CHAPTER 9

Social Networks and the Liability of Newness for Managers

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INTRODUCTION

In his classic piece on organization theory, Stinchcombe (1965) suggested that organizations could be better understood by taking into account the "social structure" in which they find themselves. By "social structure" he meant the broad set of societal variables that remained fairly stable over time and which had a bearing on the life of the organization. In the course of reviewing this broad set of environmental conditions, he noted that young organizations tended to suffer a premature demise (relative to seasoned organizations). This was especially true for organizations that required a new "form", a new way of organizing. He cited four reasons (Stinchcombe, 1965, pp. 148–149) for this "liability of newness":

(1) "New organizations . . . involve new roles, which have to be learned". Old organizations can draw on the experience of their members to deal with the varieties of specific problems, exceptions, and disruptions to routines. New organizations must rely on the generalized experiences of their numbers, experiences that may not be as relevant to the current organization's problems. Thus, there is a *learning curve disadvantage* suffered by new organizations.
(2) The process of inventing and developing new roles has "high costs in time, worry, conflict and temporary inefficiency". That is, the organizational learning creates its own side effects that themselves are

costly for the new organization. These side effects may be thought of as *process disadvantages.*

(3) "New organizations must rely heavily on social relations among *strangers*" [emphasis mine]. In particular, Stinchcombe notes, the critical relationship of "trust" is more difficult to obtain when people do not have the history together to be able to predict what colleagues will do in response to any given situation or information (Karckhardt, 1994). Thus, new organizations suffer from a *trust disadvantage* relative to established firms.

(4) Much of the work of an organization, in terms of its inputs from suppliers and outputs to customers, transpires through well-established relationships among those sets of organizations. Customers provide repeat business in part because they are familiar with how the focal organization works, how it handles different orders, and consequently how to get exactly what they need. Familiarity with how the organization fits into the larger system of organizational transactions is a distinct advantage for the older, experienced organization. A new organization, then, suffers from a *systems knowledge disadvantage*, knowledge of how the system of exchanges works around them and how it fits comfortably and profitably into this system.

While Stinchcombe eloquently argued for this phenomenon at the organizational level, it is apparent that the same rationale can be applied to managers who emerge in a new organizational environment, either through hiring or through transfer. In today's world, the rapidly changing technology, the restructuring and downsizing of organizations, and the general mobility of the population make this problem even more salient. Managers frequently find themselves in the unfamiliar territory of new organizations or new organizational subunits. Such managers carry with them role expectations from their prior positions, roles that may not be compatible with the expectations of colleagues within the new organizational unit. It takes time to learn these expectations; thus, managers new to the specific organization experience their own kind of learning curve disadvantage. Collaterally, in the process of learning, changing and experimenting, they are likely to create anxiety and conflict among others in the organization. Moreover, since trust inherently takes time to build (Krackhardt, 1994; Mayer, Davis & Schoorman, 1995), the new manager will often wait before introducing substantial changes that require sincere trust among herself and her new peers, subordinates and superordinates (Gabarro, 1987).

But perhaps the most critical liability to the new manager is the lack of a clear understanding of how the current system of exchanges and relationships works in the organizational unit. Just as within the macro

system of organizations, these relationships are often subtle, not explicit, not formally declared or even admitted to by the participants. That makes them difficult for the newcomer to observe. An established hand, who perhaps rose up through the internal ranks of the organizational unit, has learned this web of ropes through years of experience. The newcomer must try to sail in these unchartered waters without so much as the occasional blink of a dim lighthouse to guide him.

Thus, managers new to an organizational unit suffer from many of the same disadvantages attributed to new organizations. Before they can operate effectively in this new environment, they must get a good handle on how things are accomplished (Krackhardt, 1990). Before they can change the organization, they must know who is likely to benefit, who is likely to resist, and who is likely to support either the beneficiaries or the resisters (Krackhardt, 1992).

These limitations are given. They are the common experience of all managers who have not come through direct promotions from below (Gabarro, 1987). The question I intend to address in this paper is how the new manager can survive this inherent liability of newness. In particular, I would like to show how the new manager can use social network analysis to overcome this liability.

