

AIRLINES DATA ANALYTICS FOR AVIATION INDUSTRY

Big Data Analytics in Airlines

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This study illustrates how airlines successfully adopt big data technology. The paper also explores the opportunities and challenges of big data in the airline industry. Based upon the qualitative approach,²⁷ semi-structured interviews with employees and experts at airlines in Egypt were conducted. The findings reveal that big data has a great importance in providing broad opportunities for airspace management, enhancing flexibility in dealing with each passenger, boosting problem solving, supporting decision, providing safe flights, boosting predictive maintenance, and improving performance. The findings illustrate a range of challenges that airlines may face when dealing with big data, such as shortage of qualified human resources, absence of data-driven culture, dealing with and processing huge amounts of data, as well as data privacy and security issues. Finally, implications for practice as well as future researches are discussed.

Discussion and conclusions

Big data as a new technology paradigm for data that is generated at high velocity and high volume, and with high variety, has captured the attention of both researchers and practitioners.