

Designing and Managing Alliance Networks¹

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Alliances have become an important strategic tool and way of organizing work because they provide resources, share risk and help companies accomplish their objectives. Networks bring multiple entities together in ways that offer some of the same benefits and challenges as alliances. They also bring unique management challenges. This section introduces the concept of networks of alliances and other collaborative relationships and offers guidance for the alliance professional that may be establishing or taking over managing a network.

Defining networks

The word network has many meanings. In the context of alliances and alliance management, a network is any association of entities that share a common interest and believe that by aligning they are better able to achieve fulfillment of that interest. Networks can have many purposes. A few that have become fairly common include:

- Driving adoption of a technology, such as the Blu-ray Disc Association, a group of companies dedicated to promoting the Blue-ray disc format; or the now dissolved Itanium Solutions Alliance that supported broad adoption of Intel's itanium processor
- Pre-competitive research, such as the Asia Cancer Research Center, launched by Lilly, Merck and Pfizer, which intends to collect and share pharmacogenomic data, focusing on biomarkers for certain cancers; or the Human Genome Project, which needed to map the genome before the knowledge could be used for specific applications
- Business process networks, such as Li & Fung, a supply chain orchestrator that assembles a network of specialist companies to meet the needs of their customers, the ostensible producers of high value, time sensitive consumer products
- Platform expansion, such as the software developer networks hosted by the major platform companies (Apple, Google, SAP, Microsoft, etc.), all of which seek to build end user value on top of the platform to drive utilization of it
- Market expansion, such as the airline networks (Star Alliance, OneWorld Alliance) or the network of distributors a company may put together to enter China
- Business expansion, such as the network Cisco is building to enter the Smart Grid market²

Networks also include the membership of professional associations, such as ASAP, as well as the local Chamber of Commerce. Linux, an open source software development project represents another type of network. There are also social networks, such as those hosted on Facebook or LinkedIn or even the network of parents in a neighborhood who share car-pooling responsibilities.

¹ This is an edited excerpt of the chapter on Networks and Portfolios we wrote for the forthcoming revised *ASAP Alliance Practitioners' Guide*.

² "Partnering on an Alien Planet," Steve Steinhilber, *Strategic Alliance Magazine*, Q3, 2011

All of these examples are intentionally organized, however loosely or tightly. Networks can also come about opportunistically when someone sees interdependencies and interconnections between and among parties not previously connected and also sees an opportunity to create new value by taking a holistic, network perspective on how the entities fit together and interact, maximizing the flow of value between and amongst the parties. This happens with big infrastructure, manufacturing and creative projects such as the networks that come together to:

- Design and manufacture a new airplane
- Make a movie or theatrical production
- Provide a therapy to patients that requires drug development and manufacturing, diagnostic testing and delivery technique to be coordinated
- Construct Boston's Big Dig or Australia's Inner Northern Busway
- Re-construct a community after a natural disaster, such as in Lawrence, Kansas, which has emerged from a devastating tornado as a model of sustainable development, or in Haiti where a network introduced cell-phone banking shortly after the 2010 earthquake when no other banking infrastructure existed

Leaders who have a network perspective see that the outcomes are improved if all the parties are collaborating by coordinating activities, communicating information as required amongst them and leveraging the resources each brings to the endeavor.

Networks occur whenever people come together to achieve a purpose they could not achieve on their own. Profiles of networks range from highly intentional and orchestrated to a loose affiliation and association. Calling upon a maxim of strategic management, structure follows strategy, so the degree of orchestration, choreography and management it takes for the participants to realize the value they seek and thus continue to be a member of the network dictates the structure and characteristics of the network.

The network organizer and a company's role in a network

Purposeful, commercial networks rarely come together and prosper without an entity taking a leadership role and building and organizing the network to meet its needs. Being the organizer of a network (also referred to as a network orchestrator or choreographer) requires that a company has the skills and resources to function in that role. These are alliance management responsibilities on a grander scale:

- Determining the scope of the network and if applicable, standards and criteria that must be met to be a part of the network
- Creating a business plan that clarifies how all members of the network contribute and receive value
- Managing the network to ensure all members are getting value
- Facilitating communication and decision making
- Pre-empting issues, facilitating conflict resolution, managing escalation
- Identifying and mitigating risk
- Managing governance and accountability structures and processes
- Identifying ways to create additional value

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- Fostering and maintaining appropriate relationships between and among the network members

A company becomes the network organizer when it either proactively sets about to build that network, or takes a network lens to a set of interdependent relationships as a means of value creation. This is not an easy role. It requires a collaborative capability that must be rooted in organization culture and embodied in processes. It also doesn't hurt if it is celebrated as a strength of the organization.