SOCIAL NETWORK ANALYSIS AS A DIAGNOSTIC TOOL

New managers, whether they are transferred or hired from the outside, often are selected because they had success in dealing with similar managerial problems in other contexts. But, their success often involved understanding how their context actually worked. They knew whom they could count on, who the coalitions were, what positions they would likely take, and which battles they could win and which ones were better left unfought. If they introduced change, they would likely know who would accept it, who would fight it, and how to manage that resistance.

While such are keys to successful change management, this knowledge is specific to the context in which the manager is operating. It takes time to find out who the key actors are and what positions and actions they are likely to take. Such political knowledge, however, is essential if the manager is to accomplish anything more than maintain the status quo.

Social network analysis has been used primarily as an analytic technique for academic organizational researchers (Wasserman & Galaskiewicz, 1994; Krackhardt & Brass, 1994; Mizruchi & Galaskiewicz, 1994). While some attention has been paid to how managing extant networks can be profitable for the manager (Baker, 1994), very little has been written on how these powerful techniques can be used to diagnose organizational problems.

To this end, I will present two cases wherein a new manager, faced with "liability of newness" problems, was enabled with network analysis to diagnose and successfully introduce organizational changes. The first case illustrates how simply knowing the social network can help the manager identify who the important political players are. The second case illustrates how network analysis can identify the problem itself as well as who must be involved in the solution.

THE CASE OF THE TRANSFERRED AUDIT MANAGER

The firm, Halifax,[1] was a large defense contractor on the west coast. One division of Halifax, the aircraft engine manufacturing division, had several plants that were subject to an extensive auditing routine to comply with federal mandates. The group of interest here is the internal auditing staff of this division, composed of 14 employees. They had fallen behind in their auditing schedules, and top management expressed some concern that this could jeopardize Halifax's relationship with the Department of Defense, upon whom Halifax depended for more than half its business.

Normally, management vacancies in Halifax were filled, to the extent possible, by promoting from within the units. This policy kept morale high and drew on the knowledge and experience of those within those units. But, when Bob Kramer, the manager of this auditing unit, chose to move on, Sheila Jackson, the Comptroller of Halifax, decided that his successor should not come from within the local unit because she was afraid that this would perpetuate the problems that this unit was experiencing. Instead, she selected a successful auditing manager, Manuel, from another manufacturing division. Manuel had been instrumental in reorganizing the auditing group where he currently worked, the results of which had decreased turnover and increased auditing output without adding to the staff.

Manuel assumed his new assignment with considerable confidence. As he saw it, the problems the aircraft auditing group faced were similar to those in his prior auditing group, and most of these problems stemmed from a lack of coordination between the auditors and the secretarial staff.

The work of this auditing group was fairly routine. Audit teams of one to three auditors would visit a manufacturing plant, often spending up to a weak at the site collecting and cross-checking the financial records.

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[1] All names and other specific identifying remarks in this paper are disguised to protect the anonymity of the site.

The auditors would return home with a satchel full of forms and supporting working papers. These papers were then given to the supervisor of the wordprocessing center (Donna), who in turn assigned the task of processing the forms to one of the four members of the secretarial pool. After the forms were processed, the finished product was returned to the auditor.

The formal organizational chart for this group is provided in Figure 9.1. The four managers are represented by ellipses; the staff auditors are represented by diamonds; and the secretaries are in boxes. Stuart and Charles, the two audit supervisors, often accompanied the auditing groups to the sites. Each audit team (teams were recomposed for each audit) had a leader who was responsible for getting the forms to Donna in a timely manner. Once the audit forms were in Donna's hands, the turnaround time was under the control of the secretarial pool.

Manuel's first task was to find out why the audits were taking an inordinate amount of time (the average audit was taking 28% longer than comparable audits in other parts of Halifax). He interviewed each supervisor and each auditor individually and the secretaries as a group. From these interviews and from audit records on file, he determined several things. First, morale among the staff was not a particular problem. Kramer had been a low-key manager, protecting his group from the eventual criticisms that would emerge from higher in the organization. For the most part, everyone was doing their part with diligence, if not efficiency.

