



ORGANIZATIONAL NETWORK MAPPING

CASE STUDY: SOLUTION DESIGN

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INTRODUCTION

Research indicates that high performing organizations across all sectors demonstrate the ability to continuously improve and innovate. To develop a culture that supports this level of performance requires a focus on both the people and processes that generate significant progress. Change should begin with a thorough understanding of how well or poorly individuals work together, and then move on to process improvement. In this paradigm, it is people first, process second. Leaders now have access to the best science has to offer to view how individuals work together and how work really gets done in organizations. It's called Organizational Network Mapping.

Organizational Network Mapping allows you to see the people side of this equation as an entire system, versus the more common focus on individual performers. This new optic makes visible the intricate details of the true structure of your organization, how it currently operates and functions, and how well or poorly teams are connected, communicate and collaborate to get work done. With this added insight of your social and cultural system we then co-create ways to build upon what works, fix what's broken, and improve the way people work together. This systems perspective provides the foundation for successfully improving the processes that guide work and overall organizational performance.

This case study highlights our work with an organization troubled by a long history of underperformance, employee disengagement, leadership turnover, and a general lack of communication and trust. Over the course of two years, our work with this organization produced the following outcomes:

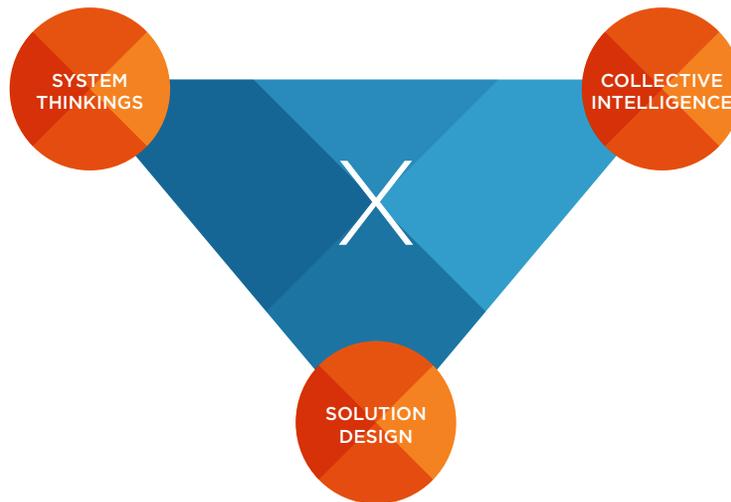
1. Increased connectedness between and among leadership.
2. Increased perception of culture, job satisfaction, and engagement across the leadership team.
3. Reduction in leader attrition and turn over.
4. Development of a leadership pipeline based on skill and connectivity.
5. Increase in the perception of trust for staff and leaders.

OUR APPROACH

Our methodology reveals the interdependent interactions between individuals that drive how well work gets done well beyond formal structures and codified work flows.

We highlight three foundations in our approach to organizational improvement: **Systems Thinking; Collective Intelligence; and Solution Design**

HOW WORK REALLY GETS DONE



In our work we:

- **Leverage Systems Thinking** that takes into account the broader system by analyzing the graphic depictions of interactions that allows you to actually see the patterns and trends that contribute to a deeper understanding of how the system is operating.
- **Focus on Collective Intelligence** to emphasize that the interdependence of social relations ultimately moderates, influences, and even determines the direction, speed, and depth of performance improvement and broad change.
- **Facilitate Solution Design** sessions to produce greater action and accountability, as the team who designs and implements the solution experiences a greater sense of ownership and responsibility for its success.

BACKGROUND

This case study highlights our work with a school district where almost 90% of the budget is dedicated to human resources or “social networks.” Exploring the “social network” in this environment allows us to put our work to the test, as performance in school districts is heavily reliant on interactions between and among individuals.

After suffering long-term underperformance and deteriorating workplace culture, a new district leader was hired to improve the performance of

the organization, which employs close to 2,000 individuals spread across 29 locations. Prior to this change in leadership, the organization had a long history of employee disengagement, leadership turnover, and a general lack of communication and trust. Moreover, the internal culture left its staff disaffected and disengaged, while making a coherent and cohesive approach to improvement nearly impossible.