Every organization participates in multiple networks, sometimes without knowing that they are participating in what their partner considers a network. A company will be the network organizer in certain networks and a member or participant in certain others. These networks may have competing purposes or be comprised of competitive firms.

Applicability to the alliance professional

The remainder of this chapter focuses on intentional networks that an alliance professional may be charged with developing or leading. These can be quite complex, requiring both alliance and entrepreneurial ability. An example is Cisco's approach to the energy market. In some cases, the network is the business, with a separate entity formed to manage it. Examples include Star Alliance and Scotland's Translational Medicine Research Collaborative. Indeed, it is increasingly common to see businesses that are made up of a network of partners with an entrepreneurial company serving as choreographer. OnStar, the company set up by General Motors to provide roadside service to its customers through a network of local partners is one such example.

If one accepts that what makes any collection of individuals a network is that they interact in some manner and combination to achieve something each wants and that in order to get what each wants, the other members of the network must also get what they want, then regardless of purpose, **all networks are collaborative**. Within a network, to whatever degree appropriate to achieve the purpose:

- Activities are coordinated
- Information is communicated
- Resources are leveraged

For that to occur there must be sufficient trust and transparency among the network members or participants. How networks are structured and function, as well as the value proposition and size of the economic opportunity they offer, should be determined by how best to achieve the purpose of each network, or in other words, its strategy. With many network purposes, come many different labels. Additionally, the lexicon varies by industry. For simplicity sake, the remainder of this chapter will use the term "collaborative network," regardless of network purpose and structure.³

³ *Collaborative Networks Are The Organization: An Innovation in Organization Design and Management*, Jeffrey Shuman and Janice Twombly, The Rhythm of Business, Inc., July 2009.

Networks and alliance management

Collaboration is the core behavior of the discipline of alliance management. The principles of managing alliances can be applied to collaborative networks. Alliances and collaborative networks are quite similar: different parties come together to achieve a purpose best not attempted alone. Organizational and cultural boundaries are crossed and re-shaped; it must be determined when a common way of working is required and to develop those shared processes and hand-offs; trust and transparency are required, yet individual interests must be protected.

The alliance professional is a natural collaborative network professional. This is an opportunity for alliance professionals to further their careers while elevating and promoting the discipline of alliance management as integral to 21st century corporate enterprise management.

Designing a Network

Collaborative networks may be built purposefully, often as a way to enter a new business or geographic market. In some instances they have developed over time, with a firm entering into many relationships to meet particular needs, but largely managing them as individual, bi-lateral relationships, not as an overall network. That perspective may remain, or perhaps a savvy alliance professional sees an opportunity to create new value by placing a network lens on the business and working to maximize the flow of value between and amongst the parties who comprise that network.

When designing a network or taking a network lens on an existing group of relationships, there are five factors that broadly define the infinite variety of collaborative networks (See Figure 1 – Network Design Factors). Each factor represents a continuum of choice that may be blended as necessary to best achieve the network design most suited for the purpose at hand. If a network has come together opportunistically, the factors provide guidance for realizing the value in the network for each participant. The left-hand side of the spectrum generally defines networks that are more informal, while the right-hand side of the spectrum defines more formal networks. Most networks will find that the “right” spot on the continuum for each factor is somewhere between the two extremes.

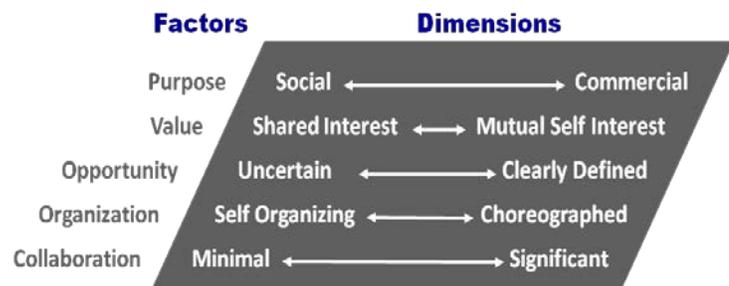


Figure 1 – Network Design Factors

The **purpose** is why the collaborative network comes together. It is what the network organizer and members hope to accomplish by giving of their time, energy, and other resources. It is the customer need or market opportunity being pursued. The purpose is the goal (strategic intent) of the network organizer. A social purpose has a focus on learning, research, and building community. A commercial purpose is one that looks to go to market.

Value describes the exchanges that occur within a collaborative network. It includes such currencies as access to specialized knowledge, equipment, expertise and market reach, as well as financial currency. Mutual self-interest is achieved when each party receives the unique mix of value it seeks through on-going negotiation. Value based on shared interest assumes all want the same thing. There may be different value propositions for members playing different roles in the network or they may all be very similar.