Second, he determined that while most auditors were completing their visits to sites in a timely manner, certain exceptions could be explained by particularly difficult circumstances at the site. Where audits seemed to take somewhat longer for no apparent reason, he found that the
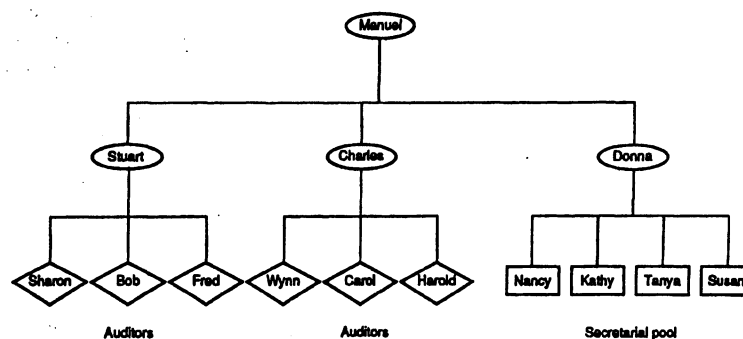

Figure 9.1   Formal organizational chart for auditing group

auditors had had little idea that their performance had been lacking. From their perspective, the audits were completed on schedule.

In reality, the majority of the delays came from a lack of coordination with the secretarial pool. Audits papers that should only take an afternoon to be processed would occasionally take several days. Several audits would come in at once, stretching the resources of the pool. Some of the secretaries were more efficient than others, and the slower ones would occasionally require the help of the more experienced ones, when they had time. Donna managed this process as best she could, but much of the coordination was managed informally by the secretaries themselves.

Manuel decided to put into effect some organizational changes that he had used when he was promoted in his prior assignment, changes that had been quite successful. First, he instituted an immediate feedback system, so that the auditors knew how much time the audit actually took relative to how long it was projected to take. Second, he reorganized how the auditors and secretaries worked together. The most visible change he made was that he reassigned the secretaries to work directly for an individual auditor. He assigned the most experienced secretaries to the auditors who typically did the most difficult audits (including Charles and Stuart), and the less experienced secretaries were assigned to auditors who typically handled routine audits. He also instituted a scheduling system that took into account when each secretary would likely get a set of papers to process, so that secretaries would not be suddenly overwhelmed by too many audits at once. Donna retained her title as supervisor, but her responsibilities changed considerably. She no longer assigned secretaries to audits; instead, she acted as a facilitator when problems arose and she spent more of her time assisting the other secretaries when they fell behind or needed help.

Manuel announced his new organization plans at a group meeting with all his staff present, including the four secretaries. There was very little discussion; everyone seemed content with the new operation, which Manuel labeled an "experiment" to try to deal with the delays that had occurred in the past.

The first week of the new organization was difficult for some of the secretaries, especially Tanya and Susan, who were less experienced. Manuel made clear that the auditors would not expect more from them than they could be expected to deliver, and by the second week there were few audible complaints emanating from any corner of the workgroup.

By the end of the first month, however, backlogs were beginning to mount. Eleven audits had been performed, which was exactly the number Manuel had scheduled, but the processing among the

secretaries, even with Donna's extra help, was not meeting the demand. Manuel was concerned, because he could not discern any particular source of the overall problem. The secretaries were each competent and apparently motivated, but somehow the work was encountering glitches, which had accumulated into a total of a week's backlog of paperwork.

Manuel considered hiring some additional staff to help with the workload. But he knew this would not be received well by the corporate office. He approached me to ask my advice on how he should handle this problem. In our first meeting, Manuel outlined the problem, his attempted solution, and the disappointing results. I responded by saying that it appeared to me that the problem was not in the plan but in the implementation. I proposed a simple network study of the group to help identify possible centers of support or resistance to his organizational changes.

I administered a questionnaire to all 14 members of the group. In the questionnaire, I asked one simple question: Who among the other 13 people here in the auditing group do you typically go to for help or advice when you encounter a problem or have a question at work? I also asked the converse question: Who typically comes to you for help or advice when they have a question or a problem at work? They were instructed to select as many of the 13 people as were appropriate in response to the question. All 14 employees (including Manuel) completed the questionnaire.

