



## CHRONICLE OF DIGITAL TRANSFORMATION THROUGH INTERNET OF THINGS TECHNOLOGIES

Some biweekly perspectives from around the globe gathered by CDAIT

(1100 entries since April 1, 2022)

[https://cdait.gatech.edu/sites/default/files/2023-03/Digital\\_Transformation\\_Through\\_IoT\\_Technologies\\_March\\_31\\_2023.pdf](https://cdait.gatech.edu/sites/default/files/2023-03/Digital_Transformation_Through_IoT_Technologies_March_31_2023.pdf)

## GOVERNANCE & THE INTERNET OF THING

Dean Marsh, "How IoT can help housing associations protect vulnerable tenants," Open Access Government [U.K.], March 28, 2023 <https://www.openaccessgovernment.org/how-iot-help-housing-associations-identify-unsafe-homes-protect-vulnerable-tenants/155615/>

Saleem Khawaja, "How military uses of the IoT for defence applications are expanding," Army Technology, March 28, 2023 <https://www.army-technology.com/sponsored/how-military-uses-of-the-iot-for-defence-applications-are-expanding/>

Apu Pavithran, "From Internet of Things to Internet of Threats," Readwrite, March 27, 2023 <https://readwrite.com/from-internet-of-things-to-internet-of-threats/>

Anna Stewart, "Internet of Things' promises smarter cities in the future," CNN [Video 2:33 about Expo City Dubai], March 24, 2023 <https://www.cnn.com/videos/world/2023/03/24/exp-internet-of-things-decoded-stewart-pkg-032410aseg1-cnni-business.cnn>

OM Gupta, "Smart Cities and IoT: A New Societal Order," Timestech [India], March 20, 2023 <https://timestech.in/smart-cities-and-iot-a-new-societal-order/>

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## Biweekly IoT News Digest (03/23 – 2)

### IoT News and Market Reports

(Second Half of March 2023)

- Selected **IoT-related announcements and featured activities** 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/2023-03/IoT\\_News\\_Filings\\_March\\_2023\\_Second\\_Half.pdf](https://cdait.gatech.edu/sites/default/files/2023-03/IoT_News_Filings_March_2023_Second_Half.pdf)
- Sample list of **IoT-related market reports** gathered by CDAIT – 80 entries: [https://cdait.gatech.edu/sites/default/files/2023-03/IoT\\_Market\\_Reports\\_March\\_2023\\_Second\\_Half.pdf](https://cdait.gatech.edu/sites/default/files/2023-03/IoT_Market_Reports_March_2023_Second_Half.pdf)

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

- JDMD Editorial Office, Gebraeel, N., Lei, Y., Li, N., Si, X., & Zio, E. (2023), "Prognostics and Remaining Useful Life Prediction of Machinery: Advances, Opportunities and Challenges," Journal of Dynamics, Monitoring and Diagnostics. <https://doi.org/10.37965/jdmd.2023.148>
- JinKi Min, Seung Hwan Ko, Yeongju Jung, and Jinwoo Lee "Laser-induced graphene based on paper for smart food decay sensor," Proc. SPIE 12409, Laser-based Micro- and Nanoprocessing XVII, 1240915 (17 March 2023); <https://doi.org/10.1117/12.2644667>

**OF NOTE:** Florence Jaumotte, Myrto Oikonomou, Carlo Pizzinelli, Marina M. Tavares, "How Pandemic Accelerated Digital Transformation in Advanced Economies," International Monetary Fund (IMF) Blog, March 21, 2023

<https://www.imf.org/en/Blogs/Articles/2023/03/21/how-pandemic-accelerated-digital-transformation-in-advanced-economies> ----- "S.90 - Informing Consumers about Smart Devices Act," [Bipartisan] Bill to require the disclosure of a camera or recording capability in certain internet-connected devices was reviewed on March 22, 2023 by U.S. Senate Committee on Commerce, Science, and Transportation, and ordered to be reported with amendments favorably <https://www.congress.gov/bill/118th-congress/senate-bill/90/text>

### Special Reading Suggestions

- Grant Brunner, "Amazon Sidewalk Is A Massive Free Network For The Internet Of Things," March 29, 2023 <https://digg.com/tech/link/amazon-sidewalk-is-a-massive-free-network-for-the-internet-of-things-6bNg6Uwefc>
- Kerem Gülen, "How can data science optimize performance in IoT ecosystems?" Dataconomy, March 28, 2023 <https://dataconomy.com/2023/03/what-is-an-iot-ecosystem-examples-diagram/>
- Zac Amos, "Has the IoT Industry Failed? Early Predictions vs. Reality," IoT for All, March 28, 2023 <https://www.iotforall.com/has-the-iot-industry-failed-early-predictions-vs-reality>
- IoT Business News posting, "Smart Labels will Help IoT Become 'Massive' with 581 Million Labels Shipped in 2028," IoT Business News, March 21, 2023 <https://iotbusinessnews.com/2023/03/21/36599-smart-labels-will-help-iot-become-massive-with-581-million-labels-shipped-in-2028/>
- Mikayla Bridge, "The Internet of Water: A new era of water management and IoT," Utilities Magazine, March 17, 2023 <https://utilitymagazine.com.au/the-internet-of-water-a-new-era-of-water-management-and-iot/>
- Cecilia Perez, "The Top Growth Opportunities For IoT In 2023," Menafn, March 14, 2023 <https://menafn.com/1105778026/The-Top-Growth-Opportunities-For-IoT-In-2023>

