

CHAPTER 20

COORDINATIVE, NETWORKED AND TEAM BASED ORGANIZATIONS

In 1992, Gerstein and Shaw observed, “Intensified competition and ever-increasing customer expectations are forcing organizations to function at a level of effectiveness (high quality at low cost), speed (reduced cycle and product development time), and innovation that is far superior to that of the past.”¹

In 1999, Ashkenas observed, “What drives success today are speed, flexibility, integration, and innovation. Successful firms respond quickly to customers, get new products to market fast, and change strategies on a dime. Their people do multiple jobs, constantly learn new skills, and frequently shift to new assignments and different locations. Instead of subdividing tasks, such firms have learned how to pull together diverse activities and people on an as-needed basis, and to focus more on the streamlined process than on the specialized pieces. They champion the new and different, and set up processes and environments that encourage and reward creativity and innovation.”²

In 2001, Beer observed, “organizational capabilities such as coordination and teamwork ... are the source of sustainable competitive advantage.”³

In today’s environment, the emphasis is shifting to organizational structures that are flatter (i.e. have fewer levels of management from the top to the bottom), where cross-functional communication is dominant and where teams and teamwork are critical elements in the drive for competitive success. In these circumstances, building an effective communications network is essential to success. As Cross and Prusak observed, “Managers invariably use their personal contacts when they need to, say, meet an impossible deadline, get advice on a strategic decision, or learn the truth about a new boss. Increasingly, it’s through these informal networks – not just through traditional organizational hierarchies – that information is found and work gets done.”⁴

Considerable effort must be expended to develop and manage organizational relationships. Reciprocity (see Chapter 9) is an important tool as is treating others with deference and respect. To better understand where we are today, let’s examine how organizations have evolved over the last several decades.

Historical Perspective

Fifty years ago an organization was seen as a multivariate system that consisted of tasks, informal social structure, technology and formal organizational structure. All four components were thought to be highly interdependent and had to mesh together in order to meet the demands of the external environment. Most people are familiar with the traditional vertical functional organization that develops specific specialties within the

given functions, such as engineering, research on the technical side and accounting marketing, finance and human resources on the business side. (Many MBA programs parallel these business functional specialties.) Over the years, this traditional type of organizational structure has proved to be successful in stable situations involving relatively well defined and/or routine tasks.⁵

However, as a result of the cold war, technological advances in the United States defensive weaponry became urgent national priorities. This led to the establishment of “special projects” such as the Polaris Program to develop nuclear powered missile launching submarines and the “skunk works” at Lockheed to develop the U-2 and “blackbird” spy planes [and more recently radar eluding aircraft]. These projects, with almost limitless funding and accelerated time frames required much closer cooperation between functional groups than had ever been required before. Instead of one functional group completing a job and passing it to the next functional group (i.e. R & D passing a job to engineering), multiple teams were established to attack the same difficult but required technical breakthroughs. Some teams included not only research people but also, during at least a portion of the team’s life, engineering, production, procurement and even budgeting specialists. These “national priority” projects proved to be highly successful but very expensive.

The need for some less costly means of accelerating the time to obtain advanced weaponry became clear but at the same time the traditional vertical functional structure appeared to be too rigid and inflexible to meet this need. The aerospace industry was being called upon to meet large-scale demands for highly complex new products, or projects that demanded integration and coordination across many technical disciplines. To meet this challenge, a coordinative form of organization evolved. This type of organization was variously called "matrix", "project", "multidimensional", "integrative" or "coordinative" by organizational theorists⁶. The need for coordinative management was illustrated by the activities associated with "task management" in a research and development organization. These people were assigned the tasks of converting various new technologies to practice. Yet, with many different such tasks on hand, it was extremely difficult for the functional managers of research or engineering to cover both the special demands of specific tasks and the regular demands of the day-to-day operations within research or engineering. Covering both aspects created a strain on the existing organization in the sense that responsibilities and loyalties were divided.

Conflicts between coordinative management and the traditional functional structure occurred at all levels. This led to the development of new sets of expectations or psychological contracts (see Chapter 4) between the organization and its employees, resulting in modified formal procedures or instructions. Many managers had made their way up the organizational ladder through the traditional vertical functional organizational structure and often felt that coordinative management was only an expedient which must be tolerated. When that attitude was perceived, many of the people involved in

coordinative management became unsure of their place in the organization. It often resulted in the reward system remaining consonant with the old functional organization and not giving weight to the performances of the coordinative leaders, i.e., the organizational culture was not congruent with the reflectively understood need for a "coordinative organization". These conflicts inhibited effective coordinative management. The typical leader who was handed his or her first coordinative management assignment found adjustment to his or her anomalous new role painful, confusing, and even demoralizing.

In dealing with the concept of task or coordinative management, one must understand the framework of the environment at that time, which points up the salient differences between the new roles of the task or coordinative leader and the traditional functional manager. While these differences were polarized in theory more than reality, they did influence the manager's behavior. Group and individual conflicts often developed when both functional and coordinative or matrix structures existed in a single organization. Awareness of the essential paradoxes was the first step toward conflict resolution.

There was no single form of coordinative or integrative management but rather a spectrum or continuum involving varying degrees of authority and power⁷, number of subordinates, and the nature of the task. Generally, as the task became more complex and required more and more cross-discipline interaction, there was a tendency for organizations to give the coordinative leader more status, authority, and people reporting to him⁸.

