



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 (3950 entries since April 1, 2022) https://cdait.gatech.edu/sites/default/files/2025-08/Digital_Transformation_Through_IoT_Technologies_as-of-mid-August-2025.pdf

GOVERNANCE & THE INTERNET OF THINGS

Jayesh Chaurasia, "Smarter Government Starts With Better Data Governance," Forrester, August 12, 2025 <https://www.forrester.com/blogs/smarter-government-starts-with-better-data-governance/>

TimesTech [India] posting, "5G IoT Market is Changing Everything. Here's How," TimesTech, August 6, 2025 <https://timestech.in/5g-iot-market-is-changing-everything-heres-how/>

Mondaq posting, "ICO[the United Kingdom's Information Commissioner's Office] Launches Consultation On Draft Guidance For Consumer IoT Products And Services," Mondaq, August 5, 2025 <https://www.mondaq.com/uk/privacy-protection/1660772/ico-launches-consultation-on-draft-guidance-for-consumer-iot-products-and-services>

LARUS Foundation, "The Future of Internet Governance," LinkedIn, August 5, 2025 <https://www.linkedin.com/pulse/future-internet-governance-larus-foundation-yeixf>

Akanksha Nagar, "DoT [India's Department of Telecommunications] unveils framework to regulate critical IoT, M2M services; issues clarity on 'critical services'," Storyboard 18, July 31, 2025 <https://www.storyboard18.com/how-it-works/dot-unveils-framework-to-regulate-critical-iot-m2m-services-issues-clarity-on-critical-services-77910.htm>

David Sella-Villa, "How smart devices affect your privacy - even when they're not yours," South Carolina Daily Gazette, July 31, 2025 <https://scdailygazette.com/2025/07/31/how-smart-devices-affect-your-privacy-even-when-theyre-not-yours/>

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Biweekly IoT News Digest (08/25 - 1)

IoT News and Market Reports

(First Half of August 2025)

- 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 - 15 entries: https://cdait.gatech.edu/sites/default/files/2025-08/IoT_News_Filings_August_2025_First_Half.pdf
- Sample list of IoT-related market reports gathered by CDAIT - 50 entries: https://cdait.gatech.edu/sites/default/files/2025-08/IoT_Market_Reports_August%20_2025_First_Half.pdf

Georgia Tech IoT-related Info/Research Noticed by CDAIT

- Kulkarni, Onkar Anand, "Design of Resilient Logistics Networks," PhD dissertation, Georgia Tech's H. Milton Stewart School of Industrial and Systems Engineering (May 2025) <https://hdl.handle.net/1853/77923>
- Aina, Kehinde O., Hosain Bagheri, and Daniel I. Goldman, "Fault-Tolerant Multi-Robot Coordination with Limited Sensing within Confined Environments," arXiv preprint arXiv:2505.15036 (May 2025) <https://arxiv.org/abs/2505.15036>
- Kim, Soohwan and Baughman, Noah and Badawy, Mohamed and Armstrong, Margaret and Wayne, Kristina and Forest, Craig R. and Vogel, Eric and Hu, David L. and Farrell, Michael L., "Integrated System for Rapid Detection of Indoor Airborne Pathogens," Available at SSRN: <https://ssrn.com/abstract=5357006> or <http://dx.doi.org/10.2139/ssrn.5357006>
- Zhou, Jingcheng, and Chunhui Rita Du, "Optimizing Diamond as a Quantum Sensor," Physics 18 (July 2025): 132 <https://physics.aps.org/articles/v18/132>
- Navaei, Milad, Jinho Park, Matthew Swarts, Christopher A. Heist, and Katherine T. Young, "Bio Sensor for Detection of Serotonin Using GPCR-Based Sensor," In Electrochemical Society Meeting Abstracts 247, no. 59, pp. 2811-2811. The Electrochemical Society, Inc., 2025 <https://iopscience.iop.org/article/10.1149/MA2025-01592811mtgabs/meta>

OF NOTE: Kalpesh Baviskar, "Satellite IoT competitive landscape: 5 notable insights," IoT Analytics, July 30, 2025 <https://iot-analytics.com/satellite-iot-competitive-landscape/>

Special Reading Suggestions

- Adrian Sunderland, "IoT technologies in demand," Comms Business, August 8, 2025 <https://www.commsbusiness.co.uk/content/insight/iot-technologies-in-demand-jola-adrian-sunderland>
- Allen Laman, "Cybersecurity Pros Say IoT, Large Language Models Are Risk Areas of Concern," Insurance Journal, August 7, 2025 <https://www.insurancejournal.com/news/national/2025/08/07/834727.htm>
- SSönke Schröder, "How private 5G and IFPP [In Factor Profile Provisioning] are powering the next wave of industrial IoT," Smart Industry, August 6, 2025 <https://www.smartindustry.com/tools-of-transformation/iiot-platforms/blog/55307408/how-private-5g-and-ifpp-are-powering-the-next-wave-of-industrial-iiot>
- hankar Somasundaran, "IoT Security: Your Next Breach Could Start with Your Thermostat," Campus Safety Magazine, August 4, 2025 <https://www.campusmagazine.com/insights/iot-security-your-next-breach-could-start-with-your-thermostat/172525/>
- Dan Cunliffe, "IoT is booming. So why can it still feel like a tough sell?" Comms Business, August 1, 2025 <https://www.commsbusiness.co.uk/content/opinion/iot-is-booming-so-why-can-it-still-feel-like-a-tough-sell-dan-cunliffe-pangea/>
- Nerd Voices, "Best Wearable IoT Companies Transforming Daily Life," Nerdbot, August 1, 2025 <https://nerdbot.com/2025/08/01/best-wearable-iot-companies-transforming-daily-life/>
- William Smith, "Why IoT Apps Are Changing the Way We Interact with Technology," Journal, August 1, 2025 <https://vocal.media/journal/why-iot-apps-are-changing-the-way-we-interact-with-technology>

