understanding what they want from the data and in what form [20, 21].

For effective BDD visualization, Zeppelin is used as an open-source, web-based tool that enables interactive data analytics and collaborative documents. It allows making meaningful, data-driven, interactive documents with SQL, Scala, R, or Python right in the browser. Zeppelin Interpreter is the plug-in which enables users to use a specific language/data-processing-backend [12]. Currently Zeppelin supports many interpreters such as Scala (with Apache Spark), Python (with Apache Spark), SparkSQL, Hive, Markdown and Shell. Interactive interface allows users to instantly see the results of the analytics and have an immediate connection with their creation.

Apache Zeppelin is used by organizations as Amazon Web Services, Hortonworks, JuJu and Twitter. They analyze their BDD with some advanced visualization methods in Zeppelin, gaining more insights in data and making decisions with diagrams created with Zeppelin.

In this paper our practical experience with Zeppelin was related to gaining visual BDD analysis, starting from extracting data from big digital data repository, data preparation and data visualization. With the created visualizations, we can highlight that the whole BDD concept of data analysis is based on visualization techniques and models, with software tools which bring competitive advantages to users and companies. For online usage, they demand a huge hardware resources, high transmission speed and time.

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