardless of frontiers.

Article 20 Everyone has the right to freedom of peaceful assembly and association.

1. No one may be forced to belong to an association.

Everyone has the right to participate in the government of his country, either directly or through freely chosen representatives.

1. Everyone has the right to equal access to public service in their country.

2. The will of the people will be the basis of governmental authority; This will be expressed in periodic and genuine elections which shall be by universal and equal suffrage and shall be held by secret ballot or by equivalent free voting procedures.

Article 22 – Everyone, as a member of society, has the right to social security and has the right to realize, through national effort and international cooperation and in accordance with the organization and resources of each State, the economic, social and cultural rights indispensable to his dignity and to the free development of his personality.

Article 23 Everyone has the right to work, freedom of choice of employment, fair and favourable working conditions and protection against unemployment.

1. Everyone, without any discrimination, has the right to equal pay for equal work.

2. Everyone who works has the right to fair and favourable remuneration, ensuring for himself and his family an existence worthy of human dignity, and supplemented, if necessary, by other means of social protection.

3. Everyone has the right to form and join trade unions for the protection of their interests.

Article 24 – Everyone has the right to rest and leisure, including reasonable limitation of working hours and periodic holidays with remuneration.

Everyone has the right to a standard of living adequate to the health and well-being of himself and his family, including food, clothing, housing and necessary medical care and social services, as well as the right to security in the event of unemployment, sickness, disability, widowhood, old age or other lack of subsistence in circumstances beyond his control.

1. Maternity and childhood have the right to special care and assistance. All children, whether born in or out of wedlock, enjoy the same social protection.

Article 26 – Everyone has the right to education. Education should be free, at least in the elementary and fundamental phases. Elementary education is compulsory. Technical and vocational education will generally be made available and higher education will be equally accessible to all on the basis of merit.

1. Education must be geared towards the full development of the human personality and the strengthening of respect for human rights and fundamental freedoms. It will promote understanding, tolerance and friendship among all nations, racial or religious groups, and promote the activities of the United Nations for the maintenance of peace.

2. Parents have the prior right to choose the type of education that should be given to their children.

Everyone has the right to participate freely in the cultural life of the community, to enjoy the arts and to share in scientific progress and its benefits.

1. Everyone has the right to the protection of the moral and material interests resulting from any scientific, literary or artistic production of which he or she is the author.

Everyone has the right to a social and international order in which the rights and freedoms set forth in this Declaration can be fully realized.

Article 29 : Everyone has a duty to the community in which only the free and complete development of his personality is possible.

1. In the exercise of their rights and freedoms, everyone shall be subject only to limitations determined by law solely for the purpose of ensuring due recognition and respect for the rights and freedoms of others and of satisfying the just requirements of morality, public order and general welfare in a democratic society.

2. These rights and freedoms may in no case be exercised in a manner contrary to the purposes and principles of the United Nations.

Article 30 – Nothing in this Declaration shall be construed as implying to any State, group or person any right to engage in any activity or to perform any act aimed at the destruction of any of the rights and freedoms set forth herein.

European Union – Rights and Freedoms.

Official Journal of the European Union C 326/395 EN TITLE I DIGNITY

Article 1 - Dignity of the human being - The dignity of the human being is inviolable. It must be respected and protected.

Article 2 - Right to life 1. Everyone has the right to life. 2. No one shall be sentenced to death or executed.

Article 3 - Right to the integrity of the human being

1. Everyone has the right to respect for his or her physical and mental integrity.

2. In the field of medicine and biology, the following shall be observed:

a) The free and informed consent of the person, in accordance with the law;

(b) the prohibition of eugenic practices, in particular those aimed at the selection of persons;

(c) the prohibition of turning the human body or its parts as such into a source of profit;

(d) a ban on the reproductive cloning of human beings.

Article 4 – Prohibition of torture and inhuman or degrading treatment or punishment. No one shall be subjected to torture or to inhuman or degrading treatment or punishment.

Article 5 - Prohibition of Slavery and Forced Labour 1. No one can be subjected to slavery or servitude. 2. No one shall be compelled to perform forced or compulsory labour. 3. Trafficking in human beings is prohibited.

Article 6 - Right to liberty and security. Everyone has the right to liberty and security.

Article - Respect for private and family life. Everyone has the right to respect for his or her private and family life, home and communications.

Article 8 - Protection of personal data

1. Everyone has the right to the protection of personal data concerning him/her.

2. Such data shall be processed fairly for specific purposes and with the consent of the data subject or on another legitimate basis provided for by law. Everyone has the right to access the data collected concerning him or her and to have it rectified.

3. Compliance with these rules shall be subject to review by an independent authority.

Article 9 - Right to marry and found a family. The right to marry and the right to found a family are guaranteed by the national laws governing the exercise of these rights.

Article 10 - Freedom of thought, conscience and religion

1. Everyone has the right to freedom of thought, conscience and religion. This right shall include freedom to change one's religion or belief and freedom to manifest one's religion or belief, individually or collectively, in public or private, through worship, teaching, practice and observance of rites.

2. The right to conscientious objection shall be recognised by the national laws governing the exercise of that right.

Article 11 - Freedom of expression and information

1. Everyone has the right to freedom of expression. This right shall include freedom of opinion and freedom to receive and impart information or ideas without interference by any public authority and regardless of frontiers.

2. Media freedom and pluralism shall be respected.

Article 12 - Freedom of assembly and association

1. Everyone has the right to freedom of peaceful assembly and freedom of association at all levels, including political, trade union and civic matters, which includes the right to form and join trade unions with others for the defence of his or her interests. 2. Political parties at Union level shall contribute to the expression of the political will of the citizens of the Union.

Article 13 - Freedom of the arts and sciences. The arts and scientific research are free. Academic freedom is respected.

Article 14 - Right to education

1. Everyone has the right to education and access to vocational and continuing training.

2. This right shall include the possibility of attending compulsory education free of charge.

3. The freedom to set up educational establishments, with due regard for democratic principles, and the right of parents to ensure the education and teaching of their children in accordance with their religious, philosophical and pedagogical beliefs, shall be respected in accordance with the national laws governing the exercise of such establishments.

Article 15 Freedom to trade and the right to work

1. Everyone has the right to work and to pursue a freely chosen or accepted occupation.

2. Every citizen of the Union shall be free to seek employment, to work, to establish himself or to provide services in any Member State.

3. Third-country nationals who are authorised to work in the territory of the Member States shall be entitled to working conditions equivalent to those enjoyed by citizens of the Union.

Article 16 Freedom to conduct a business. The freedom to conduct a business shall be recognised in accordance with Union law and national laws and practices.

Article 17 Right to property

1. Everyone shall have the right to own, use, dispose of and transmit his or her lawfully acquired property. No one may be deprived of his property, except for reasons of public utility, in the cases and under the conditions provided for by law and subject to just compensation for the loss of such property, in good time. The use of property may be regulated by law to the extent necessary in the public interest. 2. Intellectual property is protected.

