



CHRONICLE OF DIGITAL TRANSFORMATION THROUGH INTERNET OF THINGS TECHNOLOGIES

Some biweekly perspectives from around the globe gathered by CDAIT

(1500 entries since April 1, 2022)
https://cdait.gatech.edu/sites/default/files/2023-07/Digital_Transformation_Through_IoT_Technologies_July_31_2023.pdf

GOVERNANCE & THE INTERNET OF THING

Maurizio Di Paolo Emilio, "IoT Solutions Pave Way for Smarter Energy Infrastructures," EE Times, July 26, 2023
<https://www.eetimes.com/iot-solutions-pave-way-for-smarter-energy-infrastructures/>

Luke Fitzpatrick, "When IoT meets AI: a futuristic outlook on technology," BBN Times, July 24, 2023
<https://www.bbntimes.com/technology/when-iot-meets-ai-a-futuristic-outlook-on-technology>

Arundhati Biswas, "Fostering India's demographic dividend by upskilling," Observer Research Foundation, July 19, 2023
<https://www.orfonline.org/expert-speak/fostering-indias-demographic-dividend-by-upskilling/>

"Carly Page, "US government launches the Cyber Trust Mark, its long-awaited IoT security labeling program," Tech Crunch, July 18, 2023
<https://techcrunch.com/2023/07/18/us-government-launches-the-cyber-trust-mark-its-long-awaited-iot-security-labeling-program/>

Aarian Marshall, "Automakers Say They Resolved the Right-to-Repair Fight. Critics Aren't Ready to Make Peace," Wired, July 17, 2023
https://www.wired.com/story/automakers-say-they-resolved-the-right-to-repair-fight/?mc_cid=9f8foac5a5&mc_eid=cf0b0e87e1

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Biweekly IoT News Digest (07/23 – 2)

IoT News and Market Reports

(Second Half of July 2023)

- 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/2023-07/IoT_News_Filings_July_2023_Second_Half.pdf
- Sample list of IoT-related market reports gathered by CDAIT – 80 entries: https://cdait.gatech.edu/sites/default/files/2023-07/IoT_Market_Reports_July_2023_Second_Half.pdf

OF NOTE: Interview of Michele Pelino, Principal Analyst and Paddy Harrington, Senior Analyst at Forrester, "IoT Benefits And Risks, Forrester, July 20, 2023 [podcast 32:17] <https://www.forrester.com/what-it-means/ep326-iot-benefits-risks/#> : "...there isn't a standard definition/understanding of what is included in the term,...'at Forrester, we define internet-of-things solutions as those things that are enabling software control of the physical world.'"

Georgia Tech IoT-related Info/Research Noticed by CDAIT

- July 2023 NSF Artificial Intelligence (AI) Research Institute for Advances in Optimization (AI4OPT) [\[www.ai4opt.org\] newsletter](https://www.ai4opt.org/sites/default/files/newsletter/july-newsletter.pdf)
<https://www.ai4opt.org/sites/default/files/newsletter/july-newsletter.pdf>
- Heidary, Roohollah, Jubilee Prasad Rao, and Olivia J. Pinon Fischer, "Smart Buildings in the IoT Era—Necessity, Challenges, and Opportunities," Handbook of Smart Energy Systems (2023): 1-21 https://link.springer.com/referenceworkentry/10.1007/978-3-030-72322-4_115-1
- Cheng, Tingyu, Gregory D. Abowd, HyunJoo Oh, and Josiah Hester "Transient Internet of Things: Redesigning the Lifetime of Electronics for a More Sustainable Networked Environment," (2023) <https://hotcarbon.org/2023/pdf/ai8-cheng.pdf>

Special Reading Suggestions

- IEEE International Conference on Artificial Intelligence, Blockchain, and Internet of Things, (AIBThings), Central Michigan University (CMU), Mount Pleasant, Michigan, September 16-17, 2023, <https://aibthings.com/>
- Phone World Staff, "Qualcomm Unveils Product Longevity Program for IoT Portfolio," Phone World, July 30, 2023 <https://www.phoneworld.com.pk/qualcomm-unveils-product-longevity-program-for-iot-portfolio/>
- Swapnil Mishra, "How IoT Can Change Supply Chain Management," Enterprise Talk, July 27, 2023 <https://enterprisetalk.com/featured/how-iot-can-change-supply-chain-management/>
- Adeeko Tobiloba Isreal, "JavaScript for Internet of Things (IoT) Development: Connecting the Physical World," Medium, July 19, 2023 <https://medium.com/@oluwadaprof/javascript-for-internet-of-things-iot-development-connecting-%EF%B8%8F-the-physical-world-2b930a630f0>
- Ryan Daws, "Satellite IoT is crucial for safeguarding national grids," IoT Tech News, July 19, 2023 <https://www.iotechnews.com/news/2023/jul/19/satellite-iot-crucial-safeguarding-national-grids/>
- Maria Webb, "The Future of IoT: Latest Statistics Unveiled," Techopedia, July 17, 2023 <https://www.techopedia.com/the-future-of-iot-latest-statistics-unveiled>
- "Kurt Mackie, "Microsoft Reviews Windows 11 and Windows 10 IoT Changes," Redmond Channel Partner, July 14, 2023 <https://rcpmag.com/articles/2023/07/14/windows-11-changes.aspx>

