



CHRONICLE OF DIGITAL TRANSFORMATION THROUGH INTERNET OF THINGS TECHNOLOGIES

Some biweekly perspectives from around the globe gathered by CDAIT

(1050 entries since April 1, 2022)
https://cdait.gatech.edu/sites/default/files/2023-03/Digital_Transformation_Through_IoT_Technologies_March_15_2023.pdf

GOVERNANCE & THE INTERNET OF THING

Javier Espinoza, "Data rises up the EU antitrust agenda," The Financial Times, March 9, 2023
<https://www.ft.com/content/be2ad18d-7b2b-4237-ae7f-7fac60af5731>

IoT.nxt, "Governance and IoT – It's all about the 'G' in ESG," IoT for All, March 8, 2023

<https://www.iotforall.com/governance-its-all-about-the-g-in-esg>

Bryan Corliss, "New bill [H.R. 904, the 'IoT Readiness Act of 2023'." wants FCC to collect data from IoT devices to assess spectrum needs," March 1, 2023

<https://www.geekwire.com/2023/new-bill-wants-fcc-to-collect-data-from-iot-devices-to-assess-spectrum-needs/>

Yujie Xue, "China unveils grand digitalisation plan, calling for accelerated push into 5G, IoT and supercomputing engines of growth," South China Morning Post, February 27, 2023
<https://www.scmp.com/tech/article/3211738/china-unveils-grand-digitalisation-plan-calling-accelerated-push-5g-iot-and-supercomputing-engines>

TechNative posting, "My Data = Your Data? How the EU Data Act May Influence IoT and Cloud Offerings in the European Union and Beyond," TechNative, February 27, 2023
<https://technative.io/how-eu-data-act-influence-iot-cloud/>

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Biweekly IoT News Digest (03/23 – 1)

IoT News and Market Reports

(First Half of March 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/2023-03/IoT_News_Filings_March_2023_First_Half.pdf
- Sample list of **IoT-related market reports** gathered by CDAIT – 75 entries: https://cdait.gatech.edu/sites/default/files/2023-03/IoT_Market_Reports_March_2023_First_Half.pdf

Georgia Tech IoT-related Info/Research Noticed by CDAIT

- Shi, Jiachen, Herald Rozas, Murat Yildirim, and Nagi Gebraeel. "A stochastic programming model for jointly optimizing maintenance and spare parts inventory for IoT applications," IIE Transactions 55, no. 4 (2023): 419-431
<https://www.tandfonline.com/doi/abs/10.1080/24725854.2022.2127164>
- Zhao, Yiran, Yujie Tao, Grace Le, Rui Maki, Alexander Adams, Pedro Lopes, and Tanzeem Choudhury. "Affective Touch as Immediate and Passive Wearable Intervention," Proceedings of the ACM on Interactive, Mobile, Wearable and Ubiquitous Technologies 6, no. 4 (2023): 1-23 <https://dl.acm.org/doi/abs/10.1145/3569484>

OF NOTE: Matthew Mohan, "Is the metaverse another fading tech fad or our future online existence? -- CNA looks at what the future could hold for a realm that many are aware of, but few understand," CNA [Singapore], March 4, 2023
<https://www.channelnewsasia.com/singapore/focus-metaverse-another-fading-tech-fad-or-our-future-online-existence-3320981> -- Shen, Jinlu, Xiangyu Zhou, Wei Wu, Liang Wang, and Zhenying Chen, "Worldwide Overview and Country Differences in Metaverse Research: A Bibliometric Analysis," Sustainability 15, no. 4 (2023): 3541 <https://www.mdpi.com/2071-1050/15/4/3541>

Special Reading Suggestions

- Donna Moore (CEO and Chairwoman, LoRa Alliance), "Internet of Things doesn't have to be overwhelming," IT Brief, March 7, 2023 <https://itbrief.com.au/story/internet-of-things-doesn-t-have-to-be-overwhelming>
- Hologram, "How to Calculate Total Cost of Ownership for Cellular IoT Projects," IoT for All, March 2, 2023
<https://www.iotforall.com/how-to-calculate-total-cost-of-ownership-for-cellular-iot-projects>
- Balakrishna DR, "Device virtualization is key to IoT adoption," VentureBeat, March 2, 2023
<https://venturebeat.com/programming-development/device-virtualization-is-key-to-iot-adoption/>

