



CHRONICLE OF DIGITAL TRANSFORMATION THROUGH INTERNET OF THINGS TECHNOLOGIES

Some biweekly perspectives from around the globe gathered by CDAIT (255 entries)

https://cdait.gatech.edu/sites/default/files/2022-07/Digital_Transformation_Through_IoT_Technologies_July_15_2022.pdf

GOVERNANCE & THE INTERNET OF THINGS

European Union, "Commission welcomes political agreement on the Digital Decade policy programme driving a successful digital transformation in Europe," European Commission, July 14, 2022 https://ec.europa.eu/commission/presscorner/detail/en/ip_22_4503

Rolf Meakin, Florian Gröne, Ralf Grammel and Barry Murphy (PwC), "Wireless infrastructure – ESG [Environmental, Social & Governance] and environmental challenges," Financier Worldwide, August 2022 <https://www.financierworldwide.com/wireless-infrastructure-esg-and-environmental-challenges#.Ys7ZQITMJPY>

Data Journalism Team, "Asia-Pacific is seeing a hiring boom in military industry IoT roles," Army Technology, July 12, 2022 <https://www.army-technology.com/dashboards/jobs/asia-pacific-is-seeing-a-hiring-boom-in-military-industry-iot-roles/>

Simon Read, "Smarter, healthier workplaces could lure us back to the office," World Economic Forum, July 11, 2022 <https://www.weforum.org/agenda/2022/07/offices-workplace-technology-environment/>

The Fish Site, "New EU [The EU-financed SEASTAR (Surveillance of Aquaculture farmS with neTworks of underwAtter sensoRs)] project brings IoT technology to aquaculture sector," The Fish Site, July 11, 2022 <https://thefishsite.com/articles/new-eu-project-brings-iot-technology-to-aquaculture-sector>

Nick Freer, "IoT is a big cog in the wheel of Scotland's future economy," The Scotsman, July 9, 2022 <https://www.scotsman.com/news/opinion/columnists/iot-is-a-big-cog-in-the-wheel-of-scotland-s-future-economy-nick-freer-3761249>

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Biweekly IoT News Digest (07/22 – 1)

Georgia Tech IoT-related IoT News and Market Reports Info/Research Noticed by CDAIT

(First Half of July 2022)

- 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 - See: https://cdait.gatech.edu/sites/default/files/2022-07/IoT_News_Filings_July_2022_First_Half.pdf
- Sample list of IoT-related market reports gathered by CDAIT– 93 entries – See: https://cdait.gatech.edu/sites/default/files/2022-07/IoT_Market_Reports_July_2022_First_Half.pdf
- John R McIntyre; Silvester Ivanaj; and Vera Ivanaj, editors. "The Role of Multinational Enterprises in Supporting the United Nations SDGs [Sustainable Development Goals]," Edward Elgar Publishers, July 2022 (hard cover) <https://www.e-elgar.com/shop/usd/the-role-of-multinational-enterprises-in-supporting-the-united-nations-sdgs-9781802202403.html>
- Jiang, Dongjie, Mingxing Du, Xuecheng Qu, Yansong Gai, Wei Sun, Jiangtao Xue, Yusheng Li, Zhou Li, and Zhong Lin Wang. "Self-Powered Intelligent Voice Navigation Tactile Pavement Based on High-Output Hybrid Nanogenerator." Advanced Materials Technologies: 2200270 <https://onlinelibrary.wiley.com/doi/abs/10.1002/admt.202200270>
- Parto, Mahmoud, Pedro Daniel Urbina Coronado, Christopher Saldana, and Thomas Kurfess. "Cyber-Physical System Implementation for Manufacturing With Analytics in the Cloud Layer." Journal of Computing and Information Science in Engineering 22, no. 1 (2022) <https://doi.org/10.1115/1.4051663>

OF NOTE: Philip Wegner, "What CEOs talked about in Q2/2022: The war and looming recession sideline sustainability and digital transformation," IoT Analytics, July 6, 2022 [In short: Five themes noticeably gained traction in Q2/2022, i.e., the invasion of Ukraine, the recession, the stock market, energy prices, and layoffs. Other topic that are rising in importance include the public cloud and industrial IoT. Mentions of digital transformation and sustainability-related topics decreased in the last quarter.] <https://iot-analytics.com/what-ceos-talked-about-q2-2022/>