Without immediate and focused action to address concerns, the

district faced sanctions by the state/federal government, risking the loss of funding, positions, resources and public support. It is in this perfect storm of issues and opportunity we began our work.

To ensure this transition had a firm foundation and high chance of success, we designed a plan to develop leaders and build networks of communication and collaboration that included the following key performance indicators:

1

Build a collaborative culture in a form of webs of social networks based on respect, trust, and collaboration.

2

Reduce the amount of leadership churn.

3

Develop an internal leadership pipeline.

PROCESS AND SOLUTION DESIGN

We implemented an evidence-based process to collect and use data to drive improvement. This robust data set included:

- Longitudinal climate and culture surveys
- Social network data
- Measures of efficacy, impact, and resources

The data collection process included an organizational leadership network assessment taken by all district administrators and site principals over a two-year period at three time points (T1, T2, T3).

The data were organized, interpreted and fed back into the organization through a series of seminars co-facilitated by our team in active partnership with district leaders.

Our team engaged in quarterly solution design sessions, as well as periodic culture and leadership development sessions to support the district operationalize and behave into their newly developed core values, cultural norms and expectations they deemed critical to success.

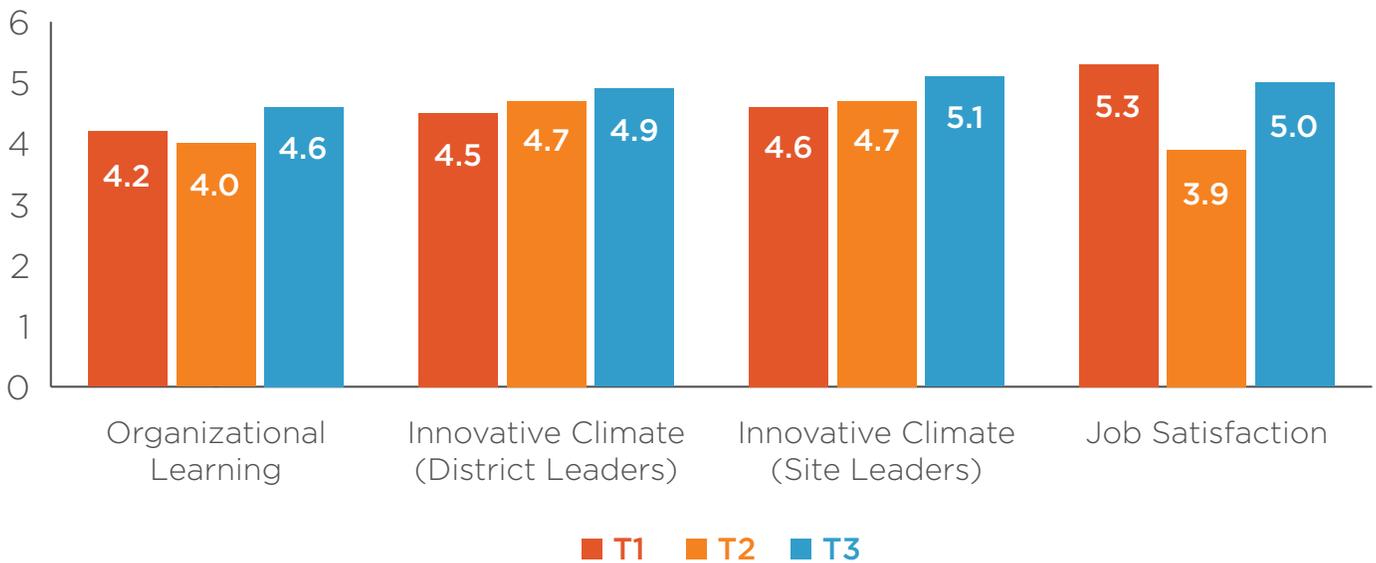
During these high-engagement collaborative sessions, leaders worked on sense-making and co-constructed action plans intended to create more effective patterns of collaboration based on social capital and social network principles. This culture-based, systems-level approach to the work has been very successful in improving outcomes across the district, serving as a best-in-class example that has since been emulated by other districts.

