

Database Management System

A system software that enables end-users to create, protect, read, edit, and delete data in a database along with creating and managing the database itself. A DBMS provides a centralized view of data that can be used and accessed by multiple users and programmers simultaneously while maintaining data integrity. It enables easy identification of relationships between relevant data that leads to improvements in an organization's operations.



Challenges

- ◆ Limits On Scalability
- ◆ Increasing Data Volumes
- ◆ Data Security
- ◆ Cybersecurity
- ◆ Limitations On Mitigation
- ◆ Maintaining Database Performance
- ◆ Database Access Concerns
- ◆ Data Integration & Quality Problems
- ◆ Lack Of Skilled Resources

Benefits

- ◆ Effective data integration
- ◆ Improved data sharing and data security
- ◆ Minimized data inconsistency
- ◆ Faster data access
- ◆ Better decision-making
- ◆ Reduced data redundancy
- ◆ Increased end-user productivity
- ◆ Robust backup and recovery

Trends

- ◆ According to finding of Research and Markets, global market for Database Management Systems (DBMS) was valued at more than \$63.9 trillion in 2020 and is expected to reach \$142.7 trillion by 2027, growing at a CAGR of 12.2% during the forecast period
- ◆ According to Gartner, enterprises worldwide have been estimated to spend \$80 billion on DBMSs in 2022, doubling from the spending amount of \$38.6 billion in 2017
- ◆ An IDC study predicts that the migration to the cloud will lead to an increase in the use of cloud-based DBMSs