

# Review Paper on Internet of Things (IoT)

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**Abstract:** *In the digital age, the Internet of Things (IoT) has radically changed the way of life. Smart homes, smart cities, pollution control, energy saving, smart transportation, and intelligent industries are some of the changes because of IoT. IoT has been the subject of numerous research studies and investigations. However, the technology still has a lot of challenges and issues that need to be resolved before IoT can become truly successful. These challenges and issues must be deliberate from miscellaneous aspects of IoT to a degree uses, challenges, permissive technologies, public and tangible impacts etc. The main aim concerning this review article search out determine a particularized discussion from two together mechanics and friendly perspective. The item explains different challenges and key issues of IoT, design and main application rules. Also, the item produces into light the existing article and pictorial their offering in different aspects of IoT. Moreover, the significance of large dossier and its reasoning concerning IoT has existed debated. This article would help the book worms and investigator to learn the IoT and its relevance to the here and now.*

**Keywords:** Internet of Things

## REFERENCES

- [1]. Jan Höller et al., From Machine-to-Machine to the Internet of Things: Introduction to a New Age of Intelligence, 1st ed. London, United Kingdom: Academic Press Ltd, 10 Apr 2014.
- [2]. Mohamed Ali Feki, Fahim Kawsar, Mathieu Boussard, and Lieven Trappeniers, "The Internet of Things: The Next Technological Revolution," Computer, vol. 46, no. 2, pp. 24 - 25, February 2013. [Online]. <http://ieeexplore.ieee.org/xpl/articleDetails.jsp?arnumber=6457383>
- [3]. Dave Evans, "The Internet of Things: How the Next Evolution of the Internet Is Changing Everything," Cisco Internet Business Solutions Group (IBSG), Cisco Systems, Inc., San Jose, CA, USA, White Paper 2011.[Online]. [http://www.cisco.com/web/about/ac79/docs/innov/IoT\\_IBSG\\_0411FI\\_NAL.pdf](http://www.cisco.com/web/about/ac79/docs/innov/IoT_IBSG_0411FI_NAL.pdf)
- [4]. Cisco, "How Can Service Providers Face IPv4?: A Review of Service Provider IPv4-IPv6 Coexistence Techniques," Cisco Internet Business Solutions Group (IBSG), Cisco Systems, Inc., San Jose, CA, USA, White Paper 2012. [Online]. [http://www.cisco.com/c/en/us/products/collateral/ios-nx-ossoftware/enterprise-ipv6-solution/whitepaper\\_c11-698132.pdf](http://www.cisco.com/c/en/us/products/collateral/ios-nx-ossoftware/enterprise-ipv6-solution/whitepaper_c11-698132.pdf)
- [5]. Alan Weissberger, "TiECon 2014 Summary-Part 1: Qualcomm Keynote & IoT Track Overview," IEEE ComSoc, May 2014. [Online]. <https://community.comsoc.org/blogs/alanweissberger/tiecon-2014-summary-part-1-qualcomm-keynote-iot-track-overview>
- [6]. Dave Evans, "The Internet of Everything: How More Relevant and Valuable Connections Will Change the World," Cisco Internet Business Solutions Group (IBSG), Cisco Systems, Inc., San Jose, CA, USA, White Paper 2012. [Online]. <https://www.cisco.com/web/about/ac79/docs/innov/IoE.pdf>
- [7]. Dave Evans, "How the Internet of Everything Will Change the World," Cisco Blog, November 2012. [Online]. <http://blogs.cisco.com/news/how-the-internet-of-everything-willchange-the-worldfor-the-better-infographic/>
- [8]. Dave Evans, "Why Connections (not Things) Will Change the World," Cisco Blogs, August 2013. [Online]. <http://blogs.cisco.com/ieo/whyconnections-not-things-will-change-the-world/>
- [9]. Joseph Bradley, Joel Barbier, and Doug Handler, "Embracing the Internet of Everything To Capture Your Share of \$14.4 Trillion: More Relevant, Valuable Connections Will Improve Innovation, Productivity, Efficiency & Customer Experience," Cisco Internet Business Solutions Group (IBSG), Cisco Systems, Inc., San Jose, CA, USA, White Paper 2013.[Online]. [http://www.cisco.com/web/about/ac79/docs/innov/IoE\\_Economy.pdf](http://www.cisco.com/web/about/ac79/docs/innov/IoE_Economy.pdf)

