

San Jose State University

From the Selected Works of Herman L. Boschken

1986

STRATEGIC PLANNING OF SEAPORT DEVELOPMENT IN A GLOBAL ECONOMY: OBSERVATIONS OF AN EXECUTIVE PORT DIRECTOR

Herman L. Boschken, *San Jose State University*



Available at: https://works.bepress.com/herman_boschken/14/

Strategic Planning of Seaport Development in a Global Economy: Observations of an Executive Port Director

Herman L. Boschken

Organization and Management
San Jose State University
San Jose, California

Abstract Seaport management is central both to the use of coastal resources and to the needs of a global economy. As the major point of commercial activity along the coast and as a source of pollution, harbors need to be administered strategically to provide the greatest benefit according to economic and environmental demands. To do this, port authorities must have the organizational capacities to appropriately perceive issues and analyze information about complex economic and environmental relationships. Moreover, factors of turbulent transition place increasing demands on ports to perceive, acquire, assimilate, and evaluate highly fragmented bits of information about new opportunities and potential constraints. This article is an annotated conversation that provides a practitioner's insight into the management of change along the coastal zone. To address the problem, we probe modern organization theory for new insight and attempt to apply concepts to practice.

Seaport management over the last two decades has involved exciting transitional changes. Developments surrounding the "container revolution" alongside the emergence of environmen-

Coastal Zone Management Journal, Volume 14, Number 3
0090-8339/86/030193-00\$03.00/0
Copyright © 1986 Taylor & Francis Ltd.

tal regulation put port authorities in the position of making strategic choices about their futures. As a result, some made tremendous inroads in general cargo markets and advanced harbor technologies while others did not. Underlying causes for the variance in performance were many, but some were organizationally derived. To manage conflicting demands and pursue vast new opportunities, the proactive ports redesigned their organizations to include new capacities for analyzing more complex information and to stimulate innovative thinking. Preceded by an overview of conceptual themes, this article conveys the insights of one executive port director to illustrate the processes of organizational adaptation in meeting the demands of strategic choice and environmental change. It does so by an annotated text of a conversation with him.

Strategic Organizational Design

Change is said to be a primary consideration in the design of complex modern organizations. Yet, the term implies many different things. If by change we mean the opening of vast new but unfettered opportunities, entrepreneurial chief executives may be all that is needed to identify new routes of success. But if by change we mean turbulent or conflicting transition, then organizations need to design *organized* strategic capacities to facilitate innovation in managing highly uncertain futures. As the shift from benign to more turbulent change occurs, one would expect strategic management to play a more determinant role in long-term performance, indeed, becoming a dominant feature of any organizational redesign. In the process, handling of planning and development activities may be different than that for operations management. Less suitable for programmed control, strategic capacities may need to be managed by means more facilitative to innovative thinking (Stout, 1980).

Important indicators of transitionary change include (1) shifts in the terms of competition caused by major product innovations, substantial new industry entrants, or fundamental new production technologies and (2) the appearance of extramarket demands such as environmental regulation. The more turbulent

setting includes a combination of these where the resulting conflict in demands heavily taxes managerial resources, threatens internal control, and delays access to markets. Organization theory has tried to deal with such conflicts through a variety of competing conceptual frames (Hrebiniak and Joyce, 1985; Astley and Van de Ven, 1983). One of the more promising addresses the problem in terms of strategic choice (Child, 1972; Miles, 1982) in the context of interorganizational exchange (Benson, 1975; Schmidt and Kochan, 1977). These views hold that effective management of conflicting demands and the encouragement of innovation depend in part on a planning process that incorporates *information-based capacities* to (1) proactively design and evaluate strategies and (2) organize resources to achieve those choices. During turbulent transitional periods, information becomes more ambiguous, distorted, and unorganized, thus increasing the difficulty for managers to anticipate the behaviors of external actors and to make appropriate internal adjustments.

To the extent that structure facilitates and directs information flows into patterns of communications, cognitions, and analyses (Scharpf, 1977; Egelhof, 1982), structural design involves creating and integrating analytical units to plan strategies around opportunities and constraints and manage interorganizational conflicts. With such a microstructure composed of scanning, analysis, and project management activities, one would expect an enhanced capability for early detection of shifting client needs or emerging technologies that could provide new opportunities. One would also expect organizational boundary managers to limit intrusion by outsiders in port authority processes or create the conditions in which it seldom occurs. In that the need for analytical capacities varies according to strategic opportunities and information uncertainty, organizations perceiving transitional settings will generally have committed a higher proportion of managerial resources to strategic planning earlier than organizations perceiving stable or unfettered environments.