Article 18 Right to asylum. The right to asylum is guaranteed within the framework of the Geneva Convention of 28 July 1951 and the Protocol of 31 January 1967 relating to the Status of Refugees and in accordance with the Treaty on European Union and the Treaty on the Functioning of the European Union (hereinafter referred to as 'the Treaties').

Article 19 Protection in the event of removal, expulsion or extradition

1. Collective expulsions are prohibited.

2. No one shall be removed, expelled or extradited to a State where there is a serious risk that he or she would be subjected to the death penalty, torture or other inhuman or degrading treatment or punishment.

TITLE III EQUALITY

Article 20 Equality before the law. All people are equal before the law.

Article 21 Non-discrimination

1. Discrimination based on, inter alia, sex, race, colour, ethnic or social origin, genetic features, language, religion or belief, political or any other opinion, membership of a national minority, property, birth, disability, age or sexual orientation shall be prohibited. 2. Within the scope of application of the Treaties and without prejudice to any specific provisions contained therein, any discrimination on grounds of nationality shall be prohibited.

Article 22 Cultural, religious and linguistic diversity. The Union respects cultural, religious and linguistic diversity.

Article 23 Equality between men and women. Equality between men and women must be guaranteed in all areas, including employment, work and pay. The principle of equality does not preclude the maintenance or adoption of measures providing for specific advantages in favour of the under-represented sex.

Article 24 Rights of the child

1. Children have the right to the protection and care necessary for their well-being. They are free to express their opinion, which will be taken into account in matters concerning them, depending on their age and maturity.

2. The best interests of the child shall be primarily concerned with all acts relating to children, whether carried out by public authorities or private institutions.

3. Every child has the right to have regular personal relations and direct contact with both parents, unless this is contrary to his or her interests.

Article 25 Rights of older persons The Union recognises and respects the right of older persons to live in dignity and independence and to participate in social and cultural life.

Article 26 Integration of persons with disabilities. The Union recognises and respects the right of persons with disabilities to benefit from measures to ensure their autonomy, social and occupational integration and participation in the life of the community.

TITLE IV SOLIDARITY

Article 27 Workers' right to information and consultation within the undertaking. Workers or their representatives shall be guaranteed timely information and consultation at the

appropriate levels in the cases and under the conditions provided for by Union law and national laws and practices.

Article 28 Right to bargain and collective action. Workers and employers, or their organisations, have, in accordance with Union law and national laws and practices, the right to negotiate and conclude collective agreements at the appropriate levels, as well as to use, in the event of a conflict of interest, collective action for the defence of their interests, including to strike.

Article 29 Right of access to employment services. Everyone has the right to free access to an employment service.

Article 30 Protection in the event of unfair dismissal. All workers have the right to protection against unfair dismissals in accordance with Union law and national laws and practices.

Article 31 Fair and equitable working conditions

1. All workers have the right to working conditions that are kept in good health, safety and dignity.

2. Every worker shall have the right to a limitation of maximum working hours and daily and weekly rest periods, as well as to an annual period of paid leave.

Article 32 Prohibition of child labour and protection of young people at work. Child labour is prohibited. The minimum age for admission to work may not be lower than the age at which compulsory education ends, without prejudice to provisions more favourable to young people and subject to well-defined derogations. Young people admitted to work must benefit from working conditions appropriate to their age and protection against economic exploitation and against all activities which may jeopardise their safety, health or physical, mental, moral or social development, or jeopardise their education.

Article 33 Family and professional life

1. The legal, economic and social protection of the family shall be ensured.

2. In order to be able to reconcile family and professional life, everyone shall have the right to protection against dismissal on grounds of maternity, as well as to paid maternity leave and parental leave for the birth or adoption of a child.

Article 34 Social security and social assistance

1. The Union shall recognise and respect the right of access to social security benefits and social services providing protection in cases such as maternity, sickness, accidents at work, dependency or old age, as well as in the event of loss of employment, in accordance with Union law and national laws and practices.

2. Everyone legally residing and moving within the Union shall be entitled to social security benefits and social advantages in accordance with Union law and national laws and practices.

3. In order to combat social exclusion and poverty, the Union shall recognise and respect the right to social assistance and housing assistance to ensure a decent existence for all those who lack sufficient resources, in accordance with Union law and national laws and practices.

Article 35 Protection of health. Everyone has the right of access to preventive health care and to receive medical care in accordance with national laws and practices. A high level of protection of human health shall be ensured in the definition and implementation of all Union policies and activities.

Article 36 Access to services of general economic interest. The Union shall recognise and respect access to services of general economic interest as provided for in national laws and practices, in accordance with the Treaties, in order to promote the social and territorial cohesion of the Union.

Article 37 Protection of the environment. All Union policies must incorporate a high level of environmental protection and the improvement of environmental quality, and ensure them in accordance with the principle of sustainable development.

Article 38 Consumer protection. Union policies should ensure a high level of consumer protection.

TITLE V CITIZENSHIP

Article 39 Right to vote and to stand as a candidate in elections to the European Parliament

1. Every citizen of the Union shall have the right to vote and to stand as a candidate in the European Parliament in the Member State of residence under the same conditions as nationals of that State.

2. The Members of the European Parliament shall be elected by direct, free and secret universal suffrage.

Article 40 Right to vote and to stand as a candidate in municipal elections. Every citizen of the Union shall have the right to vote and to stand as a candidate in municipal elections in the Member State of residence under the same conditions as nationals of that State.

Article 41 Right to good administration

1. Everyone has the right to have his or her affairs handled impartially, fairly and within a reasonable time by the institutions, bodies, offices and agencies of the Union.

2. That right shall include, inter alia:

(a) the right of any person to be heard before any individual measure is taken against him which would adversely affect him;

(b) the right of every person to have access to his or her file, with due regard for the legitimate interests of confidentiality and professional and business secrecy;

(c) the obligation on the part of the administration to state the reasons for its decisions.

3. Everyone has the right to compensation from the Union for damage caused by its institutions or by its servants in the performance of their duties, in accordance with the general principles common to the laws of the Member States.

4. Persons shall have the opportunity to address the institutions of the Union in one of the languages of the Treaties and shall receive a reply in the same language.

Article 42 Right of access to documents. Any citizen of the Union, and any natural or legal person residing or having its registered office in a Member State, shall have a right of access to documents of the institutions, bodies, offices and agencies of the Union, whatever the medium of those documents.

Article 43 European Ombudsman. Any citizen of the Union, and any natural or legal person residing or having its

registered office in a Member State, shall have the right to petition the European Ombudsman concerning instances of maladministration in the activities of the institutions, bodies, offices or agencies of the Union, with the exception of the Court of Justice of the European Union acting in its judicial role.

Article 44 Right to petition. Any citizen of the Union, and any natural or legal person residing or having its registered office in a Member State, shall have the right to petition the European Parliament.

Article 45 Freedom of movement and residence

1. Every citizen of the Union shall have the right to move and reside freely within the territory of the Member States.

2. Freedom of movement and residence may be granted, in accordance with the Treaties, to third-country nationals legally residing in the territory of a Member State.

