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A CASE-STUDY VISION

#### The electronic detection of offenders (DOO) in the District Secretary of mobility of Bogota: a step forward in the configuration of the concepts of digital citizenship in Colombia

La detección electrónica de infractores (DEI) en la Secretaría Distrital de movilidad de Bogotá: un paso adelante en la configuración del concepto de ciudadanía digital en Colombia

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#### ABSTRACT

The perspective of the article that is presented focuses on analyzing the concept of digital citizen, a subject temporarily located in the 21st century, spatially on the globe and with a generalized immersion in computer media, and the processes of assimilation and adaptation that this renewed citizen dynamizes its mental scheme and its social positioning in the face of the technological practices that globally characterizes the contemporary was, such as the organization and control mechanisms of the mobility and road safety system of the city of Bogota. The foregoing taking ace to case of analysis the implementation of solutions such ace DEI (Electronic Detection of Offenders) through the CPIT platform, by the district Mobility Secretariat of the city of Bogotá, taking into account that this type of urban organization tools they have to wide incidence in to significant number of cities on the global scene.

#### RESUMEN

La perspectiva del artículo que se presenta se enfoca en analizar el concepto de ciudadano digital ubicado temporalmente en el siglo XXI, espacialmente en el globo terráqueo y culturalmente con una inmersión generalizada en los medios informáticos y los procesos de asimilación y adaptación que este "renovado" ciudadano dinamiza en su esquema mental y su posicionamiento social frente a las prácticas tecnológicas contemporáneas, tales como los mecanismos de organización y control del sistema de movilidad y seguridad vial de la ciudad de Bogotá. Lo anterior tomando como caso de análisis la implementación de soluciones como DEI (Detección Electrónica de Infractores) a través la plataforma CPIT, por parte de la Secretaría Distrital de Movilidad de la ciudad de Bogotá, teniendo en cuenta que este tipo de herramientas de organización urbana son de amplia incidencia en un número significativo de ciudades de la escena global.

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#### 1. Introduction

The ICTs in the century XXI have the particularity of associate to processes social each time further complex and alien to the chain strictly productive operational of the organizations business, the which in principle established as his niche of deployment and exploitation. This job part of a inescapable freak of analysis in where the technological tools in recent years showed outstanding results in the ambit business as components innovative and optimizers, substitutes of the means of production. So much so that they began to diversify outside the companies and to occupy a role protagonist in each a of the different areas that understand the development of societies. For this case, the system of mobility of the city of Bogotá and one of its most recent innovations: the DEI platform (Detection electronics of Offenders) and his paper in the joint of the concept of "citizen digital" in Colombian society, which is a clear example of the progress and evolution towards the modernity that makes visible in territory national.

The tasks of the state and territorial organization, which cover much more that the dynamics associated with tangible productivity find in the new century a extensive technological support based on virtuality, specialized software, intelligence artificial intelligence, social networks, databases and a wide range of computer applications that They result in the massive technologization of the cities of the 21st century. This is the case of system DEI (Detection electronics of Offenders) of the city of Bogota and the platform that it supports (CPIT).

It is here where new terms and mainly renewed forms of grasp structures sociocultural ontological and widely complex as the citizenship and the city. In this case we talk about "digital citizenship" and "smart cities." as the new ways of understand these concepts protagonists in the ambit macrosocial. The boundaries of this article demarcate in land of the citizenship digital and its relationship with DEI-type tools and

what is related to the modernization of the information system mobility and security vial in the city of Bogota.

In the same way that the world order and the global political structure have been redefined to the ebb and flow of technological advance; the local level and organizational practices urban in the territory Colombian also experience variations of order multidimensional. The concepts and practices that concern to "it public and it private", "the right and duty", "institutionality and governance" among others, are in a state of molding in view of the new parameters gestated from the association ICTs – globalization. This is how we begin to think politically about the "digital citizen" as animated icon of the cyber age, knowledge society, global village or any of the denominations coined in the scientific community to refer to the last 4 decades passed for humanity. This digital citizen is a social construction mediated by the practices technological of the new century and the interactions that inside of are they configure.

#### 1.1. The system DEI

The DEI platform is a system for detecting different violations at points on the road, with the aim of reducing accident rates in the city. This component will be integrated, through of the grid of communications of the SIT, with the systems contraventional and of notifications of the SDM, with the end of send all the information that goes from the detection of the evidence of the violation, until the imposition of the summons and sending it to the System Contraventional of the information of the same and its respective evidence, [1].

