A distributed database in banking ensures that customer data is stored across multiple interconnected branches while functioning as a single logical systems. For example, when a customer deposit money at a rural branch, the transaction is immediately reflected in the central database and synchronized across other branches. This allows customer to withdraw funds or check balances from any ATM or branch nationwide without inconsistency. Distributed database enhance reliability by replicating data across servers, ensuring operations continue even if one node fails. They also improve performance, as queries are processed locally before being integrated globally. Security measures such as encryption and access control are enforced across all sites to protect sensitive financial data. By providing scalability, fault tolerance and real time synchronization, distributed databases support seamless banking operations in today’s interconnected financial world (Ozsu, 2020)

# Bibliography

Ozsu, V. P., 2020. *Principles of distributed database system.* 4th ed. s.l.:Springer.