Article 46 Diplomatic and consular protection. Every citizen of the Union shall enjoy, in the territory of a third country in which the Member State of which he or she is a national is not represented, protection by the diplomatic and consular authorities of any Member State under the same conditions as nationals of that State.

TITLE VI JUSTICE

Article 47 Right to an effective remedy and to a fair trial. Everyone whose rights and freedoms guaranteed by Union law are violated shall have the right to an effective remedy before a tribunal in accordance with the provisions of this Article. Everyone has the right to a fair and public hearing within a reasonable time by an independent and impartial tribunal previously established by law. Everyone has the opportunity to be advised, defended and represented in court. Legal aid shall be granted to those who do not have sufficient resources, to the extent that such aid is necessary to ensure effective access to justice.

Article 48 Presumption of innocence and rights of defence

1. Every accused person shall be presumed innocent until proven guilty by law.

2. The rights of the defence shall be guaranteed respect for all accused persons.

Article 49 Principles of legality and proportionality of criminal offences and penalties

1. No one may be convicted of an act or omission which, at the time when it was committed, did not constitute an offence under national or international law. Nor may a heavier penalty be imposed than that applicable when the offence was committed. If, after the offence, the law provides for a lighter penalty, that shall be the penalty imposed.

2. This Article shall be without prejudice to the sentence or punishment to which a person has been sentenced for an act or omission which, at the time when it was committed, constituted a crime according to the general principles recognized by all nations.

3. Penalties must not be disproportionate to the offence.

Article 50 – The right not to be tried or punished twice for the same offence. No one shall be liable to be tried or punished in criminal proceedings for an offence for which he or she has already been finally acquitted or convicted in the Union in accordance with the law.

TITLE VII GENERAL PROVISIONS GOVERNING THE INTERPRETATION AND APPLICATION OF THE CHARTER

Article 51 - Scope

1. The provisions of this Charter are addressed to the institutions, bodies, offices and agencies of the Union, with due regard for the principle of subsidiarity, and to the Member States only when they are implementing Union law. They must therefore respect rights, observe principles and promote their application, in accordance with their respective competences and within the limits of the competences conferred on the Union by the Treaties.

2. This Charter does not extend the scope of Union law to competences other than those of the Union, nor does it create any new tasks or competences for the Union, nor does it modify the tasks and competences defined by the Treaties.

Article 52 Scope and interpretation of rights and principles

1. Any limitation on the exercise of the rights and freedoms recognised by this Charter must be provided for by law and respect the essence of those rights and freedoms. Subject to the principle of proportionality, such limitations may be introduced only if they are necessary and genuinely meet objectives of general interest recognised by the Union or the need to protect the rights and freedoms of others.

2. The rights recognised by this Charter which are governed by provisions contained in the Treaties shall be exercised in accordance with the conditions and limits laid down in the Treaties.

3. In so far as this Charter contains rights corresponding to rights guaranteed by the European Convention for the Protection of Human Rights and Fundamental Freedoms, the meaning and scope of those rights shall be the same as those laid down by that Convention. That provision does not preclude EU law from providing more extensive protection.

4. In so far as this Charter recognises fundamental rights deriving from the constitutional traditions common to the Member States, those rights must be interpreted in accordance with those traditions.

5. The provisions of this Charter containing principles may be implemented by means of legislative and executive acts adopted by the institutions, bodies, offices and agencies of the Union and by acts of the Member States when they are implementing Union law in the exercise of their respective competences. They will be relied on before the court only for the purpose of interpreting those acts and reviewing their legality.

6. National laws and practices shall be fully taken into account, as set out in this Charter. 7. The Courts of the Union and of the Member States shall take due account of the explanations intended to guide the interpretation of this Charter.

Article 53 Level of protection. Nothing in this Charter shall be interpreted as restricting or adversely affecting the human rights and fundamental freedoms recognised, within their

respective fields of application, by Union law, international law and international conventions to which the Union or all the Member States are parties, in particular the European Convention for the Protection of Human Rights and Fundamental Freedoms, as well as the constitutions of the Member States.

Article 54 Prohibition of abuse of rights.Nothing in this Charter shall be interpreted as implying any right to engage in activities or to do any act aimed at the destruction of the rights or freedoms recognised by the Charter or to the greater restriction of those rights and freedoms than those provided for in this Charter. ° ° ° The above text reproduces, adapting it, the Charter proclaimed on 7 December 2000 and replaces it from the date of entry into force of the Treaty of Lisbon

FUNDAMENTAL CONCEPTS
News
The concept of information is always present in journalistic products. The expressions informative journalism or informative content are linked to the news. When we talk about news, we automatically talk about information for journalism. What is the content of journalism? The information of the news, that is, the **news is the theme, while the information describes the theme.** For example: news – economic crisis in Europe – information is everything that characterises/describes the economic crisis from its origin to its consequences. The *media* (print or electronic) even though it suffers strong competition from other media, the newspaper / *newsletter* continues to affirm its vocation to inform us of everything and all dimensions of our presence in the world.

The term light news is often used to mean news that is not serious (Davis, 1996: 108-109). Serious news refers to coverage of events involving political leaders, substantive public issues, or significant disruptions in the routine of daily life, such as an earthquake or an aviation disaster (Smith, 1985). Information about these events is supposed to be important for citizens to understand and respond to public issues (Donsbach, 1999; McCartney, 1997). News that is not of this kind is, by definition, light.

Using this pattern, it can be said that the weight of light news in news coverage has grown significantly. News without a clear link to public policy (topics of substance) decreases. News with a public policy component – serious news – decreases to a corresponding degree. The degree of change differs between different media, but the trend is the same for everyone – local television news, national television news, reference newspapers, local dailies and weekly magazines. Each has less politically-related news coverage today than it did a decade or two ago.

Light news is sensationalist news, more personality-centered, less localized in time, more practical, and more incident-based (Spragens, 1995). These characteristics, in fact, have changed: in the early 1980s, approximately 25 percent of news stories had a moderate to high level of sensationalism, compared to nearly 40 percent today.

Digital Capitalism
Technological changes are always accompanied by narratives in which optimistic interpretations predominate, whose function is essentially to legitimize, to hide the power relations that drive or underlie the processes of technological change, relations with social consequences, based on the generalized digitalization of processes, products and services.

The decade of the seventies was lavish in diagnoses that pointed to the relevance of a series of technological developments and economic trends – then manifested mainly in the United States – on the basis of which it was argued that advanced industrial societies were undergoing a fundamental social transformation, equivalent in scale and importance to the transition to industrial society during the eighteenth and nineteenth centuries. The most diverse names then began to refer to this new society: an active society, a service society, a knowledge society, a technocratic society, an interconnected society, a telematic society, a leisure society, a post-capitalist society, an interactive society, a multimedia society, a post-industrial society. The most successful name was that of the information and knowledge society.

Most of the research was based on the consideration that the new information and communication technologies, as "open technologies par excellence, regardless of economic, social and cultural weights", so that the evolution of daily life would also be open to a plurality of futures. An open future full of optimism, until one could conceive of a whole saga of post-industrial utopias according to which, together with the hand of new information and communication technologies, the expected human liberation in the form of productivity and material abundance, communicative fluidity and personal self-fulfillment, would emerge.

