

# The Web of Things – Connecting, Innovating and Shaping the future: A Comprehensive Review

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**Abstract:** *The rapid growth of the Internet of Things (IoT) today results in the huge, heterogenous network of devices, often troubled by interoperability issues because of proprietary protocols and partitioned platforms. Such a fragmentation hinders smooth integration in use, severely limiting full potential in IoT. The Web of Things (WoT) emerges as the solution with the application of standardized web protocols such as REST; it abstracts communication complexities to enable interaction among many different kinds of devices. This implies that more sensible IoT ecosystems have to scale while destroying the barriers created by proprietary systems.*

*WoT also has integration advantages with cloud, edge, and fog computing paradigms related to the centralization and management of data inside the cloud, which improves scalability, but proximity to the source of data reduces latency and allows for instant decisions by edge and fog computing. All these technologies are the important improvement in the efficiency and adaptability of the IoT system; therefore, they will be given innovation in Smart Cities, Healthcare, Industrial Automation. This review paper explains the part taken by WoT in forming connected technologies and shaping the future of tomorrow: it will break the interoperability barrier and catalyze disruptive innovation..*

**Keywords:** Internet of Things (IoT), Web of Things (WoT), Interoperability, Standardized web protocols, Scalability, Cloud computing, Edge computing