Special Reading Suggestions

- Brian Stone, "Critical infrastructure IIoT/OT security projects suffer high rates of failure," TechRepublic, July 12, 2022 <https://www.techrepublic.com/article/critical-infrastructure-iiot-ot-security-projects-suffer-high-rates-of-failure/>
- Catherine Thorbecke, "Why Bluetooth remains an 'unusually painful' technology after two decades," CNN Business, July 10, 2022 <https://www.cnn.com/2022/07/10/tech/bluetooth-technology-headache/index.html>
- Henry Martel, "Eight Key Trends for the Industrial IoT," Automation [ISA], July 8, 2022 <https://www.automation.com/en-us/articles/july-2022/eight-key-trends-industrial-iiot?listname=Automation%20&%20Control%20News%20&%20Articles>
- Farmer, S., Bricout, J. C., Baker, P. M., & Solomon, J. (2022), "Personas, the Pandemic, and Inclusive, Synthetic, Smart City Planning," International Journal of E-Planning Research (IJEPJR), 11(1), 1-15, published July 8, 2022 <http://doi.org/10.4018/IJEPJR.299545>
- Jemina Walker, "The four stages of IoT development: How we get to a fully automated world," Verdict, July 7, 2022 <https://www.verdict.co.uk/the-four-stages-of-iiot-development-how-we-get-to-a-fully-automated-world/>
- Martech Series Staff Writer, "How IoT is Creating a New Pathway for B2B Marketers," MTS, June 5, 2022 <https://martechseries.com/mts-insights/staff-writers/how-iiot-is-creating-a-new-pathway-for-b2b-marketers/>

Selected IoT Perspectives The Internet of Things for Manufacturing

"IoT has come to manufacturing. It is here and cannot be stopped. We need to embrace it." (*)

(*) Thomas R. Kurfess, Ph.D., P.E., Executive Director, Georgia Tech Manufacturing Institute, Professor and HUSCO/Ramirez Distinguished Chair in Fluid Power and Motion Control, George W. Woodruff School of Mechanical Engineering, during Energy and Commerce Committee Hearing, "Disrupter Series: The Internet of Things, Manufacturing and Innovation," Testimony before the Subcommittee on Digital Commerce and Consumer Protection, United States House of Representatives, January 18, 2018 <https://www.congress.gov/115/meeting/house/106781/witnesses/HHRG-115-IF17-W-state-KurfessT-20180118.pdf>

- Report Ocean press release, "IoT in Manufacturing Market Strong Demand, Incredible Growth, Key Players Analysis Forecast by 2030," MarketWatch, July 13, 2022 https://www.marketwatch.com/press-release/iiot-in-manufacturing-market-strong-demand-incredible-growth-key-players-analysis-forecast-by-2030-2022-07-13?mod=search_headline
- Mobidev, "Top IIoT Manufacturing Trends in 2022," IoT for All, July 7, 2022 <https://www.iotforall.com/press-releases/mobidev-lists-top-iiot-manufacturing-trends-in-2022>
- Newsmantraa press release, "IoT in Manufacturing Market is to be Digitally Served at a CAGR of 24.2% Between 2020 to 2026," Digital Journal, June 30, 2022 <https://www.digitaljournal.com/pr/iiot-in-manufacturing-market-is-to-be-digitally-served-at-a-cagr-of-24-2-between-2020-to-2026#ixzz7Yv13EJf>
- Business Insider India Tech Bureau, "How IT Works: Internet of Things (IIoT) for manufacturing," BI India, June 28, 2022 <https://www.businessinsider.in/tech/enterprise/how-it-works-internet-of-things-iiot-for-manufacturing/articleshow/92509382.cms>
- ITRex, "IoT in Manufacturing: What you Need to Know," Hackernoon, June 6, 2022 <https://hackernoon.com/iiot-in-manufacturing-what-you-need-to-know>

Research background info (sample): Márquez, Claudia L., Jesús D. Avilés, Oscar Omar Ovalle-Osuna, and Reyna Virginia Barragán-Quintero. "The interrelationship between Lean Manufacturing and Internet of Things: a bibliometric analysis." In 2022 IEEE Technology and Engineering Management Conference (TEMSCON EUROPE), pp. 135-140. IEEE, added to IEEE Xplore: June 23, 2022 <https://ieeexplore.ieee.org/abstract/document/9801947>; Wójcicki, Krzysztof, Marta Biegańska, Beata Paliwoda, and Justyna Górna. "Internet of Things in Industry: Research Profiling, Application, Challenges and Opportunities—A Review." Energies 15, no. 5 (published February 25, 2022): 1806 <https://www.mdpi.com/1996-1073/15/5/1806>; Haghnegahdar, Lida, Sameehan S. Joshi, and Narendra B. Dahotre. "From IIoT-based cloud manufacturing approach to intelligent additive manufacturing: Industrial Internet of Things—An overview." The International Journal of Advanced Manufacturing Technology (published January 3, 2022): 1-18 <https://link.springer.com/article/10.1007/s00170-021-08436-x>
See also: Industry IIoT Consortium www.iiotconsortium.org/ and Georgia Tech Internet of Things for Manufacturing Symposiums, Factory Information Systems Center, Georgia Tech Manufacturing Institute <https://www.fis.gatech.edu/events/>