- [10]. John Mahoney and Hung LeHong, "Innovation Insight: The 'Internet of Everything' Innovation Will Transform Business," Gartner, Inc., Stamford, Connecticut, USA, Research Report 2012. [Online]. <https://www.gartner.com/doc/1886915/innovation-insight-interneteverything-innovation>
- [11]. Joseph Bradley, Christopher Reberger, Amitabh Dixit, Vishal Gupta, and James Macaulay, "Internet of Everything (IoE): Top 10 Insights from Cisco's IoE Value at Stake Analysis for the Public Sector," Cisco Internet Business Solutions Group (IBSG), Cisco Systems, Inc., San Jose, CA, USA, Economic Analysis 2013. [Online]. [http://www.cisco.com/web/about/ac79/docs/IoE/IoE-VAS\\_PublicSector\\_Top-10-Insights.pdf](http://www.cisco.com/web/about/ac79/docs/IoE/IoE-VAS_PublicSector_Top-10-Insights.pdf)
- [12]. Mahdi H. Miraz, Sajid Khan, Moniruzzaman Bhuiyan, and Peter Excell, "Mobile Academy: A Ubiquitous Mobile Learning (mLearning) Platform," in Proceedings of the International Conference on eBusiness, eCommerce, eManagement, eLearning and eGovernance (IC5E 2014), University of Greenwich, London, UK, 30-31 July, 2014, pp. 89-95. [Online]. <http://edlib.asdf.res.in/2014/ic5e/ic5e2014014.pdf>
- [13]. Sajid Khan, Md Al Shayokh, Mahdi H. Miraz, and Moniruzzaman Bhuiyan, "A Framework for Android Based Shopping Mall Applications," in Proceedings of the International Conference on eBusiness, eCommerce, eManagement, eLearning and eGovernance (IC5E 2014), University of Greenwich, London, UK, 30-31 July, 2014, pp. 27-32. [Online]. <http://edlib.asdf.res.in/2014/ic5e/ic5e2014004.pdf>
- [14]. Joseph Bradley, Jeff Loucks, James Macaulay, and Andy Noronha, "Internet of Everything (IoE) Value Index: How Much Value Are Private-Sector Firms Capturing from IoE in 2013?," Cisco Internet Business Solutions Group (IBSG), Cisco Systems, Inc., San Jose, CA, USA, White Paper 2013. [Online]. [http://internetofeverything.cisco.com/sites/default/files/docs/en/ioevalue-index\\_Whitepaper.pdf](http://internetofeverything.cisco.com/sites/default/files/docs/en/ioevalue-index_Whitepaper.pdf)
- [15]. Shane Mitchell, Nicola Villa, Martin Stewart-Weeks, and Anne Lange, "The Internet of Everything for Cities: Connecting People, Process, Data, and Things To Improve the 'Livability' of Cities and Communities," Cisco Internet Business Solutions Group (IBSG), Cisco Systems, Inc., San Jose, CA, USA, White Paper 2013. [Online]. <http://www.cisco.com/web/strategy/docs/gov/everything-forcities.pdf>
- [16]. Joel Barbier, Puneet Kumar Bhatia, and Divya Kapoor, "Internet of Everything in ASEAN: Driving Value and Opportunity in Oil and Gas, Utilities, and Transportation," Cisco Internet Business Solutions Group (IBSG), Cisco Systems, Inc., San Jose, CA, USA, White Paper 2014. [Online]. <http://www.cisco.com/web/about/ac79/docs/IoE/IoE-inASEAN.pdf>
- [17]. Dave Evans, "'How Will the Internet of Everything Impact Teachers' Roles in the Connected Classroom?'," Ask The Futurist, September 2013. [Online]. <http://blogs.cisco.com/ioe/connected-classroom/>
- [18]. Sasitharan Balasubramaniam and Jussi Kangasharju, "Realizing the Internet of Nano Things: Challenges, Solutions, and Applications," Computer, vol. 46, no. 2, pp. 62 - 68, February 2013. [Online]. <http://ieeexplore.ieee.org/xpl/articleDetails.jsp?arnumber=6357163>
- [19]. Ian F. Akyildiz and Josep Miquel Jornet, "The Internet of NanoThings," IEEE Wireless Communications, vol. 17, no. 6, pp. 58 - 63, December 2010. [Online]. <http://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=5675779>
- [20]. Gil Press, "It's Official: The Internet Of Things Takes Over Big Data As The Most Hyped Technology," Forbes, August 2014. [Online]. <http://www.forbes.com/sites/gilpress/2014/08/18/its-official-theinternet-of-things-takes-over-big-data-as-the-most-hyped-technology/>