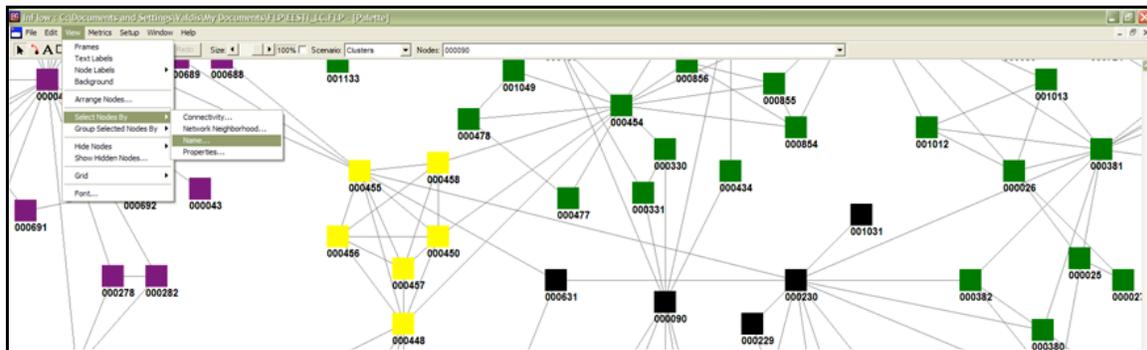


Organizational Adaptability Quotient



Background

The 21st century economy moves faster and demands quicker learning. With massive connectivity, within and between organizations, change is rapid and unrelenting. Organizations that can learn and adapt faster than their competition have an advantage.

Over the past several years, our research in Organizational Network Analysis [ONA] -- an extension of Social Network Analysis [SNA] -- have led us to develop a predictor of business transformation success, which we call an *organizational adaptability quotient - AQ*. This statistically significant predictor of organizational success was derived from a study of 15 global corporations undergoing major strategic change in the context of business transformation. Business transformation is defined as "a significant change in business direction or performance achieved through changes in organizational process and human behavior."¹

The 15 global companies represented a broad range of industries including: Telecommunications, Finance, Manufacturing, Health, Insurance, Transportation, Retail, and Utilities. The companies are located in the United States, Canada, Sweden, Germany, Spain, Japan, Korea, and Australia. All fifteen organizations have significant business transformation experience.

¹ IBM Global Services

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ONA Data Collection and Analysis

Organizational network and other data were collected from the 15 global companies. The project involved included a total of 959 people from all 15 companies, an average of 64 people per organization. The table below provides details of the group size for each company studied.

Org	Size	Location	Industry
41	56	USA	Utilities
51	98	USA	Telecommunications
52	66	USA	Telecommunications
53	52	USA	Insurance
54	45	Korea	Manufacturing
56	76	USA	Finance
55	54	USA	Finance
62	73	Sweden	Transportation
71	62	Australia	Finance
73	87	USA	Retail
75	85	Canada	Transportation
76	81	Spain	Utilities
77	56	Spain	Insurance
78	35	USA	Health
79	33	USA	Telecommunications

Table 1 - Profile of 15 Organizations Studied

Social network questions were part of the ONA data collection process. These questions covered both process and practice around business transformation. With the results we were able to map each organization's connections around

- Strategy
- Work Flow
- Innovation
- Decision-Making
- Customers

Each set of connections form a “network” that allows us to view an organization the same way a doctor uses an x-ray or CAT-SCAN to look inside the human body.

