LITERATURE SURVEY

1. **Anscombe, F. (1973), Graphs in Statistical Analysis,** *The American Statistician***, pp. 195-199**

    Big Data Analytics involves the use of advanced analytics techniques to extract valuable knowledge from vast amounts of data, facilitating data-driven decision-making. Big Data Analytics consists of three different levels of analytics. Each level of analytics has a different role and desired outcome. For this literature review, we consider the three levels of Big Data Analytics to be Prescriptive Analytics, Predictive Analytics and Descriptive Analytics. Currently, the level of consideration received by Prescriptive Analytics, followed by Predictive analytics with Descriptive Analytics receiving the least amount of consideration. Prescriptive Analytics finds application data from processes such as Manufacturing, Logistics, Transportation and Warehousing along with newly introduced processes such as Cyber Physical Systems in the Industry 4.0 trend.

2. **Barnett and Lewis (1994),** *Outliers in Statistical Data***, 3rd. Ed., John Wiley and Sons.**

    Predictive analytics finds strong applications in Procurement, Risk assessment, Risk Management, Forecasting. Descriptive Analytics has the widest scope in terms of the number of processes in a system. Descriptive analytics finds application in development of effective and summarizing reports on raw data that is easy for human interpretation. The data used for descriptive analytics is mostly the Historical data (Nguyen, Zhou, Spiegler, Ieromonachou, & Lin, 2017).

    According to a study by Accenture (2014), companies with a disciplined strategy of utilizing Big Data Analytics have had bigger returns for their respective investments in Big Data Analytics . As it is evident that a clear and systematic strategy towards Big Data Analytics can provide a good Return On Investment, the areas in Supply Chain such as Marketing, Procurement, Transportation, Warehousing can be tapped by Big Data and Big Data Analytics (Benabdellah, Benghabrit, Bouhaddou, & Zemmouri, 2016).

3. **Birnbaum, Z. W. and Saunders, S. C. (1958), A Statistical Model for Life-Length of Materials,** *Journal of the American Statistical Association*, **53(281), pp. 151-160.**

In this paper, the concept of Big Data and Big Data Analytics in Supply Chain is reviewed. The scale of Big Data is considered as the main reason for adopting it with Supply Chain. After studying the sources of Big Data generation in Supply Chain processes and activities, valuable insights regarding the potential of Big Data Analytics were uncovered. It was observed that combination of the complex data from supply chain activities and the scope of Big Data in terms of Volume, Variety, Velocity, Veracity and Value have practical applications that can solve some of the most prevailing challenges faced by supply chain even the recent years. Considering the adoption of Big Data Analytics, a relatively new phenomenon, it was found that the pace of creating infrastructure to sustain the increasing data needs to increase. It was found that the unavailability of professionals with appropriate skillsets can hinder the potential of Big Data Analytics in Supply Chain.

4. **Bloomfield, Peter (1976),** *Fourier Analysis of Time Series*, **John Wiley and Sons.**

As the complexity of the Supply Chain Networks around the globe increases, the Supply Chain industry along with the Data Analytics industry should work on developing new and effective models and techniques. Given the high infrastructure costs for Big Data Analytics, a dedicated research on making Big Data Analytics more cost effective is possible by reducing the infrastructure costs for storing Big Data. To increase the volume and accuracy of the data generated from various processes such as manufacturing and logistics, improving the sensor accuracy in physical systems along with enhancements in the data integration technology amongst various business processes is necessary and can be a potential field of study for further research.

5. **Box, G. E. P., Hunter, W. G., and Hunter, J. S. (1978),** *Statistics for Experimenters: An Introduction to Design, Data Analysis, and Model Building*, **John Wiley and Sons**

This research study will help the practitioners and academia with insightful observation on research finding, applying and incorporating BDA for managers and supply chain (SC) professional to take decision whether use of analytics will help to improve SC and is in vesting in BDA a good decision. Also, the article indicates the scope of future study by highlighting the trends in use of analytics and how this implementation in various functions of SC can be further studied based upon the research gap and future direction.