

Technical Specifications for Data Analytics, Analytics Performance **Diagnostics**

- ❖ Tender is invited for setting up and operationalizing a large scale Data analytics platform with visualization capabilities.
- ❖ System to be scalable for 100 TB of data.
- ❖ Hardware will be provided to the vendor.
- ❖ The software environment and related licenses (if any) must be provided by vendor and included in the amount quoted.
- ❖ Vendor must have capabilities to execute very large-scale projects in both data analytics and analytics performance diagnostics.
- ❖ Vendor must have experienced teams to carry out data exploration, database design reviews, database partitioning & clustering methods, data extraction from multiple sources and data types, data de-dup methods, data cleansing, data transformation, data loading in real-time, data lake formation, data mart creation, advanced data visualization, expertise in open-source visualization tool Metabase, dashboarding techniques, and security configuration for analytics users within the organization.
- ❖ Vendor must quickly convert the existing MIS reports to meaningful analytics dashboards with drilldowns, scheduled auto emailers and geo-based dashboards.
- ❖ Vendor must have executed niche projects for the Government sector and must know the protocols and procedures in executing Government projects.
- ❖ Vendor must have expert teams that can carry out multi-variate regression models, and clustering & classification of large data using Python libraries.
- ❖ Vendor must have extensive training capabilities to train a variety of users in data analytics and machine learning.
- ❖ Since the analytics data volume is very high, vendor must have capabilities to carry out end to end performance testing, performance monitoring and performance profiling engagements, of large distributed enterprise analytics and transaction applications. Vendor must carry out the following activities at the minimum (not limited to these activities only): Create performance test scripts, execute scripts, prepare test data, monitor the performance metrics of operating system (Linux, Unix, MS Windows), application servers (tomcat, jboss, MS IIS), monitor database performance of Oracle, Postgres and provide performance tuning suggestions, so that the analytics stack's performance is optimal. Providing profiling information and open source tools is a distinctive plus point.

The tool must provide continuous performance monitoring capabilities of the analytics stack.

- ❖ Vendor must submit two parts of the quotation - technical bid and commercial bid, in two separate sealed envelopes. Both of these envelopes should be put inside another sealed envelope, which must be superscribed "Quotation for Data analytics and performance with diagnostics".

The commercial bid need to be split into two parts:

1. Base cost (if any) for all software and tools used by the vendor for a period of 5 years.
2. Cost of manpower on a person-hour basis not exceeding 3000 person-hours
3. The quote should state the applicable Tax components like GST etc separately.
4. Hardware Quote is not applicable here as it will be provided.

The following check list need to be provided in the respective bids.

Technical bid

1. Proof of work (at least one) in Government/Private Sector carried out and completed in the area of performance monitoring, data analytics and data visualization. The minimum data handled should be at least 1 TB. Performance monitoring must be done for a system handling at least 5000 concurrent users.	Enclosed / Not Enclosed
2. Detailed study of performance monitoring, data analytics and data visualization abilities using a sample application and data set of vendor's choice. The application must be a web + database one and the data set must be in size at least one Terabyte. Vendor may be called for a live demonstration of the same.	Enclosed / Not Enclosed
3. List of tools to be used by the vendor must be stated along with version numbers.	Enclosed / Not Enclosed

Commercial bid (Excluding applicable taxes)

<u>Details</u>	<u>Cost in INR</u>
1. Cost of software tools with necessary AMC for 5 years.	
2. Cost of man-power per person-hour .	