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Study Parameters

In an effort to identify the major factors that facilitated rapid and successful change, we measured the business transformation process in each organization with a “Master of Change” Index². The Master of Change Index, as seen in Figure 1 below, is a composite of three components:

- 1) degree of difficulty
- 2) achievement of objectives
- 3) speed of transformation

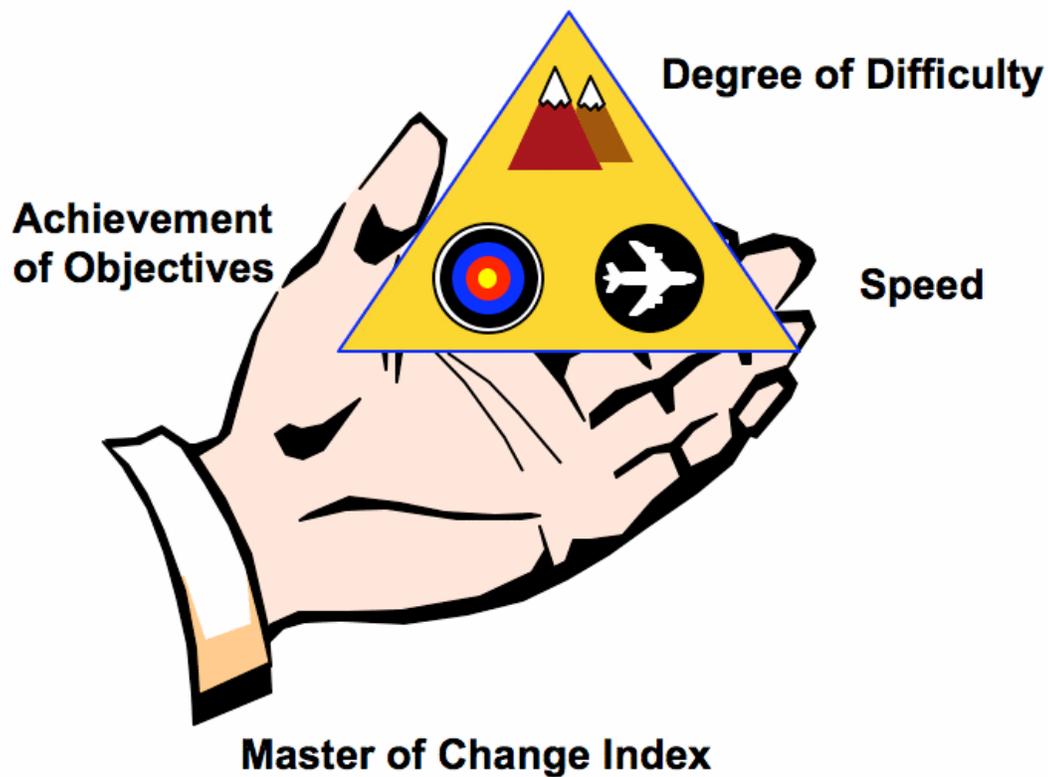


Figure 1 - Master of Change Components.

² IBM Global Services

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A variety of human network variables were then studied in terms of their correlation to the business transformation process. These variables included such social network metrics as such centrality, clustering, reach, structural equivalence and influence.

These measures, found in InFlow³ software, provide metrics of the networks found in each organization. These dimensions are used to profile the characteristics of emergent information flow and knowledge exchange networks.

Predictor of Business Transformation Success

When we performed a statistical analysis of the ONA data, one network metric emerged as a statistically significant predictor of business transformation success. This metric measures the diffusion of information and knowledge throughout the organization via human networks.

We found a very strong statistical correlation between this metric and the Master of Change Index. In other words, *organizations that were good at change had a different human network structure than those who were poor at change and not adaptive*. Just like in the human brain -- connections matter. But it is **not** a simple finding that more connections are better. The key to an efficient and effective network is the pattern of direct and indirect links.

³ **InFlow**, developed by Valdis Krebs is a powerful easy-to-use tool for diagnosing and optimizing information flow and knowledge sharing within a company. Organizational change agents and consulting firms use *InFlow* for its ease-of-use, what-if capabilities, and rapid speed of turning raw data into client action plans to improve the effectiveness of internal and external communications.

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The metric ranges from zero to one -- a lower score indicating a less effective network. Given its high correlation to mastering change, we call this metric an organization's Adaptability Quotient [AQ].