Some went further in considering the revolutionary nature of the transformations being experienced by the more developed countries. The communicator of the new society, Alvin Toffler, put it this way: It has become a cliché to say that we are living through "a second industrial revolution". This phrase is intended to describe the speed and depth of change all around us. But, in addition to being vulgar, it can be deceiving. Because what's happening now is probably bigger, deeper and more important than the industrial revolution. In fact, a growing and trusted opinion group argues that the present moment represents nothing less than the second crucial milestone of the digital society.

Privacy
The concept of privacy was born in ancient philosophy, with the distinctions between the public and private domains. In ancient Greece, the interest of the state was superior to the private interest. With the decline of Greek political life after the Macedonian invasion, philosophical interest shifted from public to private life, thus valuing the intimacy of the citizen. With the decline of feudal society, in which isolation was the privilege of a few, privacy began to be extended to all, as an element of promoting equal treatment between citizens and social parity. In America and Europe, until the first half of the nineteenth century, the defense of the right to privacy was confused with that of private property and honor, but from the second half of the nineteenth century the protection of privacy received new contours.

In the twentieth century, technological innovations brought about sudden changes in the concept of privacy, increasing the risk of breach. The desire to get information about people has become increasing. (Navarro, 2014) In 1948 the American Declaration of the Rights and Duties of Man appeared, an international protection of the right to privacy, which in Article 5 provides as follows: "Everyone has the right to the protection of the law against abusive attacks on his honor, his reputation, and his private and family life." According to Sampaio (1998), in the same year, the United Nations General Assembly approved on December 10 the Universal Declaration of Human Rights, which stated in its article 12 that "no one shall be the object of arbitrary interference in his

private life, in his family, in his home or in his correspondence, nor of attacks on his honor or reputation. Everyone has the right to the protection of the law against such interference or attack."

Honesty

Honesty is a **value or quality proper to the human being that has a close relationship with the principles of truth, justice and moral integrity**. An honest person is one who always seeks to precede the truth in his thoughts, expressions, and actions.

Throughout the history of philosophy, honesty has been studied by a number of thinkers. For example, Socrates devoted himself to investigating its meaning and to inquiring into what honesty really is. Later, philosophers such as Kant defined a series of general ethical principles that included among them honest conduct. Another philosopher, Confucius, differentiated different levels of honesty for ethics and according to their degree of depth they were called Li, Yi and Ren. It is a matter of debate whether honesty is an innate characteristic of human beings or whether it is the result of their interaction in society.

In this sense, honesty (as an ethical or moral quality of society) is also linked to sincerity, coherence, integrity, respect and dignity. But since human truth can never be absolute, honesty is also a subjective value, insofar as it depends on the context and the actors involved. For this reason, it becomes difficult to establish moral parameters shared by one society or one culture or another, and even between groups or individuals. These conceptions can change radically and what for some is a demonstration of honesty, for others is not.

In the different fields of a society, the concept of honesty is variable and more or less privileged. For example, in the sciences honesty is a priority, but in political areas this notion is much more debatable. However, the contamination of honesty has reached several fields in which the sentence of this fact is very versatile and depends on the rules applied. Thus, while a dishonest event is repudiated without hesitation by the entire scientific community, when plagiarism or fraud is demonstrated, unfortunately this example is not recognized on many occasions in the powers of the State.

What are the values of honesty:

- **Respect** – is the ability to be considerate of other people's feelings.
- **Honesty** is a fundamental value for human beings and can influence every aspect of a person's life. With honesty, there is no hypocrisy or artificiality that creates confusion and distrust in the minds and lives of others. Honesty contributes to a life of integrity, because the inner self and the outer self are a mirror image.
- **Sincerity – it is** a very important value in people, since it is the ability not to be false, that is, not to lie in life. Being sincere implies being faithful to who you are, always showing outwards what you are on the inside in any situation.
- **Humility** is a virtue characterized by an awareness of one's limitations; modesty, simplicity.
- **Empathy** - Empathy is the intention to understand feelings and emotions by trying to objectively and rationally experience what another individual feels. The word empathy is of Greek origin *"empátheia"* which means "animated".

- **Sense of justice** - There is also what is called the "sense of justice" which translates into a moral virtue present in each individual, who is **the actor of practicing justice according to** some principles, rights, honor, duties and freedom that are imposed on him.
- **Education** means the means by which the knowledge, habits, customs, and values of a community are transferred from one generation to the next.
- **Solidarity** - is the noun that indicates **the quality of solidarity and a feeling of identification with the suffering of others**. The word solidarity comes from the French word *solidarité*, which can also refer to mutual responsibility.
- **Ethics** – is the part of philosophy responsible for the investigation of the principles that motivate, distort, discipline or guide human behavior, reflecting respect for the essence of the norms, values, prescriptions and exhortations present in any social reality, that is, a set of rules and precepts of an evaluative and moral order of an individual, a social group or a society. An example in medicine is the set of rules of moral, deontological and scientific conduct of health professionals in relation to patients.

Equality

Equality is an essential value for the progress and advancement of the whole of society, because it offers the possibility that every human being has the same rights and opportunities and, consequently, that every person can contribute to the whole from his freedom, that he can contribute with his work, his effort, their knowledge and their solidarity.

Equality **is the identical treatment**, without difference of race, sex, social or economic condition, physical, mental, intellectual or sensory condition or of any kind, where all people have the same rights and the same opportunities.

Equality **must exist for people before the law** in order to achieve equality or equitable treatment that seeks to observe the social sphere and the existential conditions of each individual. Equality **is today an essential value for the real progress** of society as a whole.

Inclusion

Citizenship presupposes equal treatment for all. It's a way to open up equal opportunities, even if it's for those who seem "different." Citizenship is forged in the consciousness of the SELF, it is based on inherited duties and values, it is strengthened in the exercise of conquered rights, it is expanded in the insertion of the individual in the social space that belongs to him. A full citizen is one who recognizes himself, as a whole being, as a capable being, despite the possible "flaw" or "deficit" that he carries, whether in the physical, intellectual, social, cultural or economic sphere.

Truth vs Falsehood

Truth is the property of being in agreement with real fact or reality. Truth is the opposite of falsehood.

Human Dignity

Human dignity is the **right of every human being** to be respected and valued, as an individual and as a social, with his or her particular characteristics and conditions, for the simple fact of being a person. History shows many cases where human dignity has been subjugated. Therefore, it is a fact that the dignity of the

human person is not limited to having access to education, health and housing, for example. It also includes the most diverse facets of freedom, work, politics, integrity, among others, as well as how these values relate to each other.

The principle of human dignity is the basis of practically all the law of democratic countries, since it is the realization that the fullness of the human being must be respected and preserved by the figure of the State, that is, a set of principles and values that has the function of ensuring that each citizen has his or her **rights respected by the State**. The main objective is to ensure the well-being of all citizens.

