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Chapter 13

Role of big data analytics in healthcare systems

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Abstract

Generating data at an abundant scale has become a boon nowadays, as we see the shining side of its features and practicality but, data quality, integrating it with other physical, cloud systems, or storing this data could be impenetrable. Every sector including finance, retail, government, and technology produces giant lofts of data every year. But the data produced by the healthcare sector is very important and diverse as compared to other sectors. The records in the healthcare industry start from electronic health records, list of medications provided to a patient, clinical trials, insurance claims, etc. Just imagine the amount of data produced by every multinational hospital present on this planet! It would be unimaginably huge. And this data obviously could not be handled by traditional data processing systems, as this type of data is real-time continuous and data storage along with analysis could be a big issue with it, hence the big data approach is beneficial when dealing with healthcare data or any type of complex and unstructured data types

which is abundant in scale and is not easy to handle. Big data practices would lead to better data handling, storing, and analyzing it in many cost-efficient ways.

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