Public administration's digitalization in Romania: a perception-based analysis and the relevance for the European's digital transition and sustainable development ambitions

Gabriela Camen Pascariu, *Alexandru Ioan Cuza University, Iasi, Romania*

Corresponding Author: gcpas@uaic.ro

Alexandra Gheorghiu, *Alexandru Ioan Cuza University, Iasi, Romania:* gheorghiu.anda@yahoo.com

Valerică Greavu-Șerban, *Alexandru Ioan Cuza University, Iasi, Romania:* valy.greavu@feaa.uaic.ro

The digitalization has been regarded as a process allowing all territories and socio-demographic categories equal access and opportunities in an ever-connected world. During the past decades, it has become an integral part of the contemporary society, being elevated as top priority in the majority of European countries and regions, a key dimension of the development strategies and policies over the world. While it's positive transformative potential is vast (and acknowledged), there is a growing concern, supported by recent data, that the digitalization process accentuates existing inequalities.

Our paper is centered on the perceptions analysis of the drivers and barriers of digitization in the public administration in Romania. We took into account the low level of digitization of the public institutions in Romania compared to other European countries and the negative impact on citizen-based governance. We were interested in our analysis on a regional perspective and highlighting urban-rural differences. The paper has a high normative dimension, with an emphasis on recommendations for evidence-based policies in the digital transition process.

The main preliminary results are:

1. 558 institutions replied to the survey invitation to fill in the questionnaire: more than 75% are from rural areas and 24% from urban areas;
2. Almost half of the respondents have an experience in the institution for over 10 years (45%) and 50% are males;
3. The analysis of digital solutions in urban and rural institutions reveals distinct trends in their adoption and usage patterns. Urban institutions show a higher engagement with digital technologies for communication, information dissemination, and interaction with the public, whereas rural institutions exhibit a more conservative approach, with lower usage frequencies and a focus on traditional communication methods;
4. A stark contrast exists between urban (80.71% daily usage) and rural institutions (41.22% daily usage), indicating a heavier reliance on email communication in urban areas. Urban institutions are more active on social media, especially on Facebook (60.43% daily usage), compared to rural institutions (29.15% daily usage). Platforms like Instagram, TikTok, and Twitter show minimal usage, particularly in rural areas, suggesting a gap in adopting newer digital trends. Both urban and rural institutions show limited usage of chatbots and

dedicated apps, reflecting a general hesitation or lack of necessity in adopting these technologies;

5. Urban areas display more frequent use of video conferencing and meeting transcription services, though not extensively. Rural institutions lag in these aspects, indicating potential barriers in technology access or preference for traditional meeting formats. There's a significant gap in offering real-time participation in meetings, especially in rural areas (58.66% do not provide);
6. The analysis highlights a digital divide where urban institutions leverage technology more effectively for operational and engagement purposes. In contrast, rural institutions face challenges in adopting and integrating digital solutions into their workflows and communication strategies. This divide could stem from differences in resource availability, technological infrastructure, and the varying needs and preferences of the urban and rural populations;
7. Regarding the main barriers in digital adoption, institution's employees mention that the lack of knowledge in digital technologies (25.83%) is the most significant barrier is the gap in digital literacy. The preference for human interaction is mentioned in second place (17.34%), followed by the distrust in online communication efficiency (14.63%);
8. Furthermore, institution's employees point out that the lack of internet access or slow connection (12.23%) can also hinder the citizen's use together with the complexity of platforms (10%). Finally, the lack of trust in technology (10.59%) and data security concerns (8.59%) complete the multifaceted nature of challenges in digital adoption in Romania. The employees also believe that if the platforms would be easier to use (57%) most citizens would increase their digital channel usage. Another driver is considered to be guaranteeing that the personal data is safely stored (52%) and a lower wait time for replies (51%).

Keywords: digitalization, institutional trust, left-behind persons, rural-urban divide

JEL: D71, E71, P25

References:

Armenta, A., Serrano, A., Cabrera, M., & Conte, R. (2012). The new digital divide: The confluence of broadband penetration, sustainable development, technology adoption and community participation. *Information Technology for Development*, 18(4), 345–353. https://doi.org/10.1080/02681102.2011.625925

Heeks, R. (2022) Digital inequality beyond the digital divide: conceptualizing adverse digital incorporation in the global South. *Information Technology for Development*, 28(4), 688-704, DOI: 10.1080/02681102.2022.2068492

Martin, R., Gardiner, B., Pike, A., Sunley, P. & Tyler, P. (2021). *Levelling up left behind places. The Scale and Nature of the Economic and Policy Challenge*, Taylor &Francis;

Perera, P., Selvanathan, S., Bandaralage, J. & Su, J.-J. (2023), "The impact of digital inequality in achieving sustainable development: a systematic literature review". *Equality, Diversity and Inclusion*, 42(6), pp. 805-825. https://doi.org/10.1108/EDI-08-2022-0224

Ramalingam, B., & Hernandez, K. (2016). The multiple forms of digital inequality. In: *World Social Science report, 2016: Challenging inequalities* (pp. 68–69). UNESCO.

Zhang, J.,Wenqi Zhao, W., Cheng, B., Li, A., Wang, Y., Yang, N. & Yuan Tian, Y. (2022), The Impact of Digital Economy on the Economic Growth and the Development Strategies in the post-COVID-19 Era: Evidence From Countries Along the "Belt and Road", Sec. Health Economics, 10, https://doi.org/10.3389/fpubh.2022.856142;

Zheng, Y., & Walsham, G. (2021). Inequality of what? An intersectional approach to digital inequality under Covid-19. *Information and Organization*, 31(1), 100341. https://doi.org/10.1016/j.infoandorg.2021.100341