



Digest is compiled by Alain Louchez,  
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### CHRONICLE OF DIGITAL TRANSFORMATION (DT) THROUGH INTERNET OF THINGS TECHNOLOGIES

Some biweekly perspectives on DT from around the globe gathered by CDAIT - 50 added for this Digest (3200 entries since April 1, 2022) [https://cdait.gatech.edu/sites/default/files/2024-12/Digital\\_Transformation\\_Through\\_IoT\\_Technologies\\_December\\_31\\_2024.pdf](https://cdait.gatech.edu/sites/default/files/2024-12/Digital_Transformation_Through_IoT_Technologies_December_31_2024.pdf)

### GOVERNANCE & THE INTERNET OF THINGS

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Paige Gross, "As 'smart cities' tools grow nationwide, so do privacy and ethical concerns," Washington State Standard, December 23, 2024 <https://washingtonstatestandard.com/2024/12/23/as-smart-cities-tools-grow-nationwide-so-do-privacy-and-ethical-concerns/>

Yatin Sapra, "IoT in Government: Bridging the Gap Between Technology and Governance," HashStudioz Technologies, December 17, 2024 <https://www.hashstudioz.com/blog/iot-in-government-bridging-the-gap-between-technology-and-governance/>

Philipp Wegner, "What CEOs talked about in Q4 2024: Tariffs, reshoring, and agentic AI," IoT Analytics, December 16, 2024 <https://iot-analytics.com/what-ceos-talked-about-in-q4-2024-tariffs-reshoring-agentic-ai/>

Francesca Blythe, Lauren Cuyvers, and Matthias Bruynseraede, "EU AI Act: Are You Prepared for the 'AI Literacy' Principle?" SIDLEY, December 16, 2024 <https://datamatters.sidley.com/2024/12/16/eu-ai-act-are-you-prepared-for-the-ai-literacy-principle/>

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## Biweekly IoT News Digest (12/24 - 2)

### Georgia Tech IoT-related Info/Research Noticed by CDAIT

### IoT News and Market Reports

(Second Half of December 2024)

- Selected IoT-related announcements and featured activities/topics gathered by CDAIT from governments; agencies; consortia; alliances; associations; standards, research and other similar groups around the world - 16 entries: [https://cdait.gatech.edu/sites/default/files/2024-12/IoT\\_News\\_Filings\\_December\\_2024\\_Second\\_Half.pdf](https://cdait.gatech.edu/sites/default/files/2024-12/IoT_News_Filings_December_2024_Second_Half.pdf)
- Sample list of IoT-related market reports gathered by CDAIT - 50 entries: [https://cdait.gatech.edu/sites/default/files/2024-12/IoT\\_Market\\_Reports\\_December\\_2024\\_Second\\_Half.pdf](https://cdait.gatech.edu/sites/default/files/2024-12/IoT_Market_Reports_December_2024_Second_Half.pdf)

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- Wang, Shu, and Roger J. Jiao. "Smart In-Process Inspection in Human-Cyber-Physical Manufacturing Systems: A Research Proposal on Human-Automation Symbiosis and Its Prospects," Machines 12, no. 12 (published December 2, 2024): 873 <https://www.mdpi.com/2075-1702/12/12/873>
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**OF NOTE:** ELE Times Report, "IoT Sensors Definition, Types, Examples & Applications," ELE Times, December 17, 2024 <https://www.eletimes.com/iot-sensors-definition-types-examples-applications>

### Special Reading Suggestions

- Vidushi Saxena, "A Look at Upcoming Innovations in the B2C IoT Market," BIS Infotech, December 26, 2024 <https://www.bisinfotech.com/a-look-at-upcoming-innovations-in-the-b2c-iot-market/>
- Carsten Rhod Gregersen, "2025 is going to be a bumpy year for IoT," Help Net Security, December 24, 2024 <https://www.helpnetsecurity.com/2024/12/24/iot-2025-security/>
- Yatin Sapra, "IoT in Robotics: Bridging the Gap Between Humans and Smart Machines," HashStudioz, December 23, 2024 <https://www.hashstudioz.com/blog/iot-in-robotics-bridging-the-gap-between-humans-and-smart-machines/>
- Sumit Kohal, "The Internet of Things (IoT) is Transforming eCommerce and Retail: A Complete Guide," CodeNomad, December 23, 2024 <https://codenomad.net/blog/the-internet-of-things-iot-is-transforming-ecommerce-and-retail-a-complete-guide/>
- Iain Hoey, "The IoT evolution: Paul Pope discusses the benefits of IoT integration and the risks of cyber threats in connected systems," International Fire & Safety Journal, December 23, 2024 <https://internationalfireandsafetyjournal.com/the-iot-evolution-paul-pope-discusses-the-benefits-of-iot-integration-and-the-risks-of-cyber-threats-in-connected-systems/>
- Manish Kothari, "Tech trends in 2025: Shaping the future with ML, IoT, and AI," Dataquest, December 20, 2024 <https://www.dqindia.com/esdm/tech-trends-in-2025-shaping-the-future-with-ml-iot-and-ai-8542671>
- Soumalaya Chakraborty, "Healing Through Connectivity: How IoT Is Bridging The Gap Between Patients & Healthcare Providers," Healthcare World, December 18, 2024 <https://bwhealthcareworld.com/article/healing-through-connectivity-how-iot-is-bridging-the-gap-between-patients-healthcare-providers-542411>
- Chris McGrady, "The Internet of Cheer: How IoT is Transforming Holiday Traditions," IoT Times, December 16, 2024 <https://iot.eetimes.com/the-internet-of-cheer-how-iot-is-transforming-holiday-traditions/>
- Suntar Subramanian, "From Factory Floor to Customer Door: How IoT Is Transforming CPG [Consumer Packaged Goods] Manufacturing," Consumer Goods Technology, December 16, 2024 <https://consumergoods.com/factory-floor-customer-door-how-iot-transforming-cpg-manufacturing>