#### The platform CPIT

The solution of DEI is a application Web, the which this composed by several components that interact with each other to respond to functional requirements and quality attributes. Among the material resources necessary for the execution of the services are the software CPIT, the which grants in license to favor of the Secretary District of Mobility of the city of Bogotá (SDM), so that this entity can integrate and receive the alleged violations of all the sources of information described to continuation and with this supply provide the traffic authority with the necessary data for the imposition of summonses, [1].

#### Sources of information of the platform

#### - Detection of evidence by devices mobiles:

Are the evidence corresponding to police units that have mobile devices that detect alleged violations. They take the photographs and enter the information corresponding to license plate, location, date, time and location of the violation in the device. A time valid by the authority Police, send in line the contents to the SDM server. Detection using electronic mobile devices makes use of different web services (RUNT, RDA, Excepted, among others).

### - Detection with cameras of the center of management of transit:

They are the evidence that is collected through the cameras currently operated for him center of management of transit of the SDM.

#### - Others sources of information:

- \* Equipment in via that are implemented in the project DEI.
- \* Equipment in via of third parties (understanding that are the agreements current with centers commercial either future agreements public and private that I arrived to have the SDM.

\* Evidence manuals taken with the cameras of the Center of Management of Transit of the SDM, [1].

# 2. The citizen digital as protagonist of the influence technological in the mobility vial

It is a highly complex exercise to make visible the extensive network of connections and alternatives that to the subject of the common you provides the city in the elapse of his experience everyday and their odds of development. The job of Jairus Albert Galindo [2] secretary general of the Colombian Society of Semiotics and Communication - within the framework of an approach to concept "citizenship digital" gather valuable perspectives, between are the of the prestigious architect Rogelio Salmona, who proposes the multidimensionality that it gives to the inhabitant of the city is "declared a network of signs. From graffiti, urban planning models and cinema metropolitan, even music and architecture, all identify structures in the city symbolic that allow it to be constructed and deconstructed in various scenarios and habitats timeless for their guests", [2].

From this perspective, the mobility and road safety system of a city would become constitute an essential part of that "network of signs and symbolic structures" that direct the reconfiguration so much of the city as of the citizenship.

The purpose of this first conceptual approach is to point out the characteristics own of the paper dynamic and protagonist of the technologies of the information and the communications in the of construction of the concept of city and the renewed sphere of it public that this process entails in the setting of the citizenship digital.

According to the above, it is necessary to take concepts as a starting point as a city, citizen and citizenship; society must be recognized as the context in in which citizens are divided into sectors, constituted as a community and reorganized permanently.

The concepts that concern epistemologically to this job group in a category specific that from the sciences policies occupies great attention to the moment of the analysis of "it public" as an axis of understanding of the social subject. The city, the urban and the citizen constitute a large part of the sociopolitical dimension that has been delimited for analysis in the terms of mental configuration of the subject from the network of signs and symbols of a society in certain moment historical, in this case the "society of the knowledge", specifically the technologies to the service of it public, such as the solution for the system of mobility and security vial DEI.

The city is defined as the "set of buildings and streets, governed by a town hall, whose dense and numerous population is usually dedicated to non-agricultural activities" (RAE - 2022). The urban, in semantic logic, invites a representation of context and setting that is opposed to the rural. In this way the idea emerges that a city is synthesized in a set of elements that maintain relationships in different senses and forms of communication; this in opposition to other guy of contexts also relational. In how much the concept of "citizen" fits highlight: "man in the law. Person considered as member of a state, title of rights politicians and subjected to their laws."

The first qualification of the citizen "man in law" proposes that, by deduction, the subjects citizens behave inside of the boundaries established by the laws of certain territory, [2]. In this way the "man outside the law" would then be a subject whose condition citizen has to reorient and reestablish yourself. This to through of the system penal, judicial either contraventional. In relationship to the first

characteristic citizen, would come the complex dissertation about the that and the as would define to the "man in the law" and to the "man out of the law". This point is of great interest from the perspective of mobility and security. road because in a contextual meaning, the traffic offender would be considered susceptible to reorient and reset in his condition citizen to through of the system of contraventions and fines.

The second definition Yeah does possible establish a relationship dynamic in the which the state It constitutes as the other interactive. This relationship formalizes rights, privileges and homework. In others terms, speaks of the subject that shape part of a city being member asset of this, because his behavior this oriented in function of the parameters with the that ha been organized. In the terms of mobility and security vial would do allusion to the subject No offender.

For point out the clarities initials, the concept of citizenship in the society contemporary "cybersociety" establishes from three perspectives clearly located in the land primary of the was technological:

- Quality and right of citizen.
- Set of the citizens of a town or nation.
- Behavior own of a good citizen.

