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SEMPRA ENERGY: A CASE STUDY FOR THE CENTER OF EXCELLENCE

A Case Study

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Sempra Energy: A Case Study for the Center of Excellence



Sempra Energy employed Computer and Connectivity Service's Center of Excellence concept and set of methodologies to transform its IT department and drive its technology towards a future-state model.

Company Overview

Based in San Diego, Sempra Energy is a Fortune 500 company with eight subsidiaries and nearly 12,000 dedicated employees. Together, their family of companies provides a wide spectrum of value-added electric, natural gas, broadband, and related products and services to a diverse range of customers. Sempra Energy was created by a merger of parent companies of two long established, and highly respected, investor-owned utilities. The union of Pacific Enterprises and Enova Corporation grew naturally from energy deregulation and the restructuring of the industry. Their utility subsidiaries still serve 21 million consumers, the largest customer base of any energy utility in the United States. Due to their size, scope and resources, they're able to compete in energy markets both nationally and internationally.

Business Requirements

Sempra Energy was looking for ways to capitalize on the newly deregulated energy markets and diversify by entering into the energy-related technology services field. Sempra was aware that it would need to approach technology services in a completely different manner than it had while supporting the regulated gas and electric business. Sempra decided to create an unregulated subsidiary that would partner with an IT solutions company to facilitate the incubation and development of new solutions while using the existing IT personnel and infrastructure wherever possible. Sempra recognized the possibility of refreshing the skill sets of its employees and using some of the newly developed technology that could be harvested and reused by the IT organization. The COE concept was presented to, and accepted by, Sempra's management team as a vehicle to realize their goals.

COE Overview

One of the pressing issues facing organizations today is need to manage continuous change. Increasing customer demands for service, better value, new products, quality, functionality and usability in a timely and cost-effective manner are forcing businesses to become more elastic and agile. Information has

become the greatest asset to organizations as the need to quickly assimilate, analyze, and interpret vast amounts of information, and rapidly deploy assets both tactically and strategically increases dramatically. In addition, the globally competitive enterprise is moving from centralized control to decentralized empowerment as it becomes functionally and geographically distributed, multinational and multidisciplinary, and grows exponentially via acquisition strategies. These circumstances bring some major questions to the forefront for organizations:

- How do I manage complexity and continuous change?
- How can I quickly achieve visibility into and interoperability amongst my financial, decision support, and operational systems.
- What enables me to manage, transform, or migrate my legacy applications consistent with new business goals and challenges?
- How do I construct the new enabling applications and capabilities in days or weeks rather than months?
- How do I promote learning and new behaviors throughout the enterprise?

An important concern for IT organizations is the refreshing of its employees' skill sets while meeting project milestones and maintaining production systems. Quite often this places IT departments in a reactive, rather than proactive, mode due to the volume of change created in today's marketplace. The main purpose of the COE is to be the BTS of the future state for the IT organization and enable a more visionary and proactive environment to flourish. The following table illustrates The Four Dimensions of Change that every organization needs to address in order to be competitive today:

Transformational	Technical	Cultural	Organizational
The Belief System - Future State	Enterprise-wide Modeling & Messaging	Empowered	Empowered
The Skills Base	Distributed, Object-Oriented	Collaborative	Distributed
The Internal Economy	Collaboration & Public Interface Focused	Entrepreneurial	Accountable
The BTS of Center of Excellence	Software Infrastructures and Services	Team Driven	Model Driven
The Mentoring Process	"Societies" of loosely coupled business components --not monolithic packages		
Knowledge Transfer			

The COE process is cyclical in nature and consists of two primary Transformation Cycles that impact the traditional People, Process and Technology aspects of an organization. The Technology Asset and Skill Asset cycles are outlined in the following table:

Technology Asset Cycle	Skill Asset Cycle
Determine/design the future-state from a technical and process viewpoint	Identify a core group of individuals to develop the future-state requirements
Identify new projects	Remove team members from operations and assign to projects
Relate each project to the future-state	Assign some team members to implementation & operations team to transition new technology and processes
Determine reusable technology that can be harvested	Assign some team members new roles of leadership in the COE
Apply harvested technology in other areas of the IT infrastructure	Identify a core group of individuals to develop the next future-state requirements
Determine/design next future-state	

As illustrated by the table, these cycles imply that at over time the IT organization reaches a state in which it resembles the future-state that was originally identified by the COE team. A large portion of the COE charter is to simultaneously produce project deliverables and train employees in a variety of software methodologies and languages, and the facilitation of enterprise interoperability (for more information see: *Managing Complexity and Change via Interoperability*). The COE approach:

- Enables IT workers to learn new skills while working with experienced developers on a real-world project that provides value to the organization
- Enables the customer to keep its personnel on-site and productive, rather than in a classroom for extended periods, minimizing the impact to project deliverables due to absences
- Enables IT workers to witness first-hand the benefits of interoperability and how it may provide a solution to other projects or issues the organization is facing
- Enables the customer to ensure that employees maintain core and intimate knowledge of the organizations projects and business logic coding, mitigating reliance on an external organization for its intellectual property

Sempre and the COE

In 1997 Sempra created Sempra Energy Information Services (SEIS) and obtained a new facility to house the business unit. This became the home of the Center of Excellence. Over a 3 year period, the COE grew to nearly 200 people and included a mixture of Sempra IT and operations personnel. A multitude of other IT personnel had worked on projects and returned to operational roles in the main IT organization. In this period a multitude of projects of varying size and scope passed through the COE and became either new lines of business for the deregulated SEIS, or were utilized as part of a corporate IT solution. These projects included the creation of an online Energy Service Provider Billing System (for more information see: Energy America: A Case Study for Interoperability) which became a deregulated business called Soliance, and the development of EFX (Enterprise Frameworks), an enterprise application framework designed to rapidly create distributed applications for use in a complex heterogeneous environment. In addition, the repository and skills developed were instrumental in delivering an SAP implementation in 200 days at one fourth the price estimated by Sempra and bid by 2 Big 5 firms. This experience was instrumental in one of Sempra's deregulated entities, Soliance, creating a new offering called Utility in a Box (UIB), which was a rapid implementation of SAP using the templates that were generated from the COE engagement.

Sempra was dedicated to the success of the COE and showed support by following the COE methodologies in all areas. This ranged from using the Solutions Needs Acquisition Process (SNAP) (for more information see: Using a SNAP to Define Requirements) to rapidly define both business and technical requirements for all projects, to extracting the best of its people to become the part of the first COE teams. Luckily, the first groups were also volunteers, generally guarantying that the first wave of "graduates" were the people most readily adaptive to change. These were the people most likely to be retained through any type of transformation process. The graduates then become the new leadership of the COE or proselytizers of the advantages of the COE, interoperability solutions, etc., thereby affecting true change throughout the organization.

Conclusion

The COE process enabled Sempra Energy to build new lines of business that could take advantage of the emerging opportunities in the deregulated energy markets. From this process Sempra harvested technology that is still used in their production systems to this day. They effectively transformed their organization and enabled a more agile IT organization to better serve its internal and external customers.

The BTS Group, LLC is a technology services company that assists business owners and executives use technology and business process analysis to reach their strategic objectives. We implement the appropriate combination of consulting, managed and sourced services that enable successful completion of their initiatives and the quantifiable measurement of that success. For more information on how BTS can help you get more from your technology, contact us at info@thebtsgroup.com.
