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Government Strategy in the Era of Digital Capitalism

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ABSTRACT: The Covid-19 global pandemic is accelerating the shift of the information and knowledge society, to the digital society. It is a major challenge for politicians who will have to understand what human, social, economic, financial, technological, political, and political transformations are, and what impact these changes are, priorities, what resources they should bet on and what information they should rely on for formulate ,define, implementation and control the political strategy. The political strategy can be defined from the outside in, that is, from the outside to the inside, according to the positioning schools, or from the inside out, (from the country to the outside), according to the schools of the movement. Governments influence world policies with their innovative policies, since some politics have in skills and capabilities that others do not have and that are difficult to imitate or copy. Information is an intrinsic component of all processes in society. N global policy be a huge competitiveness between countries and a group of countries, which can be enhanced by effective information management.

KEYWORDS: Information, Political Strategy, Political Leadership, Strategic Political Decision,, Political Strategic Knowledge, Digital Society.

I. THEME AND RESEARCH PROBLEM

Rulers are people who spend much of their time making decisions of various natures and dimensions. The requirements for the time available for political decision-making politic seem to be higher, than the total time available. Decisions of great importance are mixed with trivial decisions. This diversity of decisions tends to increase with the level of responsibility and becomes particularly pronounced in the case of higher-ranking rulers. The role of the Prime Minister or the President of the Government involves a very broad set of activities, analyses, decisions (including strategic ones), communication, leadership, motivation, evaluation and control. Of all these activities, we isolate the political strategy, as it is the "cornerstone" of the(s) ruler(s) top.

Decisions and actions are the final product of the work of the rulers. Strategic decisions taken explicitly or implicitly, precede any action, regardless of the process by which they are taken, either by the formal hierarchy or by the broad participation of mid-level or omission-level rulers. The process of strategic political decision-making is complex, so it poses some problems for the governments, in terms of approach methodology, to choose the preferred, policy strategy among the various alternatives.

The emergence of political strategy, an area always distinguished by the military, must not only make it possible to understand others, in particular rival governments, in terms of capabilities and motivations to anticipate future behavior, but also, as to the ignorance and idiosyncrasies underlying the myopia of their views.

Questions for debate

- 1. Are we witnessing the transformation of the information and knowledge society in the digital society?
- 2. What will be the impact of this transformation?
- 3. What is the best political strategy in the context of the Age of Digital Capitalism?

II. OBJECTIVES AND APPROACH METHODOLOGY

As for the nature of the work, it is qualitative, since it does not claim to quantify anything, nor does it favor the statistical study. The theoretical framework of this work was constructed through the literature review. This is a method of scientific research used to assist in the identification of the relevant literature on the models of definition of the political strategy, with the objective of analyzing the strategic political alternatives, through the bibliographic review, in the face of the Digital Age..

It were identifies the different schools of formulation of the business strategy, as well as the inputs for the development of strategic policy alternatives, namely those related to information, such as strategy information,

weak and strong signals, alerts, information surveillance, as well as the structure of the function of the government, responsibilities, available national resources, policy the information, risk management and elaboration of the theoretical conceptual framework with the main relations.

III. FUNDAMENTAL CONCEPTS

a. Data, Information and Knowledge

Information is not the same as data, although the two words are often confused, so it is understood that the subtle distinction between these concepts is essential. The data do not convey sense or meaning of the facts, images or sounds, since they lack relational elements essential to the establishment of a complete meaning, lacking an internal relational structure for a cognitive purpose.

This structure is one of the attributes of the information. Data is transformed into information when its creator adds meaning to it Davenport and Prusak, (1998). Wiliam G. Zikmund (2000, p.19) defines knowledge as "the mixture of information, experience and understanding that provide a structure that can be applied in the evaluation of new information or new situations". Information "feeds" knowledge. Knowledge can thus be defined as a person's ability to relate complex information structures to a new context.

New contexts imply change, action and dynamism. Knowledge cannot be shared, although the technique and components of information can be shared. When a person internalizes information to the point that he can use it, we call it knowledge Zikmund, (2000). This is a fluid mix of experiences, values, contextual information and expert judgment, structured that provide a framework for evaluating and incorporating new experiences and information. Organizations are found not only in documents and reports, but also in organization routines, processes, practices and standards.

Knowledge has its origin and is applied in the minds of connoisseurs Davenport and Prusak, (1998), William Zikmund, (2000). Knowledge is information as valid and accepted, integrating data, acts, information and sometimes hypotheses. Knowledge needs someone to filter, combine and interpret information. Information can be considered as a "substance" that can be acquired, stored and owned by a person or group and transmitted from person to person or from group to group.

Information has a certain stability and it may be better viewed as existing at the level of society Davenport and Prusak, (1998). Although we can store it using various physical supports, the information itself is not physical, but rather abstract and neither purely mental. Knowledge is stored in people's memory, but information is out there in the world. Whatever it is, there is somewhere between the physical world around people and the mental of human thought.

Knowledge = Internalized information + ability to use it in new situations.

Knowledge is found fundamentally and intrinsically within people. These are more complex and unpredictable at the individual level than an entire society, so it is not surprising that knowledge is much more difficult to obtain than information. Knowledge exists mainly within people; it is an integral part of human complexity and unpredictability.

Knowledge has a fundamental duality: it is something storable (at least sometimes we intend to do it) and something that flows (something that communicates from person to person). It is possibly the duality of knowledge (something that flows and storage process) that makes its treatment and management difficult. According to Dahlberg (2006), knowledge is organized into units of knowledge (concepts) according to its characteristics (objects / subjects / subjects). The organization of knowledge is related to a process of conceptual analysis of a domain of knowledge and from there, it is structured / architected generating a representation of knowledge about that domain that will be used for the organization of information about that domain of knowledge.

Given	Information	Knowledge
 Simple observations on the state of the world: easily structured. easily obtained by machines. often quantified. easily transferable 	 Data with relevance and purpose: requires unit of analysis. requires consensus on meaning. necessarily requires human mediation. 	 Valuable information from the human mind. Includes reflection, synthesis, context. difficult to structure. difficult to capture on machines. often tacit. difficult to transfer.

Matrix - 1 Data, Knowledge and Information.

Source: Davenport, 1998.

Data, information and knowledge should be seen and analyzed from the continuing perspective of values and fundamentally marked by the growing human contribution – processing, management, action, result, learning and feedback, that is, human empowerment for actions that generate the desired results at the organizational level

	Dat	ta Processing	Info Man	rmation agement	Knov	wledge Managemen	Stoc	eks/Results
Activities	•	Data capture Data definition Data Storage Data Modeling.	• infor • Orga Infor	Information Needs Acquisition of mation Information mization Distribution of mation	• Knov	Knowledge Creation Sharing of vledge Use of Knowledge	allia • Serv •	Strategies, nces and initiatives Products and vices Processes Systems Structures Values
Values	•	Precision Efficiency	•	Access Relevance	•	Enables action Value generation	•	Innovation Learning
	"Or we	ce we have the data, can analyze it"	"Brin infor perso	nging the right mation to the right	"If oi know	nly we knew what we	The only adva	ability to learn is the sustainable

Matrix - 2 ·	Data, In	formation,	Knowledge,	Actions /	Results
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Source: Adapted from Choo, (2002, p.258).

b. Sources of Information

For governates is important to know the sources of information, internal and external, which involve the world policy in which the country is inserted, because these sources vary in formats, nature and contents, not the process of using these sources, in the decision-making of strategic political. Choo (1994, 2006) classifies information sources into four categories: external, personal and impersonal, personal internal, and impersonal. The author states that information is an intrinsic component of almost everything a government does. The primary sources express the author's direct interference; secondary sources facilitate the use of knowledge from primary sources, since there is a differentiated treatment for them, according to their function; tertiary sources allow primary and secondary sources to be found.

Ribeiro (20013, p. 44), groups the sources of information into: external personal sources - colleagues of governance, experts, other rulers or ex., consultants, partners, international fairs, congresses or lectures (face-toface or telephone interaction); personal and internal sources – is public employees, co-workers, senior workers, partners (face-to-face or telephone interaction); electronic personal sources: e-mail (personal or state), forums, web discussion groups, Messenger, Skype and the like; external impersonal sources - documents produced outside the country, such as magazines, magazines, web discussion groups, Messenger, Skype and the like; external impersonal sources - documents produced outside the country, such as magazines, magazines, web discussion groups, Messenger, Skype and the like; external impersonal sources - documents produced outside the country, such as magazines, magazines, web discussion groups, Messenger, Skype and the like; external impersonal sources - documents produced outside the country, such as magazines, magazines, web discussion groups, Messenger, Skype and the like; external impersonal sources - documents produced outside the country, such as magazines, magazines, web discussion groups, Messenger, Skype and the like; external impersonal sources - documents produced outside the country, such as magazines, magazines, web discussion groups, Messenger, Skype and the like; external impersonality sources - documents produced outside the country, such as magazines, magazines, web discussion groups, messenger, skype and the like; external impersonal sources documents produced outside the country, such as magazines, magazines, web discussion groups, messenger, skype and the like; external impersonal sources - documents produced outside the country, newspapers, books, technical reports, regulations, government publications, radio or television broadcasts; internal impersonal sources - documents produced within the state, such as reports, studies, memos, paper files and work notes; and electronic impersonal sources - electronic documents in general, intranet, electronic databases of the state, government websites online, various Internet sites, news portals.

c. Weak and Strong Signals

Weak signals were initially used in military strategies (Ansoff, 1975; Choo, 2009), these signs have spread since then,, in various areas of knowledge, such as studies focused on the exploration of the future (political and business); the prevention of disasters or natural disasters, in medicine, and in organizational studies, in the fields of strategy (business or military), management and information systems for management. In all the areas mentioned, the main objective of the study of weak signals is identical: to anticipate uncertain, unexpected events, with significant potential impact in countries and society in general, to be well prepared to decide or act

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when they occur (Choo 2009; Lesca & Lesca, 2011; Holopainen & Toivonen, 2012; Mayer et al. 2013).