The responses were collapsed into a picture (see Figure 9.2). The answers to the network questions were represented by lines and arrows between the names. For example, the arrow going from Donna to Manuel meant that both Donna and Manuel agreed that Donna typically went to Manuel for help and advice at work. A double-headed arrow, such as found between Stuart and Charles, meant that both parties agreed that they each typically went to the other for help and advice. Over the years, I have found that these pictures communicate much more than any number of statistical results (Krackhardt, Lundberg & O'Rourke, 1993; Krackhardt, Blythe & McGrath, 1994). The picture was drawn so that the arrows tended to point upward on the page, revealing an informal status hierarchy. Those higher on the page where the recipient of advice requests, those lower on the page were the ones going to others for advice, those in the middle were both giving and getting advice (see McGrath, Blythe & Krackhardt, 1995, for a description of how different drawings of the same network can communicate different information).

The picture itself showed that many people went to the supervisors for help and advice, and that these informal advice relations by and large stayed within their particular work subgroup (secretaries went to
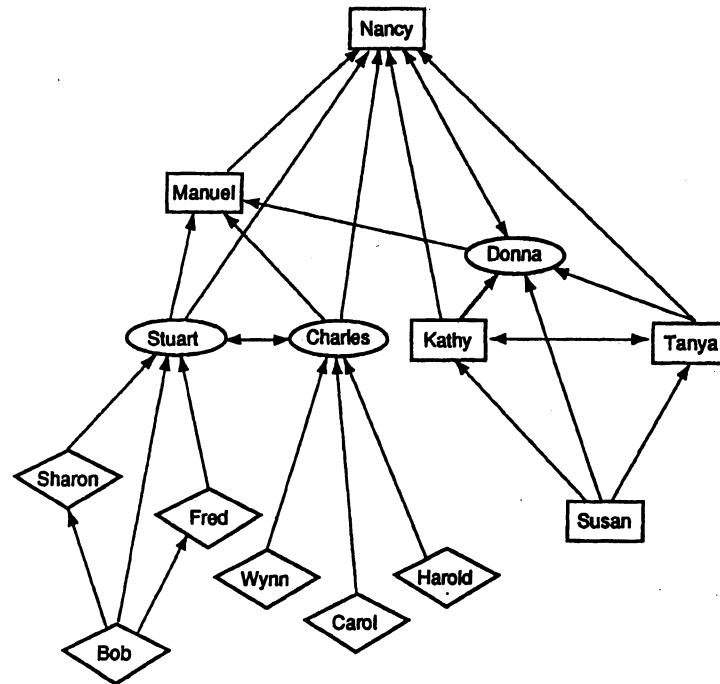
Figure 9.2 Advice* networks for auditing group
* A line from A to B indicates that A goes to B for help or advice at work

secretaries, auditors went to auditors within their subgroup). But, there was one notable exception to this pattern. Nancy, one of the two experienced secretaries, was the recipient of an inordinate number of advice lines. In fact, she was at the top of the page, indicating the highest informal status. Moreover, Nancy was approached both by secretaries and by experienced auditors. Even Manuel went to Nancy for help and advice.

Almost immediately upon seeing this picture of the advice network, Manuel slapped his hand to his forehead and exclaimed, "Of course! I forgot to ask Nancy!" I was not sure what Manuel meant by this remark, so Manual explained.

> I knew Nancy before I even came to this unit. I have always respected her uncanny ability to forecast both audit problems and problem audits. She knows what rules have to be obeyed and which ones can be bent. What I

didn't realize before I saw this picture was how much the rest of this group relied on her also. I should have thought of it, but it just didn't occur to me.

What also occurred to Manuel was that if Nancy was not behind the changes he was making, she could subtly, even unconsciously, make it difficult for these changes to succeed. ·

Manuel decided to approach Nancy directly. He asked her in private what she thought of his decision to break up the secretarial pool, and she replied after some prodding that she thought it was not a good idea (her reasons for this were not articulated, but Manuel sensed that she felt a loss of autonomy when she was assigned to two of the auditors). Manuel then asked her what she thought would help to improve the coordination problem between the auditors and the secretaries. She was not forthcoming with any ideas, but she promised to think about it.

