

Big Brain: A Single Database System for a Federated Data Warehouse Architecture

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Abstract : Traditional federated architectures for data warehousing work well when corporations have existing regional data warehouses and there is a need to aggregate data at a global level. Schibsted Media Group has been maturing from a decentralised organisation into a more globalised one and needed to build both some of the regional data warehouses for some brands at the same time as the global one. In this paper, we present the architectural alternatives studied and why a custom federated approach was the notable recommendation to go further with the implementation. Although the data warehouses are logically federated, the implementation uses a single database system which presented many advantages like: cost reduction and improved data access to global users allowing consumers of the data to have a common data model for detailed analysis across different geographies and a flexible layer for local specific needs in the same place.

Keywords : data integration, data warehousing, federated architecture, Online Analytical Processing (OLAP)

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