

The impact of digital citizenship on the development of the socio-political environment of the region

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Abstract. The emergence of cyberculture, characterized by extensive use of digital technologies, has transformed various spheres of life, notably the political domain. The purpose of the study was to evaluate the impact of digital citizenship on the development of the socio-political environment of the region. The research methodology includes a comprehensive review of literature from specialized databases, providing a rich understanding of the evolving trends in cyber communication and digital citizenship. The study concludes that the exercise of citizenship within a cyberpolitical framework can contribute significantly to democratic expression, provided it aligns with the users' comprehension and purposeful consumption of digital content. Authors conclude that digital citizenship have the transformative potential for socio-political development, while also highlighting the need for enhancing digital literacy and critical thinking skills among citizens to ensure the positive impact of this transformation in a region.

1 Introduction

1.1 The cyber communication

Indeed, technological development, cybernetics, big data, and artificial intelligence caused a communication revolution that breaks with old schemes used by traditional media, limiting the random access of the ordinary citizen [1].

Diverse technologies and digital environments influence how we relate to each other in the information society [2]. Technologies that, in interaction, configure a new socio-communicative framework and create a new information ecosystem characterized by: the transmedia, the empowerment of the prosumer, the cognitive surplus, the constitution of collective intelligence, the transition from cold media to hot media, and transform ourselves from visitors to the network to residents in it [3].

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In these two decades of the 21st century, as [4] expresses, in terms of digital resources, the pioneers in the exploitation of this information (data mining) have been the large technology companies such as Amazon, Netflix, and Google, and in the specific of social networks; Twitter, Snapchat or Facebook. They are associating large volumes of information and building user profiles [5-11].

Amid the Big Data era, the avalanche of information produced and shared through digital spaces such as social networks is transforming the hitherto known forms of social interaction and communication and, therefore, citizenship [12, 13]. The traditional role of citizens as mere receivers and consumers of information opens the way to the infinite possibilities of creating and sharing content in the new public and communicative space fostered by the internet. [14].

In this sense, cyberculture and social networks offer a new political culture; a new mode of civic activity, of citizen participation, focused both on the generation of political content and on the individual, who establishes digital connections with a political message and purpose. Political information could form a better democratic political culture only if it becomes the user's understanding and if they internalize it, analyze it, and assume it to transcend it [15].

Del Valle [16] mentions that participation today is based on technological devices that permanently try to transform social mobilization, characterizing a techno-citizenship that privileges technological mechanisms over traditional ones.

The dynamics of the new technologies permeate all scenarios of human development, the economic-financial, the educational, the cultural, the health, and of course, the political [17, 18]. The mediations occur with specific constructions to the citizen's performance, the State, governments, and the political institutions [19]. With digital citizenship, the necessary adoptions are manifested for their exercise from the networks, shared or individual expressions, in a community or isolated, to generate opinions, consume information, support political preferences or desist from proposals and influence others in for or against.

Likewise, the network has expanded the scenario for citizen intervention and action, has changed distances and space, and has facilitated the mobilization and contact of people. Such transformations have impacted the appearance of new problems, the values to be analyzed, and the duties to be fulfilled; to a certain extent, we could say that the network has allowed citizens to acquire new symbolic capital [20]. Therefore, to speak of citizenship is to reflect on the characteristics of today's society: globalization, multiculturalism, feminization, inclusion, and the equality/inequality binomial; in short, of the very concept of democracy [3].

When these social networks are used in an environment of citizen participation to stimulate political issues, the role of social networks as communication channels leads organizations and political actors to consolidate a strategy that is mainly linked to the electoral, where its active role becomes the most direct and immediate mechanism of ideological promotion. Of course, these dynamics involve the positive of digital interactions, such as proximity and immediate expressions. However, without a doubt, they can also involve political manipulation, misinformation, misleading communication, false news, and other practices that affect the system's credibility [21].

Because the potential of the internet to connect with potential constituents allows politicians to promote themselves and communicate interactively without the media's interference [22]. Therefore, the critical filter of the city continues to be a determining element for its effective articulation in the networks without the mediation of other actors, which in its management is positive and negative.

