



### About

- One of the world's largest electronic manufacturers
- Multi-billion dollar company with strong growth
- More than 50,000 employees in over 1,000 locations globally

### Goals & Business Issues

The business planned to grow through technology leadership with innovative solutions targeted to industries. This required effective collaboration across functions, locations, and expertise.

### Solution

- Reduce collaborative overload on central people in network
- Integrate newcomers and high performers on periphery
- Break down divisional silos
- Leverage top talent

### Results

- Collaborations increased across the key intersections with economic benefit
- Newcomers integrated more quickly
- Innovation increased as expertise became more visible in the network

## Executive Summary

Effective coordination across functions, geography and product lines are critical for growth. Yet few organizations profess to be effective at sharing across boundaries. Organizational network analysis provides the means for executives to measure collaboration levels at intersections where connectivity is important to economic value.

This large electronic manufacturer wanted to build a strong network of collaborators and experts, so the Chief Technology Officer embarked on an organizational network analysis (ONA). They believed that the company's scale had the potential to produce a network with a wide range of expertise that could be easily tapped to solve problems, avoid re-invention, and rapidly innovate. To better support growth, the company also wanted to create an environment that retained high performers and had a succession plan for those planning to retire.

## Challenge

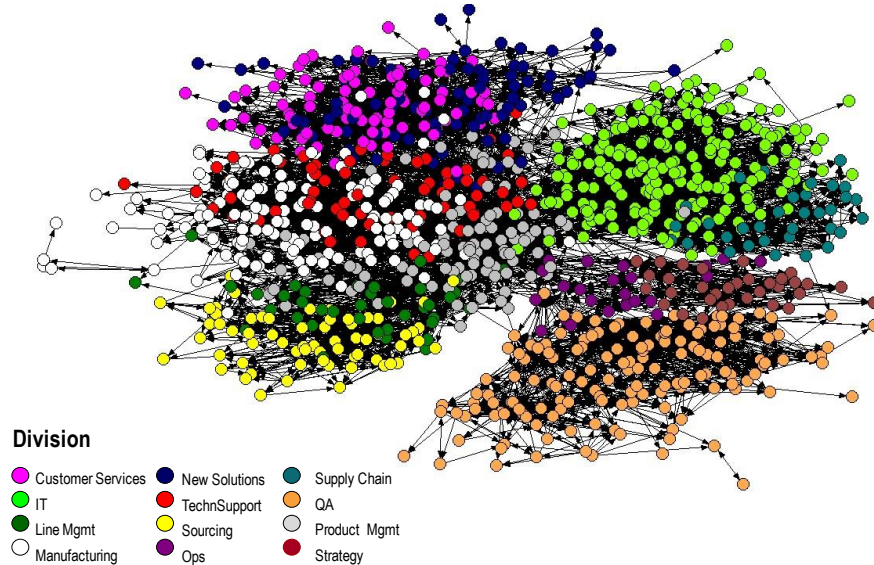
To meet growth goals, this company's network must be aligned with strategic objectives. Collaboration must occur seamlessly across units and locations. Key connectors cannot be so overloaded that they become bottlenecks to others trying to achieve business results, which means a better network balance of relationships. It also requires rapid integration of newcomers and their expertise.

The key challenges revealed by the ONA were:

- The average network size was lower than expected at an average of 9 relationships per person. However, the range of relationships varied widely, from none (those on the periphery) to 115 (those who were overloaded).
- In addition to a wide range of connectivity, new employees were having difficulty building a robust network, taking up to five years to do so. In fact, all but one of the top connectors and two of the brokers had more than 10 years of tenure. The top connectors were overwhelmingly from the same division representing a significant problem for innovation.
- Although divisions were expected to collaborate, significant silos existed with 84% of all collaborations occurring within division. A closer look at the connections which bridged divisions showed that only 5% of the people held 46% of the connections across divisions. These "brokers" were critical to the transfer and dissemination of knowledge and best practices.
- Leaders often do not recognize people who the network identifies as rising stars and team players. Conversely, there are a number of high performers who are not well connected and thereby not conveying their knowledge. Ensuring these people are recognized or leveraged is important to maximizing talent potential. In this case, 38% of people with top performance ratings were on the periphery and 49% of the strongest networkers were not considered top performers.



This network diagram shows the strong clustering by division (each node represents a person and the color represents their division).



This heat map measures the collaboration within and between divisions. The red areas indicate low (or none where a -1.0 exists) levels of collaboration. The higher the number, the more collaboration that exists. This heat map highlights the lack of collaboration between divisions.