Selected IoT Perspectives Consumer Internet of Things

"The global Consumer Internet of Things (IoT) market size is experiencing significant growth, driven by increasing consumer demand for smart, connected devices that enhance convenience, security, and overall quality of life. According to Expert Market Research (EMR), the consumer IoT market was valued at USD 252.42 billion in 2024 and is expected to grow at a robust compound annual growth rate (CAGR) of 11.3% between 2025 and 2034, reaching a value of USD 660.97 billion by 2034. This market encompasses a wide range of interconnected devices designed to improve user experiences in daily life. These include smart homes, wearables, health monitoring devices, and smart appliances, which are all designed to automate tasks, enhance functionality, and provide real-time information. As consumer preferences shift towards smarter and more efficient living, the consumer IoT market is set to continue its strong growth trajectory, transforming both individual lifestyles and industries at large." Satyan Kumar, "Consumer IoT Market: Drivers, Trends, and Analysis (2025-2034) Insights into Growth, Opportunities, and Future Forecasts for the Industry," LinkedIn, December 30, 2024 <https://www.linkedin.com/pulse/consumer-iot-market-drivers-trends-analysis-2025-2034-satyan-kumar-ymulc>

- Park Associates press release, "Consumer IoT Products are Priced 44% Higher on Average Than Similar Non-Connected Products," PRNewswire, June 24, 2025 <https://www.prnewswire.com/news-releases/parks-associates-consumer-iot-products-are-priced-44-higher-on-average-than-similar-non-connected-products-302488257.html>
- Hollie Hennessy, "Consumer IoT Device Cybersecurity Standards, Policies, and Certification Schemes 2025," Omdia, May 2025 <https://omdia.tech.informa.com/-/media/tech/omdia/marketing/commissioned-research/pdfs/consumer-iot-device-cybersecurity-standards-policies-and-certification-schemes-2025-v2.pdf?rev=0b0369dc59a54014b08c3ee877fef63>
- Sumbrilo Technologies Limited Private posting, "The Future Is Smart: The Rise of Smart Homes & Consumer IoT in 2025," LinkedIn, May 9, 2025 <https://www.linkedin.com/pulse/future-smart-rise-homes-consumer-iot-2025-sunbrilotechnologies-bsdsf>
- Patricia, "Global Consumer IoT Market: 10 Key Players and Their Offerings," Extrapolate, June 5, 2025 <https://www.extrapolate.com/blog/consumer-iot-market-insights-top-10-companies>
- Kim Crawley, "Consumer IoT and privacy," Medium, January 8, 2025 https://medium.com/@kim_crawley/consumer-iot-and-privacy-e39edc190ed6
- Ryan Daws, "ETSI [European Telecommunications Standards Institute] releases consumer IoT market security guidelines," IoT Tech News, October 31, 2024 <https://iotttechnews.com/news/etsi-releases-consumer-iot-market-security-guidelines/>

Research background info (sample): Schöttle, Pascal, Matthias Janetschek, Florian Merkle, Martin Nocker, and Christoph Egger, "Large-Scale (Semi-) Automated Security Assessment of Consumer IoT Devices--A Roadmap," arXiv preprint arXiv:2504.06712 (2025) <https://arxiv.org/abs/2504.06712>; Hudig, Anna Ida, Anna Maria Mandalari, Chris Norval, Hamed Haddadi, Reuben Binns, and Jatinder Singh, "Rights Out of Sight: Data Practices and Transparency Gaps in Smart Consumer IoT Ecosystems," In Proceedings of the 2025 ACM Conference on Fairness, Accountability, and Transparency, pp. 2260-2273, 2025 <https://dl.acm.org/doi/full/10.1145/3715275.3732154>; Xu, Xuemei, Anita Binti Rosli, Xianpeng Yang, Ming Wu, and Jiyin Hu, "Role of Consumer IoT Smart Devices for Safety and Security of Data Privacy to Enhance User Experience of E-Commerce," IEEE Transactions on Consumer Electronics (published May 19, 2025) <https://ieeexplore.ieee.org/abstract/document/11006888>; Hanna, Yacoub, Jessica Bozhko, Samet Tonyali, Ricardo Harrilal-Parchment, Mumin Cebe, and Kemal Akkaya, "A comprehensive and realistic performance evaluation of post-quantum security for consumer IoT devices," Internet of Things (September 2025): 101650 <https://www.sciencedirect.com/science/article/abs/pii/S2542660525001647>; Aly, Salma Roshdy, Sherif Saad, and Mohammad Mamun, "Thoth: A Lightweight Framework for End-to-End Consumer IoT Rapid Testing," (2025) <https://www.scitepress.org/Papers/2025/136502/136502.pdf>



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August 15, 2025

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