But what are weak signals? Weak signals are defined by Rossel (2012) as perceptions of possible changes, essentially hypothetical, within a process of construction of socially relevant knowledge. Detailing a little more, Schoemaker and Day (2009) describe weak signals, as part of the information, apparent, random or disjointed, which at first glance, looks like a background noise, but which can be significant, whether viewed from other perspectives, or related to other information.

Example for better understanding of the difference between weak and strong signals. We're on the beach and we look at the universe and there's a few little clouds in the distance (weak signals). The warned go home, because it may rain. Other vacationers see the same clouds, but think they are passing clouds. After a while the clouds gather and get darker (strong signs) and it starts to rain. The unwarned get wet because it started raining. Those who predicted the rain are already home.

d. Early Indications / Alerts

In the field of strategic political management and anticipatory interpretation, the difference between signal and clue /alert lies in the intention of the information sender and, consequently, the meaning and reliability of the information. The word "signal" implies a deliberate intention on the part of the sender to communicate that information. This form approaches the idea of signaling, such as political analysis between countries, through public demonstrations (like market signals).

Political signals make it possible to know the intentions and future actions of other politicians. Dealing with the situation of anticipation of information in the area of strategic political management, it is not what the issuer explicitly wishes to communicate. What interests us most: it may be a deception or a common piece of information. Conversely, what may potentially interest us is not always the subject of a deliberate issue of the sender. What may most interest us and of greater importance are the involuntary, non-deliberate emissions and manifestations of the "politicians" of the change we wish to anticipate. In this case, we can say that we are facing clues

/ alerts.

e. Political Leadership

In Politics, leadership is linked to the interest in the quality of life of the populations, based on the ability of leaders and leaders to achieve the economic, financial, social and political results of these countries. However, leadership is a broader matter than it can judge. The theme of political leadership has been little studied by different areas and fields of knowledge. Of these areas, the most fruitful has been Management, which, under the tutelage of specific fields of knowledge and a practicality (particularly, organizational psychology and the human resources area) has delineated research programs on political leadership that carry very particular premises and interests.

In generalist studies - that is, academic-scientific guidance aims to improve the practice of the management of organizations - leadership is strongly linked to productive efficiency, having as fundamental presupposition the capacity of leaders and leaders to achieve social results, quality of life of populations, a measure almost always translated by this literature in the purely economic focus, and finance.

However, political leadership is a much broader matter than generalist-based literature can judge. As a social phenomenon, political leadership presents relations and social circles that go beyond the dimensions of countries. That is why we see in the literature on this subject the mention of political leaders, military, religious, community, activists and intellectuals, aiming at the scrutiny of good practices and other references for the development of models and principles of good political leadership. Thus, the focus of investigation of the phenomenon of political leadership expands, but requires greater care from the researcher, regarding the, misappropriation or reductionist of the perspectives coined in different social and academic fields

f. Political Strategy

Politicians are people who spend a large part of their working time making decisions of various nature and dimension. The requirements for the time available for decision-making always seem to be greater than the total time available to them. Decisions of great importance are mixed with trivial decisions. This diversity of decisions tends to increase with the level of responsibility and becomes particularly pronounced in the case of politicians of higher hierarchical level. The role of politician involves a very broad set of activities, including analysis, decisions (including strategic ones), communication, leadership, motivation, evaluation and control. From all these activities, we isolate the process of strategic political decision-making, as it is the fundamental "stone" of a government. Decisions and actions are the final product of the work of the rulers.

Political strategic decisions formulated explicitly or implicitly by politicians precede any action, regardless of the process by which they are taken, either through personal decision, formal hierarchy, broad participation of party politicians (cadres) or by default. The process of strategic political decision-making is complex, so it poses some problems for policymakers, in terms of the approach methodology, to choose the preferred policy strategy from among the various alternatives.

Politics is synonymous with the exercise of power in a way that is not purely economic. The formulation of the political strategy can be a process of planning and analysis, cognition and learning, but also a process of negotiation and concessions between politicians and political groups (of the party or others).

Bolman and Deal (1997) formulated the following propositions regarding the world of government policy:

• Society is made up of several citizens and interest groups (political parties and others), sometimes antagonistic.

• There are lasting differences between interest groups (political parties and others) and citizens in values, beliefs, information and perceptions of reality.

• Most important policy decisions involve the allocation of scarce resources (human, economic, financial and material).

• Scarce resources and lasting differences give the conflict a central role in political dynamics and make *power* the most important resource.

• The goals and. political decisions emerge from the "political wars", negotiations and maneuvers in search of positions, among the different stakeholders (political parties and others).

The rulers formalize procedures to elaborate the strategic plan and aware of the increasing weight of variables with social impact, try to plan their development. All these procedures are called into question by the emergence of new problems and are, in theory, as in practice, subjected to evolution.

Strategic **political management** ensures in time the bests coherence between the demands of society, the different stakeholders (internal and external) and the personal objectives of politicians, which means, it is the management of government resources, the management of human, economic, financial resources, existing matters and information and the creation of potential. Strategic policy management is interested in the dimensions:

• Technical-economic - politics in which countries should bet.

• Organizational - governmental architecture that enables the effective execution of the technicaleconomic dimension.

• Politics - social structure, as a means of achieving government performance.

The model shows that the political strategic analysis is transformed over time and that the technical-economic analysis is complemented by the integration of complementary dimensions: the consideration of government, as a social organization and the recognition of it as a political system. It considers as key variables the interdependence between the variables (information), political globalization, technological turbulence and stagflation, that is, it includes only the variables of the global and immediate (next) globalization political environment, as well as some variables that have an impact on some countries or groups of countries (e.g. The European Union, Mercosur).

While the different models of political strategic analysis are based not on the analysis of global or immediate policy, when it does not exist or takes forms far removed from democracy, it is necessary to address new forms of definition of political strategy and which can be classified as relational, according to the authors and whose illustration is now known by strategic political or cooperation alliances.

The relational approach was explored in a series of empirical studies carried out by the HEC school (1994). "A *political strategy* is said to *be relational when it is based not on the law of* competitive *democracy, but on* the privileged relationships that the government establishes with certain

political partners."

Specialization is part of an exclusive framework of a field of activity, in which the government is concentrates all its efforts in order to achieve the best possible level of results and thus a decisive political advantage.

The problems are very complex, so it is very difficult for a govern to solve the problems of political strategy alone. Consequently, responsibilities for the tasks of political strategic management are dispersed through the organizational structure of the state and the political party. Some of the governments create very specialized structures to support strategic political decision-making, such as departments and staff bodies staff to develop strategic analyses. In practice, these support structures elaborate political analyses and bring political alternatives on a "plate" to the Prime Minister or President of the Government and bring the strategic political decision. These support structures agree with the Carnegie school (Ansoff, et al 1965), when it considers that the function of governates is to make decisions, but that they are not responsible for their formulation, but rather those responsible for planning. Comparatively, the School of Positioning (Porter et al, 1980),, follows a methodology of similar approach, in which analysts formulate the strategy and politicians approve it.

g. Strategic Political Decision

Political decision-making is based on the information available on a specific problem, in order to provide the political decision-maker with a reasonable number of alternatives, one of which, chosen, as the best or the most favorable. It is common for policy makers to be bombarded by a large amount of information. It is considered

essential that the policy maker can identify the relevant information and discard the irrelevant information. The political decision-making process involves the decision, execution and control cycle. In this sense, the decision process can occur the individual or collective level and, it presupposes five stages:

- Initial recognition of the problem or opportunity.
- Search for strategic political alternatives, when there are several possibilities and possible solutions.

• Analysis of strategic political alternatives, a phase that determines an evaluation criterion, within the context determined by the first stage.

• Choosing the best political strategic alternative, making it necessary to order the alternatives, selecting the most acceptable or grouping the best ones, for later evaluation.

• Implementation of the chosen political strategic alternative, in the implementation of political action. Strategic political decision-making can involve multiple interests, causing tensions among participants. It also requires the political decision-maker to develop the skills to deal with complex and turbulent political issues and, often, to confront personal interests, with the interests of the country and the world. Therefore, it is worth emphasizing the importance of looking for, the common points, the collaboration and cooperation of the team, in all stages of the political decision-making process.

The information is differentiated according to the political decision-making process and can be grouped into strategic, operational and coordination. Operational information is "that which is intended to allow certain operations to continue in progress within the operating cycle", that is, daily. At this level, the political decision-making process is repetitive, since it is focused on real, day-to-day problems.

Political coordination (intermediate level politicians) aims to feed the political decision-making processes involved in the allocation, planning, control and evaluation of the human, economic, financial and material resources made available to them. This level works with summary and accurate information, which requires analysis of the performance achieved. The quality of information is an important factor in making effective political decisions and must be reliable and accurate. The value of a government's information is directly linked to the way in which it assists government officials in making the strategic political decision. Timely and adequate information is directly related to the political capital of the leader, as they are factors that contribute to an effective decision.

Davenport (1998, p. 16) states that: "(...) Nobody can deny that useless political decisions based on irrelevant information cost millions of euros / dollars, in purchases and services that don't work, in unproductive investments". The flow of information available is another factor for the effectiveness of the decision. A large volume of information can be time-consuming and difficult for the political leader to distinguish, which are relevant to the strategic political decision-making process.

h. Political Strategic Knowledge

It is important to make the difference between the concepts that are involved in the context of strategic knowledge (Miranda, 2004):

• Strategic Decision: it is the integration between ends (the strategic objectives) and means (the strategic actions), being influenced by the cognitive limits of the decision maker, the complexity of the problem and conflicts between the decision makers, that is, it is the decision making about the strategy to be adopted, carried out by the decision-maker with formal authority within the organization.

• Strategy formulation: it is the process of developing strategic reflection, the result of a cognitive elaboration (diagnosis, evaluation of alternatives, choice and implementation) and which is influenced by factors, such as structure, policy, power, organizational culture and even emotions, that is, it is the process that precedes the strategic decision and is carried out by strategists (or strategist-decision makers).

