

# [Example of case study on data warehousing](https://assignbuster.com/example-of-case-study-on-data-warehousing/)

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## Bank of America

Bank of America is a national giant in the financial sector. It offers a wide range of banking and non-banking services, not only in the United States of America, but in the entire world. It has six main business segments. These are: Global Commercial Banking, Deposits, Global Wealth and Investment Management, Card Services, Global Banking and Markets and Consumer Real Estate Services. In the stocks, the American Bank has a record of good performance. Currently at the stock market, the share price stands at $ 11. 33. The organization structure is functional based, that is, segmented according to services and client groups. Currently, it has about 59 million consumer and small business relationships and six thousand retail banking offices.
The SAS enterprise risk management system is intended to provide a swift and precise loan forecasting in the mortgage services. It goes down into tackling issues around probability of loan default calculations and provides comprehensive information for consumption by the mortgage department. The platform operates on a SAS Grid Computing model complete with SAS Scalable Performance Data Server based on a 112-core IBM BladeCentre grid and XIV Storage System by IBM. It, therefore, utilizes IBM generated technology and software for effective operation. It also applies data pulled from eight systems of records. It should be appreciated that the systems of record should be accurate for proper results to be anticipated. This is in line with the normal operational platforms of technological application. That is, the garbage in garbage out philosophy.
The need for the data warehouse system was created by the long hours consumed in computing information in the mortgage sector. Previously, the group would require 96 hours to compute the probability for loan default. This has reduced to only four hours. In addition, the scouring routine of 400000 loans reduced from 3 hours to ten minutes. This has effectively yielded productive results in terms of efficiency and saved time. It has, therefore, allowed the business to operate within achieving its objectives of efficiency, and fast and accurate decision making in the mortgage department. In addition, the warehouse system was inspired by its ability to incorporate data from eight different systems of storage. It reconciles the data and comes up with information that is accurate and informed. This is because it is an incorporation of all factors of relevance. This would trickle down into positive results in the form of higher profits, less losses due to defaulting to loan repayments and more certainty in terms of decision outcomes.
The beauty of the project lies in its minimal training requirements. This is attributed to the fact that it is largely technology based rather than labour based. The system pulls data from eight systems of record and manipulates them internally eventually producing end user information for interpretation by the Corporate Investment Group. This necessitates the knowledge by the group members of interpretation of output of the system. It would be equally prudent for members to appreciate the processes and principles that the technology applies in calculating the data. This would certainly enhance their understanding of the system operation. However, the system calculates most of the data and gives a final output that is user friendly. To that extent, personnel with financial knowledge would be comfortable working with it without additional training. However, additional back up is needed from IBM personnel or other information technology personnel for purposes of addressing technical hitches. It, therefore, requires the technical services of IBM personnel. Incidentally, IBM is a partner in the SAS system implementation and application.
The project was a success. In light of the positive feedback reflected by the company, one appreciates the essence of the system. The errors on loan default calculations has been reduced. In addition, the time consumed in arriving at the probability focused has been substantially reduced. This means the employee can either address other concerns or handle more clients within the previous timeframes. This leads to efficiency and better performance outcomes. It also places the company ahead of its competitors. This competitive advantage is essential for a highly competitive market. That the personnel are less engaged and lesser time required of them should impact on the charges incurred by clients. A reduction of charges would definitely appeal to the middle class. Incidentally, this is the group that consumes mortgages in most parts of the world. The success of the system opens ground for yet another essential but often forgotten aspect. That is, what risks and losses would be incurred in the event the system goes under? Indeed, the saved time would be lost and the accuracy of predictions and forecasts diminished greatly if the system would fail for say three hours. This can be reduced to losses in the short term.
The major success factors of the project remain the IBM efficiency and the competence of the Corporate Investment Group personnel. Going by the observations, the operations of the system rely heavily on the efficiency of the application which depends on IBM as the program developer. In addition, the competency of personnel in the Corporate Investment Group is essential for proper interpretation of the results channelled by the system. The system remains effective only to the extent of the creativity and development of IBM personnel and additions by Corporate Investment Group personnel. These two also inform the list of the major risk factors. If the success of the platform depends on them, it also goes without saying that their undoing could pose a great risk. The application failure posits the biggest risk as the system relies on technology rather than personnel in pulling data from eight sources. In the event the technology fails or is defective, decisions could be based on inaccurate facts. The system ought to be enhanced through the introduction of secondary platforms that would operate as a backup or alternative in the event the application collapses or technical lapses are seen. It would be prudent for the bank to train the personnel on manual computations which would suffice in the event technical lapses occur. In addition, placing near full reliance on IBM could be risky as it places the bank at its whims. This could be abused in the event the two parties disagree on the partnership operations to the detriment of banking services.
In conclusion, one appreciates the special place information technology occupies in the modern business world. It has become indispensable and a must have component for any progressive business concern. The partnership with IBM by Bank of America rightly demonstrates this aspect. The future of business success would depend on how we use our data system to come up with accurate predictive models. Information technology offers a breather in that regard.

## References

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