Innovation & Organizational Alignment

## ABOUT

- One of the world's largest engineering and construction companies.
- Annual revenue exceeds $1B.
- Over 5,000 employees in more than 150 offices globally.

## GOALS & OBJECTIVES

- To shift IT from a distributed to a centralized function.
- To effectively leverage IT to provide expertise for integrated client solutions and improved project support.

Case Study Summary

## SOLUTION

- Eliminate cross-function and cross-location silos.
- Improve awareness and utilization of expertise.
- Identify key connectors and brokers in each location and leverage their relationships to accelerate the organizational change in a positive way.
- Integrate newcomers rapidly.

## RESULTS

- Reduced cost of IT from 5.2% to 3.6% of gross revenue.
- Increased customer satisfaction from 93% to 99%.
- Raised awareness of IT expertise by 55%.
- Heavy reliance on IT to deliver client projects and provide the best solution.

# Transforming Information Technology Into a Global Strength

## Executive Summary

*The CEO of one of the world's largest engineering and construction companies determined it was necessary to centralize its Information Technology function. The shift, if properly done, would allow the company to streamline IT processes and take advantage of collective expertise to better serve customers and lower costs of operation.*

*Moving from a multi-national, distributed function to a single one with global responsibilities is difficult. The company CIO, responsible for this restructuring, relied heavily on an annual Organizational Network Analysis (ONA) over five years to make this transformation a success.*

## Challenge

The company had grown through many mergers, resulting in fragmented and widely varied IT-related processes, ranging from infrastructure support, to CAD technology and even IT strategy. Multiple e-mail, ERP and financial systems led to multiple problems. Each group reported to different leaders, with different goals. Best practices were not systematically adopted.

The main drivers for consolidation were to establish a set of processes so that internal and external customers received a consistently higher level of service, and to provide leading technologies and practices for the best solution. Streamlining processes were expected to bring IT costs down and improve the ability to be creative and solve problems.

## Solution

Once the new IT function was formed, the CIO initiated a network analysis to examine the levels of collaboration across roles and regions to determine how people were integrating into the new organization. The ONA was conducted annually for five years, with a focus on three key dimensions – silos across functions and locations, awareness of expertise, and people most and least connected – which were measured to track progress toward goals.

The first ONA was eye-opening.

The first dimension that was evaluated was cross-function and cross-location silos. Some fragmentation was expected, but not to the degree revealed by the ONA. It turned out that people continued to work with their previous, pre-reorganization colleagues instead of reaching out to others across the organization. To shift this pattern, cross-organizational teams were formed, bringing together well-connected employees from different silos to work together on critical projects or issues. Training and off-site meetings were provided to the teams to build relationships with people they did not know but were likely to be valuable colleagues.

The second dimension evaluated in the initial ONA was the level of awareness of IT expertise. The ONA revealed that people with similar expertise were not well connected, and in some cases, only one or two people held key knowledge. Targeted team-building meetings among expert groups were held with the goals of building trust, improving team dynamics and communications, and strengthening the relationship of the leader with their team. Exchange programs were also established to build relationships across locations.

Lastly, the ONA highlighted people who were highly overloaded and those who were on the periphery of the network.

Management was concerned that highly connected people were overloaded, resulting in organizational bottlenecks. To address this, overloaded employees were helped to shift portions of their role to other talented employees. Management also worked to ensure that newcomers were integrated more quickly and to re-engage peripheral high performers so others could benefit from their skills.

An additional problem revealed by the ONA was the fact that, while senior leaders were collaborating well, managers lower in the hierarchy had few relationships. The organization showed a high turnover rate within this population, which stifled best practice transfer and innovation. To overcome this, first- and second-level managers were trained on how to build relationships with virtual team members, how to communicate a vision and identity to unify the team, and how to effectively use tools to work virtually.

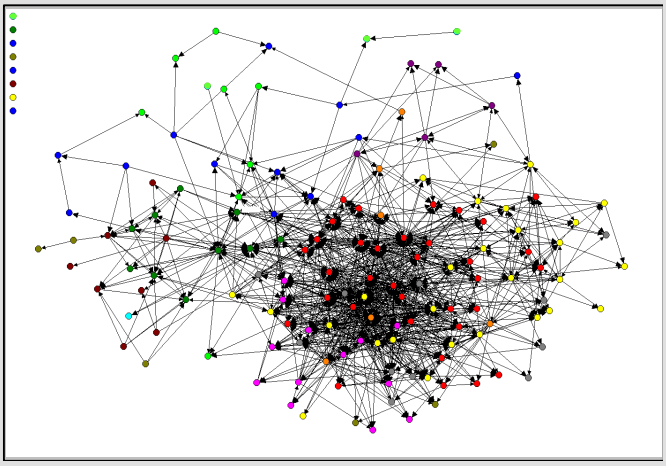
In addition to the group-level insights, individuals were given personal reports to improve their own connectivity based on their unique position in the network.