• Decision maker, strategic decision maker or decision maker is the leader of the political organization (or governing body), endowed with formal competence to choose the most appropriate strategy for a given objective, exercising the act of strategic decision.

• Strategist: it is the professional of the political organization, without necessarily decision- making power, who uses strategic knowledge to formulate strategic alternatives.

• Experts: are the strategists or the decision-makers of a political organization who have experience in carrying out activities related to formulation and strategic decision and, therefore, tend to use the tacit strand of strategic knowledge more in their work. For the study, professionals with 10 or more years of experience in the formulation and / or strategic decision making are considered experts.

• Newbies: are the strategists or decision-makers of a political organization who have little or no experience in carrying out activities related to formulation and strategic decision and, therefore, tend to use more explicitly strategic knowledge in their work . In this case, two groups of beginners are considered: trainees, who have up to 2 years of experience, and juniors, between 2 and 10 years of experience.

It can be noted that the skills of strategists and policy makers can be integrated in the same person, in smaller political organizations.

IV. THEORETICAL-METHODOLOGICAL FRAMEWORK OF RESEARCH

a. The Information and Knowledge Society

The biggest of all changes was the transformation of the industrial society into the information and knowledge society. The center of work has shifted to "intellectual work". In developed country societies, access to good jobs and a professional career has increasingly depended on a university degree. This was the logical result, since you stopped working with the sweat on your face and the strength of your body, you went through industrial work and came to intellectual work. This last stage represented a break with the past.

The fact that knowledge and education have been a passport to winning good jobs and a career, has meant above all that in society companies are no longer the only way for someone to progress in life and have become one of several opportunities available. The third sector emerged, the services sector, such as consultancy companies, non-governmental and non-profit institutions with paid or unpaid teams.

Governance, in addition to exercising a function, also has a social function. Organizations are evolving and taking on new forms based on information. Knowledge has become the capital of developed economies and knowledge workers, which determine society's values and norms. The great challenge for developed countries was to maintain the commitment to the necessary economic performance, so that organizations and countries remain competitive. Governance and entrepreneurship contained the entrepreneurial spirit. They are not antagonistic nor mutually exclusive concepts. 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.

The government is held accountable for performance. This needs to be measured, considering strategic political and operational objectives. The essential principles of governance can be summarized as follows:

• Governance refers to the management of resources (human, financial, technological, material, logistical and informational). The main task of government officials is to make people capable of acting together and harnessing their strengths and making their weaknesses irrelevant. The success of governance is in people's ability to contribute to achieving global goals through their skills, dedication and commitment.

• The responsibility of governance is to integrate people into a common goal. What government officials do in any country is the same, that is, manage the resources available to achieve the objectives and ensure success and sustainability.

• Any government must have simple, clear and unifying objectives. The government's mission must be clear and broad enough to provide a common vision among its members.

• What is crucial for government performance and sustainability is political position, innovation, productivity, people development, the quality of products and or services and financial results.

• The government must bear in mind that the results are outside the organizations, that is, the result of a government is the satisfied citizens, that of a hospital is the cured patient, that of a school is a student who has learned something and who knows it apply for a few years. Within state organizations there are only costs.

Governance deals with the fundamental aspects of knowledge, wisdom and leadership and can be considered an "art" because it is a practice and an application. Governments must use all the knowledge and teachings of the social and human sciences, psychology and philosophy, economics and history, the exact sciences and ethics. But government officials have to polarize that knowledge around effectiveness and results.

b. The Digital Society

It will not be a glaring exaggeration or mistake to affirm that the current society is increasingly qualified by the digital adjective, where the new information and communication technologies (ICTs) have constant daily influence, configuring themselves as mediators of social relations, economy and even in the way of producing / disseminating knowledge. There are ways of absorbing knowledge about users in a ubiquitous way, in which ICT's be 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 has not started historically with technologies, it develops at high speed through them (De Mul, 2015, p. 106).

The increasing insertion of Information and Communication Technologies (ICT's) in people's daily lives has promoted a deep dependency relationship between both. 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, changing the way, how they relate to the environment , with other people and how, they conceive themselves in the face of 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 great influence in the studies of the second half of the 20th century, including in Philosophy, mainly for its algorithmic approach to the nature of thought, in which he proposes the thesis, according to which, "to think is to calculate" (Turing, 1950, p. 436). This is that given that digital computers operate from calculations and manipulate rules for the organization of symbols, if we consider that thinking consists in the activity of symbol manipulation, according to a set of logical rules, constituting algorithms, then the digital computers could, in principle, think. Once intelligent thinking is understood mechanically, it would be possible to build 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 Teixeira Cognitive Science, (1998):

• Strong Artificial Intelligence - is one in which the 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 tool, limited to intelligent mental activity.

The common point of these notions is that they both accept the thesis that simulating is to explain, in order to attribute to the 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 experiencing today and that have generated new types of problems, especially those that relate 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 concurrently with technological improvement.

Floridi (2008, p. 3-4), states that during the second half of the 20th 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 to experience the world, using such technologies. These events illustrate the influence of ICTs in different areas of society (sociological, economic, scientific and cultural), providing elements for its characterization, as an information and knowledge society. According to Floridi (2002, p. 127): "Post-industrial societies are always fed by information".

ICT's take on a central role in the characterization of the digital society, as they are present and related to the person and their well-being, and their continuous use in everyday situations (e.g., leisure, work, etc.). It constitutes a dependency relationship, between the person and the ICT's. This relationship is strengthened, according to Floridi, based on the following factors:

- Increase in the power of ICT's, at the same time, reducing their cost of production and marketing.
- Improvement of ICT's in their potential for interaction (machine-machine and man- machine).
- Emergence of the "zettabytes" Era (dated 2010).

The factors indicated are responsible for bringing people and ICTs closer together, generating a deep relationship of dependence for the performance of routine actions, in the current 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 inter-relationship (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, Uber, Taxi 99), realization calls (using the network, via Skype, Whatsapp), physical activity (Runkeeper, for example), professional activities via SOHO (small office / home office), political organization (via websites or social networks), among others. It can also be highlighted the situations in which there is no mediation of artifacts connected to the Internet, on the part of 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 removing books from libraries, among others.

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 when people spend a great deal of time transmitting information about themselves, interacting digitally with other people, which is a good example of how ICT's are affecting and shaping people's personal identity.

- Self-conception consists of "who we think we are".
- Social self it concerns what 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, in turn, end up encouraging vanity and competition. [...] young people

strive to show on 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 yourself generated by third parties, encourages 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 a intense.

The biggest of all changes is the transformation of the information and knowledge society into the digital society. The center of work has shifted to "remote work - teleworking". In developed country societies, access to good jobs and a professional career will increasingly depend on a university degree with distance work, anywhere, in a country, in the globalized world. That is, the logical result, since one stopped working in the office and in large urban centers, went through intellectual work and arrived at telecommuting at home or elsewhere, outside large urban centers.

This last step represents a break with the past.

• The fact that knowledge and education have been a passport for winning good jobs and a career, has meant above all that in society, companies are no longer the only way for someone to progress in life and have become one of several opportunities available.

• Knowledge has become the capital of developed economies and knowledge workers, which determine society's values and norms.

The great challenge for developed countries is to maintain the commitment, with 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.

c. 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 that underlie the processes of technological change, relations with social consequences, based on the generalized digitization 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 18th and 19th centuries.

The most diverse denominations 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-society capitalist, an interactive society, a multimedia society, a post- industrial society. The most successful name was that of the information and knowledge society. Most investigations were based on the assumption that the new information and communication technologies, such as "open technologies par excellence, regardless of economic, social and cultural weights", so that the evolution of daily life, were also open to a plurality of futures. An open future full of optimism, until a whole saga of post-industrial utopias could be conceived 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, fluidity communicative and personal self-realization would arise.

Some went further in considering the revolutionary nature of the transformations that were 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 experiencing "a second industrial revolution". This sentence is intended to describe the speed and depth of change around us. But in addition to being vulgar, it can be deceiving. Because what is happening now is, most likely, 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.

i. Digital Capitalism: The problem is capitalism, not technology According to Gary T. Marx (2015, p. 735), surveillance is linked to verbs such as "look", "observe", "supervise", "control", "inspect", "monitor",

"keep "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 can also involve sophisticated forms of manipulation, such as seduction, coercion, deception, unequivocal information and other special forms of observation, Marx, (2015, p. 735-737). Surveillance has become more misleading over time and can be seen as something more difficult to defeat than before, after all, many forms are so

omnipresent that they are generally presumed to be omnipotent Marx, (2015, p. 736). Surveillance can succinctly take place on human routine, the semi-conscious "autopilot" and often even the biological instinct of our sensory receptors that are ready to constantly receive information from whoever is territorially close, Marx, (2016, p. 16). With the development of language, both numerical and written, and different forms of social organization involving larger political entities, more complex and systematic forms of surveillance have emerged, based on counting, recording, interrogation, information, infiltration, confessions and the expanded use of tests , Marx, (2016, p. 17).

With the rise of industrial society, new surveillance and communication tools emerged, from individuals, groups and contexts using 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 feat constitutes a fundamental paradigm shift for contemporary society, Beraldo; Milan, (2019, p. 01). The nature of databases is inherent in any software, which basically performs data programming that can be divided into four operations, De Mul, (2015, p. 106): a) add; b) research; c) change; and d) destroy (command that can be classified by the options of insert, select, update and delete). Together, these commands constitute the dynamics of database ontology.

In the era of BIG data, databases are increasingly connected with each other and with connected data flows, such as Google searches, interactions in social media (Twitter, Facebook, Instagram, LinkedIn, Reddit, etc.) and online commerce. These connections derived from BIG data are tracked and used for real-time user profile configuration and data mining 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 localizable devices, an immense global database is being developed. formed and will transform the ways of life, work 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 the purposes of genetic engineering, implementations in industrial robots and the profile detection system at airports, with the objective 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 exhibition are not just the paparazzi - after all, anyone with a mobile device can broadcast live instant.