Distinctions must be made, however, between strategic considerations and operational routines. Strategic information-processing deals "with the fundamental position of the organization in its environment" (Egelhof, 1982). It therefore looks at how the

organization copes with transitional forces associated with changing external demands and requires analytical resources involving not only greater volumes of data but also more fragmentary data about unique situations and critical performance problems.

The relevance of structural considerations in interorganizational exchange is seen in the fact that organizational boundaries "seem to create semi-permeable walls which impede the flow of information and which reduce the capacity for conflict resolution" (Scharpf, 1977). In order to balance conflicting demands and maintain equilibrium, the organization needs "boundary spanning units" (Aldrich and Herker, 1977; Organ, 1971) that overcome this impedance. Such units are defined as "any group or department whose primary responsibilities are to deal with parties outside the organization" (Callahan and Salipante, 1979), including clients, suppliers, and governmental agencies. Boundary spanners are cast as exchange agents involved in (1) representing the organization, (2) scanning and monitoring events, (3) deflecting threats to the organization, (4) acquiring information on external dynamics, and (5) linking, transacting, and coordinating with outside actors. Boundary spanning, then, consists of two types of tasks. The first is to acquire and array information about external circumstances in a form usable to the organization in planning new development (Tushman, 1977). The second involves negotiating with actors such as environmental agencies to avert threats to its planned innovation (Selznick, 1949; Van de Ven, 1976). In times of change, boundary spanning units often ascend to positions of power because those "relationships which constitute the organization's ties with its environment can reasonably be defined as the ultimate climate of decision-making" (Gore and Silander, 1959). This may also involve a shift in power from one formerly powerful boundary unit to another. For example, public relations departments may work fine for routine operational issues, but fail to provide proper linkage to a community concerned about the effects of substantial new development. They consequently may be superseded by a more strategically prepared project planning team.

In summary, strategic performance involves the effective use

of organizational resources to adjust to or take advantage of transitional forces. With the crosscurrents of market, technological, and environmental changes, "effectiveness derives from the management of demands" (Pfeffer and Salancik, 1978). Such adaptation, however, is premised on the capacity of management to recognize the need for innovations as performance gaps emerge from changing dynamics. As Thompson and McEwen (1958) observed, "One of the requirements for survival appears to be the ability to learn about the environment accurately enough and quickly enough to permit organizational adjustments in time to avoid extinction." Being a perceived variable, performance stress is felt in different magnitudes by different organizations. Partly the result of planning and project development capacities and partly organizational history, some organizations understand the meaning of performance erosion early, while others are blinded by a "trained incapacity."

To Miles and Snow (1978), the most alert and innovative organizations are characterized as "prospectors." The prospector is an organization oriented to a continual search for new domain opportunities and exploration of emerging environmental trends. To facilitate change, this organization often has a design that deploys strategic information-processing capacities among numerous units (frequently arranged as a matrix) rather than controlling corporate planning activities centrally. Moreover, the design contains mechanisms to develop and maintain a wide range of strategic relations with external actors and invests heavily in processes that scan the environment for clues.

Often, an instrumental way of seeing the compatibility of theory and management practice is through the eyes of a distinguished practitioner involved in the processes of strategic innovation. Such an opportunity arose in the context of a research project on Pacific coast port authorities (Boschken, 1982; Boschken, 1987). In one instance, an extensive taped conversation ensued with Richard D. Ford, executive director of the Port of Seattle, until his retirement in 1985.

Reflecting Miles and Snow's prospector, the port of Seattle has been at the forefront of innovative management in dealing with turbulent transition. With new maritime transportation tech-

nologies (primarily intermodal containerization) and the growing interdependencies between regional, national, and global economies, port authorities experienced enormous pressures to support economic development by modernizing their harbor facilities. In the United States, foreign trade grew at a substantial rate over the last two decades compared to previous years. For Pacific coast ports, where potential cargo growth is greatest, a combination of containerization, expanded trade with Asia, and a change in shipping routes from the Panama Canal to overland continental rail invigorated Pacific rim trade and transformed these ports into intermodal transport gateways for the nation.

Until the early 1970s, most large Pacific coast ports were able to accommodate these emerging demands with few conflicts in purpose. Over the subsequent decade, however, equally important demands for environmental quality and more diverse planning were imposed. Ports operate in delicate wetland environments where extensive marine ecosystems are impacted by dredging and land filling and other terminal development activities. Consequently, environmental regulation that emerged to offset or mitigate such impacts required ports to plan and develop their harbors around new demands of multiple interests in addition to their traditional economic development values.

