Product Presentation

Applicant Name:

Esri China (Hong Kong) Limited

Product Name: ArcGIS Enterprise Standard 10.9

Specification: ArcGIS Enterprise provides a complete GIS that let project team to access powerful mapping and analytics and share geospatial data- all from a web browser. User can access ArcGIS Enterprise anywhere – behind the firewall or in the cloud.

Core Functions: Create web map for data sharing and deployment on configurable apps and ArcGIS Field apps

Technology Used: Esri ArcGIS

Construction Process Involved:

Master Planning, Design, Construction and Operation

Key Improvement in Construction Process:

➢ Productivity – Efficient fieldwork operation on common operation platform

➢ Quality – Access real-time synchronized project data on desktop and any other portable devices

➢ Safety – Create configurable safety dashboard to manage field condition in real-time

➢ Environmental – Replace traditional paper-based workflow with smart web GIS platform.

Job References:

[Electronic Management and Maintenance System, Hong Kong, Adoption, 2020]

[Slope and Tree Management System, Hong Kong, Adoption, 2019]

[Farr West Engineering, Nevada Canada, Adoption, 2019]

Innovative Features

Core Technology: Esri ArcGIS

Comparison with current practice and popular models:

- State of the art GIS platform to manage and visualize 2D and 3D data
- Complete platform with configurable browser-based interface, advanced analysis capabilities and out-of-the box field applications
- Seamless integration with other Esri products
- Extendable server capabilities to cater IoT, big data and other analysis purpose with wide ranges of extension
- Access to resourceful map resources shared by ArcGIS Users through Living Atlas of world
- Flexible deployment with options of on-premises or private cloud

First Launch Date: ArcGIS Enterprise Standard 10 (2010)

Adoption Example

Project for illustration:

Farr West Engineering, Navada Canada, Adoption, 2019

Work Process:

Operation and Maintenance

Use / Function in project:

- Centralized platform for rural utility district to track and manage their asset
- Offer immediate response on client query of specific assets informatino with spatial intelligence
- Comprehensive platform that give clients dynamic, real-time access to their data
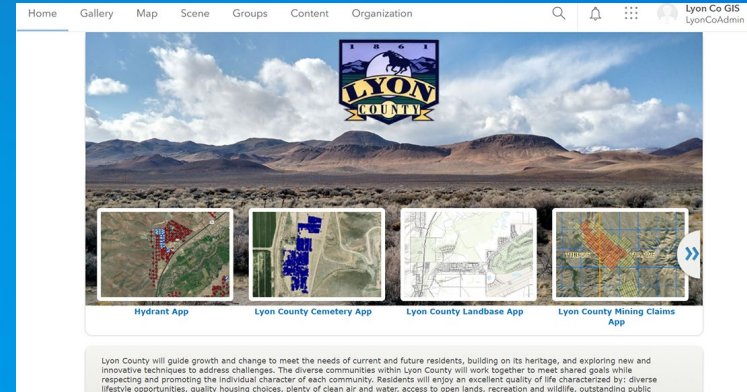
Benefits – Productivity

Improve productivity by:

1. Significant Reduction in time cost of data delivery
   a) Customer data and customized application directly connected to ArcGIS Enterprise web services
   b) Avoid repeatable soiled and taxing workflow of delivering data to each client individually
   c) Save over 80% of time spend compared to traditional workflow

2. Access data everywhere and every time
   a) Quick access to data through web-browser and ArcGIS mobile apps

3. Manage Multiple format of data in one platform
   a) Utility staff could manage all data, include sit photos, forms and videos of their asset with geographical location at once. Avoid discrepancy of what they see in person and what is shown on record

4. Seamless collaboration with SaaS GIS platform
   a) Disseminate synchronized data to huge quantity of customer through ArcGIS Online
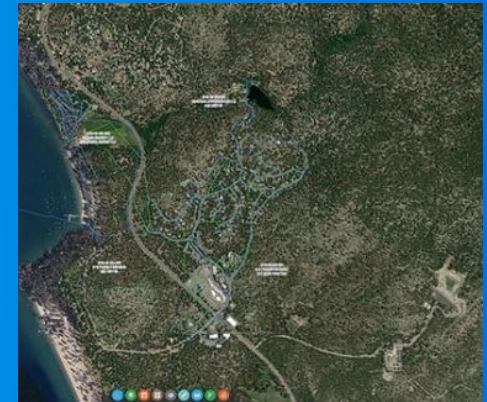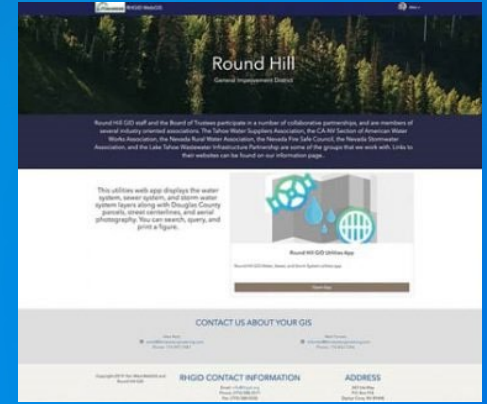
(Top) Customer Information Front Page
(Bottom) Display asset on ArcGIS Map

Benefits – Quality

Improve Quality by:

1. Single Source of Truth Platform
   a) Different stakeholder access to same data through unified ArcGIS web service
   b) Synchronized data in real-time to reflect latest change of data to all users
   c) Minimize data loss

2. Standardized deliverables with ArcGIS configurable templates
   a) Provide basic analysis tools to evaluate utility assets with widget-based application
   b) Present locations and all key index of assets with map-centric dashboard

3. High security system
   a) System owner has full control on infrastructure of GIS Enterprise at on-premise/ private cloud environment
   b) Efficiently keep data away from unauthorized viewing and editing
   c) Secure data integrity

Benefits – Safety

Improve Safety by:

1. Minimized manual inspection on field
   a) Capture accurate data and create information update of utility assets; Instant synchronized data to platform database.
   b) Reduce on-site visiting time and frequency of both workers and client, and thus minimize risk of accident during field visit