Price concludes that leadership is the difference between success or failure in health care venturing.

In the third section of the book, Price discusses how to identify new business opportunities. She offers a range of creative assessment tools in this application of medical economics. A health care opportunity audit is one of the many creative tools described. The tools help solve the problem of how to generate new product and service ideas. This section concludes with a discussion of the legal issues surrounding with venturing.

Implementation steps for health care venturing are reviewed in the last section of this volume. These include putting the innovation plan in place, descriptive models for innovative venturing, implementing the business plan, and managing and compensating the venture team. The final section also predicts future trends. Here, Price states that, "The next wave of health care entrepreneurial ventures will learn from the painful experiences of their predecessors. Health care innovators and intrapreneurs will learn the discipline of entrepreneurship."

As a Practical contribution to a growing field, this well-written and carefully researched volume provides a unique introduction to innovation in a traditional, American industry.

It is my hope that Price will follow this volume with a look at the issue of health care venturing in the international arena, especially on a comparative basis. Such an investigation of alternative, international models would assist policy-makers in the United Stares. This topic is noticeably absent here. Relating the issue more broadly to the field of medical economics from a national and International policy perspective would surely be useful.

Finally, any subsequent revision of this volume can be enhanced by adding case studies for analysis. What is included, however, will be welcomed by all professions that help shape the infrastructure of innovation in the health care industry. Academicians teaching health care management and also professors of entrepreneurial studies will find this volume a dependable, scholarly guide that students will welcome.

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Donald Chisholm, *Coordination Without Hierarchy: Informal Structures in Multiorganizational Systems*, Berkeley: University of California Press, 1989, ISBN 0-520-06368-6.

This study addresses the informal features of organizations that are relevant to the problem of coordination and suggests "a practical solution and a foundation for a generalizable theory of coordination by informal mechanisms" (xi). By observing and analyzing the behavior of decision makers in the public transit systems of the San Francisco Bay Area and Washington, D.C., areas, respectively, this study generates conclusions about coordination in multiorganizational systems. The evidence collected supports that view that behavior within and among organizations is determined by the informal aspects or the organization, itself.

Coordination-by-informal-mechanisms (CBIM) is of interest to students of small business economics because it helps us illuminate features of organizations that are especially essential for the success of small business. These features are individual initiative, flexibility and adaptation to unanticipated circumstances, and the formation of a network of informal channels to acquire accurate information. CBIM enables small business to develop and maintain a culture that promotes these features and warns it against the tendency, as small business expands, to develop formal, rigid organizational structures.

In Chapter 1, the author presents the problems that need to be tackled by any transit system; namely, (1) the lack of coordination among the network of services and facilities; (2) the significant gaps in the transit network and (3) the competing interests of independent jurisdictions that frustrate coordination and diffuse responsibility.

Economists sometimes claim that, unless public transportation is regulated and priced in accordance with efficiency criteria, the alternative is centralization and monopoly. The author, however, finds evidence that disputes that claim. For example, "one of the principal mechanisms for coordinating transit activities in the San Francisco Bay area fails to appear on any organization chart or newspaper accounts of transit events. For example, it has no board of directors, no employees of its own, and cannot raise taxes" (11). The coordinative mechanism is an informal channel of communication and an informal agreement shaped by specific problems that, in fact, would otherwise require centralized coordination.

Through flexibility and adaptation, CBIM in the Bay area, helps avoid disruptive outcomes especially when innovation takes place. This flexibility stems from the fact that interdependencies are "tightly coupled" in a formal hierarchy while they are "loosely coupled" in an informal one (12). In the latter sense, an informal system of coordination is problem-oriented and self-organizing. It responds to personal experience rather than to rigid rules designed by the organizers.

Chisholm attributes misunderstandings about the nature of multiorganizational systems to the misuse of the descriptive term, "fragmented." Fragmentation implies disconnection, which, in turn, recommends tight integration, centralization and hierarchy as solutions. But if multiorganizational systems, such as the Bay Area Public Transit System, are characterized by loosely coupled, organizational domains that have flat instead of hierarchical structures and horizontal instead of vertical connections, then based on this success, one can not be so quick as to suggest centralization as a remedy.