	Cstmr Svcs	IT	Line Mgmt	Manufacturing	New Solutions	Tech Sppt	Sourcing	Ops	Supply Chain	Q.A.	Product Mgmt	Strategy
Customer Services	7.2	-1.0	-1.0	-0.4	-0.7	-0.6	-1.0	-1.0	2.4	-0.3	-1.0	-1.0
IT	-0.7	12.5	-0.9	-0.4	0.1	-0.1	-1.0	-0.6	-1.0	-0.8	-0.7	6.2
Line Management	-1.0	-0.4	3.4	-0.9	-0.5	-0.3	-1.0	-0.9	-1.0	-0.5	-1.0	-1.0
Manufacturing	0.1	-0.4	-0.9	1.3	-0.3	-0.5	-0.6	-0.6	-0.3	-0.3	-0.2	-1.0
New Solutions	-0.8	0.6	-0.7	-0.3	1.1	-0.4	-0.8	-0.7	-0.8	-0.8	-0.4	0.9
Technical Support	-0.3	0.1	-0.3	-0.2	-0.3	0.2	-0.8	-0.6	0.0	-0.5	-0.5	-1.0
Sourcing	-1.0	-1.0	-1.0	0.6	-0.7	-0.4	-1.0	-1.0	-1.0	-0.3	-1.0	-1.0
Operations	-1.0	-0.8	-1.0	-0.1	-0.6	-0.6	-1.0	-0.2	0.8	0.1	0.1	-1.0
Supply Chain	2.5	-0.7	-1.0	1.5	-0.6	-0.2	-1.0	-0.4	-1.0	0.2	-1.0	-1.0
Quality Assurance	-0.5	-0.4	-0.7	0.1	-0.6	-0.4	0.0	-0.8	-0.3	2.6	-1.0	-1.0
Product Mgmt	-1.0	-1.0	-1.0	-0.6	0.4	-0.7	-1.0	-1.0	-1.0	-1.0	4.8	5.7
Strategy	-1.0	8.2	3.0	-0.8	1.9	-0.8	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0

Note: This chart compares actual to expected values for collaboration based on the average number of relationships across the network based on completed responses, and is normalized for group size. A value > 0 indicates higher than expected levels of collaboration, 0 indicates collaboration is exactly at expected value, and a -1.0 indicates that no collaboration exists.

## Solution

This organization had been following a more traditional model, depending on very senior, tenured people within divisions. To help them move to a more global, responsive model, several recommendations were made.



- The network must be balanced so that there is sufficient access to the top connectors and they are not overloaded, while also ensuring that there is redundancy of expertise. Where core expertise is critical to success, secondary “go-to” people were identified and work shifted to them via a mixture of role definition, decision right allocation and training. Documenting work processes and FAQs in a readily accessible system also formed an element of memory that reduced the load on core experts and so the susceptibility to their departure.
- In order to engage newcomers and make their expertise transparent, the on-boarding process needed to include introductions to key connectors who might utilize their skills early on, a “smart mentoring” program, initial staffing on the right projects with short rotations, and a good expertise locator system. The smart mentoring would also benefit the longer tenured people, by giving them a clear channel to engage with new employees. Strong on-boarding practices were particularly important to the integration and retention of experienced hires, to help them build out their network systematically.
- To improve collaboration across divisions, specific points in the information network were identified where greater collaboration could yield benefit through best practice transfer and better leverage of expertise. Sharing a network map of these divisions and sub-groups made the fragmentation visible and actionable. Conducting select interviews at these fragmentation points helped identify local causes of collaboration breakdowns (e.g., process flow, incentives, awareness of expertise, political dynamics, etc.). To help overcome these, the organization focused on redefining staffing methods, ensuring incentives were aligned, creating liaison roles to share best practices, and other uses of technology. Brokers are effective ambassadors and tend to have the best perspective of what will work, so including them in this process will improve its success.

## Results

As leadership shared the ONA results and began systematically bridging gaps by creating new connections at critical junctures, cross-division sharing began to bring a more holistic perspective to problem solving and solution development. Brokers and second-level connectors were brought together to speed up this process. (The most connected people didn’t need any additional relationships or responsibilities, so the CTO targeted the next layer down.)

Smart mentoring of new hires and peripheral high performers was implemented using brokers, as well as on-boarding which included short meetings with 10 people they would likely work with. These measures quickly made a difference as reported by their levels of job satisfaction.

The human resources team revised their performance rating system to include a consideration of network role and position.

A short follow-up survey was conducted one year later that revealed a more balanced distribution of collaboration. Collaborations rose by 23% across divisions, and resulted in a higher number of solutions in the pipeline. The average number of relationships per person rose by 26% as the newer and lower tenured people became more integrated. However, work was offloaded from the key connectors, improving access and allowing employees to get the information they needed in a timely manner.