# Appendix A

| | | | | | | Social | | | | | Economic | | | Political | | Sustainability | Safety and Security | | | Legal | Technology | | | | |
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| Paper | Technology | Smart community | 5G Focus | Rural Focus | Geographical Focus | Digital Inclusion | Quality of Life | Culture | Health and Wellbeing | Human Capital | Employment | Economic Impact | Innovation | Community Engagement | Governance | Environmental Sustainability | Public Safety | Privacy and Trust | Information Security | Regulatory Compliance | Connectivity | Transport | Innovation | Technology Acceptance | Energy |
| Başol, O., Sevgi, H. & Yalçın, E. C. (2023). The Effect of Digitalisation on Youth Unemployment for EU Countries: Treat or Threat? In *Sustainability (Switzerland)* (Vol. 15, Issue 14). | Digitalisation | NO | NO | NO | Pakistan | | | | | improved (IT) education | decrease in youth unemployment | creation of new businesses; increase in individual earnings | | | | | | | | | | | | | |
| Benevento, M., Mandarelli, G., Carravetta, F., Ferorelli, D., Caterino, C., Nicoli, S., Massari, A. & Solarino, B. (2023). Measuring the willingness to share personal health information: A systematic review. In Frontiers in Public Health (Vol. 11). | Digital Health Care | NO | NO | (YES) | International (Italy) | | | | improved health care quality | | | | | | | | | willingness to disclose personal health information | data security | | | | | perceived benefits affect willingness to share data | |
| Gorantla, R. & Bansal, S. (2023, April). Towards a sustainability index calculator for smart cities. In Companion Proceedings of the ACM Web Conference 2023, pp. 715-722. | Sustainability monitoring app | YES | NO | NO | General | social inclusion | quality of life | | | | employment rates | economic growth | | | | carbon footprint; waste management | | | cybersecurity measures | | accessibility | | | | |
| Makhalany, T. M., Mamushiane, L., Kobo, H. & Lysko, A. (2024). Towards a 5G Equipped Video Surveillance UAV for Public Safety. 2024 IST-Africa Conference (IST-Africa), pp. 1-11. | UAVs | NO | YES | NO | South Africa | | | | | | | | | | | | air surveillance to combat crimes | | | balance of increased safety and civil rights | | | | | |
| Samarakkody, A., Amaratunga, D. & Haigh, R. (2023). Technological Innovations for Enhancing Disaster Resilience in Smart Cities: A Comprehensive Urban Scholar's Analysis. In Sustainability (Switzerland) (Vol. 15, Issue 15). | Disaster Resilience – 24 technologies | YES | NO | NO | General | | | | | | | | | enhanced gov-citizen communication (during disasters); public participation in technology development | | | coordination of emergency responders | | | | | | | perceived usefulness and perceived ease of use | |
| Popova, Y. & Popovs, S. (2022). Impact of Smart Economy on Smart Areas and Mediation Effect of National Economy. In Sustainability (Switzerland) (Vol. 14, Issue 5). | General | YES | NO | NO | Latvia | employment of women in tech | working hours | | | adult learning; educational attainment; spending on education; employment in knowledge-intense areas | unemployment rates | turnover of SMEs due to e-commerce; contribution of ICT industry to GDP | | | | emissions from transport | | | | | | passenger transport | | | energy consumption per capita; share of energy from renewable resources |
| Kemal, A. A. & Shah, M. H. (2024). Digital innovation in social cash organisations – the effects of the institutional interactions for transforming organisational practices. In Information Technology and People (Vol. 37, Issue 5), pp. 2092-2126. | Social Cash Payments | NO | NO | NO | Pakistan | access to digital payments for women | | | | | | | | | corruption | | | | safer money transfers | | | | | | |
| Kiseľáková, D., Košíková, M., Miškufová, M. & Loumová, V. (2024). Driving factors of the digital economy – how countries can manage their digital development; [CZYNNIKI NAPĘDOWE GOSPODARKI CYFROWEJ – JAK KRAJE MOGĄ ZARZĄDZAĆ SWOIM ROZWOJEM CYFROWYM]. In Polish Journal of Management Studies (Vol. 29, Issue 2), pp. 311-327. | Digitalisation | NO | NO | NO | EU | digital skills and literacy | satisfaction with quality of life | | improved health care | public expenditure on education; public expenditure on R&D | unemployment (decreasing DESI) | | | | | | public safety | | | | | | | | |