### Selected IoT Perspectives Internet of Things Security

*"Each connected device represents a potential entry point for cyberattacks, making securing IoT devices both essential and increasingly complex. The sheer diversity of IoT devices—differing in hardware, software, and communication protocols—compounds the difficulty of securing them. Many of these devices are designed with convenience and cost-effectiveness in mind, often at the expense of robust security features. Additionally, the often-limited processing power and memory of IoT devices restrict the ability to implement advanced security measures, making them attractive targets for cybercriminals."* Jamie Anderson, "Securing the Internet of Things (IoT): Strategies for 2025 and Beyond," Bryghtpath, October 22, 2024 <https://bryghtpath.com/securing-the-internet-of-things/>

- Carsten Rhod Gregersen, "Chip Changes, New Security and Going Open Source to Define IoT in 2025 | 2024 RFIDJournal.com Year in Review," RFID Journal, December 27, 2024 <https://www.rfidjournal.com/expert-views/chip-changes-new-security-and-going-open-source-to-define-iot-in-2025-rfidjournal-com-year-in-review/22429/>
- Nathan Eddy, "IoT and ransomware are big security risks, and health systems feel unprepared," Healthcare IT News, December 27, 2024 <https://www.healthcareitnews.com/news/iot-and-ransomware-are-big-security-risks-and-health-systems-feel-unprepared>
- Alex Passett, "Deeper Evaluation of IoT Security: New Joint Task Force to Lead the Way, Courtesy of IMC [IoT M2M Council] and GCF [Global Certification Forum]," IoT Evolution, December 23, 2024 <https://www.iotevolutionworld.com/iot/articles/461507-deeper-evaluation-iot-security-new-joint-task-force.htm>
- John Terrill, "IoT Security is MIA," Manufacturing.net, December 19, 2024 <https://www.manufacturing.net/cybersecurity/blog/22929232/iot-security-is-mia>
- Ashih Kkanna, "Why IoT is a blind spot for manufacturers but a sweet spot for hackers," The Manufacturer, December 17, 2024 <https://www.themanufacturer.com/articles/why-iot-is-a-blind-spot-for-manufacturers-but-a-sweet-spot-for-hackers/>
- Oleksii Tsybmal, "How to Mitigate IoT Security Threats in 2025," Mobidev, December 10, 2024 <https://mobidev.biz/blog/mitigate-internet-of-things-iot-security-threats>
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**Research background info (sample) - 2024 sources:** Pitropakis, Nikolaos, and Sokratis Katsikas, "Security and Privacy in Smart Environments," (2024), book, <https://link.springer.com/book/10.1007/978-3-031-66708-4>; Omair Faraj, David Megias, Joaquin Garcia-Alfaro, "ZIRCON: Zero-watermarking-based approach for data integrity and secure provenance in IoT networks," Journal of Information Security and Applications, Volume 85, September 2024, 103840, ISSN 2214-2126, <https://doi.org/10.1016/j.jisa.2024.103840> see also November 29, 2024 related article, "Interconnected devices and security: how to protect the Internet of Things?" <https://www.uoc.edu/en/news/2024/internet-of-things-iot-security>; See also National Institute of Standards and Technology (NIST) Cybersecurity for IoT program <https://www.nist.gov/itl/applied-cybersecurity/nist-cybersecurity-iot-program>; new 2024 revised GSMA IoT Security Guidelines <https://www.gsma.com/solutions-and-impact/technologies/internet-of-things/iot-security/iot-security-guidelines/>; and ENISA (European Union Cybersecurity Agency), "Navigating cybersecurity investments in the time of NIS 2," November 29, 2024 <https://www.enisa.europa.eu/news/navigating-cybersecurity-investments-in-the-time-of-nis-2>

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December 31, 2024