21st century capitalism found a new massive raw material to take over: 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 able, only in a rudimentary way, to extract data, from the production process or from the use of the client. The lean production era changed this slightly, as global supply chains 'just in time' required data on stock status and the location of supplies.

The Dominant Discourse: what hides and what it shows

Data outside the company remained almost impossible to obtain; and, even within the company, most activities were not recorded. The electronic platform, on the other hand, has data extraction incorporated into DNA, as a model that allows other services, goods and technologies to be built on it, as a model that requires more users to obtain network effects, and as a means that simplifies registration and storage. All these characteristics make platforms a central model for extracting data as a raw material. The data can be used in several ways to generate revenue. For companies like Google and Facebook, data is a resource that can be used to attract advertisers and other interested parties. For companies like Rolls Royce and Uber, data is at the heart of beating the competition: they allow these companies to offer better products and services, control workers and optimize their algorithms, for a more competitive business.

With the Google system in operation and the creation of Facebook in the online scenario - targeted advertising, surveillance capitalism adds a new logic of accumulation where its guidelines and financial prowess dominate the virtual sphere, of connected networks and that disfigures roughly the previous dream of digital technology, as an enabling and emancipatory force, Zuboff, (2019,

p. 01). Today, this surveillance capitalism can no longer be identified punctually, as a specific company (as it was, until some time ago, Google exclusivity, a pioneer in this form of data capitalization), since this logic has broadly expanded with which Silicon Valley has expanded to different sectors of the economy and its wide range of products and services, Zuboff, (2019, p. 01).

Both capitalism and surveillance can no longer be confused, as belonging to an individual corporation, after all digital technologies today can take many forms and reproduce different reflexes, depending on their social and economic orientation. For Zuboff (2019, p. 01) economic orientation is the master, while technology is the

puppet. As a result of a change in the logic of the global economy and in the global technological market, we currently have a work environment characterized by less job security, stagnant wages and where the nature of work has become more intense and idiosyncratic; several employers believe that they must obey a market imperative that constantly presses for greater productivity, so that their organizations remain competitive, Connolly, (2017, p. 69).

Therefore, attempts to satisfy such demands, foster an unremitting search for efficiency, and the emergence of strict performance quotas. Surveillance capitalism is not the same as algorithms, sensors, machine intelligence or platforms, although it depends on all of this to express its will; therefore surveillance capitalism is in fact an economic creation and, therefore, is subject to democratic challenge, debate, review, restriction, supervision and may even be illegal in many cases, Zuboff, (2019).

d. The Impact of Information and Communication Technologies on the Economy

Currently there is a special moment in the diffusion of technologies, especially observing, as a source, the fields of Information Technology, Computer Science, Management, Economics and Communication. With the supply of emerging technologies, in a list that grows rapidly, generate new potentials for existing markets, the emergence of new markets is also enhanced.

Among the driving technologies of these phenomena are Big Data, Analytics, Software Robots, Machine Learning, In-Depth Learning (the last two related to the original field of **Artificial Intelligence**), automation via robots, augmented and virtual realities, 3-D printing, application of crypto currencies via Blockchain, among many others.

It is possible to evaluate, from the literature in production and debate today, that emerging technologies constitute factors of expressive movements in the Economy in two ways: (1) As drivers of innovations based on business models, being, thus, important agents of the treatment of information and communication (Davila, Epstein and Shelton, 2007; Knickrehm, 2018) and (2)

As new market sectors by itself, creating and negotiating opportunities, generating new business segments(Jacob, Belderbos and Gilsing, 2013; Thaddeus *et al.*, 2019).

In the exercise of the first point, we notice cases such as the use of analytical and big data for qualitative and quantitative studies, associated with decisions of marketing strategies. In this respect, the sampling of profiles and behaviors associated with future and potential users and customers, previously performed with the use of specific software and processes, are integrated, to implements integrated to the daily life of the citizen (Jamil, Santos and Jamil, 2019). In these processes, the software elements, supported by redesigned databases, according to new theories and adapted to consolidate information from various sources, produce in-depth levels of perception related to the "why" of decisions of market agents, allowing the strategist, the effective construction of scenarios.

Evaluating the same technology, McKinsey (2020) describes, in a timely manner, how data analysis, reaching the contextual denomination of "Data Science", currently makes a segment of opportunities and business generation, in isolation. Considering this scenario, specifically, they go back to the "information services", addressed in some classics of literature, which defined precisely business and public operations related to the processing and subsequent processing of information for varied applications, always with the view of, by providing reliably the valuable collection, allow the promotion and promotion of markets and business competitiveness (Tadeu *et al.*, 2019; McKinsey, 2020).

In this way, we perceive the two scenarios where technologies can have an impact, in many respects, on the Economy. In addition, similar studies could be done, addressing summary examples such as:

• The use of artificial intelligence machines for applications, for example, in health areas, consisting of techniques and tools to streamline services and exams, implementing machine and in-depth learning algorithms (Jamil, Vieira and Xavier, 2019).

• The application of augmented reality instruments and software in the provision of real estate opportunities such as construction, sale and leasing of real estate and in the realization of automotive and aircraft projects.

• Widespread use of care robots, based on machine learning algorithms, associated with the processing of data and information, to perform tasks of first level of care or even repetitive, at the operational level.

• Drive, via 3-D printing of operative machinery in construction environments and operational processing lines.

• Use of crypto currencies and digital books of registration, as occurs in the bitcoin pair – Blockchain, seeking transparency, immediate and secure communication of records, currently used in logistics business modeling components and supply chains.

There are several immediate impacts of these technologies and their associated uses on facts and economic aspects. The disruption brings with it immediate review of business models, resulting in implications for the

organizational structures in use, the processes already defined, affecting models of business revenue and general communication with the organizational chain or network of value aggregation (Sultanuzzaman *et al.*, 2019).

In this way, it is possible to foresee repercussions on the proposals of forms of production and productive arrangements eliminating or pressing links of chains and networks. In addition, functions and jobs, especially those operational or in consideration of low value aggregation, are threatened due to lack of standardization, inaccuracy, low productivity or simply for reasons of effectiveness, where machines and implements can be offered in such a way that human workers no longer become necessary. It is important to mention that other waves of information technology base automation have preceded similar signals in other eras, such as commercial and banking automation, implementations of operational integration systems (ERPs), the introduction of web- based services, among others. What assumes significant proportions now is the automation and the speed at which such technologies are implemented, for these substitute purposes, often without the effective planning and risks associated with the economic management of national systems.

In the discussion of these impacts, there is a context not yet delimited between benefits and risks, some related, others not. First, in the usual statement that "positions are deleted, while others are created". In a superficial way, we see this perspective, where workers who work in operational and repetition functions, find themselves with jobs and functions threatened by the massive introduction of technologies that even offer the same results, with advantages related to economies of scale and incremental levels of operational productivity.

In other scenarios, such as medicine, for example, it is discussed whether certain professions and delegations will be maintained, or will have revised attributions, depending on automatic diagnoses, distance procedures and others, in what can be affirmed, such as the advance of Telemedicine. The impacts here are potentially sensitive to the review of professional curricula and their relationships with the methodological definitions of ongoing procedures.

The situation of automaton vehicles, auto crewed by robots demonstrates how these technologies can offer potential disruptions to markets, implying economic revisions. On the one hand, there are expectations and possible satisfaction of consumers, by having an automated transport for people and cargo, with precision and predictability, in addition to decreasing costs. Additionally, there is also the possibility of reducing traffic jams, general transfer times and emission of pollutants, with less loss of efficiency in transport. On the other hand, the existence of automated cars brings, with it, the threats of digital security, in the case of systems with low securitization allow the invasion of their processing environments by criminals. Also, the occurrences of some – for the sake of truth, few, but expressive – accidents, stem from additional concern when demonstrating that

such automatic systems are not foolproof.

The automotive industry, for its part, still shows a certain impasse in the adoption of new business models, in response to this growing intervention predominantly of technology. Automakers invest in car-sharing models, self-driving car prototypes and new forms of transportation, appearing to be a forced movement of strategic differentiation that carries with it severe management risks.

For the effectiveness of organizational management, emerging technologies still affirm consistent revenue models and associated costs, among other factors (Hoffman, 2016). Thus, the real scope of the supply of these resources are still of perception considered unstable, in tests and constant learning (Tadeu *et al.*, 2019).

It is also important to evaluate the proposition of the "shared economy", a factor that is very much based on the existence of new technologies. From the application of machine learning and the use of analytics to build data models, aiming at capturing customers, in the use of mobile application platforms, which are easy to disseminate and aggregate by users and, additionally, agility in analyzing data on consumer reactions, the shared economy advances rapidly, in various sectors. Currently, it is perceived, in addition to the already known cases of urban passenger transport - Hoffman (2016) - the models of housing, entertainment, education and tourism. However, the economic consequences of these offers, eventually, are reflected in misunderstood results or even difficult to analyze by managers, bringing uncertainties, risks and incoordination, in the advancement of competitiveness.

This brief description seeks to illustrate noticeable impacts, delimitation contours, some degree of risky level of ignorance, uncertainties associated with immediate benefits, in the adoption of emerging technologies for market solutions, nowadays. Whether they will be punctual, as effective instruments of agility for one sector or another of the economy or may constitute a means of precariousness of social institutes, impacting economic models, it is still unsafe to affirm.

What is certain is that such technology offerings do not appear to have recoil, remaining and advancing in our daily lives.

e. Urban Planning and the Construction of Sustainable Urbanism

The urban phenomenon of smart cities, their main characteristics and future perspectives, as well as possible new models of sustainable development, considering, for this reason, the point of view of urban mobility as the center of the studies carried out. At the heart of this, the concept of <u>smart city</u> and its consequent correlation with Information and Communication Technologies (ICT's) were explained, scrutinizing the essentiality of governance for smart cities and legal science.

