Accenture Asset and Operations Services

Connected Mine
Optimizing operations at the mine

High performance. Delivered.
Mining companies are shifting their strategies and adopting new business and operating models faster than ever before.

Why? A combination of low commodity prices, changing global demand, radically different input economics, a focus on a longer asset lifecycle and a commitment to operational excellence—as well as policy shifts around the globe—are all contributing to a seismic shift in the industry. To seize the opportunity, mining companies must leverage digital tools and capabilities to improve operating efficiency, reduce costs, and increase revenues and profit.

Mining companies have typically made substantial investments in Operational Technology (OT) to gather data from their operations, measuring and monitoring things such as vehicle movements, driver fatigue, slope condition, weather data, etc. However, these systems typically operate in isolation and are only visible in the mining control center, requiring a great deal of experience to make sense of the many screens, all with their own unique displays and user-interface.

Accenture's objective is to help its clients gain more value from these investments, aggregating data from these disparate systems into the Cloud where we can apply advanced analytics across multiple data sources to generate clear, actionable insights into the operation of the mine.

The Connected Mine

The Connected Mine solution, built by Accenture and Avanade, brings together mobile, cloud, and analytics to enable mining companies to more effectively manage their in-pit operations. It provides a single application on a mobile device which mining supervisors can carry with them providing actionable insights, as well as the decision support tools they need wherever and whenever they are needed.

Central to the solution is Microsoft Azure's Internet of Things (IoT) cloud services that enable the Connected Mine to aggregate data from a variety of operational technology systems such as dispatch, fleet management, fatigue detection, data historians, data warehouses, IP cameras, SharePoint, and more.

The solution uses rules (from the cloud infrastructure) to alert users of events, trends or other changes via SMS, email or in-app notifications, allowing mine supervisors to better react to key problems and maximize productivity. The solution also applies advanced data analytics to the raw data to create insights, visualizations, and specific recommendations which are pushed down to users in near real-time via their mobile phones or tablets.
Key Benefits

- **Advanced Analytics**
  - 24/7 anytime, anywhere visibility of asset utilization and production information versus plan

- **Custom Alerts Framework**
  - Customized, real-time notifications of events

- **Data Aggregation Platform**
  - Increase shift yields by providing supervisors with analytics-enhanced, real-time data from in-pit equipment
  - Real-time, end-to-end overview of the operation on your mobile device

- **Real-time visibility**
  - Allows for better tracking of people and anticipation of safety risks
  - Reduces machine downtime, inventory and maintenance costs using enhanced predictive maintenance
  - Enables faster, more informed decision making actionable within the app

Advanced Analytics + Custom Alerts Framework = Data Aggregation Platform
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About Accenture

Accenture is a leading global professional services company, providing a broad range of services and solutions in strategy, consulting, digital, technology and operations. Combining unmatched experience and specialized skills across more than 40 industries and all business functions—underpinned by the world’s largest delivery network—Accenture works at the intersection of business and technology to help clients improve their performance and create sustainable value for their stakeholders. With more than 358,000 people serving clients in more than 120 countries, Accenture drives innovation to improve the way the world works and lives. Its home page is www.accenture.com.

About Avanade

Avanade leads in providing innovative digital services, business solutions and design-led experiences for its clients, delivered through the power of people and the Microsoft ecosystem. Our professionals combine technology, business and industry expertise to build and deploy solutions to realize results for clients and their customers. Avanade has 27,000 digitally connected people across 23 countries, bringing clients the best thinking through a collaborative culture that honors diversity and reflects the communities in which we operate. Majority owned by Accenture, Avanade was founded in 2000 by Accenture LLP and Microsoft Corporation. Learn more at www.avanade.com.

About Microsoft

Founded in 1975, Microsoft (Nasdaq "MSFT") is the worldwide leader in software, services and solutions that help people and businesses realize their full potential. Visit www.microsoft.com.