

Delivering performance metrics dashboard and database analysis solution

Client is a leading data services company dealing with international customers offering data management, aggregation and reporting services. The company is committed to provide an efficient data management solution that can manage huge data. They cater to sectors like financial services, insurance, manufacturing, healthcare and entertainment sector that include casinos.

Situation analysis

Client specializes in providing data management needs to casinos in order to keep a track of the visiting players and hosts. They wanted to study the player behavior and accordingly mention their target players who they can invite for better programs based on their performance.

Usually, casinos have huge database related to players displayed in tabular format or exported to Excel for analysis. There were no visual reports for faster analysis that can help analyze and visualize the data better.

They partnered with e-Zest to develop a suitable product that can be customized to suit the requirements of the casinos. They chose e-Zest for the product development, reporting expertise and the engagement model flexibility.

Client Requirement

- The client required a dashboard with the player and host specific information displayed in visual reports with related analysis. e-Zest decided to go for an open source framework for its cost-effectiveness to meet the client's requirement.

Our Solution

e-Zest decided to go for an open source framework, Pentaho, that comes with the least licensing cost. In the initial phase of the product, the development team understood the key requirements of the client which gave the clear understanding of the solution architecture and possible business outcomes.

e-Zest used AngularJS to request and display results for the end user. The next step was to use NodeJS server for handling the client/server requests. To make requests to database and return responses, the team used the ExpressJS server. The CSV files were loaded in the desired format using the Pentaho ETL tool.

As the requirement was for visualization and reporting solution, we suggested smart filters, what-if analysis with probability histogram with detailed analysis of each player and player statistics. Features like search and alerts were added to make the product more dynamic.

Technology Stack

- e-Zest used Pentaho ETL (open-source) as well as MEAN stack for faster development
- The application was hosted on AWS Cloud
- MySQL database was used

Challenges

- The client wanted the solution as a base for product which could be used by other casinos with minimum possible changes as they were more interested in the productizing the solution for more gains and usage.
- To meet the client's expectation and preference for using platforms with least cost.

Conclusion

- The creation of the dashboard has made the reports more interesting and user-friendly that has helped the casino management in making better decisions.
- Since our partner developed this as a base for a project, they have received a request from other casinos to have a trial installation of the product increasing new revenue and new business for our partner company.

Business Value

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