The evaluation of urban planning, as a way of achieving sustainable urbanism, in order to preserve the right to the city, ensure respect for the rules and, allow the qualified expansion of access to public and private transport, as a means of guaranteeing the right to come and go.

Urban and territorial planning can be defined as a decision-making process whose scope would be the achievement of economic, social, cultural and environmental goals, through the development of visions, strategies, territorial plans and the application together of policy principles, tools, institutional mechanisms and participatory regulatory procedures.

Spatial planning is fundamental to the understanding of the theme and it can be affirmed, in summary, that it is a planning instrument, of a technical-political-administrative character, from which it is intended to configure, in the long term, an organization of the use and occupation of the territory, according to its potentialities and limitations, in addition to the expectations and aspirations of the population and the desired development objectives.

It is interesting to note the fact that urban planning and spatial planning are part of a systematic set of administrative actions whose actions are inextricably related to public management. It also relates its administration to the recently addressed concept of governance, through which the operationalization of government policies takes place. Urban territorial planning is a risk factor, which is potentially responsible for social, environmental and segment challenges, such as health and urban mobility.

In the context of spatial planning and urban planning, urban law stands out as one of its main constitutive and guiding components. In the legal system, it presents fragmented traces in its ordering, such as the right to housing (access to urban land), planning itself, urban activity and management and land regularization.

The recurring need for changes and adaptations in the urban structure, in order to accommodate social advances, there is an intrinsic relationship between urban planning and urban law, which can be glimpsed by understanding that planning will never be descriptive or stationary, precisely because there will be, as a rule, a strategic or transformative purpose, which will teleologically assume a program to be carried out. In this context, we reach the climax of the explanation of this point, when the relationship between urban planning and smart cities is delimited, since, given the set of factors exhaustively exposed and the importance of constructing alternative and problem- solving solutions to the problem of urban mobility, the need arises to bring to light the discussions viable ways of adding factors capable of promoting the enterprise of intelligent cities and sustainable urbanism.

Smart cities are a very beneficial alternative because they monitor and integrate all critical components of their infrastructure, such as: highways, bridges, tunnels, railway networks, ports, buildings, energy plants, communication systems, among others. Thus, find support to optimize resources and plan preventive maintenance activities, in addition to ensuring safety, while maximizing the services to be offered to citizens. Allied to these characters, it is known that there will be the employability of information and communication technologies, as a means capable of promoting improvements in urban functioning, efficiency on the provision of service, among other benefits. It is true that the confluence of factors is necessary for the construction of smart cities, with self-decisive, independent, conscious and participatory citizens.

In order to demonstrate the essence of an intelligent city and the means necessary to achieve sustainable urbanism, it follows a scheme, recreated from the original source, for purposes of better understanding:

Smart economy (competitiveness)	Intelligent people (Social and human capital)						
Ability to innovate Entrepreneurship	Level of qualification						
Trademarks and patents	Affinity with long-term learning						
Productivity	Ethnic and social plurality						
Flexibility of labor markets	Flexibility						
International Insertion	Creativity						
Ability to transform	Cosmopolitanism and interest in the unknown						
	Participation in public life						
Smart Governance (Participation)	Smart Mobility (Transport and ICT)						
Participation in the decision-making process	Local accessibility						
Social and public services	National and international accessibility						
Transparent governance	Availability of ICT infrastructure						
Strategic perspectives and policies	Innovative, safe and sustainable transport systems						
Intelligent Environment (Natural	Intelligent Life (Quality of life)						
Resources)							
Attractiveness for natural conditions	Cultural facilities						

Matrix - 3 - Dimensions and characteristics of smart cities

Pollution	Health systems			
Environmental protection	Individual security			
Healthy resource management	Quality of housing			
	Educational resources			
	Tourist attractiveness			
	Social cohesion			

Source: Giffinger, R. Fertner, C., Kramar, H., Kalasek, R., Pichler-Milanovic, N., & Meijers, E. (2007). Smart cities.

Ranking of European medium-sized cities. Venna: University of Technology. Available in: http://www.smartcities.eu/download/smart_cities_final_report.pdf.

The construction of smart cities implies significant improvements in social dynamics, as seen, in various sectors, with the primary purpose of achieving sustainable urbanism.

As regards urban mobility, it is stated that these models stimulate initiatives to reduce congestion levels and encourage adherence to public transport. To this end, the projects envision the creation of efficient, fast and low-cost displacement alternatives, besides being feasible because they have a low level of environmental impact.

f. Effective Government

What is the first responsibility of the government of a country? We can aggregate government into three levels of governance/organization. The top government, the operational rulers and the intermediate or coordinating rulers. **Figure - 1 - Pyramid of levels and responsibilities of rulers**



The main responsibility of top governments is the definition of the overall policy strategy and objectives in order to ensure the best results (economic, social, human, infrastructure and information) with the resources used or available. The responsibility of the interim governments is to define the political objectives for their area of responsibility, allocate and manage the resources they must achieve the objectives to which they have set themselves. The responsibility of operational rulers (local and or geographically located rulers) is to ensure the normal functioning of state organizations on a day-to-day basis.

The top rulers are based on synthesis information (e.g. the Covid-19 pandemic, the number of deaths, infected deaths, the number of tests carried out, the number of recovered at national level, etc.), while the intermediate rulers or coordinators rely on the same information at the level of their area of responsibility in order to make the best decisions to improve the allocation and performance of the resources they coordinate. Operational rulers the same information, but at the local level, that is, internal information quantified and accurate to solve the problems of day-to-day local.

The source of the information on which operational political rulers rely is 100% internally generated. The source of the information on which intermediary or political coordination governments rely is internal, but also external, since they have contacts with the outside world (e.g. customers, suppliers, etc.) and that in percentage terms we can be talking about 75% internal and 25% (e.g. price comparison between suppliers). The source of information for top rulers is

75% off (e.g. trends, turbulence, evolution of world policy, political-legal constraints, etc.) and 25% internal (e.g. evaluation of the performance of the Organization (State). Everything else that governments do or may want to do is based on economic performance and the results obtained for the following years. Even the most sublime governance tasks, such as the assessment of social responsibilities and socio-cultural opportunities, do not escape these assumptions.

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should be able to organize themselves for the function, distinguish what is essential from the accessory, distinguish what is relevant from what is a waste of time, what is potentially effective, what is merely frustrating. The role of rulers is to work hard, be demanding and take risks, especially the top rulers. There are many technologies available, especially information and communication technologies that save a lot of time and work. but do not spare the thought.

The Institutional Level Information - allows the top leaders to observe and evaluate the variables related to the evolution of the environment and the internal situation, whose purpose is to manage and evaluate the internal performance of the organization, the definition and implementation of the strategy.

The Mid-level Information – allows intermediate-level or coordination managers to allocate and manage the resources of their area of responsibility, that is, to monitor the evolution of the performance of their area and the correction of possible deviations from the objectives to be achieved.

Operational level information – allows operational managers to supervise and control day-to- day activities and tasks, monitoring the geographic space under their responsibility.

Characteristics that quality information should have are, inter alia:

- \checkmark In the time dimension:
- Readiness should be available when it is needed.
- Acceptance must be up to date when provided.
- Frequency must be available as many times as necessary and cannot be lost after use.
- Period must reveal its evolution historical vision.
- \checkmark Interdimensional content:
 - Accuracy do not contain errors.
- Relevance must have a purpose.
- Integrity all components must be present.
- Conciseness must contain only what is necessary.
- Amplitude refers to the scope of the content.
- Performance evaluation of the impact of information on the desired results.
- √ In the dimension form:
 - Clarity ease of understanding.
- Detail degree of detail required.
 - Order must be organized in the necessary sequence.
 - Presentation must have the appropriate format.
- \checkmark Other characteristics that quality information should have are, in particular:
- Accessible accessible to authorized users.
- Segura Only authorized users can access.
- economic the value of the information must offset the cost of producing it.
- Flexible can be used for more than one purpose or by more than one type of user.
- Reliable the reliability of the information depends on the method, how it is acquired and its origin.
- Strategic Political Information g.

Governments when formulating the strategy from the outside intend to be more aggressive, and restless. The formulation of the strategy from the inside out is based on the models of strategic movement (sociological) and therefore they are less dynamic, that is, they tend to be more passive and inclined to react to events (Mintzberg, 1998). These models represent the two extremes between which there is a range of behaviors. Based on the concept of organizational openness in systems theory, this is determined by (Ansoff, 1978):

Perception of strategic political information that describes the future (trends).

Perspective of the action that describes the familiarity of the actions of a government official, about his past experiences.

The characteristic of openness and the perception of action correspond, in general, to the perspective of information:

Politicians of a backward nature prefer alternatives that have been successful in the past and rely on known historical information.

Politicians whose attention is focused on the present, are willing to disconnect from the past, if it is not very different from the present, that is, they seek to rely on relevant information about society.

Politicians who seek to predict threats and opportunities tend to have an active attitude, in order to look for new paths, based on past information and using predictive (economic) models, bearing in mind that the future will be an extrapolation from the past.

Politicians who go beyond extrapolating the past, in order to perceive new worlds and discontinuities, look for opportunities that are new and unusual, that is, they assume that the future is not an extrapolation of the past.

 \Box Entrepreneurial politicians are also the creators of deliberate actions. They look for policies that have never been explored, human needs that have never been met, their motto is: "invent the future".

The range of possible responses and behavior is determined by the skills and abilities of politicians. There are two factors that determine the empowerment of politicians:

- Competence (set of knowledge that leads to strategic behavior).
- □ Capacity (workload).

One of the main attributes is the approach to the solution of the strategic problem that comprises the individual skills of politicians, personal knowledge together with group dynamics. The reactive method of solving the strategic problem seeks, through systematic analysis, the causes, with the use of analytical processes to identify all possible alternatives and to establish explicit and quantified relations between the variables, selecting the best ("optimal") alternative (Ansoff, 1978).

