

Impact of Cybersecurity on the emergence of Bigdata and IoT Technologies

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Abstract - Applications based on big data and the internet of things (IoT) are promising and essential in practically all disciplines. IoT applications deliver useful services to us while also collecting and sending data to big data databases for archival and analysis. Big Data and IoT have begun to be used in smart agriculture, smart housing, smart healthcare, smart education, and even smart shopping. These IoT- and Big Data-based applications are expanding quickly. The more these technologies improve our lives and provide us with useful applications, the more cybersecurity attacks are launched against them. Due to the extensive and useful data these programs contain, they are a target for hackers. With these technologies, cybersecurity is a big problem. Cybersecurity threats and attacks have the potential to halt the development of these technologies, which is bad news for both us and these promising innovations. Threats to cybersecurity degrade these technologies, allowing them to fully access user data. Knowing the potential uses and advantages that we might derive from these technologies is crucial. Furthermore, it is crucial to comprehend and be aware of any vulnerabilities that can endanger the various Big Data and IoT-based applications. Understanding potential cybersecurity dangers and attacks can help us learn how to defend these systems and applications against such threats. The security dangers and assaults that could be launched against Big Data and IoT-based apps and hinder their development are presented in this research as important cybersecurity implications. An example of a healthcare system with potential cybersecurity threats is used to further explain these effects. This case study demonstrates the connection between the development of Big Data and IoT technologies and cybersecurity attacks.

Keywords—Cybersecurity, bigdata, IoT technologies.

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