

others, (5) influencing, politically or otherwise, and learning from others who elect to network with you, (6) linking individuals with individuals, organizations with organizations, or individuals with organizations, (7) affecting change in complex organizations or situations by offering alternative methods of increasing awareness, and unfreezing attitudes, and refreezing them in changed directions, and finally, (8) expanding, without undue risk but with lower acquisition costs and improved stability, awareness of what we personally have to offer others. Given one or more purposes it is easy to design and create a network.<sup>3</sup>

Anthropologists and sociologists have used the concept of networking as a metaphor for over one hundred years. Virginia H. Hine and Luther P. Gerlach, anthropologists, gave us the first theoretical framework for setting up networks as "an adaptive pattern of social organization for the global society of the future."<sup>4</sup> They conceived this pattern based on their fieldwork with two subcultures: the Pentecostal movement and the Black Power movement.

The basic paradigm has been described in lay terms in Virginia Hine's classic essay.<sup>5</sup> The concept goes under the acronym SP(I)N, pronounced "spin." It stands for an anthropological mouthful: segmented, polycephalous (ideological) network. Autonomous segments that are organizationally self-sufficient can stand alone and survive the elimination of all the others that comprise the first element of the equation. The word *polycephalous* means "many-headed" and in a human network there are many leaders for many tasks or points of view . . . networks have multiple pools of responsibility, awareness, and information. Hine wrote, "But the power of the unifying idea and qualitatively different element to the equation." The I of the SP(I)N gives the concept of its symbolic power . . . the deep personal commitment networkers have to a few basic tenets shared by all.

In early 1981, I created a temporary network of my own for the purpose of assessing, for a client, certain technology trends around the globe. The trends pertained to advanced composite compositions of matter, new polymeric materials, and the future impact of certain new, world-class petrochemical sources of supply springing up in the Middle East. Initially this was both an ego and a positional network. The contacts made in Europe, Africa, the Middle East, Latin America, Canada, and the Pacific Basin were all personal friends. The contact was made either by correspondence, or, in some cases, by a personal visit. Later on the network included friends of friends who were respected in the fields of interest.

# Chapter 11

## *How to Design and Set Up a Network*

Networkers are already motivated or they wouldn't be in the network . . . the biggest problem networkers have is how to pay the phone bill.

—Byron Kennard

Networks are essentially free-form and self-organizing. Hazel Henderson, author of *Creating Alternative Futures*, describes a network as a combination of an invisible college and a modern version of the Committee of Correspondence, which our revolutionary forefathers used as vehicles for political change.<sup>6</sup>

A consistent theme found in most networking is the search for alternative solutions which conventional wisdom may not suggest. Networks offer cooperation rather than competition. The fact that networks are decentralized in concept makes the search for solutions easier to understand, broader in scope and reach. Decentralization benefits can be ideally maximized by networking. A key is the possible restoring of accountable flesh, as individuals take action within a social system. With such personal accountability comes personal dignity, motivation, and reward.

Designing and setting up a network can serve a variety of purposes. Usually networks are established for the purpose of finding alternative pathways for personal or group action. Networks may be for (1) enhancing our intellectual, social, and leisure activities, (2) keeping in touch with certain people who share common interests or concerns, (3) exploring the value and potential of a more formally organized endeavor, (4) keeping informed and trading information with

The objective was to get a periodic panel view of technical, economic, and social forces at work, along with possible interventions by governments, and to track the intercourse between private industry and public sector producers and consumers. After initial exchanges by letter, the network participant role was telescoped down to only four internationally experienced and technically qualified individuals.

We organized an advisory council and arranged quarterly meetings to serve the client with a running, interpretive evaluation of what was going on in the world in the areas with which he was concerned. The institutionalization and shake-out of the original network did not destroy the vital nature of the input and exchange. The meetings and the sharing and testing of views were kept to a loosely organized system of face-to-face, telephone, and written exchanges. In this example, the design and creation of an initial network led to a small, functional organization. The sequel to the network was a formal advisory group. It acted as a sounding board and an early warning, look-out group, created after the network experiment warranted some formalization of process and a clarified charter.

#### NETWORK START-UPS

A logical approach to designing your network can consist of the following eight steps:

##### Step One: Purpose and Objectives

Clarify the purpose(s) of the proposed network. This may be any of the eight notional purposes listed previously in this chapter or others that suit your fancy.

##### Step Two: Resource Inventory

Inventory your personal "ego network" and your "positional network." Define yourself as a resource. This is the simple task of, as objectively as possible, taking stock of your personal and material resources, such as, your knowledge, skills, experiences, contacts, intuitive and instinctive interests, values, beliefs, articles of faith, aspira-

tions, expectations, and natural talents. In addition, your material assets may be useful to others in the proposed network. Material assets can include office equipment, communications facilities, club memberships, office facilities, business and personal card files, transportation, etc.