Another attribute of the training of politicians is leadership, in the definition and implementation of political strategy, requiring skill to capture and direct social energy. A fourth element of the competence of politicians is information to support decision making, which presupposes the existence of a process of surveillance of strategic political information, oriented towards the future and which we can call the informational competences of politicians.

Information about future possibilities comes from society and the performance capabilities of governments, which means that governments have access to information about their performance and the performance of governments in other countries. They also have access to information about which events and the forces that determined performance, as well as what skills and competences they managed to develop during a given period. Political strategic information is, therefore, the relevant information that allows the government to have a better performance through the active exploration of the imperfections of the information of the political facts (Truijens, 2001).

h. Political strategic management

Political strategic management is a poorly developed scientific topic, in which information (in a broad sense) is treated as a resource with strategic potential. Obviously, one is not thinking about cases where information is a political asset. If we realistically consider that the functioning of the government-governed 'is a perfect relationship, it is an abstraction, then the opacity or asymmetry of information can be a source of political advantage for the governors. For the imperfections of the government-governed relationship to be managed, government officials must equip themselves with specific capacities for obtaining political information, treatment, selective dissemination of it, and the creation of specific knowledge that will have to be carefully managed. After all,... the secret is the soul of politics!

Political strategic management encompasses both strategic decisions, regarding the relationship between the government and the governed (global society), as well as operational and control decisions. The quality of strategic political information surveillance systems can capture the weak signs of political evolution and thus offer the government room for maneuver, in good time. This time gap, before the events start to precipitate, can be used for preventive adaptation of policies or for proactive differentiation.

i. The Power of Government Information

"Information is a complex concept, omnipresent since the appearance of life and inherent in any evolutionary process and thus served and continues to serve as a framework for reflection, both in Biology, Physics, Psychology, Management, Linguistics, in Politics, as in several other branches of science "(Zorrinho, C., Serrano, A., Lacerda, P., p. 23, 2003).

The power of information resulted from the development of information and communication technologies, during the 20th century, as it happened two centuries ago with the concept of energy, a key factor of the industrial revolution (Zorrinho, C., Serrano, A., Lacerda, P., 2003).

The imperfections of political information are some of the imperfections that shock the political ideal of the perfect society (Yao 1988). The perfect society is characterized by numerous citizens and political groups and whose mechanism of elections determines the party and / or candidate with the most votes in the election. Looking at the information, all politicians are fully and perfectly informed about all relevant aspects of society / citizens of the country.

While the political ideal serves as the most important appropriation of neoclassical political theory, contemporary political theories tend to allow this, unlike the appropriation of unrealistic theories. Therefore, we assume that the perfect political ideal and that perfectly informed the governors and the governed, is a myth. For this reason, it is proposed that elections are characterized by imperfect competition and that imperfections in political information are an important advantage. (Yao 1988).

The result of the elections that political parties can achieve depends on the cost of the resources involved (human, economic, financial, technological and material), the cost of acquiring new resources (eg, support from specialists) and the economic value, of the support obtained . In case the political ideal is perfect, the governors and the governed, both will have the same and perfect expectations, regarding the result of the elections. Consequently, politicians will have to bet on a political project that meets citizens' expectations, otherwise they will be subject to voter non- participation in the electoral act. To win the elections, politicians must exploit the imperfections of political information in their political action / campaign. Under the greatest claim that these political imperfections exist, it seems realistic that the different governors and governors have different expectations about the outcome of the elections.

These give rise to differences in expectations, differences in the resources involved, different paths in which the resources can be used, but also differences in political information. If imperfect political information is exploited by parties and / or governments, and / or by citizens to obtain better electoral expectations, political strategic information results from this, Truijens, (2001).

For this reason, political strategic information is a new type of advantage in order to focus on the strategic political relevance of the imperfections of political information. The imperfections of political information are the main sources of political advantage: the main objective of strategic political information, Clemons, (1987), Amit et al, (1993).

j. Information Surveillance and Citizens Privacy

The process of "political surveillance" of information is essentially a process of observing the behavior of the governed and competing governments and is intended to monitor the evolution of global and regional policies. This "political vigilance" is ensured in most cases, by an organic unit (Staff organ - the "analysts" or those responsible for planning) which is in line with the Carnegie schools model (Ansoff, 1965 et al), and Positioning (Porter, 1980 et al).

The process of "political surveillance" on the economic activity of many governments focuses essentially on monitoring economic developments and forecasts for the European Union, namely the countries with the greatest expression in the European economy (Germany, France and the United Kingdom), as well as on the countries with which there is a greater affinity, such as Italy, Ireland and Greece, their evolution being accompanied by the internal structures of governments (the "political analysts").

This information is the object of collection, selection, treatment, analysis and reflection by "political analysts". In their treatment, they resort to extrapolation forecasting and problem analysis techniques, as a way to understand the structure of the domestic, European and international economy, as well as the interdependence between the various sectors of the economy, as a way to identify possible future scenarios. Information on the foreseeable development of the world, European and Portuguese economy thus becomes essential in defining the political strategy of the government or group of countries (governments in the same political area).

The process of "political surveillance" on sociocultural and demographic changes in some countries is an irregular process, of temporary and periodic assessment, essentially on social and demographic changes and includes demographic patterns, lifestyles, social structure, social trends and is designed to ascertain the changes verified in that time interval, such as the birth rate, the level of education, the capacity for indebtedness, being ensured by the "political analysts" of each government (internal and / or consultants).

However, the importance given to this information is less, when compared to the information on economic aspects, but it becomes essential in the implementation of the political strategy of each government, as a way of identifying which citizens are the target for each political measure, as allowing them to understand needs, available resources, legal requirements and financing adjustments. For the treatment of this information, the "analysts" use simple analysis techniques.

The "political surveillance" process related to political aspects is a "permanent" process that aims to "continuously" monitor the political decisions of different governments with an impact on citizens, such as unemployment policy, labor policy, tax policy, as well as community directives that may have an impact on citizens and society at large (eg Basel II agreement), are ensured by internal "political analysts" and or consultants.

The information object of collection, selection, treatment and analysis consists of legislation on several aspects, such as economic, fiscal, labor, educational, health, tourism, etc., as a way of identifying possible opportunities and threats. In handling this information, political analysts use simple analysis techniques to understand political influences.

The use of data by government, security, commercial and even criminal agencies (so that such information obtained by automatic tracking can be mobilized for their own purposes) are classic examples of monitoring, which with the advent of new forms of tracking it reaches the hands of the private sector or even people, with just a smartphone in their hands (Lupton, 2016, p. 114). Surveillance, as such, is not ontologically good or bad, it

is the context and behavior that will characterize it in one way or another (Marx, 2015, p. 734), and the same can be said for the concept of privacy.

The context refers to the type of institution and organization and its objectives, rules and expectations; and behavior refers to expected behavior (either based on the law or less formal social expectations). Differences in surveillance contexts that involve coercion (government), assistance (parents and children), contracts (work and consumption) and accessible and free personal data (personal and private, in public) need to be considered - after all, surveillance is it is a generic process characteristic of living systems, with frontiers of information, and not something restricted to governments, espionage or secrecy. And so, surveillance and privacy are not necessarily in opposition, and the latter can be a means of securing the former, as well as controls on access to information. Although media attention to the problems associated with inadequate surveillance (mainly by the government) is present, there are also problems associated with failure to use surveillance, where appropriate. The emerging interdisciplinary field of surveillance studies analyzes these issues (Marx, 2015, p. 734)

k. Information in support of Political Strategic Decision Making

There is a significant difference between the quality and quantity of information that politicians and governments rely on when making strategic political decisions. The fact that the value of qualitative information is recognized, however, is quantitative information, which has the greatest significance for "political analysts" and for government officials. It is easier to obtain and allows them to make performance comparisons and also because "political analysts" and government officials want to know to what extent, whether or not their government is performing well, since this will help you decide more easily what to do about the future.

Information in support of strategic political decision-making is a very important issue in this globalized world, as political strategic decisions are made based on this information. Quantified information is collected, selected, processed and analyzed by internal and / or external "political analysts" (consultants) and presented in the most favorable way to government officials, since they make decisions based on the numbers presented, in each alternative. Government officials want to know the extent to which their government will be able to perform well, since this will help them to better understand the current situation and decide the future, that is, to define the political position.

Government officials are much more satisfied with the amount of information about the economic, financial and social context, than with information about other contexts, insofar as this is qualitative information and that is quantitative information and determines the current performance, in achieving objectives, such as citizen satisfaction with greater or lesser efficiency and effectiveness, than competing or previous governments. Government officials believe that they can be informed in a formal way, by internal "political analysts" (staff or planning bodies) and or by consultants. They believe that global turmoil needs to be reduced to quantified and firm information, aggregated in a way that can be provided to them regularly and in a digestible format (Mintzberg, 1995, pp. 257-266). However, the factual (quantitative) information has some shortcomings:

Description: They are mainly historical, lacking in wealth and often do not cover important information, not economic.

They are, however, concrete and precise.

They are used in the formulation of deliberate political strategies.

Some quantitative information is worthy of little credibility and confidence and is mostly historical. Intangible (qualitative) information is subject to all kinds of interpretations and emphasizes the individual perspective of the "political analyst and / or the political decision maker," in the "reading" of the world and or the political group (ex: European Union), as well as its trends.

The intangible information analyzed by the internal "political analysts" of the political parties and

/ or governments and or consultants, is speculative and can be distorted. Informal (qualitative) information, for example, about the dissatisfaction of one or more citizens, can be worth much more, because it can suggest a solution, in contrast to, for example, information about a financial study (quantitative) that can simply identify a problem. Factual (quantitative) information informs the intellect, but it is intangible information that builds wisdom (Mintzberg, 1998).