In an integration exercise, it is possible to configure a conceptualization of citizenship in the following terms:

"Citizenship: exercise of the rights and the homework dictations, implicit either explicitly, by the city. In all cases, for the definition of city, citizen and citizenship, we find a common denominator: everyone understands, at their base, processes of relationship and subordination, processes of communication", [2].

Doing allusion to the burst media and to the leadership informative focused in the phenomenon of the inclusion of ICTs in all the relational dimensions of the subject, is states in a simple way that the communication processes have been permeated by the "technologization" or inclusion of technological applications for its mediation, which has resulting in the strengthening and social anchoring of information technologies and communications as an omnipresent object in the complex network of signs and symbols that edify the relations citizens.

Of this shape the relationship of subordination of the citizen would see clearly represented, for example, through the influence of the practice of discipline and control mediated for him system of detection electronics of offenders (DEI).

Recognizing the omnipresence of ICTs finds coherence in simple practices daily life of the city and the common citizen. In this case, upon receiving or being notified of a violation of traffic laws, furthermore, when making or receiving a call to through of the device mobile, send a message by mail electronic either chat, remember to put on up to date with debts corresponding to public services or tax responsibilities, because banking entities preferentially motivate these payments to be made through your channels in Internet.

It should be noted that the above, coupled with the global health crisis unleashed in times of the COVID 19 pandemic, makes cyber protagonism such a reality irrefutable in terms of the clear need to think about the 21st century in a new citizen, a "citizen digital".

From a vision prospective fits mention that:

"Studies of graffiti, music or even urban dance will one day have a space of study from a perspective digital. Is necessary deepen in all those aspects that are incorporated or modified in the city from the application or linking ICTs; Even those who now commit us, those of the city and the citizenship digital", [2].

The massive meaning that is formally outlined for the term "digital" is "of or relating to the fingers." (RAE - 2022). Maybe in dictionaries or encyclopedias techniques it is possible to find a complex approximation to the term; or how the put it [2] "perhaps because its definition is still too digital and does not become tangible in the hands of who prepare the dictionaries".

However, from a technical perspective, the term "digital" refers to the condition that characterizes the elements whose representation is based on abstract signs, in this case binary code, which bears no similarity to the reality they are representing this calls the shape analog.

At this point the challenge for society and specifically citizens is woven, to translate and give meaning to digital information. It is necessary to identify and understand the codes that indicate the meaning of the signs. City, citizen, citizenship; in his set as society and in his individualization as items politicians, for establish, need a communication scenario, a territory of dialogue, that leads to the construction and formalization of common rights and duties, for which the initiative of the Road Mobility Secretariat of the city of Bogotá within the framework of the design of computer tools for detecting traffic offenders. Is this a step enlarged for the setting of that of communication in territory pos institutionalization of common rights and duties. This scenario and this territory is it that calls society.

As the processes of communication, dialogue and agreement are located in space digital, then this society adds a new dimension that inevitably fractures the citizen interaction practices preserved until the 1980s and places the subject in a global model where the substrates associated with privilege and power are no

longer the land neither the possession of wealth; it that dominates and prevails is the information.

In this case, the field of mobility and road safety, represented promisingly by solutions technological as DEI, would happen to be architect of the construction and formalization of common rights and duties, all this within the framework of the constitution of the new society.

In this new order, information, as a determining and at the same time intangible resource, it is established as a fundamental tool for the cohesion and organization of society. Thus, the dynamics that give vitality to the relationship between city and citizen are only possible by the interaction of parts constitutive in a dimension in the that these items are embedded, it is what has been called "information society". "A Information society can be defined as an informed society, which builds knowledge thanks to the assimilation of technology by all its citizens, shape that stay built-in to their daily lives, [3].

Raising the concept of digital citizenship implies thinking about a society that encompasses a lot further that to their individuals, also this immersed in this spot the obligation civil to through of duties and, based on the provision of services, rights. In a common characterization, it is found that the most important are health, culture, security, the training, the trade, the training, the administration, the tourism and the leisure.

Taking into account the altruistic vision and the full exercise of politics, each society tends for its individuals to achieve a level of development and a quality of life that secure his training and further there, his self-realization comprehensive [4], are the bases for the exercise of citizenship and participatory democratic culture. To this end, the challenge focuses on the elderly benefit of services possible extend with the elderly coverage to the whole of its population, in this case road safety and mobility are structured as a

service imminently necessary for the construction of city and the dynamization of citizen.

The shape further effective of achieve with this task, arrive to the citizen, is through the use of a certain means of communication, of some interface. McLuhan, in a not very past distant in which the cybernetic paradigm had not yet been consolidated as a cornerstone of contemporary era, stated: "The city no longer exists, except in the form of a cultural center for tourists. Any roadside stop with a television set, newspaper and magazine is so cosmopolitan as New york either Paris", [5].