Manuel decided to reconstitute the secretarial pool. Over the next two months, he worked with Nancy to device a compromise solution to the problem, wherein auditors were temporarily assigned secretaries for particular auditors, and wherein the secretaries (especially Nancy) had a say in what those assignments were going to be. By the end of the third month, the aircraft auditing group had improved its performance considerably, with the audits beating the standard time allotted by an average of 10%.

THE CASE OF THE INSURANCE COMPANY CRISIS

This case differs from the prior case on several dimensions. One important factor was that the network data were collected not in response to a managerial problem but rather as part of a larger research project. Coincidentally, the data were useful to one incoming manager, as I will describe later.

Allway Insurance Company (AIC) is a large, East Coast firm that specializes in hazard insurance. They have assets in excess of several billion dollars. AIC enjoys a reputation as having one of the most successful and lucrative financial investment strategies in the industry. This success was amplified during the fast growth financial times of the 1980s.

One consequence of this success was that internal control of some expenses was lax. As one principal in the firm put it,

> We were making so much money and growing so fast that we didn't care about these incidental expenses. They were small potatoes. We figured it wasn't worth reining them in because it would take precious time and energy away from our ever-growing investment opportunities.

After the 1987 market crash, there was less room for such glib oversight. The firm's overall performance started to decline. Top management started taking a harder look at expenses in the company. What they found was disturbing, especially in the MIS division.

The MIS division was a core group of computer experts who handled all information systems hardware and software requirements for the various users in the firm. There were three types of users: administrators, who wanted an MIS system that allowed them to access large personnel and internal accounting databases on demand; sales people, who wanted an MIS system that easily generated options and forms for customers to buy and sign; and financial asset managers (investors), who wanted the state-of-the-art high-powered MIS systems that allowed them to have immediate access to stock, bond and options trading, as well as sophisticated modeling capabilities for market forecasting. Each group asked for (and received) a completely different system, tailored to their own desires. The financial asset managers themselves demanded several, often expensive, workstations from a variety of manufacturers, which employed different and incompatible operating systems. To make matters worse, the investors were demanding hardware upgrades almost continually to keep up with the fast-paced technologies.

The MIS group was responsible for ordering, installing, and connecting these systems. Moreover, they were responsible for ordering, installing, connecting and disconnecting phone and ethernet lines as people moved from one floor to the next. One of the disturbing facts that top management discovered in their detailed examination of expenses in the firm was that as people moved and requested new phone lines, their old phone lines were not being disconnected. By 1990, the firm was paying for over 2000 phone lines that were not being used. To make matters worse, the MIS group seemed overworked and were not getting their orders completed to the satisfaction of various user groups, especially the investors.

The technical problems of multiple, incompatible systems and dead phone lines were clear and solvable, but unfortunately they were only the most obvious of a host of problems that the MIS group faced, including the growing dissatisfaction among users. The more disturbing question to top management was, how was it possible that things were allowed to get this out of hand?

Clearly, drastic changes were needed. The AIC executive committee decided to hire an MIS expert from outside the firm to revamp the MIS division and its role in the firm. Steve Russell was hired from AT&T. Russell had had more than 10 years of operational experience at IBM before he had become director of information services to one of AT&T's large divisions. He knew the technology, he knew how information

systems worked in large diverse organizations. He appeared to be the right person for this job.

Russell spent his first three months figuring out how AIC worked, what its IS needs were, and where its organizational weaknesses might be. He acted quickly to reduce some major obvious costs. For example, he ordered all phone lines disconnected that did not have a recent record of activity. As he anticipated, this resulted in a handful of irate users who found one of their phone lines disconnected. He reconnected this small number of lines and mollified these users (including one executive committee member) by convincing them the drastic step was necessary to get a handle on the problem.

By the end of the third month, Russell felt he had managed to cut back on many of the wasteful practices of the unit. He had personally addressed and solved many specific problems. But, he still faced the more difficult question of figuring out how to set up a system so that such problems did not get out of hand in the future. Russell was baffled by the fact that the problems had got so severe without anyone realizing it and without anyone within the unit being able to do anything about it.