Your occupational or professional position affords certain resources including access to individuals in specialized or status roles. Memberships in learned societies, professional organizations, and fraternal and social orders all provide "positional network" resources for building a new independent network.

##### Step Three: Resource Gap

Estimate or identify resources which you find missing in Step Two and which are needed to accomplish the purpose(s) of your network. These become target resources, i.e., network nodes or linkages to be built or explored as your network swings into action. Searching for such resources can be done through your own "ego" or "positional" network contacts, by a survey of literature and activities underway in the field of interest, or by field interviews on the issue or topic to be addressed.

##### Step Four: Structural Nature

Decide on the kind of network which intuitively seems most appropriate to serve the purpose(s). At least two kinds of networks can be distinguished from the start: attribute networks and transactional networks. In an attribute network, persons are connected when they share some commonality, such as, similarity of views, life goals, sex, nationality, race, education, or status. Transactional networks are different in that they focus on the exchanges that occur among a group of individuals.

Incidentally, these two networks define two initial network strategies. As outlined by Dr. Fombrun, University of Pennsylvania, when starting with an attribute network, exchanges are seen as dependent characteristics or consequences of the network pattern. If we begin with a transactional network, individual attributes become the causes of the transactional configuration.<sup>6</sup>

**Step Five: Actor Assessment**

Assess the proposed networkers as to their probable role in the communications function of the network. This means identifying those individuals whom you perceive as having a great deal of influence on others (not dominance) and who are the focus of most communications within the group of persons in Step Three that you hope to reach. These can be "stars" in your network and nodes in the structure.

Peg the individuals in your own ego and positional networks that you expect will be less communicative. These are the "isolates." Identify individuals in your own existing networks who serve as intermediates; within some other set of persons. These are the "liaisons" or "linkers." They serve as connections between the nodes. Other linkages may be physical information sources, rather than human, i.e., a computer data base, a library, a newsletter, or a book. Identify the boundary spanning individuals known as "gatekeepers" who can serve as important linking mechanisms (or barriers) between organizations and the environment external to the boundary or domain in which they operate. For example, in large companies certain individuals in, say, an R&D department may control exchange with other departments or projects only on these tasks which are locally oriented.

Step Five is when you begin to use the structure of your network. The first inquiries and sharing of information will be with the stars, weavers, linkers, and selected isolates

**Step Six: Networking Process**

Consider the process of networking to be used. If your primary experience has been limited to highly structured organizations, such as, a large business corporation, government, or religious hierarchy, you will find networking processes differ considerably and can be much more fun. As Tim Heald puts it, "Networking, like sex, is one of the few activities at which a gifted and enthusiastic amateur has built-in advantage over the purely professional."<sup>7</sup>

The process which you may find most effective in your own networking is one that encourages relationships with those with whom you have or can establish a collegial connection. Conversely, you skip

or discourage connections where one person is dominant and nonegalitarian. Ideally, there is no dominate-subordinate equation in a network. The relationship or connection made in a network is a thing in itself separate from either participant. If you don't want or can't establish a relationship separate from the actors involved, your networking process may become influenced by the control of the relationship and run the risk of introducing a personal bias of those serving as stars, weavers, linkers, gatekeepers, or isolates.

The connection which has a life of its own is one of trust. Trust develops over a period of time where exchanges take place. Competition has no role in network relationships, contrary to the essential nature of dominant-subordinate relationships in hierarchical structures. The collegial nature of the networking process works on the freedom to explore associations and information exchange.

Dr. Allen Parker, founder and executive director of the Center on Technology and Society, Cambridge, Massachusetts, and Dr. Marianne Hedra, research associate at the Center, studied sixty innovation networks in the field of education to seek patterns of change involved in the networking processes. They found that management by objectives does not work well in networking. Rather, they specify five "positions" which take place sequentially, with some bypassing and recycling as innovative ideas or problems to be solved move from their origin to fruition or solution.<sup>8</sup>

Briefly, Position I is where isolated innovators and problem solvers become willing to share the idea or problem with others. Position II is called an unintentional informal network of dispersed people who know others and make contacts on a nonprearranged basis. If this exchange and interaction creates a strong common concern, the process moves to Position III, intentional informal network. Meetings, newsletters, and more formal communications begin. Funds are sought, if needed. If this step proceeds, Position IV, the formal network, is reached. The Position IV effort establishes identity and purpose, participants are listed, meetings or exchanges are planned. At this point the network may have achieved its goal and is often disbanded.

Alternately, Position V may be sought and reached. This is the institutionalized network creature. Centralization takes place with a facilitating center in a nonprofit corporation, or a wing of an established institution. Funding, formal organization, and structure are introduced. If everyone is not careful a bureaucracy will grow and destroy the nature of the network by introducing competition and

hierarchy. If a competitive culture develops the comparative analysis with others may limit the freedom of participants, elitism creeps in, and the withholding of network information gathered from others becomes a practice to preserve the institution. Position V, when routinized, can be shifted to established professional societies, associations, or consortium of organizations. The human network features then have to exist in conflict with institutionalized goals and norms. The essence of collegial networking may be jeopardized.

