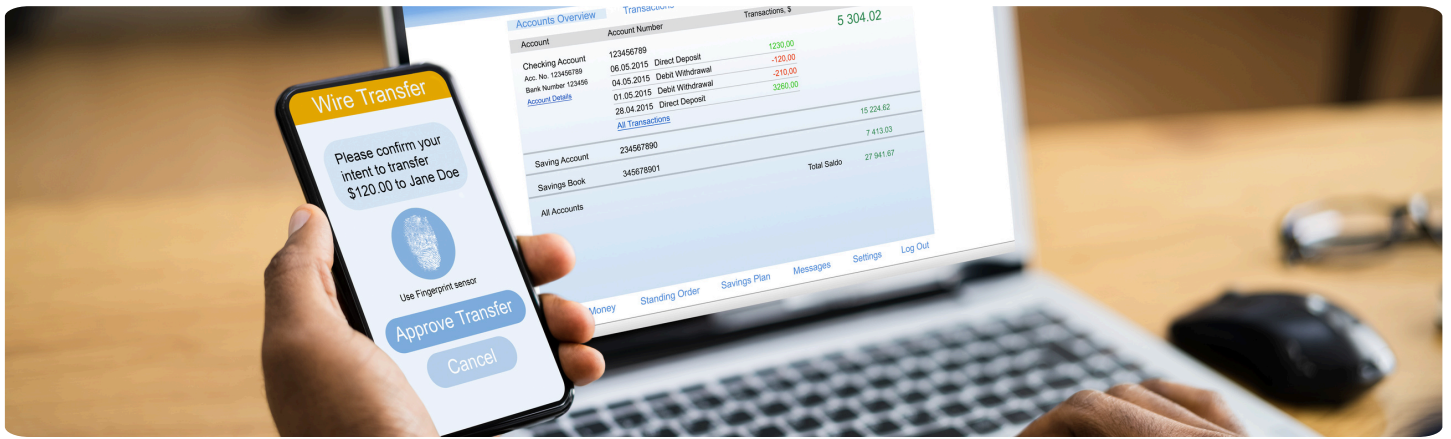


AHANA BOOSTS PERFORMANCE
AND **EXPANDS DATABASE**
CAPACITY FROM 4TB TO 17TB FOR
INDIA'S THIRD-LARGEST PRIVATE
SECTOR BANK'S MOBILE BANKING
APPLICATION



Effective database management is vital for the performance and reliability of applications that handle large volumes of data. As businesses expand and user demands increase, databases must be able to scale efficiently while maintaining optimal speed and security. This is especially important for mobile banking applications, which need to provide both fast and dependable access to financial data. Ensuring robust performance and seamless user experiences in such applications can significantly enhance customer satisfaction and business operations.

Client Profile:

Our client is India's third largest private sector bank headquartered in Mumbai. They offer a wide range of banking products and financial services, catering to both corporate and retail customers. Their services include personal finance, investment banking, life insurance, and wealth management.

The Challenge:

A popular mobile banking application, hosted on a MongoDB server with a 3.5TB database and a four-node cluster, began experiencing performance degradation. Users faced slowness in both read and write operations, impacting their experience and satisfaction. This issue emerged as the database grew and the application expanded its user base. Initially managed by another vendor, the database support was transferred to Ahana, who needed to find an effective solution to restore and enhance performance.

The Approach:

To address the performance issues and ensure smooth operation, our team implemented the following steps:

- The mobile banking application was initially supported by another vendor before the transition to Ahana.
- Our team took over the management of a MongoDB server with a database size of 3.5TB and a four-node cluster.
- Performance issues, including slowness in read and write operations, were identified.
- The database behavior with a focus on query scans was analyzed.
- Created the required indexes on collections to improve query efficiency.
- Adjusted configuration parameters to enhance overall performance.
- Implemented TLS as per RBI guidelines to ensure data security.
- Upgraded MongoDB from version 3.6 to 7.0.11, successfully managing the upgrade process without any downtime.
- The database was expanded to 17TB and scaled to a five-node cluster, ensuring smooth and efficient operation.



Business Impact:

- 1) The mobile banking application now runs seamlessly on a server where the database volume has increased from 4TB to 17TB with Ahana's support.
- 2) This growth was managed effectively, ensuring continuous operation without any performance issues.
- 3) Ahana executed the MongoDB upgrade from version 3.6 to 7.0.11 without any downtime, allowing critical business functions to proceed uninterrupted.

Conclusion:

By optimizing the database, implementing necessary security measures, and executing a seamless upgrade, Ahana not only resolved existing issues but also prepared the system for future growth. This case demonstrates Ahana's capability to handle complex database environments efficiently, ensuring continued application reliability and uninterrupted service for business operations.

About Ahana Systems and Solutions:

Ahana Systems & Solutions is a leading IT Infrastructure Management Services and Digital Transformation company based in Bengaluru, India. Our expertise extends to a wide range of solutions, including Cloud, RPA, DB & EDW, BI & Analytics, and Application Development. Our 100+ roster of clients relies on us for our deep domain expertise, skilled resource base, and proven partnership with the best technology providers.

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