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# Customer Analytics for Data Aggregation and Building Analytical Tools to Create an Exceptional Customer Experience

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## Scenario:

In this project I have described how customer analytics implied no-SQL (Mongo DB) for Data Aggregation and Building Analytics Tools to create an exceptional experience. I have considered multiple factors why we switched from RDBMS to NO-SQL and stated reasons why chosen NO-SQL is best solution.

- Industry: Customer Analytics.
- Firm: E-commerce Company.
- Software Requirements: MongoDB Shell and MongoDB Compass.
- Data Requirements: For the project I was used a dataset related to Customer Analytics from Kaggle website. The dataset contains the attributes like ID, Customer Rating, Gender, Weight

**1.A discussion describing the form that the NoSQL DB should take (including choosing a specific DB). You should consider other options in your discussion.**

### Problem:

In today's environment of high consumer expectations, tough competition, and the technological intricacies of Big Data, it is difficult to convert visitors into buyers and eventually into devoted customers. In this fiercely competitive industry, businesses who establish a strong consumer data analytics strategy stand to benefit greatly.

With outdated relational technologies, it might be practically impossible to provide a single view of your customer data to enable complex analytics, but MongoDB makes it simple. MongoDB assists businesses of all kinds, from fledgling startups to Fortune 100 corporations, in developing a sophisticated analytics solution to convert new consumers and strengthen existing customer connections. MongoDB is the leading database designed to handle the complexity of Big Data.

**2.A discussion of why your non-relational solution would work best – a key grading point is justifying your choice (business issues such as cost may also contribute to your decision in addition to technical requirements). Describe the specific characteristics of your scenario that suggests your NoSQL solution is the best choice. Describing why it can be utilized is important but insufficient; convince me that it should be the solution – not just that it can be the solution.**

The main reason choose Mongo DB is to handle the dynamic data easily because it has dynamic schemas. But relational databases have fixed schemas so that can not handle dynamic data.

I have addressed some of the factors that why MongoDB is best? I took one of the real time industry, MetLife to address the factors.

- ✓ **“MetLife switched to MongoDB to provide exceptional single view and customer experience”**

Customer experience was to be streamlined, call center efficiency was to be increased, and new cross-sell and upsell opportunities were to be created. After years and millions of

dollars of investment, MetLife decided to switch from the relational database it had initially chosen to MongoDB. The team shipped a prototype in less than two weeks. The application was in production after 90 days. The Wall is an application that gathers data from more than 100 million customers, 100 products, and more than 70 source systems into a single data center. For customer support professionals, it shows the data in a simple, Facebook-like manner.

✓ **“MetLife achieved Faster, Leaner and Better Process after switch to MongoDB”**

- In just three months, MetLife created a single view of over 100 million consumers.
- A Tier 1 investment bank increased performance by 200 times while saving \$40M
- Mailbox reinvented the mobile inbox and grew to 1 million users in just six weeks.
- ADP successfully distributed a customized mobile app to 1 million customers in 17 nations.
- The roadmap for Salesforce Marketing Cloud was expedited by a full year.
- Telefonica reduced storage costs by 67%, time to launch by 4X, and performance by 100X.

✓ **“MetLife’s Broad usage of MongoDB for building its applications”**

MetLife plans to construct several applications on top of its aggregate data hub with MongoDB as the base. Since then, it has expanded—and is still expanding—the range of clients and geographical areas covered by The Wall, as well as the number of representatives who have access to it.

The Research Wall, a platform for business analysts to mine customer data and inform strategy, was created by the company. Additionally, it is developing a predictive churn engine that foresees when a customer is most likely to leave MetLife and alerts a representative to get in touch before it happens. Separately, MetLife also created a recruiting tool tailored specifically for developers using MongoDB. The Wall served as the launchpad for MetLife's data freedom initiative.

✓ **“To build analytical tools and aggregate data for excellent client experiences MongoDB is Ideal”**

Using data aggregation, many businesses may produce outstanding client experiences. This is so they may add publicly available data to the vast amounts of data they have collected about their clients, both past and present.

They will gain more precise insights on how their clients interact with their products thanks to this. It also enables them to develop methods that will keep clients happy and loyal. To build analytical tools and aggregate data for excellent client experiences, MongoDB is ideal.

A business that sells products online would like to keep track of how many customers buy a specific item. Therefore, to gather this data, the marketing team would need to aggregate client data. The statistics on the demographic and behavioral characteristics of different

customers, the average age of customers, and the total number of transactions for each client would be included in the aggregate data (etc.). The marketing team, product team, and finance team all value having access to this information.

The marketing team can personalize content and include discounts and offers for each customer based on the aggregate data. It aids in the development of more effective customer-focused advertising campaigns.

## Conclusion

To Justify Why we switched from RDMS to no-SQL (Mongo DB) for our customer analytics and why we chose MongoDB for our building analytics tools and why we decided to go No-SQL and presented the reasons why it is the best solution.

Company has considered multiple factors like businesses who establish a strong consumer data analytics strategy stand to benefit greatly. High consumer expectations, tough competition, and the technological intricacies of Big Data are some of the reasons why it is difficult for people to become loyal customers of websites and e-commerce sites.

MongoDB is the leading database designed to handle the complexity of Big Data. MongoDB assists businesses of all kinds in developing a sophisticated analytics solution. With outdated relational technologies, it might be practically impossible to provide a single view of your customer data. But MongoDB makes it simple.

## References:

- [1] <https://hevodata.com/learn/data-aggregation/>
- [2] <https://hevodata.com/learn/mongodb-use-case/#t7>
- [3] <https://www.mongodb.com/scale/customer-data-analytics>
- [4] [www.kaggle.com/search?q=customer+analytics](https://www.kaggle.com/search?q=customer+analytics)