The principle is linked to rights and duties, it involves the necessary conditions for a person to have a dignified life, with respect for these rights and duties. It is also related to moral values, because it aims to ensure that citizens are respected in their personal issues and values.

Many basic rights of the citizen (fundamental rights) are related to the principle of the dignity of the human person, especially **individual and collective rights and social rights.** Respect for fundamental rights is essential to guarantee the existence of dignity. It is precisely for this reason that the dignity of the human person is recognized as fundamental by the Constitution.

Individual **and collective rights** are the basic rights that guarantee equality to all citizens. Some of the most important are:

- right to life.
- right to security.,
- equal rights and obligations between men and women.
- freedom of expression of thought.
- freedom of religious belief.

There are also individual and collective rights: the protection of privacy, freedom at work, freedom of movement, and the freedom to engage in artistic or intellectual activities. Social **rights, on the other hand**, are rights related to the well-being of the citizen. Some examples are:

- the right to education and work.
- guarantee of access to health, transportation, housing, security, social security.
- protection of labour rights.
- protection of children, maternity and those most in need.

The dignity of the human person is **a principle of the democratic rule of law**, which is the state that respects and guarantees the human rights and fundamental rights of its citizens. Thus, it can be understood as a principle that places limits on the actions of the State. Thus, the dignity of the human person must be used to base decisions made by the State, always considering the interests and well-being of citizens.

This means that, in addition to guaranteeing people the exercise of their fundamental rights, the State must also act with sufficient care to ensure that these rights are not disrespected. It is an obligation of the State, through governments, to take measures to guarantee the rights and well-being of citizens. In the same way, it is also the task of the State to ensure that **fundamental rights are not violated**.

Ethics

According to Du Mont (1991), ethics aims to establish principles of human behavior that help people choose alternative forms of action. These considerations lead to definitions of ethics and morals, prompting us to refer to deontology as the study of the codes or ethics of the professions. Targino (2006, p. 135) states that the definitions of ethics originate from the "Greek term ethos, as the etymology suggests, it is the part of philosophy that deals with the reflection on customs, encompassing the guidelines". On the other hand, morality "is a term from the Latin mores that refers to acts and customs per se, that is, to the set of objective norms of conduct, changeable in time and space".

According to Sá (2007), the word ethics is sometimes associated with the sense of morality, but not always in an adequate way. It has also been understood as the science of human conduct towards the being and its fellow men, to study the action of men and their considerations of value. In this research, we emphasize its importance for justice professionals, highlighting ethical action in the context of today's society and, mainly, with regard to their social responsibility.

With a view to the theoretical foundation of the study, we approach the theme of professional ethics linked to the code of ethics, studied by deontology which, according to Targino (2006, p.135) "comes from the Greek deontos, duty; logos, discourse or treatise, etymologically equivalent to treatise or science of duty."

In summary, ethics is the part of philosophy responsible for the investigation of the principles that motivate, distort, discipline or guide human behavior, reflecting respect for the essence of the norms, values, prescriptions and exhortations present in any social reality, that is, the set of rules and precepts of an evaluative and moral order of each person. social group or a society. An example in medicine is the set of rules of moral, deontological and scientific conduct of health professionals in relation to patients.

Privacy

The origin of the concept of human rights originated in the seventeenth century, and is a product of the theory of "natural rights" (Natural rights were established by God and reason, to all men, because they are all equal to each other – Principle of Equality among Men), by John Locke, defender of religious freedom and tolerance. However, in the pre-Christ era, there was already an embryonic perception of the human concept and specificity:

- Cyrus Cylinder decree of 539 B.C., - protects the right to equality and religious freedom;
- The Pact of the Virtuous (Hifl-al-fudul) – drawn up by Arab tribes around 590 A.D. is considered one of the first human rights alliances.
- No tax may be imposed without the consent of Parliament,
- No subject may be imprisoned without a demonstrated reason (the reaffirmation of the right of habeas corpus),
- No soldier may be quartered in the homes of the citizens
- Magna Carta - establishes equality before the law and the right to property;

After King John of England violated a number of ancient laws and customs by which England had been ruled, in 1215 his subjects forced him to sign the Magna Carta, which lists what later came to be regarded as human rights. Among them was:

- The right of the church to be free from government interference,
- The right of all free citizens to own, inherit property(s), and be protected from excessive taxation.

- The right of widows to own property and to decide not to remarry,
- Establish the principles of equality before the law. This also contains provisions prohibiting bribery and official misconduct. (A Brief History of Human Rights - The Magna Carta (1215);
- The Petition of Right (1628), - the English Parliament passed a Declaration of Civil Liberties, safeguarding civil liberties, such as, the right of *habeas corpus*;
- The Constitution of the United States of America (1787) - defines the basic rights of citizens;

The Declaration of Independence of the United States of America "was the document in which the Thirteen Colonies of North America declared their independence from Great Britain, and it inspired human rights documents around the world." (United States Declaration of Independence (1776).

The Constitution of the United States of America (1787) "is the oldest national constitution, and it defines the principal organs of government, their jurisdictions, and the basic rights of citizens." (A Brief History of Human Rights - The Constitution of the United States of America (1787) and the Bill of Rights (1791).

The Declaration of the Rights of Man and of the Citizen (1789) marks in a broader and more significant way the historical process of Western awareness of the intrinsic value of Man. The French Declaration of the Rights of Man emerged in the context of great political and social upheaval, under the influence of the Enlightenment of natural rights and Renaissance ideas that evoked equality among all human beings, calling into question the ancient ideals

The Bill of Rights (1791) - "... protects freedom of expression, freedom of religion, the right to keep and bear arms, freedom of assembly and freedom to petition.' (A Brief History of Human Rights - The Constitution of the United States of America (1787) and the Bill of Rights (1791).

It was only in the nineteenth and twentieth centuries that significant initiatives were put in place for the international protection of human beings, namely the eradication of the slave trade; treaties aimed at improving the conditions of the sick and wounded in war; the protection of minorities; the creation of the Leagues of Nations; concern for the fair treatment of refugees; the legal status of women, and the creation of the International Labour Organization (ILO), with the humanitarian mission of eradicating poverty and social inequalities, along with concerns about equal opportunities for men.

On October 24, 1945, the United Nations (UN) was created. Its founding principle of seeking and maintaining peace was to rebuild the world on the pillars of freedom and justice, through cooperation between peoples, to strengthen human rights and to seek solutions to the economic, social, cultural or humanitarian problems that occurred after the end of the 2nd World War. A war where many atrocities were committed, 6 million lives were lost among soldiers and civilians, entire cities in ruins and flames in which the Holocaust is an example.

Article 55 of the UN Charter itself proclaims that the United Nations shall promote "respect for human rights and fundamental freedoms *for all without distinction as to race, sex language, or religion."* Article 55 of the Charter to the UN. In Article 56, the member states express their willingness to develop cooperation

actions with the UN, both joint and individual, with a view to achieving those objectives (states with different legal and cultural origins, from all regions of the world).