## 3. The exercise of the citizenship as reflection and axis of the transformation social

Beyond the elements recorded up to now in the framework of an approach to the new citizenship "citizenship digital" raised by the society of the knowledge, ensue other analysis factors that may well constitute a considerable break in the spectrum that about the concept of citizen hovers in the was digital.

The citizen is considered as that individual who has acquired, either by his origin or Due to migrant status, a subordinate link with a state and, therefore, with a society. Until this generic spot limits the vision digital regard to the citizenship.

Nevertheless, it is necessary to take into account Note that this link, very Above the subordination, grants the citizen the right to take an active part in social development, in the decisions and transformations that are formalized and institutionalized from the sectors of the can public that act in representation of this to through of the exercise of the vote popular. Of this conception of citizen is derived from the statement that "under a form of government authoritarian dilutes the condition of citizen", [6].

It is important to begin to elucidate to what extent technological practices, therefore less in the system of mobility and security vial, configure as a shape of cancel the supposed authoritarianism of the control entities, since the "apples of discord" such as sanction, fine and contravention are fully argued and justified through digital evidence. Videos, photos, information crossing of the offender and all sources of Data used by DEI, for example, allows the citizen to have a clear vision about the action governmental forehead to the evidenced violations and individualized.

Linz then points out an inalienable duty as citizens, that of exercising vigilance about the mechanisms, strategies and tools of power. "That is exercising citizenship, specify it and is a process that requires learning and that has to emerge from the base of the society. Only So conquest a democracy real well of it contrary reduces to simple expressed conditions in a paper called Constitution", [6].

Of this shape, the task citizen of lend special attention, reflect and to debate of be necessary; about of the strategies, practices and devices sanctioning as the fines and traffic violations, is now nourished by completely true and verifiable facts to through the evidence digital that they throw System of detection as DEI.

Zuleta in [7] declares that it is necessary to modify what the calls "a negative conception of democracy", which points to a tolerance certainly confused with "resignation". This is accepting and inhabiting the terrain of pluralism, diversity, the new trends that locate to the sector technological as the incubator of the sphere social; it which it implies to a citizen who maintains an active and participatory position regarding the models and parameters emerged in the world globalized.

Being a "citizen" means traveling the gap between the personal and collective spheres; is move from an egocentric positioning where the center of human action is in satisfying one's own interests, to a position of solidarity with the other members of the society. The procedures IT technological of mobility and security vial traces by the Secretary District of Mobility of the city of Bogota, such and as it poses the solution DEI, extend to all members of society and that is where the information that manages is aimed at investigative processes, forms of citizen participation and, mostly, to the formalization of the rights and homework as all that that It represents the comprehensive training of the citizen. At this point the concept "citizen digital".

#### 4. Conclusions

Is possible say that the circulation global of information to leave of channels as the media of communication, of interfaces, is not new in terms of the ways of generating citizenship. In the years 60 and 70 the channel media of the information citizen answered to the need for each city to summon the greatest number of subjects for the purpose of fully comply with their duties (payment of taxes or moral commitments) and exercise fully their rights as individuals in constant interaction with other individuals and with the objects "citizens".

It really novel in how much the driving of information as device citizen of the societies lies in the sense organizational structural that in the last years granted to this complex network of information dissemination. The development of ICTs is not a made isolated and delimited in the ambit of the science and the technology for the development world of the new century; On the contrary, it is directly associated with the political phenomenon of globalization. economic and organization of the territory local, in this last spot cobra a important prominence and the Crime Offender Detection System can be conceptually anchored the

District Mobility Secretariat of the city of Bogotá; as a focus of analysis in the sociological processes of new world: the world digital.

So, the things, the sense that has acquired the harvest of information, and the consolidation of bases of data; to through of the new technologies, centers in the dynamic of socio-political order on which the entire state context of the time is structured. The constitution of the condition of citizenship in the 21st century through the systems of information is significantly influenced by the need to adapt the legislative apparatus to the new order global.

For point out, would conclude that all the individuals of a society are responsible for this because they constitute themselves as leading actors in their reproduction or its transformation depending on whether they are located as the subordinates of the technologies that are used in all areas: health, entertainment, glamour, education, security, finance; such and as could appreciate in the asides initials of this job either, case opposite, reiterating always the dignity own and collective, to through of the use full of the right to active participation in decision-making versus the institutionalization of practices disciplinary in pos of the status what, such as the system of fines, violations and contraventions of transit, it which is widely renovated and facilitated by solutions as DEI.

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