

Principles of Distributed and Parallel Database Systems

Why Distribution?

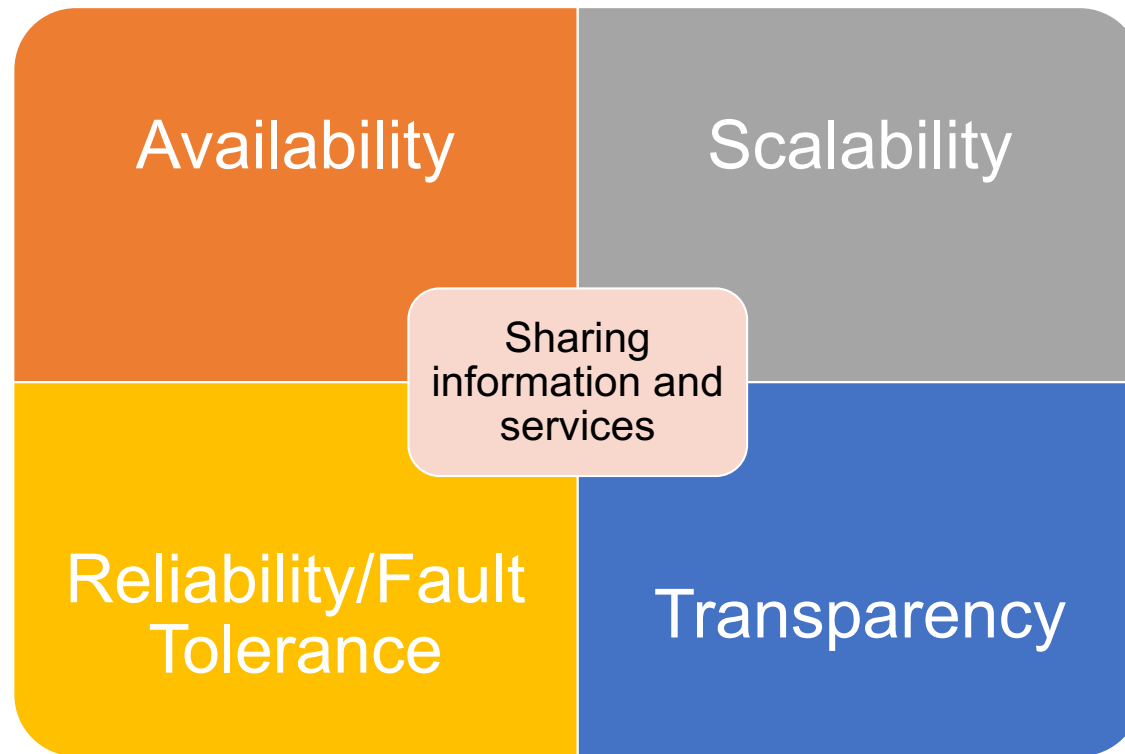
Objectives



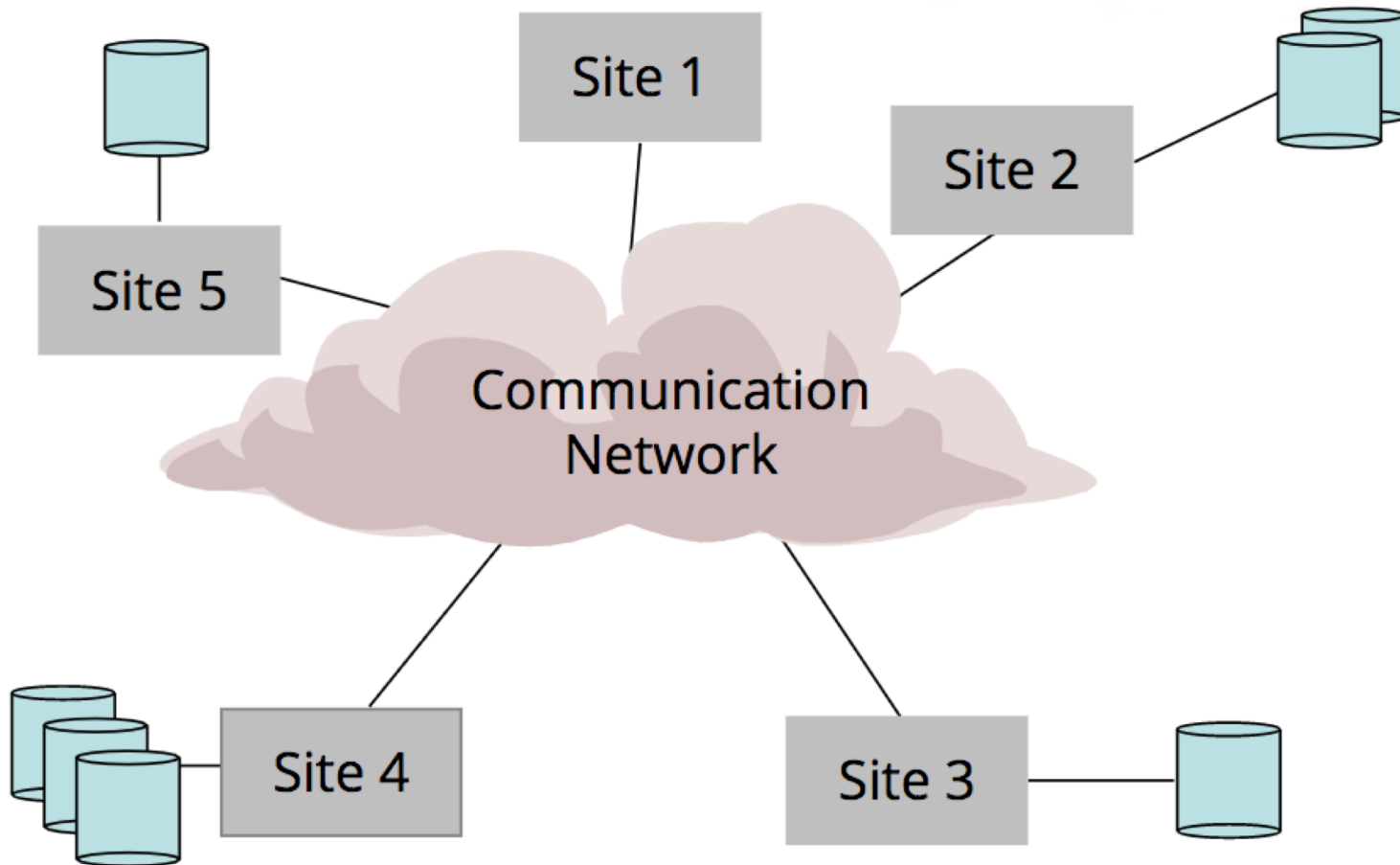
Objective

Realize how queries are
processed in distributed
databases

Why Distribution?



Distributed DBMS Environment



What is a Distributed Database System?

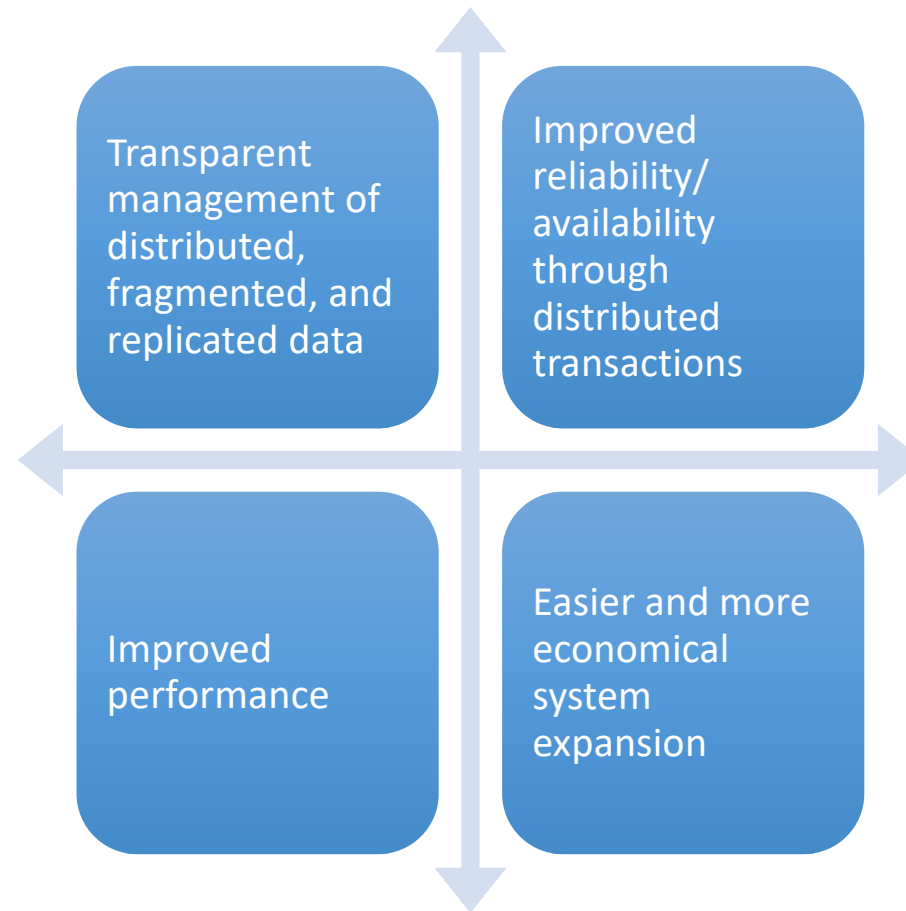
| A collection of multiple, **logically interrelated** databases distributed over a **computer network**

| The software that manages the DDB and provides an access mechanism that makes this distribution **transparent** to the users.

| Distributed database system:

$$(DDBS) = DDB + D-DBMS$$

Distributed DBMS Promises



Transparency

| Separation of the **higher level** semantics of a system from the **lower level** implementation issues.

| Fundamental issue is to provide **data independence** in the distributed environment