

GT CDAIT Biweekly IoT News Digest (06/23 – 1)

CHRONICLE OF DIGITAL TRANSFORMATION THROUGH INTERNET OF THINGS TECHNOLOGIES

Some biweekly perspectives from around the globe gathered by CDAIT

(1350 entries since April 1, 2022) https://cdait.gatech.edu/sites/default /files/2023-06/Digital Transformation Through

06/Digital_Transformation_Through_ IoT_Technologies_June_15_2023.pdf

GOVERNANCE & THE INTERNET OF THING

Tim Hinchliffe, "US intelligence looks to 'anonymize conversational speech' recorded by IoT devices in real-time," The Sociable, June 13, 2023 https://sociable.co/government-

and-policy/us-intelligenceanonymize-speech-iot-devicesreal-time/

Achal Kothari, "Policy and regulatory considerations for ADAS [Advanced Driver-Assistance Systems]-IoT integration in smart city planning," The Times of India, June 12, 2023

https://timesofindia.indiatimes.c om/blogs/voices/policy-andregulatory-considerations-foradas-iot-integration-in-smartcity-planning/

Deborshi Barat, "India: Back To The Future: India's Proposed Digital Governance Framework," Mondaq, June 1, 2023

https://www.mondaq.com/india/d ata-protection/1324188/back-tothe-future-indias-proposeddigital-governance-framework

Telefónica, "Spanish Smart Cities and the National Plan for smart cities," Telefónica website, June 1, 2023 https://www.telefonica.com/en/co mmunication-room/blog/spanishsmart-cities-and-the-nationalplan-for-smart-cities/

IoT News and Market Reports

(First Half of June 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 – 15 entries: https://cdait.gatech.edu/sites/default/files/2023-

06/IoT_News_Filings_June_2023_First_Half.pdf

 Sample list of IoT-related market reports gathered by CDAIT – 80 entries: https://cdait.gatech.edu/sites/default/files/2023-06/IoT_Market_Reports_June_2023_First_Half.pdf

Georgia Tech IoT-related Info/Research Noticed by CDAIT

- Doumanidis, Constantine, Yongyu Xie, Prashant HN Rajput, Ryan Pickren, Burak Sahin, Saman Zonouz, and Michail Maniatakos.
 "Dissecting the Industrial Control Systems Software Supply Chain," IEEE Security & Privacy (online May 16,2023) https://ieeexplore.ieee.org/abstract/document/10136825
- Zhao, Binbin, Shouling Ji, Jiacheng Xu, Yuan Tian, Qiuyang Wei, Qinying Wang, Chenyang Lyu et al. "One Bad Apple Spoils the Barrel: Understanding the Security Risks Introduced by Third-Party Components in IoT Firmware," IEEE Transactions on Dependable and Secure Computing (online May 25,2023) https://ieeexplore.ieee.org/abstract/document/10135135
- Ciortea, Andrei, Xiaomin Zhu, Calton Pu, and Munindar P. Singh.
 "Introduction to the Special Issue on Multiagent Systems and Services in the Internet of Things." ACM Transactions on Internet Technology 22, no. 4 (online March 3, 2023): 1-3 https://dl.acm.org/doi/abs/10.1145/3584744

OF NOTE: Knud Lasse Lueth, "**Winning in IoT: How the enterprise IoT market is evolving**," IoT Analytics [Hamburg, Germany], June 7, 2023 https://iot-analytics.com/how-enterprise-iot-market-is-evolving/ ----- "The future of IoT is the convergence of AI and IoT"; "Nearly half of all IoT applications to be AI-infused by 2027"

Special Reading Suggestions

- Special Smart Home Week articles (5), "Smart homes for smart people," The Verge, June 12, 2023 https://www.theverge.com/23724605/smart-home-apple-google-amazon-matter
- Diana Ambolis, "What Is Metaverse Of Things(MoT) And How It Is Different From Internet Of Things (IoT)," Blockchain Magazine, June 12, 2023 https://blockchainmagazine.net/what-is-metaverse-of-thingsmot-and-how-it-is-different-from-internet-of-things-iot/
- Joe Rodriguez, "The Confluence of AI and IoT: The Emergence of Smart Devices," Down to Game, June 6, 2023 https://dtgreviews.com/uncategorised/the-confluence-of-ai-and-iot-the-emergence-of-smart-devices/1322/
- EE Telecom posting, "Economy of Things' may be new telco revenue opportunity: Vodafone-STL Partners report," EE Telecom, June 2, 2023 https://telecom.economictimes.indiatimes.com/news/industry/economy-of-things-may-be-new-telco-revenue-opportunity-vodafone-stl-partners-report/100692324
- Brian Whitaker, "4 Ways to Enhance IoT Battery Performance Using Emulation Software," EE times [Asia] June 1, 2023 https://www.eetasia.com/4ways-to-enhance-iot-battery-performance-using-emulation-software/
- Prateek Saxena, "Role of IoT in Changing the EV Charging Landscape," Energetica, June 1, 2023 https://www.energetica-india.net/articles/roleof-iot-in-changing-the-ev-charging-landscape