According to [4], a deconstruction of digital critical thinking must be carried out, which would consist of moving from the explicit to the implicit in identifying the true intentions and interests underlying communication through networks and having the capacity to manage

the impact. If reality vs. information on the networks can be interpreted from citizen expressions, they can have a relevant and timely social impact [23, 24], symbolic and emotional of them.

2 Materials and Methods

In the study authors use general scientific methods of cognition, incorporating principles of objectivity and consistency. Alongside these general methods, specialized scientific methods are employed: theoretical analysis, comparative review, technical and legal analysis, and concretization.

In the context of digital citizenship and its impact on democracy, these methodologies are manifested in the following ways:

1. Theoretical analysis is used to unpack the concept of digital citizenship, its role in democratic processes, and its evolution with advancements in technology.

2. Comparative review allows for the analysis of different approaches to digital citizenship in various sociopolitical contexts, comparing their efficiency and effectiveness in promoting democratic participation.

3. Technical and legal analysis aids in understanding the legal frameworks, regulations, and technical factors that affect the digital citizenship and democratic engagement.

4. Concretization, interpretation, and application of these methods provide nuanced insights into the implications of digital citizenship on democratic participation.

5. Regional focus is used to study the specific characteristics of regional socio-political environments and the analysis how digital citizenship is shaped depending of the context [25, 26].

6. Socio-political impact analysis involves evaluating how digital citizenship has influenced various aspects of the socio-political environment, such as political participation, civic engagement, political dialogue, and the power dynamics between citizens and political institutions.

The data sources for this study are diverse, including 30 selected information sources, such as statistical data, monographs, articles published in scientific journals, and conference proceedings. These sources are divided into two groups:

1. The first group includes monographs and articles published in Scopus and Web of Science-indexed journals that contain insights on contemporary digital citizenship concepts.

2. The second group comprises articles and conference presentations by researchers from various countries, discussing the role of international legal acts in the formation of digital citizenship and their influence on democratic processes of the region.

3. The third group include regional statistical databases as FAOSTAT [24] and ROSSTAT [27], local governmental and non-governmental reports, and region-specific scholarly publications.

Through the course of this study, a systematic analysis of legislation, scientific literature, and international approaches to digital citizenship and its role in democracy is conducted. Generalization of scholars' views on the topic is also done to gain a comprehensive understanding of the research problem.

Ultimately, the methodological basis of this study lies in the application of the theory of knowledge method, with a focus on understanding the complex intersection between digital citizenship and democratic participation in the digital age.

3 Results

3.1 Citizen participation through digital citizenship

The challenges of democracy and citizen participation in conventional times of face-to-face have multiplied given the different variables that intervene in the democratic exercise; due to the intersection of local-national interests intervened by the transnational, the old breaches of political meta-narratives, the same dynamics generated by Covid-19 and post-Covid-19, corruption, the insufficiencies of the representative and participatory model, among others [28].

According to [29]; Participation faces various limitations for its execution; time (the period determined to specify the proposal for a citizen initiative). Space (to gather citizen assemblies). Origin (the stipulation of the promoting instance from citizens well communicated or representatives who are aware of the needs of the voters). The demographic extension (by the number of applicants or participants required). Legal binding (of the mandatory nature of participation and the formalities to make participatory results imperative) and, significantly, the complexity and specialization of the information of the matters, faced with all these limitations, ICTs can contribute to participation in representative institutions.

In this order of ideas, as defined by [30], digital citizenship is assumed for all internet users who interact, communicate, share, and receive information from any valid device with internet access. These interactions imply collaborating with public opinion and adding technical quality to the latest generation vehicles and networks involving speed, capacities, and the associated communication aggregates (videos, voice, images, others).

Rendón Gil & Angulo Armenta [31] state that; Digital citizenship is not an isolated phenomenon but rather a continuation as far as the adoption of technologies by society is concerned. Said technological adoption has its closest antecedent in digital skills, understood as an emerging and distinctive element of the digital society that seeks to take advantage of the benefits of technology and the opportunities it offers in different areas of social and individual development.

This new phenomenon in citizen participation has led large political organizations and governmental and non-governmental institutions (NGOs) to use the virtual platforms of social networks -whether these are on the Internet Web or the Web as means of communication and connection for capture the management of public opinion of voters, sympathizers and those citizens who may or may not be satisfied with the management [32].

