

## Data Analytics in Hospitality Industry

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**Abstract :** In the recent years, data analytics has become the buzzword in the hospitality industry. The hospitality industry is another example of a data-rich industry that has yet fully benefited from the insights of data analytics. Effective use of data analytics can change how hotels operate, market and position themselves competitively in the hospitality industry. However, at the moment, the data obtained by individual hotels remain under-utilized. This research is a preliminary research on data analytics in the hospitality industry, using an in-depth face-to-face interview on one hotel as a start to a multi-level research. The main case study of this research, hotel A, is a chain brand of international hotel that has been systematically gathering and collecting data on its own customer for the past five years. The data collection points begin from the moment a guest book a room until the guest leave the hotel premises, which includes room reservation, spa booking, and catering. Although hotel A has been gathering data intelligence on its customer for some time, they have yet utilized the data to its fullest potential, and they are aware of their limitation as well as the potential of data analytics. Currently, the utilization of data analytics in hotel A is limited in the area of customer service improvement, namely to enhance the personalization of service for each individual customer. Hotel A is able to utilize the data to improve and enhance their service which in turn, encourage repeated customers. According to hotel A, 50% of their guests returned to their hotel, and 70% extended nights because of the personalized service. Apart from using the data analytics for enhancing customer service, hotel A also uses the data in marketing. Hotel A uses the data analytics to predict or forecast the change in consumer behavior and demand, by tracking their guest's booking preference, payment preference and demand shift between properties. However, hotel A admitted that the data they have been collecting was not fully utilized due to two challenges. The first challenge of using data analytics in hotel A is the data is not clean. At the moment, the data collection of one guest profile is meaningful only for one department in the hotel but meaningless for another department. Cleaning up the data and getting standards correctly for usage by different departments are some of the main concerns of hotel A. The second challenge of using data analytics in hotel A is the non-integral internal system. At the moment, the internal system used by hotel A do not integrate with each other well, limiting the ability to collect data systematically. Hotel A is considering another system to replace the current one for more comprehensive data collection. Hotel proprietors recognized the potential of data analytics as reported in this research, however, the current challenges of implementing a system to collect data come with a cost. This research has identified the current utilization of data analytics and the challenges faced when it comes to implementing data analytics.

**Keywords :** data analytics, hospitality industry, customer relationship management, hotel marketing

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