Government Budget 360

The Department of Budget and Management (DBM) is an Executive body under the Government of the Philippines which is responsible for managing an annual budget of 3.3 trillion pesos (about USD 65 billion)

Project Name	**Budget Cycle Analytics**
Client Name	**Philippines Department of Budget and Management**
Duration & Team	Live since 2016 February 12 months and 12 people • 1 Lead Architect • 2 Lead Data Analyst • 1 Data Scientist • 5 Lead ETL Developers • 2 UI/UX specialist • 1 Quality Manager
Data Volume	20 million rows for 7 years of data processed including history.
Infrastructure	Hosted on Azure Cloud with Linux Operating systems. • RDBMS Source Systems (5 difference source systems) • MongoDB and Analytics database for optimized data warehouse • Pentaho Enterprise Edition 6.0 for data ingestion and visualization service 80 users and 10 power users • Scheduled ETL jobs to run every 2 hours once to monitor near time data

Business Problem

- Losing track of where budget is being spent
- Data for each of the budget phases of the National Budget Cycle (i.e. preparation, legislation, execution, accountability) were split over several different IT systems and includes paper based records
- DBM was challenged with maintaining a single view of their data due to the quantity, complexity and variety of data formats
- The team of analysts was spending their time (months) manually preparing data to create reports and dashboards instead of using data to drive better decision making
- Inability to measure financial performance vs physical performance

Solution

- Pentaho platform to consolidate data from multiple disparate data silos and provide a 360-view of budget
- Budget Preparation of the annual budget for 2017
- Monitor the compliance on the submission of budget proposals for 2017
- Monitor the compliance on the submission of budget and financial accountability reports for 2015 and 2016
- Evaluate the level of budget execution by the departments/agencies for 2015 and 2016
- Getting a 360 view of government spending of US$65bn was reduced from months to a mere under 10 minutes.
- That how long it takes to process 20 million rows of inter-agency data each day and put out into 5 dashboards and 22 adhoc reports.