The generation of political content on social networks can effectively change any political actor's public agenda since it raises public issues that traditional media do not address or filter into a social debate, becoming a medium increasingly essential to develop strategies aimed at forming temporary coalitions for the dominance of opinion positions in public debate [33]. They generate a critical mass of information and debate so that it transcends the blogosphere and manifests itself in the public space.

In general terms, technological activities become a condition for the existence of democracy, making it a social and ethical challenge in societies in need of institutional innovations. Public debates are consolidated when each individual has the possibility and the right to create links for citizen participation that allow them to access government affairs individually and directly (in person) or through virtual social networks [34-36]. Likewise, in any area of social interaction, both politically and educationally, economically, culturally, and artistically [37-39].

4 Discussion

The Web power has caused exponentially, with each passing day, more and more people begin to use the environment of social networks such as Twitter, MySpace, FaceBook, Flickr, YouTube, or the Really Simple Syndication, better known as RSS. Political actors and personalities from the public administration are faced with new spaces for participation, which must be adapted according to the needs of citizens [40]. To assume synergies, they must have two well-developed skills: the ability to solve problems systematically and the ability to develop social networks that allow them to know the needs of voters and their possible behaviours in public and electoral acts [41].

It was exposed by the ordinary citizen in these digital media, which allows offering information that serves as an input to maintain public and personal dialogue with those elected governors and candidates or political leaders who aspire to assume government. Likewise, it is contemplated that such content be oriented toward principles of public management and citizen participation. In this sense, it is also required that an understanding of the needs and subjectivity governs the contents.

In summary, for [42], power in the network society has four expressions:

1) power networks: the power of the core actors and organizations of the global network society in the human community and individuals who are not included in these global networks;

2) the power of the network: by the imposition of the rules of inclusion;

3) the power of the connection: the power of social actors over other social actors in the network;

4) power networking: the power to program specific networks among the dominant actors of various networks.

Likewise, as expressed by [43-49], within networks, mutual control, and learning processes guide cooperation between people who share information, preferences, and motivations, which favours and encourages trust and mutual commitments, outlining effectiveness in the scope and support of political objectives that define citizen preferences.

5 Conclusions

It is of indisputable importance that today, citizen participation in cyber media has become the great generator of information flows that allow Internet users to access and transfer information almost instantaneously. The internet as a virtual space for citizen meetings allows the individual's direct participation without the group's mediation in public affairs, exercising their right to citizenship through an active presence on equal terms, strengthening identity, and promoting civic competencies.

In the daily and circumstantial life of each citizen, the digital interaction space is an opportunity to express their opinions immediately, without co-optation, and with the possibility of improving their decision-making capacity through the extensive management of technical, diverse, mass web information, plural, and with experiences from other contexts. Additionally, their intervention in public affairs can facilitate their active role and even as controllers of public policies in general and be able to demand greater efficiency, efficiency, coverage, inclusion, and equity in their social, political, and community management from institutions.

An approach to the structure and composition of the participating networks is decisive in characterizing the intervening actors, their interrelationships (depth, durability), internal and external mobilizations, the resources they manage, and the degree of ascendancy in the public space of action. This characterization makes it possible to define deepening strategies in its

citizen management for a more significant and influential penetration for political intervention.

The critical interpretation coupled with the consumption of political content by citizens in the space of the networks implies developing skills that detect deceit, manipulation, demagoguery, and false news, behind the disseminated speeches. However, it is a problematic acquisition given the excessive, rapid, and emotional load of information that is handled; the messages' processing, analysis, and synthesis times must be sought in the praxis of digital citizenship.

Finally, sustaining those cyber politics in the exercise of digital citizenship concentrates on the advantages and disadvantages of any shared human space; therefore, it is and will continue to be the critical filter of the citizen, a competence, ability, or skill, determinant for their articulation in networks as a mechanism of active and effective participation.

