



Microsoft® Virtual Earth™

Location Services for the Utilities Industry

Utility companies today are faced with major changes in the competitive landscape. As managers of utility companies plan for the marketplace, they must consider new obstacles, such as fuel price volatility, water shortages, environmental considerations, changing regulations, and an aging infrastructure. Profitability margins are shrinking as public knowledge of prices, best practices, and the industry in general, are rising. Altogether, the changes that are happening in this industry compound the challenges these organizations are facing.

Today's Challenges in the Utilities Industry:

Poor Customer Connections

- :: Many customers feel frustration because of utility downtime resulting from damages, systems updates, or infrastructure improvement.
- :: Acquiring, aggregating, and reporting customer feedback is difficult when the organization has limited direct interaction with customers.
- :: Effective customer service and brand differentiation can be difficult given all other challenges that a utility company faces.

Limited Business Insight

- :: Utility company managers need a way to enrich their understanding of metrics, such as demographic statistics and key customer attributes.
- :: Managing the location of capital assets requires comprehensive asset visualization.
- :: Key performance metrics are difficult to analyze, creating challenges for identifying specific opportunities to connect with customers.

Barriers to Innovation

- :: Changes in systems and Web sites can be difficult to scale, costly to implement, and cause substantial downtime.
- :: Utility companies can lack the technology to integrate data management systems and group relevant information for business analysis.
- :: Utility companies need a way to expedite the decision-making process for optimal work prioritization.

Virtual Earth Advantages

The Microsoft Virtual Earth platform is an integrated set of services that combines advanced viewing options, including exclusive bird's eye¹ and hybrid views, aerial imagery, and enhanced 3D models, with innovative mapping, location, and search functionality. It enables utility companies to engage business partners and customers by providing innovative solutions and a visual display of data. Additionally, the service-oriented architecture enables utility companies to easily develop solutions that leverage customizable features and imagery, dynamic maps, driving and walking directions in 15 languages, and powerful data visualization and reporting capabilities without significant financial investments.

Utility companies use the Virtual Earth platform to realize the following benefits:

Empower: The Virtual Earth platform empowers utility companies by providing tools to help them manage data and connect to users more effectively. By leveraging the powerful Virtual Earth data visualization capabilities, utility companies can use the platform as a foundation for building location intelligence solutions. Empowered with the most up-to-date information, utility companies can also focus on connecting with users and delivering the best products and services.

Real: The Virtual Earth platform offers reliable imagery and data, allowing utility companies to build a precise view of their organization. Exclusive bird's eye imagery helps utility companies create richer connections with their users by allowing them to view and familiarize themselves with locations before arriving. Enhanced geocoding and reverse geocoding provide the most accurate and up-to-date results possible for efficient driving directions and position locators. Pushpin information boxes allow users to learn about a location or quickly visualize information relevant to that location. Combined, these features result in a more enhanced and immersive Web site experience.

Professional: The Virtual Earth platform utilizes open standards-based technologies, and offers flexible licensing options that fit almost any budget, enabling utility companies to develop innovative solutions through a cost-effective approach. With 99.9 percent availability, utility companies can be confident that the platform services will be available when needed.

Virtual Earth Platform for the Utilities Industry

With the Virtual Earth platform, utility companies can create an immersive collaborative experience that enables clients to easily search, locate, and visualize work schedules and locally relevant information. Seamlessly integrate the Virtual Earth platform with Web sites, applications, and services to deliver the highly visual and locally relevant information your customers and end users care about most. *Imagine the possibilities with Microsoft Virtual Earth:*

Strengthen Customer Connections

- :: Inform your customers about downtime and work orders with pushpin information boxes, and offer traffic tile overlays to help them avoid congested work areas.
- :: Connect with customers by offering uniquely branded service experiences through your own Web site using Virtual Earth customization capabilities.
- :: Empower customers by creating a place for them to express opinions and concerns and use the Virtual Earth platform to view this information by location.

Improve Business Insight

- :: Track and forecast infrastructure risk and manage customer need by visualizing planned improvements and potential problem areas.
- :: Analyze business metrics and distribution networks by integrating Virtual Earth with business intelligence applications.
- :: Manage the location of capital assets in real time by integrating Virtual Earth with GPS, RFID, or sensor data.

Grow Through Innovation

- :: Speed time to deployment and help minimize IT costs by integrating with existing technology investments through an open standards platform
- :: Visualize data by integrating line-of-business applications with location based information such as GeoRSS feeds or sensor data for electrical or water networks.
- :: Improve work prioritization and deployment efficiency by incorporating multipoint routing to improve work prioritization and deployment efficiency.

Virtual Earth in Action

Scenario: A major utility company wanted an efficient way to coordinate a comprehensive infrastructure improvement. It also wanted a way to manage customer relationships during the improvement.

Solution: The utility company used the Virtual Earth platform to plot all utility infrastructures on a map. It used the powerful Virtual Earth Web services to link to its server database and plotted the infrastructure information on top of the map. By doing this, it was able to categorize the most important projects and use GeoRSS to plot traffic patterns against work flow. The utility company also placed customer feedback data in the appropriate information boxes associated with relevant project sites.

Using the Virtual Earth platform location-based technology, the company was able to track and manage customer relationships as they pertained to the work in progress.

Benefits: The utility company experienced an increase in efficiency through expediting planning and execution functions. This resulted in a reduction of infrastructure damage because they could visualize and implement infrastructure improvements before the problems reached critical levels. Customers experienced higher satisfaction because the infrastructure improvements interfered less with commutes. Customers also appreciated having recourse for voicing complaints or suggestions.

More Information

For more information, please visit: www.microsoft.com/virtualearth. For information on Virtual Earth for Utilities, please visit: www.microsoft.com/virtualearth/industry/utilities.aspx. In addition, you may contact a Virtual Earth Sales Specialist: North, Central, and South America, e-mail: maplic@microsoft.com. In Europe, Africa, Middle East, and the Asia Pacific region, e-mail: mapemea@microsoft.com.

¹ Available in many metropolitan areas across the U.S. Not available for government customers.

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