The **opportunity** is a reflection of the maturity of the network and how clearly defined the network organizer sees how it will achieve its purpose. It is also impacted by the time it takes from making an initial commitment to when value and profit can be realized. The longer it will take to realize value, the more uncertain the opportunity, just because of the passage of time and the impact of unforeseen events. This weighs on the resources a company can commit and must be factored into the value proposition.

A purposeful network is an **organization**, although most are bound together by a contract, collaboration agreement, or just a memorandum of understanding, not a legal entity agreement. As stated in the Section on the network organizer, nearly all commercial networks require that leader to light the spark and carry the torch, just as with any new business. The leader choreographs the members in the network, carefully selecting them to provide certain forms of value to the network. These are the networks that may have a separate managing entity or that are otherwise highly structured. The other extreme are the self-organizing networks that come about because of a shared interest, such as an alumni group or Chamber of Commerce.

Collaboration is not black or white. It is a continuum of behavior requiring various degrees of communication, coordination, trust and transparency, depending on the activities at hand. The more one expects to benefit from a partnership, the more collaboration is required to leverage the currencies and other resources one seeks.

The network organizer's job is to ensure that the appropriate collaboration is occurring throughout the network. It uses the governance system to ensure all parties are engaging and benefiting as expected and to initiate changes when required.

Managing a Network

Within traditional alliance management results are achieved by creating the conditions that allow alliance teams to create value. The same is true in a collaborative network. There are five specific questions that the collaborative network organizer should address:

- Network scope – What is in the network and what is excluded?
- Network governance – How do the participants relate to each other and to the network organizer?
- Stakeholder alignment – How are parochial or entrenched interests overcome?
- Value creation – What opportunities are there to connect network participants and create additional value?
- Network risk – What risks might arise because of the network and the connections among the parties?

Network scope

What does the network encompass and what is excluded? In some instances, the answer is obvious because the purpose of the network dictates it. For example, the Blu-ray Disc Association only includes companies that promote the disc format. In other networks, the answer is defined by meeting a set of standards determined by the network organizer. For example, the SAP Developer's Network only includes companies that meet a set of requirements and standards SAP, the network organizer, has set forth as a way to define membership. Additionally, within membership there may be different levels, entitling members to certain value, depending on membership category. Along with the value come obligations that the member must meet, such as completing training courses or generating a level of revenue.

Failure to properly understand the scope of the network can leave value on the table and expose the network organizer to unnecessary risk. Take for example, the network assembled by Boeing to design and build the 787 Dreamliner. Many of its well-publicized problems with suppliers that resulted in a three year delay in the plane's delivery can be traced to a failure to properly scope the network. Boeing didn't appreciate that its partners had partners, too. In some instances, the same high-end design firm or precision manufacturer was engaged by multiple first-level partners, overwhelming those small firms. If Boeing had considered the implications of the broader network, and looked at how its partners' networks could affect the Dreamliner program, it may have avoided some of its problems and improved the overall profitability of the program by scoping and managing the network differently.

Network governance

The governance a network requires can vary greatly, depending on the purpose of the network. At one extreme it may be simply conforming to a few group norms, standards or membership criteria. On the opposite extreme, governance can be quite complicated. For instance, if all members of a network, or a certain class of members, have a position in a formal governing body – a steering committee, management committee, network board of directors, or some combination of the three – gaining alignment among the members may become more challenging because of the different needs the members have and the challenge of balancing each partners' needs with the needs of the greater network. This is particularly challenging in networks that bring together competitors for a common purpose, such as pre-competitive research.

Ironically, the smaller the network the more challenging it may be to get the governance correct. In smaller networks, each member or partner wants a say. Even in situations where an independent entity has been established to guide the work of the collaboration, as with the Asia Cancer Research Center or the Translational Medicine Research Collaborative, each of the partners generally has a representative on the Board. As with any alliance, that person has a dual fiduciary duty to both his/her company and to the network.

In a larger network, standardization surrounding such hot button issues as intellectual property is desirable. For example, several years ago, Dow Chemical assembled a network of 26 material, tool and equipment companies to introduce a new material and potentially disruptive technology into the semiconductor manufacturing process. Many of these companies competed with one another. Some also competed with Dow. To allow the parties to work together and not feel their competitive

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position was compromised, Dow, with the help of a few of the early partners, crafted an alliance agreement that contained very specific language about how the partners were to interact with both Dow and one another. The agreement governed the alliance. Any one that wanted to join that network had to adhere to the terms of the agreement otherwise they weren't allowed to join. However, it took the better part of a year to craft that agreement.

