Michael Armbrust, Ali Ghodsi, Reynold Xin, Matei Zaharia. (2020). Lakehouse: A New Generation of Open Platforms that Unify Data Warehousing and Advanced Analytics.

<https://databricks.com/wp-content/uploads/2020/12/cidr_lakehouse.pdf>

It is hard to say if it is possible to combine Data warehouses and Data lakes into a single system. According to this paper, the current Data Lakehouse architecture adds management capabilities, but it is not sufficient to achieve good SQL performance. Alternative designs are required to achieve functions such as parallel reads from advanced analytics workloads. I think the name is appropriate because the idea of Data Lakehouse is to use the advantages of both technologies. However, we cannot implement a data Lakehouse by simply combining two systems together. Maybe using similar data formats and management technologies in Data warehouses and Data lakes at the same time will make the combining process easier. The Databricks company implements the data lakehouse by “storing data in a low-cost object store, using a standard file format such as Apache Parquet, but implements a transactional metadata layer on top of the object store that defines which objects are part of a table version” to implement management features such as ACID transactions or versioning within the metadata layer.