The internal "political analysts" of the political parties and governments, in the extreme case, can, in about an hour, evaluate world policies, identify the distinctive competencies, generate alternative political strategies and discuss which one should be selected, based on the information collected on the previous day or the same day, through a formal and analytical exercise, which focuses attention on the selection of the factual (quantitative) information considered most relevant and ordered, according to its degree of importance. This concept comes close to the case study, in a classroom (Christensen et al, 1982). This process agrees with the Design schools (Andrews et al, 1982) (the leader), Carnegie (Ansoff et al, 1965) (the planners) and the positioning school (the analysts) (Porter et al, 1980).

The consultants (external analysts) that some political parties and governments use, arrive in a country, without any knowledge of society, carry out a SWOT analysis in several ways, which allows them to formulate the strategy in a few days of work (discussion) policy, over a period of two or three months (analysis and design), that is, two or three days are sufficient for the annual review and update of the political strategy (Tregoe and Zimmerman, 1980).

This means that they collect, select, process and analyze factual (quantitative) information, "play" with a set of generic political strategies, based on growth-participation matrices and the experience curve, write the report, issue the invoice and leave (BCG, 1974-79, ADL, 1974-79, Mckinsey, 1976-79, PIMS, 1972).

There is a set of variables on which political parties and governors pay special attention in the process of formulating political strategy, such as the positioning of other political parties, the country, the quality of the measures taken (modalities and others, and or services, investment intensity, return on investment and social satisfaction. This set of strategic political variables is in accordance with the PIMS model (1972), in: (Schoeffer et al, 1974, 1980, Buzzell et al, 1975). "All situations of political parties and rulers are basically similar, in obedience to the same laws of world politics, so that, a trained strategist, can operate usefully, in any country" (Schoeffer, 1980, pp. 2-5).

The strategic planning adopted by some political parties and government officials requires not only the predictability to formulate the political strategy, but also stability, during its formulation. Although certain repetitive patterns can be predictable (eg, the seasonality of fires), predictions of discontinuities are practically impossible to predict (Spiro Makridakis, 1990, p. 115). The hope of the strategic political planning adopted by some political parties and those of the government is the extrapolation of the past, based on recent or past (quantitative) historical information, to foresee future trends and hope for the best. Long-term forecasts (two or more years) are notoriously inaccurate (Hogarth and Makridakis, 1981, p. 122).

In the military strategy this approach is also very common, "we need to determine what our foreign policy will be, formulate a military strategy to implement that policy and then train the military forces, to successfully conduct the strategy", (Robert McNamara, in: Smalter and Ruggles, 1966, p. 70).

Traditional military art emphasizes the importance of being informed about the enemy and the location of the battle and for that purpose identifies a set of relevant information, such as the location of the army, in relation to mountains and rivers, fighting down the hill and occupying horizontal or high ground, anticipating the advantage of the first one who moves and occupies the battlefield and awaits his enemy, is at an advantage, because whoever arrives later, on the scene to fight, is tired (Sun Tzu, 1971).

Information on the art of war is, firstly, the measurement of space, secondly the estimation of quantities, thirdly calculations, fourthly comparisons and fifthly probabilities. With many calculations you can win; with few not. Those who do not do any calculations are much less likely to win (Sun Tzu, 1971). Comparatively, some governors also measure their position through social satisfaction, performance and perform simulation exercises (calculations) to determine the most favorable scenario. This concept is in line with the positioning school (Porter et al, 1980) which emphasizes the study of the geographical area (country), in which the government operates.

V. Political Strategy Formulation Model

Governors manage people, in addition to other resources, including information subject to the filter of cognitive abilities and the "game" of influences and alliances. The definition of political strategy tends to take the form of a perspective rooted in collective intentions and reflects patterns of the use of resources and capabilities, as an advantage. Government officials tend to regard information as a "resource" that can be acquired, stored and owned.

The information provides stability and comfort, and the governors to internalize it, transform it into knowledge, about the country and or about the world. However, there are limitations in the prospective models used, since non-quantifiable information (weak or strong signs of changes) was not considered. Governments actively explore the imperfections of political information, through political facts, to obtain advantages.

The sources of information that "political analysts" and "political strategists" often use are macroeconomic forecasts made by credible institutions, in global terms, prioritizing quantitative information over qualitative information. Information provides them with the creation of wealth and value for populations; the information makes it possible to increase the time available for making strategic political decisions.

Matrix -	4-Data-I	nformation	-Knowledge	and Action
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ICT's (data)	Information	Knowledge	Stocks / Results
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Activities	•	Data capture. Data definition Data Storage Data Modeling	• • info • Org	Information ds Acquisition of rmation Information anization Distribution of	● Crea ● Shar	Knowledge tion Knowledge ing Use of knowledge	• and i • •	Strategies, alliances initiatives. Products and Services Processes Systems Structures
X7 1	_		Info	ormation				
Values	•	Precision	•	Access	•	Enables action	•	Innovation
	•	Efficiency	•	Relevance.	•	Value generation	•	Learning
	"Or	nce we have the data,	"Br	inging the right	"If o	nly we knew what	"The	e ability to learn is the
	we	we can analyze it"		information to the right		we know"		sustainable advantage"
			pers	on"				

Source: Adapted from Choo, 2002, p.258.



VI. DISCUSSION AND CONCLUSIONS

a. General Considerations

For information to be used by political rulers they need to be valuable, since they are flooded with useless information. This requires a surveillance and filtering process to identify which are the weak and strong signals and what are the relevant information on which they can rely onstrategic policy decision-making.

Information adds value when it allows governments to realize political opportunities and strategic threats, detecting trends or potential problems. Information adds value when its analysis/interpretation comes to new ways of doing politics.

The weak and strong s and the relevant information affect the success of governments, as they are a strategic resource of high added value, since they allow governments to be constantly attentive / informed,, about alternative (external) scenarios, in addition to consolidating at any time important policies, , n the strategic political decision-making.

To this end, these relevant signals and information should be managed by a surveillance and filtering process involving the perception/interpretation capacity of the specialized technical teams, of the development trends of the world market (weak and strong signals and information), while useful in location and time.

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b. Social Transformation

Considering the previous analysis, it can be said that we are witnessing the transformation <u>of the Information</u> <u>and Knowledge Society in the Digital Society for</u> the following reasons:

- The new Information and Communication Technologies (ICT's) have constant influence on the daily life of companies and people, becoming mediators of social relations and the economy and in the way of producing / disseminating knowledge.
- ICT's are used in new forms of economic, technological, political and social surveillance.
- ICT's play a crucial role in the process of globalization, characterized by the wide circulation of people, ideas and habits, and engages in high speed.
- The increasing insertion of Information and Communication Technologies (ICT's) in people's daily lives has promoted a relationship of deep dependence between them.
- Everyday actions have become essentially informational..
- The complex digital 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 they understand reality, changing the way, they relate to the environment, to other people and how they conceive themselves in the face of reality itself.
- Digital computers operate from calculations and manipulate the rules for the organization of symbols, allowing the possible construction of mechanical models of the structure and dynamics of thought, through Artificial **Intelligence.**
- The theory of information promoted the social changes that are currently being experienced and that have generated new types of problems, especially those related to the relationship between action / technology / environment.
- The impact of ICT's in the academic and social spheres, the approximation between the different sciences, in the development of theories, above all, in technological innovation.
- The influence of ICT's in various areas of society (sociological, economic, scientific and cultural), since. society lives fed, by visto que, information.
- ICT's are present and related to the person's and their physical and social well-being, and in their continuous use,, in everyday situations (e.g., leisure, work, etc.). It constitutes a relationship of dependence between these person's and the ICT's.
- Increasing the power of ICT, while, reducing their cost of production and marketing.
- Improvement of ICT's in their interaction potential (machine-machine and mem-machine).
- Emergence of the Age of zettabytes (dated 2010).
- ICT's are responsible for bringing people together and generating a deep amount of dependency, for the performance of routine actions in today's world.
- The dependence of people and ICT's organizations is based on the mediation of common actions, such as financial movement (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, Uber, Taxi 99), making calls (using the network, via Skype, Whatsapp), physical activity (Runkeeper, for example), professional activities via SOHO (small office / home office), political organization (via websites or social networks), among others.
- The ICT's have a deeper channel of action, in the design of people's identity, because there is a growing adherence and overvaluation of social networks..
- The Web enhances narcissistic culture by expanding the forms of self-celebration and self- promotion. Relationship sites, in turn, end up encouraging vanity and competition. [...] young people strive to show their profiles, photos and texts that value them and promote the increase in the number of people they add as "friends". [...], in the constant search for attention and social recognition, feeding the network with personal information in an intense way (social self).
- The work center shifted to 'remote work teleworking'. In developed country societies, access to good jobs and a professional career will increasingly depend on a university degree with distance work, anywhere, in a country, in the globalized world.
- Complained about working in the office and in the big urban centers, went through the intellectual work and came to telework at home or elsewhere, outside the big urban centers, and presented do a break with the past.
- Knowledge has become the capital of developed economies and knowledge workers, which determines the values and norms of society.

• The great challenge for developed countries is to maintain the commitment to economic performance that is necessary for organizations and countries to remain competitive.

c. The Information Age

The rise of digital, technology in society, has increased the availability of information, to the extent that it has brought down the price for achieving it. The Information Age is a term used to refer to the technological **reality**, as a mediator of human relations **and interactions between machines**, increasingly autonomous. **One of the main features of this reality is Hyper Connectivity**, that is, the fact that everyone is connected all the time. **In addition to exchanging information in Real**time, a user has the possibility to consult an immense universe of information sources at a relatively low cost.

Today, a computer or mobile phone connected to Starbucks Wi-Fi does the same operation in minutes (search, selection, download of the article), probably before finishing the coffee. But the Information <u>Age</u> goes far beyond that. With these devices connected, **people become data generators**, even if they often don't realize it. By using Waze, such as GPS to get somewhere, for example, a driver **is providing** hundreds **of real-time data**, about your route.

