

## **LITERATURE SURVEY:**

### **1. Big Data Analytics in Airlines: Opportunities and Challenges:**

**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.**

Big data analytics is a process of examining information and patterns from huge data. The airline industry is interesting because of its importance to the global economy, international presence and fierce competitive environment (Sternberg et al., 2018). The current paper is one of the studies that inductively explain the challenges and opportunities that big data can provide to airlines

#### **References:**

- Aguinis, H., and Solarino, A. M. (2019). Transparency and replicability in qualitative research: The case of interviews with elite informants. *Strategic Management Journal*. 40, pp. 1291–1315.
- Akter, S. (2016). How to improve firm performance using big data analytics capability? *International Journal of Production Economics*, 8, pp.1-53.
- Alharti, A., Krotov, V., and Bowman, M. (2017). Addressing barriers to big data. *Business Horizons*. 60, pp. 285-292.
- Altinay, L., and Paraskevas, A. (2008). *Planning research in hospitality and tourism*. Butterworth-Heinemann: Oxford.
- Badea, V.E., Zamfiroiu, A. and Boncea, R. (2018). *Big Data in the aerospace industry*.

### **2.Data Analytics for Air Travel Data: A Survey and New Perspectives:**

From the start, the airline industry has remarkably connected countries all over the world through rapid long-distance transportation, helping people overcome geographic barriers. Consequently, this has ushered in substantial economic growth, both nationally and internationally. The airline industry produces vast amounts of data, capturing a diverse set of information about their operations, including data related to passengers, freight, flights, and much more. Analyzing air travel data can advance the understanding of airline market dynamics, allowing companies to provide customized, efficient, and safe transportation services.

Due to big data challenges in such a complex environment, the benefits of drawing insights from the air travel data in the airline industry have not yet been fully explored. This article aims to survey various components and corresponding proposed data analysis methodologies that have been identified as essential to the inner workings of the airline industry.

### **References:**

Juhar Ahmed Abdella, Nazar Zaki, and Khaled Shuaib. 2018. Automatic detection of airline ticket price and demand: A review. In *Proceedings of the International Conference on Innovations in Information Technology*. IEEE, Piscataway, NJ, 169–174.

1. William Adams and Janet L. Yellen. 1976. Commodity bundling and the burden of monopoly. *Quart. J. Econ.* 90, 3 (1976), 475–498.

2. Esi Adeborna and Keng Siau. 2014. An approach to sentiment analysis-the case of airline quality rating. In *Proceedings of the Pacific Asia Conference on Information Systems*. Association for Information Systems, Atlanta, GA, 363.

3. Nicole Adler and Joseph Berechman. 2001. Measuring airport quality from the airlines' viewpoint: An application of data envelopment analysis. *Transport Policy* 8, 3 (2001), 171–181.

## **3. AIRLINES DATA ANALYTICS FOR AVIATION INDUSTRY**

### **LITERATURE SURVEY:**

The Purpose of this chapter to review the previous of Researchers on the Airlines Data Analytics for Aviation Industry. This chapter will present the main recent works on the effects of Airline and Air Port services and to avoid delays in Air Travel across different locations at Municipality level.

Wang, Sen & Gao, Yi(2021) investigated identifying contributing factors and understanding the effect of these factors in causing the variation of air travel demand have been one of the key focus areas in air transportation research. Through our detailed computational results, we compare the performance of solutions arising from these different robust modeling paradigms and discuss the underlying reasons for their performance differences from a data-driven perspective.

## **Reference:**

Wang, Sen & Gao, Yi(2021) A literature review and citation analyses of air travel demand studies published between 2021 and 2020. *Journal of Air Transport Management*. 79. 102135. 10.1016/j.jairtraman.2021.102135.

Shi, Qiang & Masoud, Mahmoud & D'Ariano, Andrea & Chung, Sai-Ho & Kozan, Erhan. (2019). A classification and literature survey on aviation management. 10.1109/IESM45758.2019.8948183.

Samà, Marcella & Palagachev, Konstantin & D'Ariano, Andrea & Gerdt, Matthias & Pacciarelli, Dario. (2017). Terminal Control Area Aircraft Scheduling and Trajectory Optimization Approaches. *ITM Web of Conferences*. 14. 10.1051/itmconf/20171400008.

Tripathy, Manish & Samà, Marcella & Corman, Francesco & Lodewijks, G. (2016). Impact of Collaborative Decision Making in Optimized Air Traffic Control: A Game Theoretical Approach. 9855. 397-410. 10.1007/978-3-319-44896-1\_26.