References

1. N. Denisov, E. Russkevich, S. Muradyan. Artificial intelligence as an issue of criminal law. *Revista Jurídica*, **3(70)**, 814-825 (2022). doi: 10.26668/revistajur.2316-753X.v3i70.5703
2. M.R. Zainullina, L.G. Nabieva, S.A. Mechtcheriakova, G.R. Chumarina. The impact of the development of digitalization and the Internet on socio-economic processes in the Russian Federation. *Relacoes Internacionais No Mundo Atual*, **2(34)**, 28–43 (2022). doi: 10.21902/Revrima.v2i34.5695
3. J. Cabero-Almenara, L. Torres-Barzabal, J. M. Hermosilla-Rodríguez. Las TIC y la creación de una ciudadanía crítica e-digital. *Education in the Knowledge Society*, **20**, 10 (2019). doi: 10.14201/eks2019_20_a22
4. F. González. Big data, algorithms and politics: the social sciences in the era of social media. *Cinta de Moebio*, **65**, 267-280 (2019). doi: 10.4067/s0717-554x2019000200267V
5. M. Robles-Carrillo. Sovereignty vs. Digital Sovereignty. *Journal of Digital Technologies and Law*, **1(3)**, 673-690 (2023). doi: 10.21202/jdtl.2023.29
6. M.M. Pernekulova, A. Sagikyzy, Z.B. Ashirbekova, D.M. Zhanabayeva, G.A. Abdurazakova. Definition of virtual reality through creative act. *Academic Journal of Interdisciplinary Studies*, **10(2)** (2021). doi: 10.36941/ajis-2021-0048
7. K. Bagratuni, E. Kashina, E. Kletskova, D. Kapustina, M. Ivashkin, V. Sinyukov, A. Karshalova, H. Hajiyev, E. Hajiyev. Impact of socially responsible business behavior on implementing the principles of sustainable development (experience of large business). *International Journal of Sustainable Development and Planning*, 18(8), 2481-2488(2023). doi: 10.18280/ijstdp.180819
8. A. Zharova. Introducing artificial intelligence into law enforcement practice: The case of Russia. *Annals of DAAAM and Proceedings of the International DAAAM Symposium*, 30(1), 688-692 (2019).
9. I.A. Filipova. Artificial Intelligence Strategy and consequences of its implementation for labour law. *Vestnik Sankt-Peterburgskogo Universiteta. Pravo*, 13(1), 5-27 (2022).
10. A.A. Shutova, D.D. Bersei, E.V. Nechaeva. Bioprinting medical devices: Criminal evaluation issues. *AIP Conf. Proc.*, 2701, 020032 (2023). doi: 10.1063/5.0121700
11. D.A. Pashentsev, M.V. Zaloilo, O.A. Ivanyuk, D.R. Alimova. Digital technologies and society: Directions of interaction. *Revista ESPACIOS*, 40(42), 1–6 (2019).