In Chapter 2, the author review some landmark contributions to the literature on informal organization. After the literature review, Chisholm concluded that successful coordination requires the use of informal channels to acquire accurate information. These channels arise as soon as agents realize the unreliability of formal channels. Furthermore, informal mechanisms prevent failure of formal designs by compensating for their inadequacies and finally achieving the always elusive coordination.

CBIM also has the capacity to achieve commonplace ends in multiorganizational settings. Informal agreements, for instance, were reached among warring factions in the Lebanese civil war. Artillery shelling and sniper fire were halted during each TV broadcast of the World Cup soccer tournament games so that the belligerents could peacefully enjoy the 90-minute game. Fighting resumed shortly after the final scores were posted.

If informal coordination arises among parties in an armed conflict, we should expect a greater degree of informal coordination among independent or interdependent organizations that are not experiencing the stresses of mortal conflict. That is what the Chisholm study sets out to prove.

In Chapter 3, the author bases his analysis of the problem of interdependence on two premises: (1) An organization must be analyzed as an open system that is dependent on other organizations or "social units," (2) organizations adopt "norms of rationality" in order to reduce or eliminate the uncertainty arising from interdependence. This is generally done "through expansion and merger, consolidation and centralization, government regulation, lateral coordination, and warfare." (43)

In chapters 4 and 5, the author makes several observations about behavior in processes of coordination without assuming full information (the basic assumption of most rational choice theory). He observes that informal organization takes place *by* informal bargains, *through* informal channels and *within* the guidelines provided by informal conventions and norms. Informal conventions and norms are patterns of behavior that are expected from participating agents and are necessary for limiting the scope of conflict and establishing a continuous and a stable decision making process through informal channels (85). Informal channels are contacts based on personal relationships between pairs of individuals and exist independently of formal line responsibility. Chisholm also observed that more informal channels emerge as interdependence increases.

Chapter 6 examines the conditions that are conducive to the development of certain, informal mechanisms. Among those conditions are the social practices of reciprocity often opposed to the principle of maximizing short-term interest. Properties of multiorganizational systems, individual organizations, as well as personal attributes can, according to Chisholm, by manipulated by managers in ways that encourage the development and maintenance of informal organizations. Recognizing the importance of CBIM, certain activities at Washington Metro "are intentionally designed to produce improved contact between individuals from different transit organizations" (122).

In Chapter 7, the author discussed the weaknesses of informal organizations. Here we learn about problems of favoritism in communications and also in negotiations. Furthermore, informal organization raises problems about the enforceability and accountability of informal agreements that are based on trust. These weaknesses can, according to the author, be compensated with the introduction of "third-party organizations with carefully circumscribed functions" without acquiring the pathologic aspects of formal centralized organizations (p. 150).

Chapter 8 highlights the trade-offs that are involved between coordination and the opportunity costs that must be incurred if coordination were to be achieved.

Finally, in the concluding chapter, the author recommends that CBIM is preferred to formal, coordinative arrangements for any given set of interdependence problems because they impose less cognitive and political demands on the participating agents. In addition, CBIM is less inclined to artificially increase interdependence within the system.

The study's inductive methodology distinguishes it from neoclassical methodology. Chisholm does not start with assumptions about human behavior and then attempt to verify them by collected evidence. Instead, he starts from on-site observations of the behavior of the participating agents and then ascends towards broader, generalized conclusions. However, the latter process of drawing conclusions itself needs to be refined into a more coherent, general theory of coordination without hierarchy. Chisholm relies on too many authorities to support his conclusions, and his focus is often lost in a plethora of questions. Overall, I feel that the study tackles a subject of paramount importance for the study of industrial as well as political organization. It makes for worthwhile reading despite these reservations.

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