



# Artificial intelligence in social services: state of the art and possible future developments [

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Analítica

The aim of this essentially theoretical paper is to analyze the degree to which Spanish social services have adapted to digital technologies, focusing specifically on the presence of artificial intelligence (AI). The fundamental contribution of the paper is the proposal of a model to test the presence of AI in social services, at the same time as designing a strategy for its integration into the different social services systems. This proposal is built through two vectors: identifying the fundamental activities or stages of social intervention in addition to access, planning and evaluation of the system; and proposing three phases or levels of AI integration according to the extent of the role played by professionals. A review of the scientific literature together with a search for AI implementation initiatives in social services identified successful experiences in Spain that can be included in some areas of the model. The notable current advances in this field are often unknown beyond their specific contexts or field of expertise. But there is a long way to go, and the remaining steps can only be taken with decisive public support

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/\*ref\*/European Commission (2019). A Definition of AI. Main Capabilities and Disciplines. Recuperado de: <https://ec.europa.eu/digital-single-market/en/news/definitionartificial-intelligence-main-capabilities-and-scientific-disciplines> /\*ref\*/Fantova, F. (2020). Els serveis socials davant la intellència de grans quantitats de dades (big data). Conferència impartida en el marc del Cicle de Reflexió "Big data i Serveis Socials. Preveure i anticipar-nos ales necessitats socials" el 10.03.2020 al Palau Macaya de Barcelona, organitzat per la Fundació iSocial /\*ref\*/ /Fernández-Riquelme, S. (2019). Conocer, integrar y divulgar. Las tecnologías digitales para la investigación y la intervención en Trabajo Social. Trabajo Social Hoy, 88, 43-68. doi: 10.12960/TSH.2019.0015 /\*ref\*/Frey, C.B. y Osborne, M. A. (2013). The Future of Employment: How Susceptible Are Jobs to Computerisation? Recuperado de: [https://www.oxfordmartin.ox.ac.uk/downloads/academic/The\\_Future\\_of\\_Employment.pdf](https://www.oxfordmartin.ox.ac.uk/downloads/academic/The_Future_of_Employment.pdf) /\*ref\*/Galván, J. V. (2021): Geolocalización en la atención a la dependencia-Aplicación GeodepVLC. Comunicación Presentada en el IV Congreso Internacional de Trabajo Social, Valencia /\*ref\*/Goldkind, L. (2021). Social Work and Artificial Intelligence: Into the Matrix. Social Service Faculty Publications, 19. [https://research.library.fordham.edu/gss\\_facultypubs/19](https://research.library.fordham.edu/gss_facultypubs/19) /\*ref\*/Goldkind, L.; Wolf, L.; y Freddolino, P.P. (2019). Digital social work: tools for practice with individuals, organizations, and communities. New York: Oxford University Press /\*ref\*/Hintze, A. (2016). Understanding the four types of AI, from reactive robots to self-aware beings. The Conversation. <https://theconversation.com/understanding-the-four-types-of-ai-from-reactive-robots-to-selfaware-beings-67616> /\*ref\*/Hodgson, D.; Goldingay, S.; Boddy, J.; Nipperess, S. y Watts, L. (2021). Problematising Artificial Intelligence in Social Work Education: Challenges, Issues and Possibilities, The British Journal of Social Work, bcab168. <https://doi.org/10.1093/bjsw/bcab168> /\*ref\*/Howe, D. (2009). A Brief Introduction to Social Work Theory. London: Red Globe Press. <https://doi.org/10.1007/978-0-230-36523-0> /\*ref\*/Joyanes, L. (2003). Fundamentos de programación. Mc Graw Hill. España /\*ref\*/Kiwan G. (coord.) (2019). Networked Relationships: Opportunities and Challenges for Social Work in the Digital Era. Journal of Social Work Practice, 33(2), 123-249 /\*ref\*/López Peláez A. y Marcuello-Servós, Ch. (coord.) (2018). e-Social Work Challenges and Opportunities: Methodologies and Experiences from a Comparative Perspective. European Journal of Social Work, 21(6), 801-953 /\*ref\*/López Peláez, A., Marcuello-Servós, Ch., Castillo de Mesa, J., Almaguer-Calixto /\*ref\*/P., Méndez-Domínguez, P. (Coords.) (2021). I Congreso Internacional de /\*ref\*/Trabajo Social Digital. Aranzadi. Thomson Reuters /\*ref\*/Mayer-Schönberger, V. y Cukier, K. (2013). Big Data. A Revolution That Will Transform how We Live, Work, and Think. London: John Murray (Publishers) /\*ref\*/Mintz, Y. y Brodie, R. (2019). Introduction to artificial intelligence in medicine. Minimally invasive Ther Allied Technol, 28(2), 73-81. <https://doi.org/10.1080/13645706.2019.1575882> /\*ref\*/Miranda, A. (2015). Big Intelligence: Nuevas capacidades big data para los sistemas de vigilancia estratégica e inteligencia competitiva. Madrid: Fundación EOI /\*ref\*/Mishna, F.; Milne, E.; Bogo, M. y Pereira, L. F. (2020). Responding to COVID-19: New Trends in Social Workers' Use of Information and Communication Technology. Clin Soc Work J. <https://doi.org/10.1007/s10615-020-00780-x> /\*ref\*/Mishna, F.; Fantus, S., y McInroy, L. B. (2017). Informal use of information and communication technology: Adjunct to traditional face-to-face social work practice. Clinical Social Work Journal, 45(1), 49-55. <https://doi.org/10.1007/s10615-016-0576-3> /\*ref\*/Mökander J. (2021). On the Limits of Design: What Are the Conceptual Constraints on Designing Artificial Intelligence for Social Good? In: Cowls J., Morley J. (eds) The 2020 Yearbook of the Digital Ethics Lab. Digital Ethics Lab Yearbook. Springer, Cham. [https://doi.org/10.1007/978-3-030-80083-3\\_5](https://doi.org/10.1007/978-3-030-80083-3_5) /\*ref\*/ /NASW, ASWB, CSWE y CSWA (2017). Technology in Social Work Practice. National Association of Social Workers. Recuperado de: [https://www.socialworkers.org/includes/newIncludes/homepage/PRA-BRO-33617.TechStandards\\_FINAL\\_POSTING.pdf](https://www.socialworkers.org/includes/newIncludes/homepage/PRA-BRO-33617.TechStandards_FINAL_POSTING.pdf) /\*ref\*/Nguyen, DD, Nguyen, L., Nguyen HX. y Tran MB. (2021). A Surrogate Assisted Multi-objective Approach to Social Work Planning. Preprint (<https://www.researchsquare.com/article/rs-698131/v1>). Consultado el 01/09/2021. <https://doi.org/10.21203/rs.3.rs-698131/v1> /\*ref\*/OCDE et al. (2021), "Repensar las instituciones públicas en la era digital". En: Perspectivas económicas de América Latina 2020: Transformación digital para una mejor reconstrucción. Paris: OECD. <https://doi.org/10.1787/4c1df5c7-es> /\*ref\*/Patterson, D. A., y Cloud, R. N. (1999). The application of artificial neural networks for outcome prediction in a cohort of severely mentally ill outpatients. Journal of Technology for Human Services, 16(2-3), 47-61. [https://doi.org/10.1300/J017v16n02\\_05](https://doi.org/10.1300/J017v16n02_05) /\*ref\*/Ramió, C. (2021). Repensando la Administración pública Administración digital e innovación pública. Madrid: Instituto Nacional de Administración Pública (INAP) /\*ref\*/ /Ramió, C. (coord.) (2019). Inteligencia artificial y Administración pública: Robots y humanos compartiendo el servicio público. Madrid: Los libros de la Catarata /\*ref\*/Reamer, F. (2020). Digital Technology in Social Work. Encyclopedia of Social Work. Retrieved 28 Feb. 2021. Recuperado de: <https://oxfordre.com/socialwork/view/10.1093/acrefore/9780199975839.001.0001/acrefore-9780199975839-e-1160>

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