| Gómez-Carmona, O., Buján-Carballal, D., Casado-Mansilla, D., López-de-Ipiña, D., Cano-Benito, J., Cimmino, A., Poveda-Villalón, M., García-Castro, R., Almela-Miralles, J., Apostolidis, D., Drosou, A., Tzovaras, D., Wagner, M., Guadalupe-Rodriguez, M., Salinas, D., Esteller, D., Riera-Rovira, M., González, A., Clavijo-Ágreda, J., ... Bujalkova, N. (2023). Mind the gap: The AURORAL ecosystem for the digital transformation of smart communities and rural areas. In Technology in Society (Vol. | Digital service platform for rural areas | YES | NO | YES | General | inclusive services for all groups; digital skills and literacy training programmes | | | | | employment in digital and tech sectors | growth in businesses using digital tech; development of innovative business models specific to the unique challenges | | engagement in forums and digital platforms | availability, transparency and efficiency of e-government tools | | | | privacy concerns and lack of trust | | stable and reliable digital connectivity | | | |

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| 74). Elsevier Ltd. https://doi.org/10.1016/j.techsoc.2023.102304 | | | | | | | | | | | | and benefits of rural life | | | | | | | | | | | | | | |
| Ha, L. T. (2022). Socioeconomic and resource efficiency impacts of digital public services. In Environmental Science and Pollution Research (Vol. 29, Issue 55), pp. 83839-83859. | Digital Public Services | NO | NO | NO | Europe | | | | | | employment rates | exports turnover from eco-industries; business mobility | | | | resource efficiency score; intensity of greenhouse gas emissions | | user centricity | | | | | | | | |
| Malkowska, A., Urbaniec, M. & Kosala, M. (2021). The impact of digital transformation on European countries: Insights from a comparative analysis. Equilibrium. Quarterly Journal of Economics and Economic Policy, 16(2), pp. 325-355. | Digitalisation | NO | NO | NO | EU | digital skills | | | | graduates in STEM fields | | export of tech; online orders | use of new technologies; patent applications; R&D personnel | use of cloud services and online shopping | interaction with public authorities online | | | | enterprises using ICT security measures | | | | | | | |
| Lin, Y., Chang, T., Su, W. & Shang, R. (2022). IoT for Environmental Management and Security Governance: An Integrated Project in Taiwan. Sustainability, 14(1). | Disaster Risk Management | NO | NO | NO | Taiwan | | | | | social return on investment | | | | | | | risk awareness | | | | | | platforms for emergency operation and communication | | |
| Hannola, L., Lacueva-Pérez, F., Pretto, P., Richter, A., Schafler, M. & Steinhüser, M. (2020). Assessing the impact of socio-technical interventions on shop floor work practices. In International Journal of Computer Integrated Manufacturing (Vol. 33, Issue 6), pp. 550-571. | Digital Shop Floor interventions | NO | NO | NO | Germany, Slovenia and Spain | increase in competences through use of new tech | reduction in work-related stress and monotony; job satisfaction | | | | | | | | | | | | | | | | | |
| Rantanen, T., Gluschkoff, K., Silvennoinen, P. & Heponiemi, T. (2021). The associations between mental health problems and attitudes toward web-based health and social care services: Evidence from a Finnish population-based study. In Journal of Medical Internet Research (Vol. 23, Issue 9). | Digital Health and Social Care | NO | NO | NO | Finland | equal accessibility of new digital services | | | mental health (depression, anxiety rates) | | | | | | | | | vulnerable groups suspicious of confidentiality, safety and privacy of digital health and care services | | | | | | acceptance of digital health solutions; usage rates; satisfaction levels | |
| Ortega-Fernández, A., Martín-Rojas, R., & García-Morales, V. J. (2020). Artificial intelligence in the urban environment: Smart cities as models for developing innovation and sustainability. In Sustainability (Switzerland) (Vol. 12, Issue 19). MDPI. | What makes a smart city smart, what technologies are used to promote sustainability | YES | YES | (YES) | Spain | | | | | | unemployment | GDP per capita | | | open databases; procedures carried out online; citizen-government channels | percentage of clean energy usage; average daily NO2 concentration; total volume of waste generated | | | | | number of charging stations; density of public transportation | | | |
| Panfilova, O. & Popova, E. (2021). Financial result of the digitalisation process in corporations. In ACM International Conference Proceeding Series. Association for Computing Machinery. | Cloud Technology | (YES) | NO | NO | Russia | access to stable connectivity; digital divide among socioeconomic groups | enhanced social interactions | | | increased access to information | job creation in tech and cloud services | growth in tech sector and contribution to GDP | | | Citizens' perception that smart gov services increase their sense of belonging and improve influence; contingency powers | carbon footprint | | public trust in cloud technologies | measures for data protection and cybersecurity awareness | | | | | | energy efficiency |