Selected IoT Perspectives

5G and IoT

"Significant progress in IoT has resulted from the development of 5G technology. IoT devices can now function to their full potential thanks to the availability of ultra-fast, low-latency data transmission." John Boinott, "5G IoT Roaming Connections Are About to Explode," Readwrite, July 12, 2023 <https://readwrite.com/5g-iot-roaming-connections-are-about-to-explode/>

- Chris J. Preimesberger, "The 5G paradox: Why increasing IoT efficiency creates new security risks," SDX Central, July 28, 2023 <https://www.sdxcentral.com/articles/analysis/the-5g-paradox-why-increasing-iot-efficiency-creates-new-security-risks/2023/07/>
- Allied Analytics LLP press release, "5G Enterprise Market Research Forecasts Exponential Surge in IoT Adoption for Enterprises | Growing at CAGR of 33.9%," EIN Presswire, July 21, 2023 https://www.einnews.com/pr_news/645594276/5g-enterprise-market-research-forecasts-exponential-surge-in-iot-adoption-for-enterprises-growing-at-cagr-of-33-9
- Lucas Ajanaky, "9mobile: 5G is game-changer for IoT," The Nation [Nigeria], July 18, 2023 <https://thenationonlineng.net/9mobile-5g-is-game-changer-for-iot/>
- Mary Lennighan, "IoT to account for over a quarter of 5G roaming connections," Telecoms.com, July 11, 2023 <https://telecoms.com/522634/iot-to-account-for-over-a-quarter-of-5g-roaming-connections/>
- Lindsey Schutters, "The future of AI, blockchain, IoT and 5G is convergence," Bizcommunity, July 11, 2023 <https://www.bizcommunity.com/Article/1/852/240070.html>
- Marco Stracuzzi, "Massive IoT and 5G: What's Next for Large-Scale Cellular IoT?" Pipeline Magazine, July 4, 2023 <https://pipelinepub.com/IoT-2023/5G-for-massive-IoT>
- Rob Pegoraro, "AT&T's car-connectivity formula: 5G plus edge compute plus standalone 5G," LightReading, July 3, 2023 <https://www.lightreading.com/iot/atandt-car-connectivity-formula-5g-plus-edge-compute-plus-standalone-5g/d/d-id/785513>
- Samuel Greengard, "5G and IoT: Making connections to change the world," Verizon News Center, December 1, 2022 <https://www.verizon.com/about/news/5g-iot-together-changing-our-world>

Research background info (sample): Pons, Mario, Estuardo Valenzuela, Brandon Rodríguez, Juan Arturo Nolazco-Flores, and Carolina Del-Valle-Soto. "Utilization of 5G Technologies in IoT Applications: Current Limitations by Interference and Network Optimization Difficulties—A Review," Sensors 23, no. 8 (2023): 3876 <https://www.mdpi.com/1424-8220/23/8/3876>; Cook, Jonathan, Sabih Ur Rehman, and M. Arif Khan. "Security and Privacy for Low Power IoT Devices on 5G and Beyond Networks: Challenges and Future Directions," IEEE Access (2023) <https://ieeexplore.ieee.org/abstract/document/10103890>; Yu, Dongxiao, Jian Ren, Qing Yang, Sasu Tarkoma, Madhuri Siddula, and Falko Dressler. "Guest Editorial Special Issue on When Blockchain Meets 5G/6G—Enabling Endogenously Secure IoT," IEEE Internet of Things Journal 10, no. 14 (2023): 11946-11948 <https://ieeexplore.ieee.org/abstract/document/10174842>; Biswas, Anushka, and Hwang-Cheng Wang. "Autonomous vehicles enabled by the integration of IoT, edge intelligence, 5G, and blockchain," Sensors 23, no. 4 (2023): 1963 <https://www.mdpi.com/1424-8220/23/4/1963>