Org	AQ
79	0.90471
55	0.80000
54	0.55340
78	0.53483
53	0.48803
51	0.47612
77	0.47597
75	0.45330
73	0.44188
41	0.41313
52	0.37873
62	0.36158
71	0.32666
56	0.26038
76	0.21341

Table 2 - AQ Scores

Figure 2 is a network map of a company with a high AQ score. Notice the many redundant paths between the employees. Adaptive and resilient networks have many short routes between any two individuals or nodes. When one path becomes unavailable, other paths can carry the information. The map also includes external sources of information and knowledge — necessary to keep abreast of best practices and industry trends.

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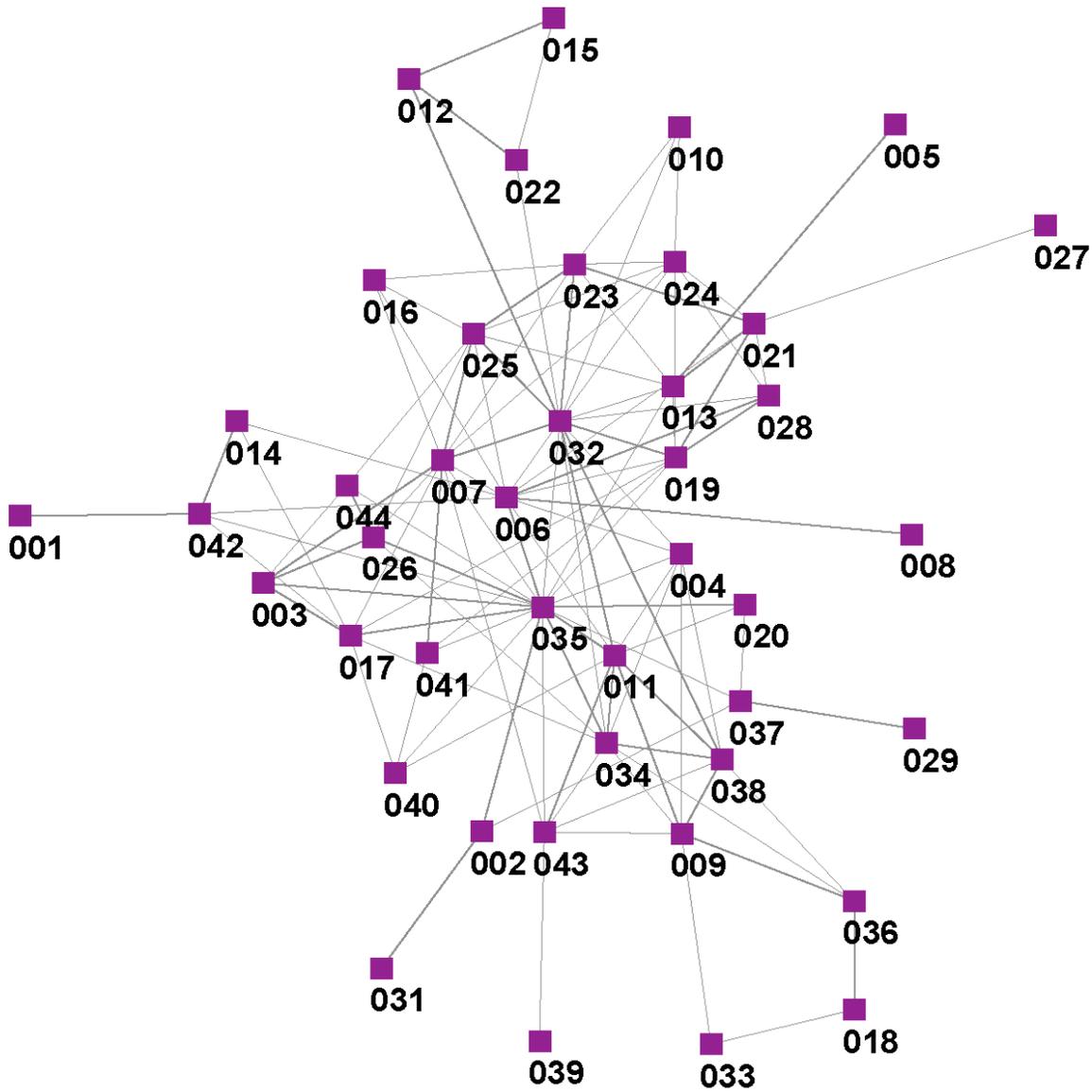


Figure 2 - Company with High AQ Score

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Putting AQ to Work

The following example illustrates how we applied the AQ score for a global company headquartered in the United Kingdom that had embarked in developing a new worldwide procurement process enabled by SAP technology.