Each model presents its own challenges in creating collaboration agreements and contracts. If a common contractual framework is required, build out the network in layers, engaging the initial layer of partners in constructing the contract that all others with similar roles must accept. Engage attorneys knowledgeable in intellectual property and competition laws, as well as collaboration agreements.

Stakeholder alignment

A key responsibility of the network organizer is to gain alignment among appropriate members as to how the purpose will be achieved and to keep them aligned as the work progresses. The governance process is a major contributor to achieving this alignment. So too, is fostering relationship among the members to help develop a sense of network identity and to build trust. It is important to keep in mind that not all members of a network necessarily want the same thing from it. For example, in the Dow semiconductor alliance described above, it wanted to commercialize its ground-breaking material. Many of the members of the alliance wanted access to the material so that they could learn how to adapt their products to work with the material and be ready for large-scale commercial introduction. The network organizer has to balance these interests so that each network member gets what it wants. If stakeholders aren't aligned, they can withhold resource from the network or withdraw.

One method of ensuring network stakeholders are aligned is by establishing what is known as a no-fault, no-blame culture. This is a signature of certain infrastructure and construction alliances in Australia and New Zealand. It aligns the commercial interests of the project owner, contractors and designers, while all assume collective risk for the project. ⁴

Value creation

The reason networks come together is that the whole is more valuable than the sum of the parts. It is assumed that the members will find value by interacting with one another. That may come about or it may not. If the network is built through a series of hub and spoke bi-lateral relationships, then the network organizer must create opportunities for the members to get to know each other and discover ways of creating additional value. Assume for example that a company's external research partners consist of bi-lateral relationships with a number of academic centers and small specialty firms. It believes that there are opportunities to further the research by introducing some sub-set of them to each other and sharing some of their work – in a manner that protects intellectual property, of course. Unless the network organizer steps in and facilitates those relationships, they are not likely to occur. Overtime, through trade shows and partner conferences, customer

⁴ *Alliancing: A Participant's Guide*, Morwood, Scott and Pitcher, AECOM, 2008.

engagement and network governance, the members get to know and start to do business with one another, increasing the opportunities available to all.

Network risks

Networks bring many of the same risks that alliances bring: strategies and priorities change and investment moves to other opportunities; a company gets acquired or acquires another company that changes its competitive position; insufficient funding prevents a company from fulfilling its commitments, etc. In addition to alliance risks, the network organizer should also consider:

- Implications of the network members engaging in business with one another
- Business that might be closed off because of bringing a particular company into the network
- Competitive aspects between network members

In addition, there is another aspect of competition to consider. Networks compete with other networks. For example, the network Cisco has assembled to enter the utilities business could find itself competing with a network assembled by IBM to do the same thing. It is also possible that a conflict could be created because a third company is a member of both networks.

Similarly, a company approached to establish a collaborative relationship should consider the networks it is being introduced into, as well as the broader implications of that partnership on its existing networks.

Conclusion

A collaborative network is a dynamic, fit-for-purpose structure that is increasingly how businesses are organizing to deliver a complete solution for customers, advance research, expand business into new markets and virtually every other purpose. Additionally, taking a network lens to an existing set of relationships can showcase opportunities for new value. The principles of alliance management apply to collaborative networks and highlight the need for alliance skills in the 21st century enterprise.

Network Organizer’s Checklist

Use the following checklist to help plan the design and management of a collaborative network. Good alliance management practices are inherent in managing networks.

Collaborative Network Design Planning Tool		
Design Factors	Description – Describe the network in question using the design factors as a guide	Planning Implications – Based on the description, how does it impact, what needs to be done to build the network?
Purpose – What is the network intended to accomplish?		
Value – What is the anticipated exchange of value between and among the members of the network?		
Opportunity – How should the size and scope of the opportunity be framed for network members? What is the anticipated time horizon for realizing value?		
Organization – What degree of structure and management is required for the network to achieve its purpose?		
Collaboration – In what ways will the network members need to collaborate with the network organizer? In what ways will members need to work with one another?		

Collaborative Network Management Planning Tool		
Management Questions	Activity	Plans and Implications
Network Scope	Map the members of the network and their relationship to the network organizer and other members. If building the network, consider any restrictions on participation	
Network Governance	Establish and manage network governance appropriate for the purpose and scope of the network. Follow the basic alliance management principles for effective governance	
Stakeholder Alignment	Conduct a formal kick-off of the network if new, planting the seeds of culture by establishing charters and operating principles	
Value Creation	Identify and plan activities for network participants to get to know one another	
Network Risks	Identify the specific management, business and legal risks that exist in the network and develop a plan for mitigating them	