#### Step Seven: Informational Data Base

Start a repository for your information and ideas. There may be more than one data base. This can be a computer log, a library, a card file, or any other means that is comfortable and accessible for you to use as you nurture and empower your network.

One network created in 1984 was facilitated by a teletailbox at The Cheswick Center. Key associates in various locations are linked by TELEnet and GOVERNnet, a newly created computer network service, through their "electronic mailbox" personal computers. Messaging goes on at all hours in a biocoastal mode, at any place, without face-to-face meetings, which are difficult to achieve due to the other full-time pursuits of the principals involved. The individuals check their electronic mailboxes, when convenient, for the stored messages. Upon command, these are displayed on the screens of their portable, four-pound, personal computers.

#### Step Eight: Action

Remember that the core of the network concept is to exchange information, expedite the process, recognize patterns of information processing, and learn. To get going, make a trial run as an initial stage. The following are some of the considerations on where and how to start.

1. The skills of networking require the ability to combine appreciation of problem structure, "opportunity space," human behavior, and symbolism. Appreciation of these four items must be accompanied by some knowledge of where the interested parties may be, e.g., industry sectors, educational domains, government

information sources, communities, organizations, and friends operating in the field of interest or exploration.

2. Recognize that when a little help from your friends—your ego network—becomes an outright imposition it's time to observe some networking protocol and a few courtesies, such as timing your requests, watching for expenses incurred, avoiding excessive requests, respecting your contact's sense of timing, being specific about the inquiry, being appreciative, and providing feedback. Don't abuse your network. Some of the most common abuses are in job-hunting situations, the ensnaring of friends for charity advisory roles, and in seeking information for investment purposes.
3. Obey the conventional, common sense "rules" of the networking process. Patricia Wagner and Leif Smith have published a popularized pamphlet guide as a tool for introducing persons to networking. Their four rules are useful: "Don't be boxing, listening, ask questions, and don't make assumptions." The "networking game" is an easy way to "the art of discovering patterns in the world and making useful connections for ourselves and for others. It is about weaving new options into our safety nets."<sup>9</sup>
4. Keep three indices in mind to track the effectiveness of your networking. Sociologists have worked this system out for measuring interchange of information in a network. *Centrality* is the tendency of one person, or of a unit's members, to be cited (referred to in the networking process) by others in the network, or by others outside the unit. *Integration* is the tendency of a networker to cite other networkers. *Dependence* is the tendency of an individual networker, or a member of some unit, to cite networkers or others outside the unit or network. By keeping tabs on these three indices you can get some measure of the effectiveness and activity of your network *if*, for some reason, you have need to assess the vitality and effectiveness of the network.
5. Start-ups should have a focus rather than a specific goal. If we knew specific goals it wouldn't be networking. For example, if the purpose of the network is to raise consciousness about the protection of quality of an inland lake, articulate that general focus in clear terms, not specific goals. Specific goals can come later and their pursuit handled by processes other than networking, i.e., task forces, projects, or organizational programs.

6. Have a "mother" or "father" figure, a leader who is the initiator, arranger, and central communicator, and one who needs or knows what's up and keeps track. This can be an executive secretary, a staff expert on a paid or volunteer basis.
7. Create a modest, regular "poop sheet" or newsletter as a regular communications vehicle. Use computers if the network "messengers" by electronic means, or the mail. The newsletter should be quick to produce and easy to read—not a professional reference or research journal. Don't make a chore out of it.
8. Publish a list of members. *Connections*, the Bulletin of the International Network for Social Network Analysis, Toronto, Canada, publishes a directory of all INSNA members grouped by disciplines and interest areas, with a sentence or two about what each member is up to. The Human Systems Management (HSM) Circle, Fordham University, New York, publishes a list of all Circle members and their affiliations. Anyone interested in networking with another can go directly to him or her.
9. Identify a group you know for initial contact, rather than a committee of networkers, to start your inquiry and information exchange. Don't institutionalize or structure the networking. It's not the organization structure or network chart that counts. It's the people.
10. Set some target event to exchange fruits of the networking. If the project warrants feedback to the contributors, set a tentative target date to share your findings, thinking, solution, or perplexity. Those who volunteer to network with you will probably want some feedback.

As indicated in the chapter introduction, networkers are already motivated or they wouldn't be in the network. This will be true of your personal "ego" and "positional" networkers. Operating a network is a subtle behavioral process of creating information exchange and of learning. Properly empowered through networking, "our self-interests can be transformed into a personally and intellectually satisfying mutuality," according to Yale University professor of psychology, Dr. Seymour B. Sarason.

Reading

# M1/3

Mueller, R.K. (1986). How to design and set up a network. *Corporate networking*. Macmillan: New York. Ch.11. pp. 119-127.