Using the AQ score, we were able to prescribe the improvements required during the early phase of a company's business transformation program. Our strategy was to analyze, make improvements and then re-analyze to gauge the progress of the organization's transformation program. We compared 'before and after' results to the data from the original 15 companies in our study. Our client company was in the bottom 1/3 when compared to the 15 companies at the start.

The AQ is an indicator -- an alert. It does not specify what is wrong. After finding a low AQ score, consultants use the InFlow software to explore the connections present, and not present, in the organization. This investigation reveals *why* the score was low. The low score in our client company was attributed primarily to ineffective decision making among the leadership team, weak teaming across formal departments [i.e. silos], and limited external communications.

Working with the leadership team, we developed a set of targeted actions to address the issues found. These actions are typical of what a strategic Human Resources [HR], or Organizational Development [OD] function normally deals with. The ONA provides an alert, and a methodology to dig deeper into the organizational dynamics.

Our network analysis revealed the "as-is" pictures of information flow and knowledge exchange in the organization. These network maps showed that the deployment team was not working together as a cohesive group. To address ineffective decision-making, we worked with the Project Office director and his team to develop a communication process that would leverage key knowledge sources.

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Upon further investigation, we discovered that the deployment team was not legitimized in the organization because roles and responsibilities had not been clearly defined nor communicated across the project. We facilitated several sessions with the manager and team to clarify roles and responsibilities. We documented each person's responsibilities and communicated this information to the others in the project.

Using the 'what if' capabilities of our InFlow software, we developed individual "to-be" communications maps to improve internal and external communications.

Digging deeper we heard feedback about her abrasive style of communications and leadership. We conducted a series of individual coaching session focused on improving her interpersonal communication skills. After three months, when we did not see sustained improvement in her communications style, we recommended that she be removed as team lead. Our recommendation was adopted.

Another obvious problem the network maps revealed was a large disconnect between external consultants on the project and the company's own employees. The SAP software consultants were not transferring skills to the permanent employees in the organization. If they would leave, project knowledge would go with them, leaving the company at risk. We recommended that the I/T director mandate that one day a week be set aside for skill/knowledge transfer between the external consultants and the company's internal experts. This was overlooked until we *x-rayed* the organization with network mapping technology.

AQ Results

Eight months later, we conducted the second ONA to gauge the project team's progress. When compared to our Organization's Adaptability Quotient AQ score of 15 global companies, we saw a significant improvement in the companies AQ score – the client organization now ranked in the top 1/3 of AQ scores. Even though the overall score had improved, the new network maps revealed some areas for further improvement such as

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the need for a formal “lessons learned” network for feeding client feedback to the development team and the need for a leadership feedback network to provide timely implementation progress to all stakeholders of the project.

Again the ONA consultants used the network analysis information to dig deeper and uncover the underlying dynamics. This iterative process of network mapping & measuring along with follow-up actions kept the project on track and towards a successful conclusion.

Conclusion

Doctors use x-rays and CAT scans to diagnose the human body because they are quick, non-invasive procedures that provide good information for diagnosis. HR and OD professionals can now *x-ray their organizations*, using ONA, to discover what is really happening inside their complex organizations. With tools like the InFlow software, HR and OD can perform the role of internal strategic consultants and partners with management. The network maps reveal how and where the human capital in the organization is, and is not, being effectively utilized. We can now see how human capital *and* social capital work together to improve the effectiveness and adaptability of our modern organizations.

This white paper is an update from the following article:

Falkowski G, Krebs V, “Predictive Model of Business Transformation: Organization’s Adaptability Quotient”, *IHRIM Journal*, Volume VIII, Number 3, May/June 2004.