Cisco Gridonomics Business Architecture Services

The electrical industry is at a point where the pace of change and opportunity is rapidly accelerating. Thirty years of energy policy and industry structural changes, along with today's social and technological evolution, are inspiring fundamental changes in utility design, operation, structure, and regulation. Clearly, effective business and public policy will require a new alignment of policy, economics, and technology: an interrelationship that Cisco calls Gridonomics™.

The Cisco® Gridonomics Business Architecture Service provides assessment and planning to help utilities leverage this interrelationship to drive revenues and achieve growth. By achieving a complete understanding of corporate strategy, models, processes, and functions, the utility determines the most appropriate technology architectures to lay the groundwork for the future evolution of utility operation.

Cisco Services experts provide:

- Gridonomics Business Transformation Scope and Profiling
- Gridonomics Business Transformation Qualitative Analysis and Recommendations
- Gridonomics Business Transformation Quantitative Analysis and Recommendations

Business Transformation Initial Scope and Profiling

The Gridonomics Business Transformation Scope and Profiling Service defines the scope and identifies the desired capabilities of the customer's future business model. It helps customers align smart grid strategies with organization goals and objectives, as well as regulatory and policy requirements. This service also provides a process that focuses on utility business requirements and maps out potential solutions that foster those objectives. Our experts utilize the Cisco Gridonomics model to analyze business activities in the energy value chain to establish the business architecture and roadmap within regulatory and policy constraints.

Qualitative Analysis and Recommendations Service

The Gridonomics Business Transformation Qualitative Analysis and Recommendations Service identifies synergies across projects in a common technology infrastructure to the benefit of various stakeholders. This service provides a process that focuses on business requirements; maps potential solutions to achieve those objectives; and, through a systematic qualitative evaluation of costs and benefits, helps the utility arrive at a preferred project deployment plan to meet its objectives.

Quantitative Analysis and Recommendations Service

The Gridonomics Business Transformation Quantitative Analysis and Recommendations Service delivers an evaluation report that includes a prioritized list of projects across all technology categories (power system, network, and software) for a given user-defined scope and desired capabilities, defined by compliance (standards and protocols) imperatives, providing better visibility and a more integrated approach to smart grid investment.

Table 1.   Gridonomics Services

Service	Activities	Deliverable
Business Transformation Initial Scope and Profiling	• Review policy, technology, and economic factors • Review current business model/role in value chain • Review current baseline and in-progress projects • Review regulatory and operational/security compliance, standards, and protocol requirements • Inventory current infrastructure capabilities • Review potential smart grid projects	• Smart grid scoping plan
Gridonomics Business Transformation Qualitative Analysis and Recommendations	• Construct baseline scenario informed by step 1 • Construct incremental smart grid investment scenarios • Review estimated cost/benefit synergies between current in-progress projects and future smart grid initiatives • Identify associated performance levels for sequencing purposes • Perform comparative analysis between incremental scenarios and base case • Provide qualitative ranking of scenarios based on identified synergies	• Scenario analysis and planning recommendation
Gridonomics Business Transformation Quantitative Analysis and Recommendations	• Monetized cost and benefit calculations • Selection of the dispatch model for generation and power procurement costs • Aggregation of costs and benefits and allocation of value to stakeholders • Prioritization of identified solution bundles based on cost-effectiveness • Financial statements, including income statement and cash flow specific to each scenario • Recommended next steps for technical architecture analysis, design, and implementation	• Sequencing and prioritization of smart grid investments • Recommendations for technical analysis

Benefits

Working with our Gridonomics Business Architecture team allows utilities to leverage today's rapidly transitioning industry environment to:

- Transform the relationship between public policy and business strategy into business planning for people, process, and technology

- Determine the conceptual cost-benefit of particular investments

- Understand the architectural context and assess investments in terms of sequencing and synergies to develop robust technology roadmaps

- Utilize the Gridonomics tools and frameworks along with a reference technology architecture to facilitate the development of future technology and information communications technology (ICT) master plans

Leading Energy Management Expertise

Cisco's energy architects provide planning, design, implementation, operations, and optimization of infrastructure and energy management tools. As developers of powerful assessment tools such as the Gridonomics Business Transformation Model, they have in-depth experience in utility, industrial, business, and government environments. Their expertise spans the end-to-end value chain of the smart grid from transmission, distribution, and distributed energy resources to smart loads.

Why Cisco?

Cisco Services provide a team of internal experts and industry-leading partners with the mission of helping enterprises plan and build ICT energy management initiatives. Our unique Cisco lifecycle approach defines a comprehensive approach to planning, design, implementation, and operation of advanced energy systems, providing a secure architecture designed to meet both today's and tomorrow's needs.

Further Information

For more information about energy management solutions, contact your local Cisco account representative or visit
http://www.cisco.com/web/strategy/energy/gridonomics.html.

Cisco services. smarter together