12. R.A. Zhukov, N.O. Kozlova, E.V. Manokhin, E.B. Myasnikova, E.A. Melay. Multi-Criteria Optimization as the Methodology of Ensuring Sustainable Development of Regions: Tula Region of the Russian Federation. *International Journal of Sustainable Development and Planning*, 18(4), 1057-1068 (2023). doi: 10.18280/ijstdp.180408
13. I.S. Dmitrieva, R.I. Sharafutdinov, V.O. Gerasimov, E.M. Akhmetshin, S.V. Pavlov. Method evaluation of the human capital with its innovational potential consideration and perspectives of regional development: The example of the Republic of Tatarstan and Volga Federal District regions. *Espacios*, **38(40)**, (2017).
14. V. Gozálvez-Pérez, A. Valero-Moya, M. González-Martín. El pensamiento crítico en las redes sociales. Una propuesta teórica para la educación cívica en entornos digitales. *Estudios sobre Educación*, **42**, 35-54 (2022). doi: 10.15581/004.42.002
15. A. Akimov, K. Kadysheva. E-government as a tool for communication with young people: legal aspects. *Journal of Law and Sustainable Development*, **11(1)** (2023). doi: 10.37497/sdgs.v11i1.272
16. C. Del Valle. *La participación como mediación en el desarrollo social y público: Tensiones y convergencias entre discurso y materialidad*, in F. Sierra. (Ed.), Ciudadanía, tecnología y cultura. Nodos conceptuales para pensar la nueva mediación digital, Gedisa, Barcelona, 57-78 (2013).
17. I.R. Gafurov, M.R. Safiullin, E.M. Akhmetshin, A.R. Gapsalamov, V.L. Vasilev. Change of the higher education paradigm in the context of digital transformation: From resource management to access control. *International Journal of Higher Education*, **9(3)**, 71-85 (2020). doi:10.5430/ijhe.v9n3p71
18. K. Bagratuni, E. Kashina, E. Kletskova, D. Kapustina, M. Ivashkin, V. Sinyukov, A. Karshalova, H. Hajiyev, E. Hajiyev. Impact of socially responsible business behavior on implementing the principles of sustainable development (experience of large business). *International Journal of Sustainable Development and Planning*, 18(8), 2481-2488(2023). doi: 10.18280/ijstdp.180819
19. V. Rybak, Y. Kryanev, I. Schichkin, M. Livson. State regulation as a comprehensive mechanism for the sustainable development of territories. *Revista Jurídica*, **1(73)**, 831 – 844 (2023). doi: 10.26668/revistajur.2316-753X.v1i73.6282
20. V.V. Manuylenko, A.I. Borlakova, A.V. Milenkov, O.B. Bigday, E.A. Drannikova, T.S. Lisitskaya. Development and Validation of a Model for Assessing Potential Strategic Innovation Risk in Banks Based on Data Mining-Monte-Carlo in the “Open Innovation” System. *Risks*, **9(6)** (2021). doi: 10.3390/risks9060118
21. S. Kruike-meier. How political candidates use Twitter and the impact on votes. *Computers in Human Behavior*, **34**, 131-139 (2014). doi: 10.1016/j.chb.2014.01.025
22. A.R. Alva de la Selva. Escenarios y desafíos de la ciudadanía digital en México. *Revista Mexicana de Ciencias Políticas y Sociales*, **65(238)**, 81-105 (2020). doi: 10.22201/fcpys.2448492xe.2020.238.68337
23. Z. Moreno, G. Ziritt Trejo. Redes sociales como canales de digi-impacto en la participación ciudadana. *Utopía y Praxis Latinoamericana*, 24(3), 30-45 (2019).
24. FAOSTAT, Statistical database (2022). Retrieved from: <https://www.fao.org/faostat/en/>
25. S.V. Khusainova. A regional system to forecast the social-economic development: The case of the RF regions. *European Research Studies Journal*, 21(1), 588-601(2018).
26. D. Denisova, E. Strandstrem, D. Nikolenko. Efficiency of Various Forms of Simulation Training in the Training of Medical Professionals. *European Journal of Contemporary Education*. 12(3), 788-796(2023). doi: 10.13187/ejced.2023.3.788