### Selected IoT Perspectives

#### The Internet of Things and Waste Management

"The smart waste market was estimated to be worth USD 2.6 billion in 2022 and was expected to reach its peak value of USD 10.1 billion by 2032 at a compound annual growth rate (CAGR) of 15.1% between 2022 and 2032...Advanced technologies such as IoT, Big Data, and AI are used in these systems to optimize waste collection and disposal procedures. By doing so, these systems help reduce waste production while increasing recycling rates – thus contributing towards environmental sustainability," Prudour Private Limited press release, March 21, 2023 <https://www.enterpriseappstoday.com/news/smart-waste-market-to-reach-usd-10-1-billion-by-2032.html>

- Alice Benozzi, "Global Recycling Day 2023: IoT solutions and smart waste management," Zerynth, March 17, 2023 <https://zerynth.com/blog/global-recycling-day-2023-iot-solutions-and-smart-waste-management/>
- Rushi Javiya, "IoT Waste Management in Smart Cities," Tutorialspoint, March 15, 2023 <https://www.tutorialspoint.com/iot-waste-management-in-smart-cities>
- Nottingham Trent University [UK] News, "Pilot study shows how zero waste in food supply chain could be achieved through smart IoT technology," January 31, 2023 <https://www.ntu.ac.uk/about-us/news/news-articles/2023/01/pilot-study-shows-how-zero-waste-in-food-supply-chain-could-be-achieved-through-smart-iot-technology>
- Kamal R. "A Guide On IoT-Powered Smart Waste Management Practices," Intuz, June 7, 2022 <https://www.intuz.com/blog/guide-iot-powered-smart-waste-management>

**Research background info (sample):** Ruprah, Taranpreet Singh, Pramod Dharmadhikari, and Krupal Pawar. "An IoT-Based Smart Garbage Collection and Monitoring System," In Modern Electronics Devices and Communication Systems: Select Proceedings of MEDCOM 2021, pp. 407-414. Singapore: Springer Nature Singapore, 2023 [https://link.springer.com/chapter/10.1007/978-981-19-6383-4\\_32](https://link.springer.com/chapter/10.1007/978-981-19-6383-4_32); Morasa, Balaji, Yasmine Begum Anwaraly, Jayasradhi Reddy Chennuru, Charunya Devara, and Mahesh Gavvalla. "Smart Monitoring System for Waste Management Using IoT," In Advancements in Interdisciplinary Research: First International Conference, AIR 2022, Prayagraj, India, May 6–7, 2022, Revised Selected Papers, pp. 461-470. Cham: Springer Nature Switzerland, 2023 [https://link.springer.com/chapter/10.1007/978-3-031-23724-9\\_42](https://link.springer.com/chapter/10.1007/978-3-031-23724-9_42); Gürhan, Batuhan Hikmet, and Fatih Başçıftı. "Development of A Smart Waste Management System with The Help of The Internet of Things," In International Conference on Frontiers in Academic Research, vol. 1, pp. 129-133. 2023 <https://as-proceeding.com/index.php/icfar/article/view/39>; Pal, Meenakshi Shruti, and Munish Bhatia. "Smart Solid Waste Management System Using IoT Technology: Comparative Analysis, Gaps, and Challenges," Intelligent Cyber Physical Systems and Internet of Things: ICoIT 2022 (2023): 795-811 [https://link.springer.com/chapter/10.1007/978-3-031-18497-0\\_58](https://link.springer.com/chapter/10.1007/978-3-031-18497-0_58); Kumar, Pappu. "IoT-based solid waste management and collection system using infrared sensors," In Recent Advancement of IoT Devices in Pollution Control and Health Applications, pp. 29-36. Woodhead Publishing, 2023 <https://www.sciencedirect.com/science/article/pii/B9780323958769000033>; R. Rathna, "Smart Waste Management Scheme using IoT for Metropolitan Cities," 2023 International Conference on Intelligent Data Communication Technologies and Internet of Things (IDCIoT), Bengaluru, India, 2023, pp. 7-10, doi: 10.1109/IDCIoT56793.2023.10053396 <https://ieeexplore.ieee.org/document/10053396>

<https://cdait.gatech.edu>



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