Selected IoT Perspectives The Internet of Things in Retail

- "Over the past years, IoT adoption has become a more common practice across the retail industry, and the trend is gaining momentum today. According to Allied Market Research, the global retail IoT market is expected to reach \$177.90 billion by 2031, growing at a CAGR of 20.3% from 2022 to 2031," "7 practical applications of IoT in retail," IoT Business News, May 23, 2023 https://iotbusinessnews.com/2023/05/23/93450-7-practical-applications-of-iot-in-retail/
- Phil Britt, "How IoT is Redefining Your Shopping Spree," CMS Wire, June 5, 2023 https://www.cmswire.com/internet-of-things/how-iot-is-redefining-your-shopping-spree/
- HTF Market Report press release, "Internet of Things in Retail Market Is Booming So Rapidly | IBM, Microsoft, Google," EnterpriseAppsToday, May 31, 2023 https://www.enterpriseappstoday.com/news/internet-of-things-in-retail-market-is-booming-so-rapidly-ibm-microsoft-google.html
- Erika Area, "**The Race is On: 2023 is a Crucial Year for Retail Modernization**," Mytotalretail, May 15, 2023 https://www.mytotalretail.com/article/the-race-is-on-2023-is-a-crucial-year-for-retail-modernization/
- Ian Ivory Dr. Tilman Kuhn, and Ingrid Wijnmalen, "Five Recent Trends in the Consumer & Retail Sector," JD Supra, May 4, 2023 https://www.jdsupra.com/legalnews/five-recent-trends-in-the-consumer-6388885/
- Megan Crouse, "NRF [National Retail Federation] 2023: How ambient computing could change retail," Tech Republic, January 17, 2023 https://www.techrepublic.com/article/nrf-2023-ambient-computing-change-retail/

Research background info (sample): Argyropoulou, Maria, Elaine Garcia, Soheila Nemati, and Konstantina Spanaki. "The effect of IoT capability on supply chain integration and firm performance: an empirical study in the UK retail industry," Journal of Enterprise Information Management (April 11, 2023) https://www.emerald.com/insight/content/doi/10.1108/JEIM-06-2022-0219/full/html; Gupta, Omdeep, and Pradeep Joshi. "Applications of IoT in Retail: A Systematic Review," In 2023 International Conference on Device Intelligence, Computing and Communication Technologies,(DICCT), pp. 86-89. IEEE, May 1, 2023 https://ieeexplore.ieee.org/abstract/document/10110252; Zheng, Xinyu, and Syed Imran Ali. "Potential of Internet of Things (IoT) and Blockchain Technology in the Collaboration and Integration of the Retail Supply Chain," In Glocal Policy and Strategies for Blockchain: Building Ecosystems and Sustainability, pp. 189-222. IGI Global, 2023 https://www.igiglobal.com/chapter/potential-of-internet-of-things-iot-and-blockchain-technology-in-the-collaboration-and-integration-of-the-retail-supply-chain/323233; Gideon, Awini, Mohammed Majeed, Emmanuel Nii-Ayi Solomon, Adu-Debrah Kankor Lorna, and Mensah Kobby. "Internet of Things and Retail Performance in an Emerging Market: A Qualitative Analysis," In Advances in Information Communication Technology and Computing: Proceedings of AICTC 2022, pp. 145-161. Singapore: Springer Nature Singapore, 2023 https://link.springer.com/chapter/10.1007/978-981-19-9888-1_11; Srinadh, Guddanti, Goli Naveen Kumar, Gera Billgates, and MV Sheela Devi. "Effective Billing Methodology in Large Scale Stores/Malls using IoT," In 2023 5th International Conference on Smart Systems and Inventive Technology (ICSSIT), pp. 424-429. IEEE, added to IEEE Xplore March 14,2023 https://ieeexplore.ieee.org/abstract/document/10061137



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