The Universal Declaration of Human Rights (UDHR), signed on 10 December 1948 by the United Nations General Assembly in Paris, is a landmark document in the history of human rights. In its desire to regulate international relations, in the repudiation of violence and barbarism among peoples, in the maintenance of peace, in its opposition to discrimination and exploitation of peoples, the UDHR established, for the first time in history, the universal protection of human rights as an ideal to be attained by all peoples and all nations, in the promotion of respect for these rights and freedoms. The 14 signatory States of this Declaration were bound to accept the precepts that, although they do not have coercive value or legal imposition, have ethical and moral value, with the commitment assumed, making them responsible for developing the appropriate legislation, in their countries, so that these rights could be implemented.

The United Nations Universal Declaration of Human Rights marked the twentieth century, bringing the legal and global recognition of human rights, innovating civil and political rights, namely, the right to life, the right not to be subjected to torture or slavery, the right to freedom of thought, conscience, religion and expression. and, in particular, to inspire the constitutions of states and recent democracies. Two decades later, given that the UDHR of 1948 had only the status of a recommendation (resolution) and therefore was not binding, States needed to create other instruments.

At the United Nations General Assembly on 16 December 1966, two multilateral treaties were concluded which recognised and strengthened the rights and duties of the UDHR; more articles were added extending the number of rights, giving them greater protection, surpassing the Fundamental Declaration itself. These Treaties are the International Covenant on Civil and Political Rights (ICCPR) and the International Covenant on Economic, Social and Cultural Rights (ICESCR), which have made human rights binding and binding on signatory states.

The ICCPR is a Covenant that reinforces civil rights (individual freedoms) and political rights (access to justice and political participation). The ICESCR established the human rights - economic, social and cultural - that must be realized in the long term, in a progressive and programmatic manner, whose duty to comply with them is addressed to the States themselves.

The principles of the UDHR are present in almost all humanitarian documents, such as the International Convention on the Elimination of All Forms of Racial Discrimination, the Convention on the Elimination of All Forms of Discrimination against Women, the International Convention on the Rights of the Child, the Convention against Torture and Other Cruel Treatment or Punishment, Inhuman or Degrading, among many others." (Universal Declaration of Human Rights). It was up to the signatory States to transpose them into the domestic legal order of those States, producing new legislation, adapting the existing legislation and giving it effective application in order to ensure that these rules were respected. Failure to comply with the rules, whether by acts or omissions, puts States in a position of having to justify themselves before the International Court of Justice (ICJ).

Privacy on the Internet

The problem between the right to privacy and the new information and communication technologies is a reality today. Warren and Brandeis (1890) wrote their article "*The Right to Privacy*", the concern with the new technologies of the time, such as the cameras and the great newspapers. The Constitution of the United States of America (1787) "is the oldest written National Constitution in use, and it defines the principal organs of government, their jurisdictions, and the basic rights of citizens." (A Brief History of Human Rights - The Constitution of the United States of America (1787) and the Bill of Rights (1791).

The French Declaration of the Rights of Man emerged in the context of great political and social upheaval, under the influence of the Enlightenment of natural rights and Renaissance ideas that evoked the equality of all human beings, calling into question the ancient ideals. The Bill of Rights (1791) "... protects freedom of expression, freedom of religion, the right to keep and bear arms, freedom of assembly and freedom to petition.' (A Brief History of Human Rights - The Constitution of the United States of America (1787).

According to Brandão, (2013), in 1974 the *Federal Privacy was published,* a federal legislation that began to govern, within the restricted scope of federal government agencies, the activities of management of stored personal data, allowing the disclosure of individual information with some restrictions and expanding the access of the interested party to personal data (right of access), including for the purpose of requesting their alteration (right of rectification). Agencies are required to follow, among other things, the principles of collecting only information essential to their activities, publishing news about the nature and structure of the database in *the Federal Register*, and not keeping information about how the individual exercises his or her individual rights.

According to Camara, (2014), in North American law, the problem of potential violation of the provisions of the Electronic *Communications Privacy Act* of 1986 ("ECPA") in the electronic media has been the subject of intense debate. In Google's case, the AdSense technology associated with Gmail e-mail messages would not be compatible with the rules of the law, related to the crimes of electronic interception and unauthorized access to content stored on the internet. The jurisprudence, however, seems to have little depth on the subject, sustaining the non-application of the ECPA rules to data storage services in electronic communication. Thus, the argument was taken to the extreme, the messages received and sent and temporarily stored on Gmail's servers would be excluded from the scope of protection of the law, especially for the privacy of users located in different US states.

According to Lucca, (2008), in March 2004, Google began testing its electronic mail service, the "G-Mail", becoming the center of controversies in the debate on privacy and protection of data and personal information of internet users. This contributed to the first lines of state laws in the United States on "online privacy", the California Online *Privacy Protection Act* of 2003.

According to Lucca, (2008) Today the United States has state laws, such as the Law of Forgetfulness, in which the post must be taken down, if required, but not all states have adhered to this law. In April 2014, the U.S. House of Congress passed the controversial *Cyber and Protection Act (CISPA) or HS-35. CISPA* will allow, with President Barack Obama's approval, companies to hand over sensitive data to the government, without a warrant, without anonymity, without judicial review. This law is not only binding on U.S. citizens, but on all countries, as all computer users who have any relationship with U.S. companies, using their services, free or paid, may have their private data collected, subject to the validity of CISPA.

Freedom

Freedom originates from the Latin libertas and means the condition of the individual who has the right to make choices autonomously, according to his own will. In the Christian tradition, **freedom** is often identified as free will. In law, **freedom** is also related to the rights of each citizen, that is:

- The condition of the being who can act according to the laws of his nature.
- The right of every citizen to act without coercion or hindrance, according to his will, as long as it is within the limits of the law.
- The human being's own capacity to choose autonomously, according to motives defined by his conscience.
- Free will.

It is a concept that assumes a wide variety of meanings among the various authors who have dealt with the subject, and it is difficult to attribute a consensual meaning, even in its fundamental elements. Analyzing its origin, in Greek, "*eleutheria*" meant **freedom** of movement. It concerned the possibility of the body moving without any external restriction. Thus, the Greek **meaning** was related to the absence of physical limitations.

The degree of legitimate independence that a citizen, a people or a nation elects as a supreme value, as an ideal. The set of rights recognized to the individual, individually or in groups, in the face of political authority and before the State; The citizen's power to exercise his will within the limits of the law:

1. **Law** - *a* measure applied to a minor offender that consists of appointing a supervisor to monitor the case, with a minimum duration of six months
2. **Right** - concession made to the convicted, subject to the requirements and conditions provided for in the Law of Penal Executions, giving him provisional release before the end of the sentence, for having served a certain period of imprisonment; conditional release.
3. **Right** - that the press has to express opinions and thoughts without prior censorship, but guided by ethical criteria.
4. **Right** – from non-obedience to the rules that guide grammar, syntax or formal literary schemes to "freedom of poetic language"
5. **Law** - liberty granted by the judge, temporarily, allowing the accused to defend himself at large, with or without bail
6. **Right** - permission granted to a juvenile offender living in boarding schools in reformatory schools and giving him the right to stay in the company of his parents or a guardian, or in the care of an employer, with the supervision of the judge.