He had spoken both to users and to all his staff in this unit. He concluded that the problem was not one of personnel; the MIS unit was made up of dedicated and competent people. Also, the current organizational structure (see Figure 9.3) made sense to him. There were four groups, three specializing in particular IS technologies (one hardware, one local area networks, and one software), and one "User Support Group", made up of people who were both facile with the various technologies and good at interfacing with users. Users mainly had contact with the User Support Group, and these people knew how much they knew and when they had to rely on the more detailed
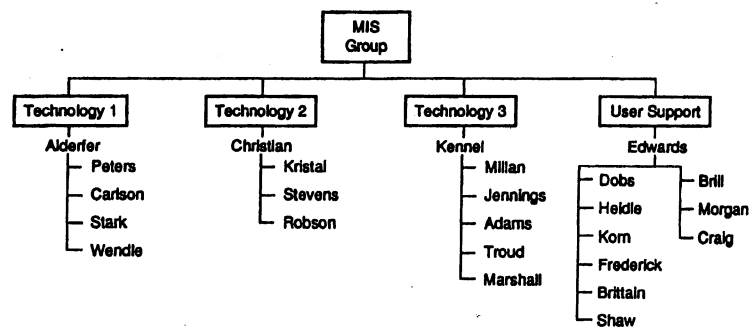

Figure 9.3

expertise provided within the various technology groups. Russell had developed a similar system at AT&T, and it had been quite successful. He was not sure why it was not working here at AIC.

It was after Russell's second month that I had scheduled to collect some network data in his unit. In this case, I asked the 25 employees of the MIS group to check the names of all those who they talked to virtually every day about work-related matters.[2] The answers are depicted in Figure 9.4. A line between two people in the figure indicates that they both agreed that they talked to each other virtually every day.

One difference between this study and the prior case at Halifax is that at Halifax, the manager (Manuel) had approached me to help him out. In the current case, Russell had not contacted me. My access came from another part of the organization. Russell, in fact, was skeptical. He tolerated my data collection and agreed to participate in a feedback session, but he considered himself too busy to be bothered by a research project that was
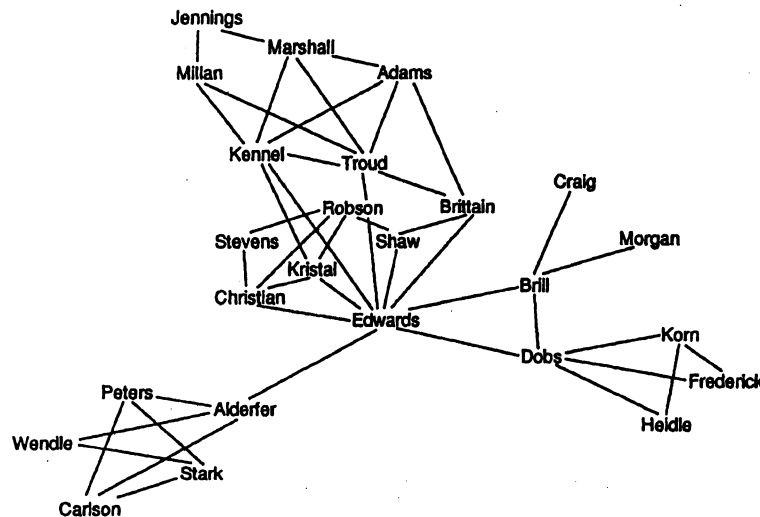

Figure 9.4   Daily interaction at insurance company

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[2]One might note that I used a different network relation in this case than in the previous one. I regularly change the network relation I study to fit the context and the particular problems of the site. In fact, I collected information on six different relations for AIC, including an "advice" relation similar to the one I used at the auditing group. However, this simple "interaction" relation was the one that proved most informative for Russell, so that is the only one I am reporting here.

clearly academic in flavor. While he was curious, he foresaw little application in what I was doing to the problems he was facing.

At the feedback session, I presented a series of network pictures on several different relations. When I put up the network in Figure 9.4, he stared in disbelief.

