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| HIGH​ VOLTAGE​ |
| **​​January 11, 2024​** |

**​​OVERVIEW​   
  
Project background and description:**

Objective: Develop and implement a data analytics dashboard to provide functional analysis.

**Project Scope**

High Voltage’s development team will create and implement a data analytics dashboard that provides field measurements, weather forecasting, predicative analytics, security, and access control along with revenue and production cost.

**Deliverables**  
  
A smooth user-friendly interface system allows easy to access and ability to read information that include:

A field measurement widget that provided live reading to smart meters, synchro phasors, and smart sensors.

A weather reader widget with live feed from ground stations, radar, satellite, and specialized systems.

Access to current and historical revenue and production cost.

Predictive analytics widget that shows probabilities and final decisions of predictive models.

And provide security and access controls that protect sensitive data and define user roles and permissions.   
  
**Stakeholders**

Data Analytics team, IT Development team, Marketing Team, Engineers

**Affected Business Processes or Systems**

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| |  |  |  |  | | --- | --- | --- | --- | | **#** | **System / Process** | **Details** | **Impact** | | 1 | Data Management | Data storage systems, databases, and data warehouses | The dashboard relies on accurate and timely data. Existing data management systems may need to be optimized or expanded to handle the increased data volume and provide seamless integration with the dashboard. | | 2 | Data Integration | SCADA systems, metering systems, and IoT devices | Integration with existing data sources is critical for real-time data updates. This may involve modifying or enhancing the connectivity of existing systems to ensure a smooth flow of data into the dashboard. | | 3 | IT Infrastructure | Servers and network infrastructure | The increased demand for data processing and visualization may require upgrades to the IT infrastructure. This could include investing in more powerful servers, expanding network capacity, and ensuring high availability. | | 4 | Security Systems | Security protocols, firewalls, and access control systems | Security measures must be enhanced to protect sensitive data displayed on the dashboard. Access controls and encryption may need to be strengthened to safeguard against potential breaches. | | 4 | Operational Processes | Asset management systems, and work order systems | The dashboard can optimize operational processes by providing real-time information on equipment health and performance. Integration with asset management and work order systems may improve maintenance planning and response times. | | 6 | Finance and Budgeting | Budgeting systems and financial databases | Implementation of the dashboard may involve budgeting for development costs and ongoing maintenance. Financial systems may need to account for these expenses and evaluate the return on investment. | |  |

**Implementation Plan**

Start Date: 01/11/2024  
Duration: 10 Months  
  
**High-level timeline/schedule**  
**Define Objectives and Requirements (3 weeks):**

Clearly define the objectives of the dashboard.

Gather requirements from stakeholders to understand their needs and expectations.

**Data Assessment and Preparation (5 weeks):**

Evaluate existing data sources and assess data quality.

Prepare and clean the data for integration into the dashboard.

**Design and Prototyping (7 weeks):**

Create wireframes and prototypes to visualize the dashboard layout and features.

Gather feedback from stakeholders and make necessary adjustments.

**Development (12 weeks):**   
Develop the backend infrastructure for data storage and processing.

Implement frontend components for the user interface.

Integrate with external systems and APIs as needed.

**Testing (7 weeks):**   
Conduct thorough testing to identify and fix any bugs or issues.   
Perform user acceptance testing (UAT) with stakeholders to ensure the dashboard meets requirements.

**Deployment (3 weeks):**

Roll out the dashboard to a limited audience for initial feedback.

Address any issues that arise during the deployment phase.

**Training and Documentation (3 weeks):**

Develop training materials for end-users and administrators.

Conduct training sessions and provide ongoing support.

**Optimization and Iteration (Ongoing):**

Continuously optimize the dashboard based on user feedback and changing requirements.

Implement updates and new features as needed.

**Approval and Authority to Proceed**

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| **​​Name​** | **​​Title​** | **​​Date​** |
| Manny Pacquiao | HVEC President | 01/11/2024 |
| Warren Buffet | HVEC VP | 01/11/2024 |
| High Voltage | Project Management Team | 01/11/2024 |

**Risks**

Risk 1: Information Security

Risk 2. Data Privacy

Risk 3. Transperency