These data, such as the average time of the route on a given route - will influence the routes suggested to other drivers. Since the data is unhandled information, it can be said that big data is the oil of the Era of Information. Refined, worth gold – crude, almost not fit for nada. What marks stand period is that the machines are not only doing the work for which they were programmed

- they are "learning" to make decisions on their own and based on the data they receive and the previous results that obtained.

d. Digital Age (Digital Revolution)

Although there is still talk of Industrial Revolution to characterize the **application of artificial intelligence and machine learning** in industries, there is another way to name the period in which we live. We can speak in the Digital <u>Age</u>, in contrast to the Industrial Age that existed before. It is not that the big industries, which employ thousands of people and have fantastic productions, have lost relevance. **Many of them remain relevant and socially important**, they make and pay billions in taxes and have factories and offices in every corner of the world, employing millions of people. Ranking is market value, that is, this is not to say that these are the companies that make the most money in the world, but rather that they are the most valuable publicly traded companies.

A clear sign that the world has already understood the power of Information.

e. Impacts of the Information Age

The advances brought by the **Information Age** have changed the way many activities **are carried out.** For example:

□ When we use the GPS of the mobile phone we do not need to ask for information or consult a printed map to find a destination

 \Box We communicate all the time with distant people through instant messages s, without relying on a phone call.

 \Box We do not need to go to a library and flip through encyclopedias to get certain information, which is accessible a few clicks on the internet.

We can check the weather forecast from anywhere in the world, anytime

Algorithms show, based on browsing history, product suggestions, music and movies related to our preferences (which is a bit annoying at times).

One of the main criticisms of the **Information Age** is that Hyper connectivity is, ironically, disconnecting people, who prefer communication mediated by a device to "eye to eye". Another negative point is the difficulty to **concentrate**, since the number of stimuli to which we are subjected grows disproportionately - interrupted the writing of this text about ten times....

The **increase in anxiety levels** noted in the world population is also related, by many,, to the Information Age: it is so much information that people feel suffocated. All this makes sense, but we need to understand that evil is not in technology, but in the (wrong) use we make of it. The Information Age is a never-going path. The solution is, therefore, to learn to live with the challenges, without harming our balance and especially our social relations.

f. Impact on Public Administration

If the **Information Age** causes all this transformation in people's lives, the corporate **world** is not alien. The opportunities, however, go far beyond marketing technological solutions to the consumer market. The fact that we live in the midst of so much information is a golden opportunity for organizations related **to** the State and the State itself to become more efficient, transforming their processes, using new information and communication technologies to get closer to citizens (their customers).

The goal of the government is to create a data driven<u>state</u>, which means that the main decisions are now supported by increasingly abundant and precious **data**. Big data has unprecedentedly expanded the possibilities of processing the most diverse types of data, mostly unstructured.

g. The Impact on the Economy

Despite all the changes in the daily lives of people, companies and **institutions, the basic rules of global macroeconomics have not changed.** The players and the way they act is that they have undergone profound changes. So, if we talk about "information economy", the reference is to the new mindset that is expected in the corporate world.

And, to **the new consumption patterns of** the population, largely influenced by the new technological possibilities, most often in the palm of the hands. It is a clear indication that it is a new era, in which information and money go together like never. The great news is that you no longer need to have a tangible **product** to generate a huge amount of money.

For example, Facebook has becoming of the largest advertising targeting platforms in history. The site has so much information **about its users** that an advertiser can pay to display its message, to a very specific group, composed of people who have an important propensity, to be interested in the brand and the message they want to pass on. Technology is an ally basically of all companies and the state, helping in the production and distribution of information.

h. Key trends in the Information Age

Information age technologies advance so quickly that sometimes an incredible novelty emerges without, even realizing it. Among the main trends for the coming years, we should see, increasingly applications of the internet <u>of things</u> and artificial intelligence, the massive use of drones and augmented reality.

In agriculture, for example, the wave will be (and already are!) equipment connected to a rural production management system, which generate in real time information about the temperature and humidity of air and soil, guiding operators (or the equipment themselves) on, how to manage production, in that exact place. In addition, autonomous agricultural equipment will make work faster, more efficient and safer.

The important trend are autonomous cars, developed by giants such as <u>Google, Uber and Tesla</u>. For this to work, it takes a lot of information and connectivity, as well as laws and even roads adapted to this reality. But not everything is technology, of course.

If so much is being automated, rethought, digitized, we also need to think about keeping alive what we have most human: our emotions and each other's social relationships. If virtual **commerce** is to continue to grow increasingly, physical establishments need to focus on creating experiences that rescue humanity and dialogue with the most basic needs – shelter, affection, security, communication. Instead of just stacking technologies, it is necessary to think about what causes the genuine enchantment of citizens.

Fortunately, information in the information age is always within reach. Just search

i. The Government Strategy

In relation to the process of formulating the strategy, several models could have been used, however the analysis / evaluation of the political positioning of the government we used the common instrument for this is the *SWOT analysis*, which aims to study the strengths and weaknesses (what is inside) and confront them with the opportunities and threats of the surrounding environment (what is outside) (Andrews, 1987). SWOT analysis can be used as a basis for the development of future strategies, as well as for the development of the policy strategy plan.

All governments, regardless of their size, have in some way an explicit or implicit Strategic Plan, this may include, for example, the general ideas of a ruler. However, the Strategic Plan is generally more formal and elaborate. This document is called **the Political Strategic Plan**. It is the document that describes the government's strategy, namely content and process, presenting the government's vision and how it will achieve its objectives. It is usually written to serve as a means of communication with (external) stakeholders, especially potential investors. In addition, it can serve as an internal control and meta-realization mechanism.

Globalization is a reality and as such it is necessary to understand and focus on the various aspects of this globalization, namely:

Globalization of Information, Economics, Technology, Politics, Ecology and Society in general and whose consequences are the transition from the Information and Knowledge Society to the Digital Society with all the social, economic, technological, environmental and other consequences.

Deconcentrating / Decentralization of large urban and population centers based on support of ICT's. The stop working in the office and in large urban centers, goes through intellectual work and arrives at telework at home or elsewhere, outside the big urban centers, representing a break with the past.

Focus on smart cities, and sustainable development models, considering urban mobility, as well as smart <u>cities</u> and their consequent correlation with Information and Communication Technologies (ICT's).

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□ **The work centre has shifted to 'remote work - teleworking'.** (the office of companies/organizations can be anywhere in the world), which will allow you to:

- Flexibility of working hours
- Improving public transport services
- Reduction of environmental and noise pollution levels

The process of Globalization is developing at high speed, so economic, technological, political and social surveillance is important in the face of large digital environments, in order to guarantee the **freedom**, **privacy and security of citizens**.

□ **Invest in electronic surveillance of** smart **cities,** and **citizens,** to **reduce crime,** based on Information and Communication Technologies (ICT's).

□ **ICT plays a crucial role in the process of** globalization, characterized by the wide circulation of people, ideas and habits, and develops at high speed.

□ Maintain the commitment, with the economic performance necessary for organizations and the country to remain competitive.

<u>Population increase</u>s a way of:

• Reduction of the average age of the population

- Reduction of social charges
- Increase in tax revenues

□ **Investing in online public services** to improve the efficiency and effectiveness of public services provided to citizens to make life easier for citizens.

Bet on Knowledge Management, which allows the support of ICT's to<u>manage national talents</u> worldwide. Increasingly, access to good jobs and a professional career will depend on a university degree with distance work, anywhere, in a country, in the globalized world. Knowledge has become the capital of developed economies and knowledge workers, which determines the values and norms of society.

 $\Box \qquad \underline{\text{Decentralization of health services}} \text{ using ICT's, as a way for hospital services to be used only for serious cases, operations and scientific research (<math>\underline{\text{Telemedicine}}$).

Decentralization of justice with recourse to ICT, to reduce the bureaucracy of judicial processes judicial proceedings and increase the efficiency and effectiveness of justice

<u>Take advantage of natural resources</u> (sea, nature, number of hours of sunshine, etc.) to harness these resources in economic development (clean energy, tourism, clean and persistent forest, organic agricultural products, etc.).

The Information Age is there and there is no possibility of going back to the past.

For any entrepreneurial and professional politician, the best thing to do is to try to understand the particularities of the time and respond to the opportunities that arise, if possible by improving people's quality of life (and gaining from it!). Even if Hyper Connectivity displeases you, think about how to ride this wave instead of fighting it. Understanding this reality, you can even explore what arises from the negative impact of technology!

Anxious, agitated people who are unable to organize their routine and fulfill their commitments can look for solutions that help them live **better**. On the other hand, if a politician is fascinated by technology, know that the minutiae and the operational are areas of interest of IT technicians.

A politician needs to know the technological solutions, but he must go beyond and internalize them in his strategic thinking. It is of no use to have a huge database if all those information's do not become valuable insights for strategic political decision **making**.

VII. LIMITATIONS OF THE RESEARCH STUDY

Previous studies on the area of strategic political management have numerous limitations that should be addressed in future investigations. First, they are often limited to governments that have already been identified, such as having formulated the Strategic Plan and other governments that have no explicit and formal strategy at all.

In addition, previous research studies are difficult to compare with each other due to differences in model of governments, countries (European, American, Chinese, etc.), or period of research. Similarly, previous studies are often limited to only one country, which reduces the potential for generalization of conclusions. In this respect, it would be interesting to examine, whether there are differences in the use of strategic instruments, in governance.

VIII. CLUES TO NEW INVESTIGATIONS

The Government Strategy can support the government in its political action through the various areas of action, influencing all organizational levels of governance, involving politicians, technical committees and other

members of the government, and thereby providing the most assertive political decision-making at all levels of the governing structure. We are already asked the following questions:

• Was the COVID-19 pandemic provoked or was it a ploy by the world's major technology companies to bring about the transition from the Information and Communication Society to the Digital Society?

• Did the COVID-19 Pandemic force global globalization at once, without being made continent by continent, country by country?

• Is it not about people's freedom and privacy with the Globalization of the Information Economy?

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