27. ROSSTAT, Federal State Statistics Service (2022). Retrieved from: <https://rosstat.gov.ru/>
28. M. Aisin, M. Aitkazina, N. Maulina, D. Zhakipbekov, G. Saparova. Financial and Administrative Measures for the Development of Tourism after COVID-19. *Journal of Environmental Management and Tourism*, **13(8)**, 2174-2180 (2022). doi:10.14505/jemt.v13.8(64).09
29. J.F. Aguirre Sala. Democracia Líquida: La opción de las TIC para incorporar la participación ciudadana en instituciones representativas. *Athenea Digital*, **19(2)**, e2212 (2019).
30. R. González-Andrío Jiménez, C. Bernal Bravo, I. M. Palomero Ilardia. Palomero Ilardia. Uso de las redes sociales entre los jóvenes y ciudadanía digital: análisis tras la COVID-19. *Revista de Investigación en Didáctica de las Ciencias Sociales*, **7**, 64-81 (2020). doi: 10.17398/2531-0968.07.64
31. J.G.R. Rendón Gil, J. Angulo Armenta. Metaanálisis sobre ciudadanía digital en Iberoamérica: énfasis en educación. *EduTec. Revista Electrónica de Tecnología Educativa*, **82**, 91-103 (2022). doi: 10.21556/edutec.2022.82.2593
32. B. Markhayeva, A. Ibrayev, M. Beisenova, G. Serikbayeva, M. Arrieta-López. Green Banking Tools for the Implementation of a State's Environmental Policy: Comparative Study The active implementation of climate change projects, the latest resource- and nature-saving technologies, and environmental measures for the green growth of na. *Journal of Environmental Management and Tourism*, **14(1)**, 160-167 (2023). doi: 10.14505/jemt.14.1(65).15
33. L.I. Khoruzhy, Y.N. Katkov, A.A. Romanova, E.A. Katkova, M.K. Dzhikiya. Adaptive management reporting system in inter-organizational relations of agricultural enterprises according to ESG principles. *Journal of Infrastructure, Policy and Development*, **6(2)** (2022). doi: 10.24294/jipd.v6i2.1649
34. E. A. Kirillova, T. Zulfugarzade, O. E. Blinkov, O. A. Serova, I. A. Mikhaylova. Prospects for developing the legal regulation of digital platforms Perspectivas de desarrollo de la regulación legal de las plataformas digitales. *Jurídicas CUC*, **18(1)**, 35–52 (2021). doi: 10.17981/juridcuc.18.1.2022.02
35. J. J. Hernández de Velazco, E. R. Córdoba Jaimes, A. C. Chumaceiro Hernández. Political culture and citizen participation: Transiting from political space. *Fronteiras: Journal of Social, Technological and Environmental Science*, **10(1)**, 140-157 (2021).
36. J. J. Hernández de Velazco, A. C. Chumaceiro Hernández, R. Ravina Ripoll. Mirada transdisciplinaria de la participación ciudadana y la felicidad social en el discurso del milenio. *Utopía y Praxis Latinoamericana*, **24(extra 3)**, 46-59 (2019).
37. E. Liccioni. Una alternativa para la investigación online en la educación superior. *Jurídicas CUC*, **18(1)**, 335-358 (2022). doi: 10.17981/juridcuc.18.1.2022.14
38. A.I. Tikhonov, A.A. Sazonov, S.V. Novikov. Multilevel Digital Ecosystem for Manufacturing Enterprises: Attracting Venture Capital. *Russian Engineering Research*, **43(5)**, 611-614(2023).
39. A.M. Abduvakhidov, E.T. Mannapova. Digital development of education and universities: Global challenges of the digital economy. *International Journal of Instruction*, **14(1)**, 743-760(2021). doi:10.29333/IJI.2021.14145A
40. D. Nakisbaev, N. Dugalich. Introduction of digital platforms to state and municipal administration: opportunities for regulation and transformation of social services for the population. *Revista Brasileira de Políticas Públicas*, **12(3)**, 132-143 (2023). doi: 10.5102/rbpp.v12i3.8612

41. G. Morozova, A. Nikitin, T. Nikitina, B. Yakupov. Efficiency of information support measures for the level of interest in elections among Russian youth. *Revista Relações Internacionais do Mundo*, **6(39)** (2023). doi: 10.21902/Revrima.v6i39.6272
42. M. Castells. A network theory of power. *International Journal of Communication*, **5**, 773-787 (2011).
43. M.O. García. Redes sociales y acción colectiva: observando el estallido social y la pandemia. *Revista F@ro*, **2(32)**, 30-66 (2020).
44. S.N. Nascimento, D.G. D. Martins. Smart Contracts: Security Issues and Further Development in Brazil. *International Journal of Law in Changing World*, **1(2)**, 26-45 (2022). doi: 10.54934/ijlcw.v1i2.22
45. G. Rusman. The active position of the court is the basis for the successful application of alternative measures in criminal proceedings. *Revista Brasileira De Alternative Dispute Resolution*, **4(7)**, 89-101 (2022). doi: 10.52028/rbadr.v4i7.6
46. E. Gromova. The free economic zone of the republic of crimea and the federal city of sevastopol. *Russian Law Journal*, **6(3)**, 79-99 (2018).
47. A.P. Garnov, V.Y.Garnova, L.V. Shabaltina. New opportunities for the digital economy: The implementation of an effective state innovation policy. *Journal of Environmental Treatment Techniques*, **8(4)**, 1321-1325 (2020).
48. M.V. Zaloilo, N.V. Vlasova, D.A. Pashentsev. Climate Change as a Global Challenge in Agricultural Economics. *Lecture Notes in Networks and Systems*, **205**, 417-422 (2021).
49. D. Cyman, E. Gromova, E. Juchnevicius. Regulation of artificial intelligence in BRICS and the European Union. *BRICS Law Journal*, **8(1)**, 86-115 (2021).