Introduction :

* Title: MongoDB vs. SQL: A Comparison
* Briefly introduce the topic and purpose of the presentation.
* State that the focus will be on comparing MongoDB, a popular NoSQL database, with SQL, a traditional relational database.

MongoDB Overview :

* Provide a brief overview of MongoDB.
* Highlight key features and characteristics:
  + Document-oriented database
  + Flexible schema
  + Scalability and high performance
  + Horizontal scaling with sharding
  + JSON-like document format
  + Rich query capabilities

SQL Overview :

* Provide a brief overview of SQL.
* Highlight key features and characteristics:
  + Rational data base management system (RDBMS)
  + Structured and predefined schema
  + ACID (Atomicity, Consistency, Isolation, Durability) compliance
  + Well-defined tables and relationships
  + Standardized query language (SQL)
  + Joins and complex transactions

Comparison - Use Cases and Data Modeling :

* Compare the use cases and data modeling approach for MongoDB and SQL:
  + MongoDB: Suited for scenarios with dynamic, unstructured, or rapidly changing data. Ideal for agile development, content management systems, real-time analytics, and large-scale applications.
  + SQL: Ideal for structured and well-defined data with complex relationships. Commonly used in traditional business applications, e-commerce, financial systems, and systems requiring strong data consistency.

Comparison - Scalability and Performance :

* Compare the scalability and performance aspects of MongoDB and SQL:
  + MongoDB: Offers horizontal scalability through sharding, enabling distributed data storage and high-performance data retrieval. Scales well with large data sets and high Traffic loads.
  + SQL: Supports vertical scalability by increasing hardware resources (CPU, memory, etc.) for a single server. Performs well with moderate-sized data sets and structure queries.

Comparison - Querying and Transactions :

* Compare the querying and transaction capabilities of MongoDB and SQL:
  + MongoDB: Supports rich query capabilities with flexible document-based queries and indexes. Provides powerful aggregation and map-reduce functions. Limited support for transactions in recent versions.
  + SQL: Provides a standardized SQL query language with powerful querying capabilities including joins, subqueries, and complex aggregations. Offres full ACID compliance with strong transactional support.

Conclusion :

* Summarize the main points discussed in the presentation.
* Emphasize that the choice between MongoDB and SQL depends on the specific requirements of the project, including data structure, scalability needs, and query complexity.
* Highlight that both MongoDB and SQL have their strengths and can be suitable for different types of applications.