RESULTS

Organizational Climate

Figure 1 presents a subset of the data showing consistent and significant increases in the leaders' perceptions of the organizational climate characteristics. Questions were asked using a 6-point scale and the data cover three time measurements (T1, T2, T3).

FIGURE 1: ORGANIZATIONAL CLIMATE CHARACTERISTICS



Organizational (Social) Network Mapping

Organizational Network Mapping allows us to make visible the complex structure of relationships and how they operate and function. The definitions of the following terms will assist with interpreting the network maps and data in Tables 1 and 2:

- **Node:** The colored circles in these network maps are individual leaders, often referred to as "actors." The larger the node, the more that individual leader is sought by others for a corresponding relationship. Nodes on the far left that have

no ties represent isolated and disconnected individuals that are not providing value into the organization.

- **Tie:** The line between nodes that represents a relationship between "actors." The direction of the arrows on the lines represent the following type of relationship (from the red node perspective):

Sending (out): 
Receiving (in): 
Reciprocal (mutual): 

- **Density:** The proportion (percentage) of existing ties in the network divided by the possible ties in the network. A higher percentage indicates a greater number of ties within the network.

- **Reciprocity:** The proportion (percentage) of existing mutual ties in the network divided by the possible mutual ties in the network. A higher percentage indicates a greater number of mutual ties within the network.

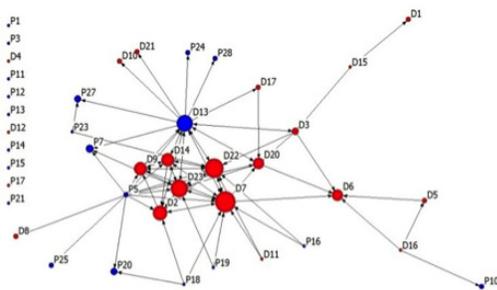
The following network maps in Table 1 and data in Table 2 represent a subset of the data from the “organizational leadership network assessment.” Several major findings have been extracted from these network patterns over time that are worth noting:

- An increase in the number of relationships (network density) and number of mutual relationships (reciprocity) from T1 to T3.
- These increases suggest a more cohesive and interconnected pattern of collaboration between and among leaders across the district. Not only did individual leaders send more ties to other colleagues, the probability of those ties being sent back to that individual increased over time.
- This implies that the leaders have continuously engaged in a variety of collaborative relationships with others and an increased amount of these relationships have become mutual or reciprocal.

TABLE 1: COMPARISON OF ORGANIZATIONAL NETWORK MAPS FROM T1 TO T3

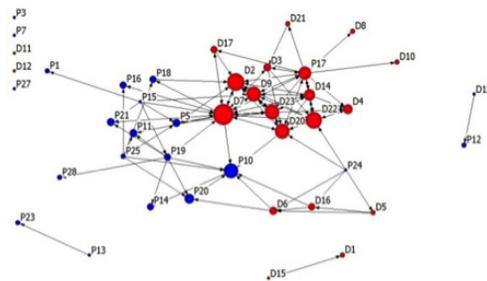
ADVICE SEEKING

Time 1 (T1)



Density = .05 Reciprocity = .28

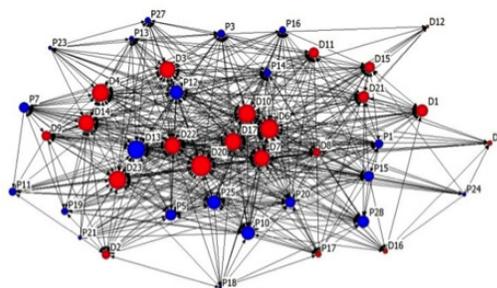
Time 3 (T3)