To be **free means** to take risks, and freedom requires carrying the weight of decisions. Freedom is not only in doing what you want at this moment; it is in planning and building the "path" (future) by deciding how, where and with whom you travel. To **be free** is to be autonomous to decide for ourselves.

Right

Defining the right is an arduous task, since such a concept implies a choice of that concept, based on several relevant factors to give the meaning to the term. In the field of the meaning of law in its juridical-political context, the concepts of naturalistic and positivist jus of law are opposed.

According to Bedin, (2014, p. 245), from the natural justice perspective there is a natural right, whose disposition is inherent to the human being. This natural law is prior to and superior to positive law, which must be harmonized with natural law in order to be valid and efficient, so that in the event of a conflict between natural and positive law, natural law must always take precedence.

The doctrine of natural law (or jus naturalism) is the oldest attempt at a comprehensive theoretical understanding of the legal phenomenon. In fact, concerns about the doctrine of Natural Law have a long historical path and are characterized by being one of the recurrent theoretical positions in the trajectory of human thought. Thus, it is possible to affirm that, in spite of all the objections that have been made to it, the doctrine of Natural Law has remained for a long period as one of the fundamental problems of juridical cognition.

In this condition, the doctrine of Natural Law was largely confused with the course of the Philosophy of Law itself and with its most important problems. Hence the discipline of Philosophy of Law was called, for many centuries, jus *naturae or jus naturale*. In other words, it can be said that the Philosophy of Law expressed, from its beginnings until the end of the eighteenth century, the doctrine of Natural Law.

In Antiquity its main foundation was man as part of nature, already in the Middle Ages, the foundation of this natural law became God (Theory of Theologism, with Grotius as one of its greatest doctrinaires), and in the Modern Age natural law is based on reason (rationalist jus naturalism, having as its greatest exponents Spinoza, Wolff and Kant); In other words, even when considering the existence of a natural right, intrinsic to human beings and their social coexistence, the basis of what underlies this right is intimately related to the historical and social context.

Justice

According to Ross (2000, p. 313-314), the concept of justice seems to be a clear and simple concept, endowed with a powerful motivating force and whose concept permeates a judgment of historical, political, social and cultural values. Everywhere there seems to be an instinctive understanding of the demands of justice. Very young children already appeal to justice if one of them receives a smaller candy than the others. Animals possess the germ of a sense of justice.

Fighting for a "just" cause empowers and excites a person. All wars have been fought in the name of justice, and the same can be said of the political conflicts between social classes. On the other hand, the very fact of the almost ubiquitous applicability of the principle of justice arouses the suspicion that something is "not right," with an idea that can be invoked in support of any cause.

Second, Plato, in classical antiquity, justice was the supreme virtue, that is, the one that brings together all the other virtues. Aristotle proposes several forms of justice as a means of generating equality, in order to be understood in its distributive and corrective aspects. Thus, distributive justice consists in geometric equality, that is, treating equals equally and unequals unequally; Corrective justice, on the other hand, consists of arithmetic equality, that is, justice to achieve reparation and achieve the previous *status quo* and not based on mere retribution.

Rawls, (2002), proposes an original definition, in which people must choose in which conditions they would like to live, without having all the necessary information in the society in which they live, where there would be a "veil of ignorance" in this society, which constitutes a necessary instrument so that the individual does not make considerations in an arbitrary way. There must be a principle of freedom, equal opportunities and treatment for all citizens.

The concept of justice has its origin in the Latin term "*iustitĭa*" and refers to one of the four cardinal (or cardinal) virtues, the one that is a constant and firm will to give others their due. Justice is that which must be done in accordance with law, reason, and equity. On the other hand, justice refers to Power.

It should be noted that the concept of social justice is used to refer to the set of decisions, norms and principles considered reasonable, according to a given social collective. It can be said that justice has a cultural foundation (based on a social consensus on good and evil) and a formal foundation (one that is codified in written provisions, applied by judges and persons specially designated and empowered to do so).

Justice is that which ought to be done in accordance with law, reason, and equity. On the other hand, justice refers to the judiciary and public punishment or punishment. In this way, when society "asks for justice" in the face of a crime, what it does is ask the State to ensure that the crime is judged and punished, with the punishment it deserves.

Lawsuit

Judicial process is a systematic way of organizing judicial proceedings, necessary for the valid exercise of power, in which a natural law judge or court, with regular jurisdiction, renders decisions on the law concerning a person or company.

The process is thus the set of documents and procedural documents that, following a pre-established legal rite and a predetermined bureaucracy, enable the competent Judge to issue a sentence. The process proceeds between the stages in the form of case files, which are also informally referred to as "proceedings". The records are the set of documents that are ordered chronologically to materialize the acts of the procedure. The process, in turn, is characterized by its purpose, whatever it may be, the jurisdiction; It is the "instrument for the legitimate exercise of power".

The judicial process is the instrument by which jurisdiction operates, whose objectives are to eliminate conflicts and do justice through the application of the Law to the specific case. It can be understood, therefore, as the instrument, created and regulated by law, for the exercise of one of the functions proper to the State, in this case the judicial one. These are general prerequisites for the constitution of the procedural relationship;

- A formal complaint.
- Capacity of the complainant.
- Presence of a judge duly vested with powers by the State.

If these conditions are met, the procedural relationship will be duly established, regardless of the validity of the right. This characterises the autonomy of the procedural relationship in relation to the substantive law at issue.

There are three main subjects in the process: the judge, the complainant and the defendant.

The judge composes the procedural relationship as **a representative of the State**, managing the procedural relationship between the parties **in an impartial manner and** with the function of resolving the conflict and generating social pacification. Accordingly, the judge must be a third party who has no interest in the dispute, who conducts the proceedings in accordance with the rules and principles established by the legal order and who allows the parties to participate widely and equally in the settlement of the dispute.

The plaintiff and the defendant are opposing subjects in the procedural relationship and will have their sphere of rights affected by the result reached at the end of the process. The complainant is the one who initiates the procedural relationship and the defendant is the one against whom the case is filed. Their positions in the process are guided by at least three basic principles:

(1) There must be at least two parties involved in opposing positions in the procedural relationship.
(2) Equal procedural treatment between the parties.
(3) Adversarial process, which guarantees the parties the possibility of acting in the process in defense of their interests.

Judge
The institutionalized figure of the judge is related to the birth of civilizations: since conflicts arise naturally, the idea of a third party, considered neutral, is essential to constitute a vision free of partiality. The senators in Rome, for example, were a group dedicated exclusively to judging matters, exercising the function of magistrate in ancient Greece and Rome.

The **concept** evolved concomitantly with society, so that Enlightenment thought and the legacy of the French Revolution contributed to a paradigm shift: by placing the citizen at the center**, the judge**, who was part of the privileged class (the Second Estate in the French Revolution), becomes a citizen elected by his capacity and aptitude to judge cases.

