



**SURVEY ARTICLE**

## **Improve Query Performance Using Effective Materialized View Selection and Maintenance: A Survey**

Ashish P. Mohod<sup>1</sup>, Manoj S. Chaudhari<sup>2</sup>

<sup>1</sup>M.Tech CSE & RTM Nagpur University, India

<sup>2</sup>ME CSE & SGB Amaravati University, India

<sup>1</sup> [mohod.ashish@gmail.com](mailto:mohod.ashish@gmail.com); <sup>2</sup> [manojchaudhary2@gmail.com](mailto:manojchaudhary2@gmail.com)

---

*Abstract— Data warehouse (DW) can be defined as a set of data cubes defined over the source relation. To avoid complex query evaluation based on master table, to increase the speed of queries posted to a data warehouse, we can use some snapshot results from the query processing stored in the data warehouse called materialized views. Appropriate Materialized views selection is one of the better and crucial decisions in designing a data warehouse for high efficiency as well as it is the basic requirement of successful business application. Materialized views are found extremely useful for quick query processing. In this paper, first we are focusing on various techniques that are implemented in past, recent for the selection of materialized view. Second, the most critical issues related to maintaining the materialized view and the effective query maintenance strategy are also discussed along with comparison between all the discussed systems.*

**Key Terms:** - Data Warehouse; Materialized View; View Selection Problem; Query processing cost; View Maintenance; Access Frequency; Threshold; Fuzzy logic

---