Thus, coordinative organizations took many forms. At one end of the spectrum coordinative leaders were appointed to the *staff* of the General Manager to act as coordinators with the functional groups without any authority. At the other end, a separate organization was established and all the functional talent needed was transferred to the new organization thus giving the coordinative leader complete line authority. The first approach generally proved ineffective in meeting accelerated schedules and the second approach very costly. Eventually, it became clear that a balance was necessary between the long term interests of the functional organization to build an ever improving technical competence and the coordinative leaders whose objectives were the short term fast and cost effective development and production of weapon systems. One way this balance was achieved was to give the coordinative leader a very small staff but a large budget and the functional groups large staffs but a small budget. In cases like this, each was dependent on the other. The coordinative leaders had to rely on the functional groups to provide the manpower to get task completed and the functional managers had to rely on the coordinative leader for the funds to keep the functional people fully employed.

A few general guidelines evolved that facilitated the transition from the traditional functional form of organization to the coordinative form:

1. It was clearly desirable to define and outline the scope of the task, including the identification of the departments, units, functions and staffs involved, and the approximate degree of their involvement. (It should be noted that a number of management tools and procedures also evolved [or were borrowed from the construction industry] to assist management at all levels in defining and monitoring the progress toward achieving the desired task. These included critical path diagrams to show the interdependencies of various sub-tasks and the costs and schedule for each of these.)
2. For a functionally-organized company, successful coordinative management meant establishing, for the duration of the effort, a workable compromise between two quite different organizational concepts. The basic ingredients of such a compromise were: appointment of one experienced, competent leader to coordinate the task full-time (often called the project manager); defining the task management function in terms of responsibilities; assignment of a limited number of people to the task team; and maintenance of a balance of power between the functional heads and the coordinative leader.
3. Special task controls dealing with scheduling, deadlines, cost, and quality were often superimposed upon the existing reporting structure for the duration of the effort. These controls varied widely in their accuracy, timeliness, and use, but they generally were of significant help to organizations making the transition to coordinative management. In particular, the crucial relationship between time control and cost control had to be recognized so that cost, schedule, and performance were fully integrated.

The important point to be emphasized is that complementary management organizations did exist within the operations of an organization: the vertical, traditional organization (concerned with the development of specific professional specialties within departmental functional lines, necessary for the long-range survival of the organization) and the horizontal, coordinative organization (concerned with specific tasks or efforts that required coordination and integration across functional lines, necessary for the timely achievement of short-range tasks). The resulting organization usually did not consist of a single matrix and a single functional organization, but rather of many matrices, even a hierarchy of matrices. Such a structure reflected the impact of rapid change in professional specialties on the organizational structure and its functions. Moreover, it pointed up the need for provision of a management structure around a specific task with commensurate lateral and horizontal relationships.

Lacking real effective line authority, the coordinative leader had to learn how to lead, persuade and influence his or her peers by the acquisition and use of power (see Chapter 9) through a trying period of time. The coordinative leader had to understand the critical difference between the exercise of power and influence as opposed to authority. When the coordinative leader became highly skilled in the acquisition and use of power

rather than authority⁹, it usually led to a successful problem-solving approach rather than a hostile conflict between polarized positions

Thus, coordinative organizations were developed that depended on the conceptual integrative skills of the coordinative leader and de-emphasized his or her allegiance to purely personal or purely functional organizational needs. In this manner, professional expertise continued to be generated effectively within functional departments and these specialties were applied to solving general problems in the inter-disciplinary coordinative organizations. The coordinative structure maximized the application of professional specialties¹⁰ across functional lines.

As the success of this coordinative type organizational structure became apparent in the aerospace industry, this approach began to spread in varying degrees and in sometimes modified form to other industries. Non-aerospace R & D was a natural place for this new approach to take root. The competitive need for rapid new product introductions quickly led to the spread of this coordinative approach across organizational functional lines. The problems and lessons learned from the aerospace industry, in turn, made this transition much smoother. As the pace of technological innovations increased, the need for coordinative organizational structures mushroomed.

This evolution took many years but, over time, this put a great premium on interpersonal skills and the development and management of a wide network of interdependent relationships. As these skills evolved and became more widely held, teams and teamwork evolved as a natural evolution as did flatter, more horizontal organizational forms.

Today, we are facing an ever increasing need for speed, innovations, high quality products at low cost, and the flexibility to adapt to rapid changes in customers, the environment and the organizational structures. The means of effectively meeting these needs are still embedded in the human equation. People must work together. They work together best when they understand the overall vision of the organization and the resulting mission, objectives, goals, and sub-goals, and when they resist inclinations to do work the way it has "always been done". Paradoxically, people find themselves having to overcome resistance to change in spite of the rapidly increasing need for change. Clarity of the organization's vision and goals at all levels in the organization is one step to future success. Another step is the recognition by the individual that he or she is part of a network of mutual interdependencies that require linear, non-linear, and contextual skills to maximize the positive effect of conflicting opinions and desires between team members and sometimes, between the team and those inside the organization but not on the team.

Questions for Reflection and/or Discussion

1. What are the differences and similarities between a coordinative and a functional organization?
2. What can leaders do to minimize dysfunctional conflict and optimize functional behavior in a coordinative organization?
3. What can leaders do to optimize the effective acquisition and use of power in a coordinative organization?
4. What can leaders do to "coordinate" more effectively?

FOOTNOTES

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 - ⁴ Cross, Rob, and Prusak, Lawrence, "The People Who Make Organizations Go-or-Stop", Harvard Business Review, June 2002, p. 105.
 - ⁵ Morse, J. J., and J. W. Lorsch. "Beyond Theory Y." Harvard Business Review May-June 1970: 61-68. [and also Chapter 6.]
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 - ¹⁰ Gordon, J. R., L. S. Corsini and M. L. Feters, "Restructuring Accounting Firms for Better Client Service", Sloan Management Review, Spring 1985.