The judge (from the Latin *iudex*, "judge", "one who judges", from *ius*, "right" / "law", and *dicere*, "to say") is a citizen vested with public authority with the power and duty to exercise judicial activity, judging, as a rule, the conflicts of interest that are submitted to his assessment. The Judge acts with decision-making in judicial cases, while the prosecutor supervises the application of the law, defending the collective interests of society. The legal environment has its own terms that configure the understanding in legal processes and situations.

Constitutionally provided for and applied by jurisprudence, the principle of the Natural Judge aims to prevent citizens from being judged arbitrarily, as occurs in a court of exception, so that this power is only given to those judges, courts and tribunals provided for in the Constitution. Due to **this responsibility, the judge must listen to the parties, evaluate the evidence presented and resolve the conflict in the light of the law, in a totally impartial manner**. **The judge is considered to be an administrator of justice**. In addition, a judge can also have a proactive role, collaborating with the Legislative Branch.

In law it is the one who administers justice by applying the law, the one who judges and who has the power to judge to settle a question or judge on something. To this end, he is vested with public authority and has the power to judge in his capacity as administrator of the justice of the State. It is part of the power or judicial system of a country and whose main and exclusive function is to judge a person and according to their conclusion about what happened. dictate a sentence of acquittal or condemnation. In the latter case, the opinion will indicate the punishment for the guilty.

Lawyer
The word "lawyer" comes from the Latin *advocātus*. A lawyer is a **doctorate or law graduate who is in charge of defending and advising parties involved in judicial or administrative proceedings**. It can also provide legal advice and advice.

According to Ada Pellegrino Grinover, (2012) the lawyer is included in the category of jurists, having a specific function in society and participating in the work of promoting the observance of the legal order and the access of their clients to a fair legal order.

Lawyers are called doctors, regardless of whether or not they have completed a doctorate and defended a doctoral thesis. The academic title is not to be confused with the "honorific title" of Lawyers. In most countries, the professional practice of this profession requires a lawyer to have a state authorisation or to be registered with the Bar Association or a similar institution.

The lawyer is indispensable to the administration of justice, he is a defender of the Democratic Rule of Law, of citizenship, of public morality, of justice and of social peace, subordinating the activity of his private ministry to the high public function that he exercises; for this reason, there is no hierarchy or subordination between **lawyers,** magistrates and members of power.

A lawyer is a liberal professional, graduated in Law and authorized by the competent institutions of each country to exercise jus *postulandi,* that is, the representation of the legitimate interests of natural or legal persons in or out of court, either among themselves or before the State.

Defendant
A **defendant is** someone who is suspected of having participated, or participated in, the commission of one or more crimes, administrative offences or infractions. The constitution of someone as **an arguido is** always a formal act and, in the context of criminal proceedings, it is usually accompanied by the duty to provide a term of identity and residence (TIR). With regard to obligations, the defendant has the duty to: appear before the judge, public prosecutor or police officer, whenever the law requires it and has been duly summoned to do so; submit to all evidentiary measures and coercive measures and asset security measures that may be ordered.

Criminal law states that the accused has the right to: be present at procedural acts (e.g. trial); Before making a statement, be informed of the facts that are suspected of having been committed. The defendant is the person who, in criminal proceedings, is constituted as such, in order to be investigated and/or charged with the commission of a crime. The defendant is the subject of criminal proceedings, while the defendant is the subject of non-criminal proceedings (there is no question of the commission of a crime). A

suspect is a person who is suspected of having committed or preparing to commit a crime or who has participated or is preparing to participate in it.

In Portuguese law, a person is made an accused, a legal term that does not exist in many foreign jurisdictions, when there is evidence that he or she has committed an offence. Without a defendant there is no trial. The defendant is considered innocent until the final judgment has been passed, and only then is he convicted or his innocence confirmed.

According to the Dictionary of the Portuguese Language, the word arguido means accused, censored, exprobrado, alleged in the Portuguese language. On the other hand, the attribution of the status of **defendant** to someone is an act of high importance, as it means that the State intends to investigate and, eventually, prosecute a crime, with the inherent compression of some rights of a particular person.

Enforcement Agent
The bailiff is, as a rule, a solicitor, a lawyer or a law graduate, registered as an agent with the Order of Solicitors and Bailiffs. The bailiff is responsible for directing the enforcement proceedings and carrying out all enforcement proceedings, including summonses, notifications and publications, attachments, sales and settlement of claims.

Crime
It is a human, typical, illicit, culpable and punishable action. In the letter of criminal law, it is defined as a set of conditions on which the imposition of a sentence or a detention order on the offender depends.

Cybercrime
It is broadly defined as the crime that is committed, facilitated, permitted, or amplified by the Internet. This definition includes crimes that already existed in the physical world, and new crimes specific to the use of computers and the Internet.

Denunciation
It is a communication made by a person to the police authority or the Public Prosecutor's Office informing that another person has committed a crime.

Inquiry
The criminal process is the phase directed by the Public Prosecutor's Office (MP) that comprises the set of steps that aim to investigate the existence of a crime, determine its agents and their responsibility, discover and collect evidence for decision-making on the accusation. The Public Prosecutor's Office in criminal proceedings is assisted by the criminal police bodies.

Instruction
A set of formalities, inquiries and information that place a case in the condition that it can be tried. In criminal proceedings, the Investigation is an optional procedural phase, which aims to provide judicial proof of the decision to bring charges or to close the investigation, or to submit or not to submit the case to trial.

Criminal complaint
A complaint is an expression of the will of the holder of the right to complain to the aggrieved party, which aims to initiate proceedings for a semi-public or private crime. It is a *sine qua non condition* without which the Public Prosecutor's Office (holder of the criminal action) cannot carry out this action. In other words, when

the crimes are semi-public or private, the prosecution by the Public Prosecutor's Office is dependent on a complaint.

It is, therefore, the act by which the aggrieved party informs the holder of the criminal prosecution, the Public Prosecutor's Office, of the existence of a crime so that it triggers the criminal investigation process and initiates the investigation phase.

Sentence
In procedural language, a sentence is understood as the act by which the judge decides the main case (this is also the case of the decision of the incident that presents the configuration of a case).

A judgment comprises a report (intended to give a brief history of the case from the time the action was brought to the end of the oral argument at the final hearing), the grounds of appeal (legal assessment of the case), the decision (based on the conclusions of the part on which the judgment is based) and consists of the court's direct response to the parties' claims.

Witness
By witness, we mean the person who is called to testify about something he has seen or heard and which may prove to be important for the establishment of the truth. Whether in civil procedural law or in criminal procedural law (in which one of the most important means of proof is testimonial evidence), the definition of this term is the same, i.e. the person who is called to testify in court, under oath, about facts of which he or she may be aware.

Court
Under the terms of the Constitution of the Portuguese Republic, the courts are the sovereign bodies with competence to administer justice on behalf of the people. The administration of justice is the responsibility of the courts to ensure the defence of legally protected rights and interests, to repress violations of democratic legality and to resolve conflicts of public and private interests.

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