"That's it!" he said. I had no idea what he was talking about, since I did not know what the "it" was. Subsequently, in a series of interviews with Russell and several of the employees in the MIS group, I discovered what he had seen in that figure.

Russell had had in his mind the way work should be coordinated within his MIS group. Users would contact someone in the User's Support Group and make a request, that person would facilitate the interaction between the relevant technology group(s) and the request would be filled. The support people would be translators, facilitators, and would do much of the installation work themselves. That was Russell's understanding of how it worked, and that is how it worked at AT&T.

When he realized when he saw the picture was that Edwards, head of the User Support Group, was doing all the coordinating. Edwards was talking to the technology people and to two key assistants in his User Support Group. All requests were going through Edwards, he was deciding which technology groups to involve and which experts to connect up with which users and/or support people. Edwards was a good people-manager, and he had good technical skills, which enabled him to have the confidence of his fellow workers to take on this central role. But, Edwards was obviously not delegating. He was overwhelmed with work, with decisions. Everyone was busy, so no one minded that he took on that coordinating role. Nor did anyone notice that Edwards was the source of huge backlogs and even lost information.

In contrast to this, Russell had imagined that all the User Support Group would have easy and equal access to the relevant technology experts. He had not expected Edwards to occupy such a central role, not to the exclusion of all others, anyway. Edwards was a bottleneck to the organization's ability to respond in a timely fashion to the fast changing demands posed by information technology.

The formal organizational chart (Figure 9.3) only communicated formal relationships, not how work was actually performed in the organization (Krackhardt & Hanson, 1993). The form chart was similar to the formal chart he had used at AT&T, and he had consequently assumed that the work was channeled in much the same way. What the network picture confirmed for him was that work was not being accomplished as he thought it should.

Russell valued Edwards' contribution to the team effort. He did not want to jeopardize Edwards' enthusiasm by demoting him. However, it

became clear that Edwards himself thought that he was in over his head and would welcome some relief from the pressure of his daily activities. So, Russell completely reorganized the unit, redefining the functions of the technology groups to focus on products rather than parts. In addition, he split up the User Support Group, assigning its members to different product groups. While it was not his stated intention, his reorganization and redefinition of job titles had the effect of turning the group into a flexible, proactive team of problem solvers, rather than a mechanized, centralized group of problem reactors.

Russell was not committed to this structure in the long run, but it broke the logjam created inadvertently by Edwards in his former position. Within a year, user complaints were down considerably, and costs were contained. Russell reorganized again at that point to solidify the changes he had made and better match the formal structure with the demands of the firm.

DISCUSSION

In both these studies, the network did not solve the problem faced by the new manager. In both cases, I, as the one who collected and analyzed the data for the manager, could not infer from the network pictures how to solve their particular problems. There are no general solutions to problems based on such pictures alone. They provide insight; but only when such insight is accompanied by a local sense of the problems and dynamics can these network pictures be useful.

Having said that, though, the new manager can be a particular beneficiary of such pictures. In Stinchcombe's model, the liability of newness is based on organizational learning. The young organization suffers from being inexperienced in the new environment and from being higher on the learning curve; it suffers from the tension and other costs of the changes it often has to make to survive; it suffers from not enjoying the trust accrued by older established firms; it suffers from a general lack of knowledge of how the web of transactions and relationships works.

New managers suffer similarly. Manuel suffered from not enjoying complete trust from his subordinates. While the network picture did not establish that trust for him, it did inform him where he had to invest his energies to get trust so that the others would follow suit. Russell suffered from a lack of understanding of how work was accomplished in his MIS group. The network picture did not tell him how work was accomplished directly. Rather, he knew that if work was being accomplished in the way he thought it should, then the informal network

would not look like the way it did. Plus it gave him enough of a clue about how work was being channeled through Edwards that he was able to quickly confirm this suspicion and fix the problem. Understanding the social network of an organization can be a very efficient way for new managers to overcome the "liability of newness".

In closing, I am reminded of Kurt Lewin's famous dictum: If you want to understand an organization, change it. I would offer a variation on that dictum: If you want to change an organization, understand it. Pictures of critical networks in the organization can facilitate that understanding and enhance the probability that the new manager will survive.

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