Selected IoT Perspectives

The Fourth Industrial Revolution (a.k.a. Industry 4.0) in 2023

"The very supply chain dysfunctions that made headlines and arguably slowed the short-term progress of industry 4.0 may yet prove to be the engine that finally delivers its promise," Richard Markoff and Ralf Seifert, "Why the promised fourth industrial revolution hasn't happened yet," The Conversation, February 27, 2023 <https://theconversation.com/why-the-promised-fourth-industrial-revolution-hasnt-happened-yet-199026>

- SNS Insider press release, "Industry 4.0 Market is Expected to Cross USD 305.01 Billion by 2030 as a Result of Growing Need for Manufacturers to Embrace Digital Transformation to Remain Competitive," Globe Newswire, March 13, 2023
<https://www.globenewswire.com/news-release/2023/03/13/2625797/0/en/Industry-4-0-Market-is-Expected-to-Cross-USD-305-01-Billion-by-2030-as-a-Result-of-Growing-Need-for-Manufacturers-to-Embrace-Digital-Transformation-to-Remain-Competitive-Research-b.html>
- Chiradeep Masubalick, "What Is IIoT (Industrial Internet of Things)? Definition, Architecture, Benefits, and Examples," "IIoT is the driving force behind industry 4.0, which would not exist without it", Spiceworks, February 28, 2023
<https://www.spiceworks.com/tech/iiot/articles/what-is-iiot/>
- Patrick Romanus, "Industry 4.0 Trends To Look For In 2023," Techsling, February 27, 2023 <https://www.techsling.com/industry-4-0-trends-to-look-for-in-2023/>
- Telefónica, "Industry 4.0: What's agriculture 4.0?" Telefónica, February 26, 2023 <https://www.telefonica.com/en/communication-room/blog/industry-4-0-whats-agriculture-4-0/>
- Adam Uzialko, "Industry 4.0: How Technology Is Revolutionizing the Manufacturing Industry," Business News Daily, February 21, 2023 <https://www.businessnewsdaily.com/10156-industry-manufacturing-iiot.html>
- Daljit Dhesi, "Challenges await SMEs in shifting focus to IR 4.0," The Star [Malaysia], February 20, 2023
<https://www.thestar.com.my/business/business-news/2023/02/20/challenges-await-smes-in-shifting-focus-to-ir-40>
- Tim Newcomb, "Humans Might Not Survive the Fourth Industrial Revolution, Global Leader Says," Popular Mechanics, February 17, 2023 <https://www.popularmechanics.com/technology/a42955750/fourth-industrial-revolution-technologies/>
- Metrology News posting, "Industry 4.0 – Reviewing The Future of Manufacturing," Metrology News, February 14, 2023
<https://metrology.news/industry-4-0-reviewing-the-future-of-manufacturing/>

Research background info (sample): Vladimir Ghildiyal, Yamini, Rajesh Singh, Ahmed Alkhayyat, Anita Gehlot, Praveen Malik, Rohit Sharma, Shaik Vaseem Akram, and Lulwah M. Alkwaib. "An imperative role of 6G communication with perspective of industry 4.0: Challenges and research directions," Sustainable Energy Technologies and Assessments 56 (March 2023): 103047
<https://www.sciencedirect.com/science/article/abs/pii/S2213138823000395>; Peter, Onu, Anup Pradhan, and Charles Mbohwa. "Industrial internet of things (IIoT): opportunities, challenges, and requirements in manufacturing businesses in emerging economies," Procedia Computer Science 217 (2023): 856-865 <https://www.sciencedirect.com/science/article/pii/S1877050922023602>; Moll, Ian. "Why there is no technological revolution, let alone a 'Fourth Industrial Revolution'," South African Journal of Science 119, no. 1-2 (2023): 1-6 http://www.scielo.org.za/scielo.php?script=sci_arttext&pid=So038-23532023000100019; Rajamanickam, Maheswari, Elizabeth Nirmala John Gerard Royan, Gowtham Ramaswamy, Manivannan Rajendran, and Vaishnavi Vadivelu. "Fourth Industrial Revolution: Industry 4.0," in Integration of Mechanical and Manufacturing Engineering with IIoT: A Digital Transformation (2023): 41. [Link to Book Chapter](#) --- See also World Economic Forum's most recent articles on the Fourth Industrial Revolution <https://www.weforum.org/focus/fourth-industrial-revolution>, and i-Scoop (Belgium), "Industry 4.0 and the fourth industrial revolution explained," <https://www.i-scoop.eu/industry-4-0/>