Density = .07 Reciprocity = .30

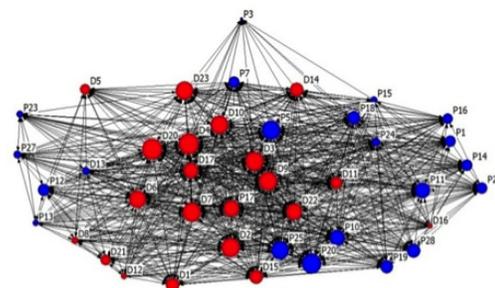
INNOVATION (ALL)

Time 1 (T1)



Density = .44 Reciprocity = .50

Time 3 (T3)

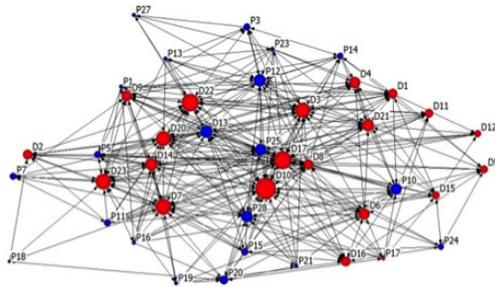


Density = .65 Reciprocity = .61

TABLE 1: COMPARISON OF ORGANIZATIONAL NETWORK MAPS FROM T1 TO T3

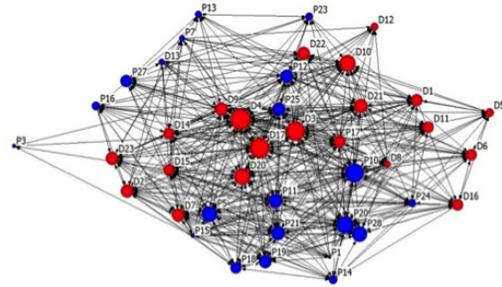
“GO-TO” PERSON

Time 1 (T1)



Density = .25 Reciprocity = .35

Time 3 (T3)



Density = .38 Reciprocity = .41

TABLE 2: COMPARISON OF DENSITY AND RECIPROCITY DATA OF NETWORK ATTRIBUTES FROM T1 TO T3

Network Attributes	Density			Reciprocity		
	Time 1	Time 3	Change*	Time 1	Time 3	Change**
Advice Seeking	0.05	0.07	40%	0.28	0.30	7%
Innovation (All)	0.44	0.65	48%	0.50	0.61	22%
“Go-To” Person	0.25	0.38	52%	0.35	0.41	17%

* Change (+/-) in the overall number of relationships from time point 1 to 3

** Change (+/-) in the overall number of mutual relationships from time 1 to 3

Over the course of two years, our evidence-driven approach to tracking and developing the district’s social network attributes and the organizational climate characteristics has produced the following outcomes:

1. Increased connectedness between and among leadership
2. Increased perception of culture, job satisfaction, and engagement across the leadership team.
3. Reduction in leader attrition and turn over.
4. Development of a leadership pipeline based on skill and connectivity.
5. Increase in the perception of trust for staff and leaders in the district.

SUMMARY

We believe that it is the interdependence of relations that ultimately moderates, influences, and even determines the direction, speed, and depth of this change. This case study demonstrates a measurable improvement over a two year period based on the collected data and a series of facilitated discovery and solution design sessions with the leadership team. We drew on our core design principles and approaches to bring this work to life. This approach to addressing critical issues and organizational improvement has benefited the organization by:

- Providing relevant and critical evidence as an initial step to identify and specify problems.
- Designing effective instruments to gather and provide useful data and information.
- Sharing and presenting preliminary findings at the initial stage to guide direction of improvement/development.
- Increasing engagement in mutual discussions to identify potential issues and the use of data to shape solution design.
- Enhancing the organization's capacity for learning and sense-making, which helps sustain its ongoing development.
- Tracking the trajectory of network development by collecting data for consecutive years.

The organization steadily continues to improve performance due in large part to its commitment to leadership, culture, and building strong networks of support, all driven by data that is fed back into the system to guide decision making at multiple levels.

RESOURCES:

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4. Daly, A.J (2010), *Social Network Theory and Educational Change*. Cambridge, MA: Harvard Educational Press.