| Hu, G., Chohan, S. R., & Liu, J. (2022). Does IoT service orchestration in public services enrich the citizens' perceived value of digital society? In Asian Journal of Technology Innovation (Vol. 30, Issue 1), Routledge, pp. 217-243. | IoT in the public sector | YES | NO | NO | Pakistan | | | | | | | | | increased public participation | | | | public trust in IoT | | | | | perceived value | | |
| Santa, A. (2022). Prosumers - A New Mindset for Citizens in Smart Cities. SMART CITIES, 5(4), pp. 1409-1420. | Smart cities, energy production and consumption | YES | NO | NO | European Union | | energy poverty | | | | | | | | | greenhouse gas emissions; energy from renewable sources; material footprint and recycling rates | | | | | | | | energy efficiency, energy productivity and import dependency |
| Szalkowski, G. A. & Johansen, C. (2024). Defining and measuring the effects of digital technologies on social sustainability: A systematic literature review. Sustainable Development, 32(3), pp. 1678-1699. | Digital technologies and social sustainability | NO | NO | NO | General | socioeconomic inequalities (minorities, gender) | working conditions | access to cultural content | positive impact on physical and mental health; health risks linked to digital technologies | facilitating education | creation and loss of jobs | | | political participation and representation; knowledge exchange within communities | | | crime prevention | | cyberattacks | | | | | |
| Berman, F., Cabrera, E., Jebari, A. & Marrakchi, W. (2022). The impact universe – a framework for prioritising the public interest in the Internet of Things. Patterns, 3(1). | IoT | YES | NO | NO | General | socioeconomic inequalities | | | | | creation of new jobs | economic growth; market leadership | rise of new services | political participation and representation | | emission reduction; sustainable material usage; | | protection of personal data; ensuring transparency in data usage | ensuring cybersecurity | | | | | | |

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| | | | | | | | | | | | | | | | | reducing e-waste | | | | | | | | | |
| Ilie, N., Oprea, I., Turcea, V. & Parnus, A. (2022). New Dimensions of Rural Communities Development in Romania - Smart Village Concept. Scientific Papers Series: Management, Economic Engineering in Agriculture and Rural Development, 22(2), pp. 425-436. | smart villages | YES | NO | YES | Romania | inclusion of marginalised groups and reduction of social inequalities; digital literacy | improvement of living conditions | strengthening of local identity and cultural heritage | access to public health services | higher education levels | unemployment rates | | increase in local entrepreneurship and business opportunities; development of local infrastructure | participation in local governance and decision-making | | | | | | | | availability of ICT | | implementation of IoT in agriculture and other sectors | | |
| Mahmoudi, S., Davar, A., Sohrabipour, P., Bist, R., Tao, Y. & Wang, D. (2024). Leveraging imitation learning in agricultural robotics: A comprehensive survey and comparative analysis. Frontiers in Robotics and AI, 11. | agricultural robots | NO | NO | (YES) | General | | improved working conditions for farmers | | | | labour displacement; creation of new technological roles | | | | need for robust governance and ethical frameworks | reduction in resource usage and improved crop yield and efficiency | | concerns over data privacy | | | | | revolutionise agricultural practices | | |
| Edelmann, N., Mergel, I. & Lampoltshammer, T. (2023). Competences That Foster Digital Transformation of Public Administrations: An Austrian Case Study. Administrative Sciences, 13(2), Article 2. | Digital Public Services | NO | NO | NO | Austria | IT skills | | | | | | | | | | | | | cybersecurity awareness | compliance with data governance and legal regulations | | | | | |
| Ashraf, A. & Idrisi, M. J. (2024). Smart and sustainable public transportation-a need of developing countries. International Journal of Networked and Distributed Computing, 12(1), pp. 144-152. | Smart Public Transportation | YES | YES | (YES) | Developing Countries (India) | | improved quality of life due to more efficient transport and facilitated social contacts | | | | | | | | | less emissions from transport | safer transport | | | | | safer, more reliable and more comfortable transport | | | |
| Bălțățeanu, A. M. (2020). Digitalisation. Global Challenges and Economic Prosperity. Example: Romania. Strategica 2020. | Digitalisation and economic prosperity | (NO) | (NO) | (NO) | Romania | social exclusion | | | better healthcare | better education | | economic growth through increased productivity | | | | | | | | | | | | | |