Given the rich findings, the ONA was repeated every year to assess the current state and to plan and set goals for following years.

ORGANIZATION NETWORK ANALYSIS:

## Initial Energy Network

** Node colors represent different locations globally*



### Themes

- The network was sparse and fragmented. Since expertise groups were not well connected across *or* within geographies, problems were solved locally, not drawing on the expertise of the larger group.
- Information flows were rigid, especially at lower levels in the organization.
- There were bottlenecks and over-reliance on some key people, while other experts went untapped.
- Connectivity was based on locality and not planned in ways to improve performance.

## Results

Each year, the IT function became more and more integrated, resulting in lower costs as well as the ability to respond to customer needs more quickly and with better solutions.

Improvements in information-sharing networks showed notable improvements in just two years. Similar dramatic improvement was seen in the energy network as well [see network map below].

After five years, IT costs were reduced from 5.2 percent to 3.6 percent of gross revenue. The company had continued to grow during this time, but the IT staff actually declined 16 percent.

Also during this time, customer satisfaction scores rose from 93 percent to 99 percent.

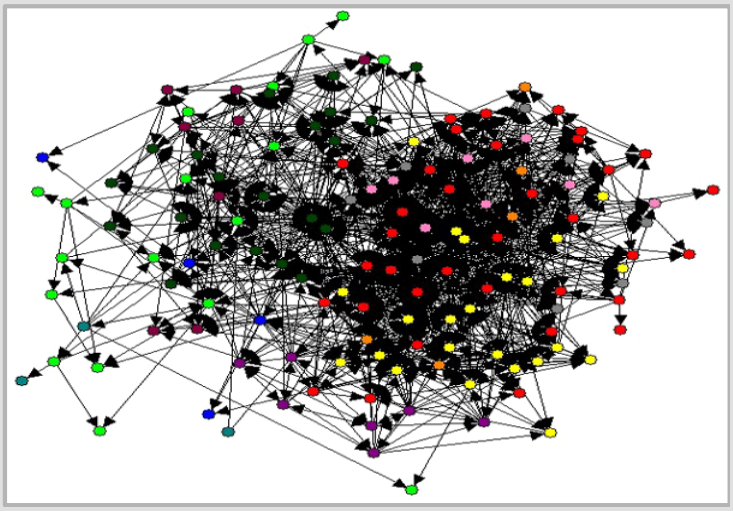
The effort to raise awareness of IT expertise and bring in people on the periphery was also effective. The gap between the number of relationships for the high performers compared to all others decreased from more than 32 percent to just seven percent. Awareness of expertise jumped, along with a rise in effective information usage, from 29 percent to 45 percent.

In addition to providing targeted insights for cost reduction and internal integration, the ONA also enabled the IT function to develop more effective collaborations with key business partners. Internal customers, who previously outsourced important and complex projects, learned to depend on the new organization.

ORGANIZATION NETWORK ANALYSIS:

## A Much Denser Energy Network Only Two Years Later

** Node colors represent different locations globally*



## Themes

- The number of relationships within expertise groups and hierarchies rose 44%, simultaneously increasing the awareness levels of who knew what, enabling better problem solving and raising the level of customer satisfaction.
- Silos within each region disappeared as more connections were established cross-geography, allowing for a more seamless flow of information.
- The flow of positive energy became apparent among all peer groups. More impressively, the lower level staff receive great energy from those in higher level positions. This indicates that communication and visibility is becoming more transparent.

## About the Author

**Deb Zehner** is a consultant focused on organizational network analysis (ONA). Over the last ten years, she has led ONA projects for Fortune 1000 companies to improve leadership effectiveness, analyze collaboration patterns and accelerate innovation. Deb's work often involves training clients on the use of network software and how to analyze and interpret the findings. Many of Deb's projects have been converted into case studies to showcase the diversity of applications for this methodology and highlight the findings. Prior to this, Deb was the Manager of Strategic Analysis at CSC, a Senior Consultant with Gemini Consulting, a Systems Analyst for Morgan Stanley and a pilot for Continental Airlines. Deb holds an MBA from the University of Virginia's Darden School.

## About the Connected Commons

**The Connected Commons** is a community of people who believe that in an interdependent world, networks are now the organizing principle of our social and organizational lives. We seek to develop network ideas that advance the performance and well-being of individuals, organizations and society as a whole.