

TECHFEST 2020-21

Dremio Business Insight

ABC Inc. is a Fortune 250 Enterprise in the insurance broking and Risk management industry. They help clients quantify and manage risk — and help them unlock new opportunities for growth. They help customers with excellent insurance products and services. The company's enterprise data team partners with business leaders to identify new opportunities for business innovation by leveraging the company's massive and growing datasets.

BUSINESS PROCESS

The company first communicates with a new or potential customer and generates a quote, to when an invoice is issued and a customer completes payment for an order. A component of payments is charged as brokerage and the rest goes to the underwriter. By mapping this data, analysts can identify new opportunities for better customer service. For example, they can identify bottlenecks in order processing, and evaluate the company's ability to consistently meet delivery commitments.

TASK

Participants are supposed to compile data given to them in different formats into a single format, and then analyse the data, and come up with innovative insights to speed up the business process and make it more efficient.

PROBLEM STATEMENT

Participants are supposed to develop a dashboard using technologies mentioned below for company management so that management can have a clear insight of the overall process and helps in taking decisions to improve customer service. Dashboard should be able to present an overall view of data aggregated from different sources. Some of the insights can be average no of orders processed weekly, monthly etc., quote vs orders conversion rates, average conversion time between first quote to order, payment delays etc.

Participants are supposed to provide design metrics and data insight solutions from Quote to payment process that is described above, using the following open source tools.

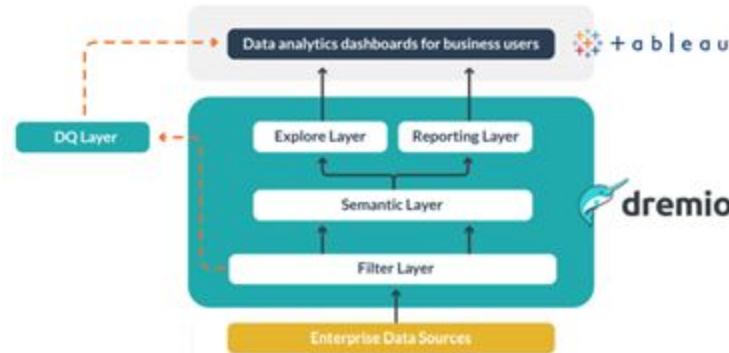
- a. Ingestion: Sqoop from legacy platforms to Hadoop, excel Oracle etc.
- b. Storage: Hadoop
- c. Compute: Dremio
- d. Analytics Tool: Tableau

Following are the uses of each tool.

- Sqoop is used to combine dataset available in different formats into one format.

- Hadoop is used to store the large data that you will be provided with.
- Dremio is used to get insights on the provided data.
- Tableau is used to make data insights more visual and presentable.

All of these tools are new and emerging technology and are available as open source. We encourage you to have a look at it



Working of Dremio and Tableau

STRUCTURE

Round 1: Abstract submission

The abstract should contain

1. Data Structures with required attributes for implementation, Any logical data models that you will be using during data transfer and load into data warehouse.
2. Front end/Dashboard mockups, - A portal with nice dashboard which should be using tableau to generate charts and data insights
3. Technology stack - Technologies that you will be using in building this application. Stack can include frontend, backend, connectors, data lake tools like dremio and any others you need to build this application.
4. Process flow/blueprint: Depiction of overall process and tools and technology you will be using to build this application.

Participants are supposed to submit this in pdf format with their 'Team_ID' as name to dremiobi@techfest.org.

Round 2: Final demonstration

Selected participants will be provided with data required to get insights. They have to demonstrate the model with visuals on a Live video call in front of a panel of judges.

Evaluation Criteria:

- 1. Flexibility of solution for scalability – **20%**
- 2. POC demonstration – **60%**
- 3. Modular solution with stated tools – **20%**

ELIGIBILITY

- Individuals or teams from the following categories are allowed:
 - 1. Students/research scholars of authorized institutions (students have to show their Valid College/School ID)
 - 2. Upto 3 years old college pass-outs.
- A team is allowed to have a maximum of 4 members..

REGISTRATION AND SUBMISSION

The Participants have to register on the official Techfest Website and fill all the necessary details. www.techfest.org ->(Hover on) Competitions-> Competitions -> Dremio Business Insight -> Explore More -> Register -> Fill all your details -> Now you must create/Join a team

Participants are supposed to submit an abstract in with team_ID as the name of pdf format to dremiobi@techfest.org

The final submissions have to be in the form of website link, and output in the form of categorized emails to dremiobi@techfest.org

TIMELINE

Last date of Registration	26 October
Abstract Submission	26 October

Result Announcement	30 October
Final Rounds	18/19 December

GENERAL RULES

1. Every team has to register online on our website for the competition. A Team ID will be allocated to the team on registration which shall be used for future references.
2. A team can register at any point of time before 10th November 2020 and submit the final abstract and video (as mentioned in the structure).
3. The decision of the organizers or judges shall be treated as final and binding on all. Techfest has all the rights to verify the identity and accuracy of the details provided by the participants.
4. No responsibility will be held by Techfest, IIT Bombay for any late, lost or misdirected entries.
5. The idea presented by the teams should be original (not protected by means of patent/copyright/technical publication by anyone else).
6. Note that at any point of time the latest information will be that which is on the website. However, registered participants will be informed through mail about any changes on the website.
7. All modes of official communication will be through the Techfest e-mail.

CERTIFICATE POLICY

Only those teams that are shortlisted for the finals and also give a final presentation about their work during Techfest 2020-21 would be awarded an e-Certificate of Participation. The top 5 entries from this event would be provided with a Certificate of Excellence.

PRIZES

The prize money will be awarded to top x winners via NEFT and will be processed within 30 working days after receiving the prize money from sponsors. Winners have to mail the following information (immediately after the announcement of results) to shubhamgautam@techfest.org

FORMAT OF MAIL :

Subject: Dremio Business Insight, Team_ID - Position - (example- Dremio Business Insight, DB191003 - 3 rd Position)

Body of mail:



1. Account Holder's Name
2. Account Number
3. Bank name and Branch name.
4. IFSC Code
5. Photograph of Bank Passbook as a proof