Some Practical Observations

The port of Seattle has been among the most successful in the industry during this period of great change. Over the twenty-year period, from 1965 to 1984, the port grew from a small regional harbor to a world leader in the container revolution. By 1984 it ranked second (behind New York) among container ports in the United States and ninth in the world. In light of this, the following conversation provides a reasonable glimpse of how a successful management redesigned its organization structure to enhance its information-processing capacity to meet new and different opportunities and constraints. The conversation between the author (B) and Ford (F) is not meant to represent an empirical validation of theory, but instead to illustrate compatibility in theory and practice.

Role of the Chief Executive

Typically, the onslaught of significant transitional change alters the character and quality of available information on external conditions. One clear result is that the chief executive can no longer handle policy in a routine manner. Indeed, as part of redesigning strategic planning and development capacities, he often must delegate large amounts of discretion, reserving for himself a catalytic leadership and oversight role.

B: Tell me how your role as executive director has changed over the years.

F: As we got bigger, as regulation increased, and as the industry itself became technologically more complex, I think the role shifted from one of the top supervisor to more of a broad policy management function. The general manager always had the function of interfacing, of course, with the port commission, and the other political entities. That remains a very vital and important part of the job, but the relationship downward into the staff itself has changed from one of supervisor to a function where you merely set criteria and policy for people to follow and are not involved on a regular basis in the details.

B: Is this what some people refer to as decentralizing the organization?

F: Probably not in a classical management sense because we really do not have a very decentralized form of management like a lot of businesses. For example, when I first came here [as a young lawyer], the general manager personally negotiated all the major deals. All the development decisions were made by three people getting together over a cup of coffee—the general manager, the controller, and the chief engineer.

B: You used the term *technological complexity*. What is it specifically in that regard that made you evolve this management change?

F: Take the computer programs we installed. A general manager can perhaps visualize the data or the ultimate kinds of control that he might want to have for a particular part of the organization, but he lacks obviously the time and usually the

technical competence. A current example that we are working with is the application of computers to the monitoring of cargo cranes. I could visualize the need for more reliable cranes at a lower cost of maintenance and a quicker response time for repair. But even if I had the technical competence, I certainly do not have the time to design a monitoring system to work on these cranes. You may provide some input, but basically you rely on a staff and maybe a consultant to come up with some solutions.

B: When you select this group or staff to develop and implement that kind of technological innovation, how would you select them?

F: Because of the size of the organization, you have to make a decision on who your key people are and, in turn, try to stimulate them to do the same thing down through their suborganizations. Back in the early 70s when we had a hundred salaried people, the general manager could reach deeper into the organization and influence more of what was going on. When you have five or six hundred, you have a scale problem. My influence maybe reaches to 25 people at the outside. Several years ago, our chief engineer and I were talking about some of the problems we saw in the technical side that were coming up, and out of that conversation we agreed that we should set up a systems engineering division within the engineering department. We talked about where to find a person to head up the division, but I did not become directly involved in the final selection.

B: That raises an interesting question. How do you define *key people* during times of uncertain futures and change? Is this by virtue of the position that they are in? Or is it a matter of unique expertise that they bring to the organization regardless of the position they hold?

F: It's probably a little of both. It is difficult to define because to some extent when you talk about people, you become subjective. You do have a rough idea of what the organizational structure is and what it should look like. You also have a vision of who heads up those areas of responsibility and what their jobs are. But selection is all done on a very

informal network basis. It is not done in a structured environment. We needed an innovative person in this systems program. As we reflected on these circumstances, we concluded that we knew a person who had the experience in the areas of knowledge we needed.

Boundary Spanning

By spreading out the surveillance and interorganizational exchange tasks to clusters of specialized boundary units, the organization enlarges its capacity to (1) absorb more complex information and translate it into usable formats for development action and (2) interact with those external actors that exercise a degree of leverage over organizational autonomy. As transitional events in the task environment become more evident, these units may become centers of power within the organization.

B: What is it that triggered the realization that you needed an environmental management section?

F: When you have a problem that is going to be around for awhile, you build into the organization the people that can deal with the problems.

B: Can you tell me the kind of variables or considerations that were apparent to you which led to developing that unit in certain directions?

F: I'm a fairly pragmatic person in terms of management and I simply believe that you should institutionalize within the organization (hopefully not in a rigid way) those skills and response mechanisms that allow you to deal with the real world that you're in. Environmental legislation was part of the real world. It appeared to be here to stay and we wanted to be able to respond to it effectively. Since one of our functions is to build and maintain facilities on the waterfront, we needed a mechanism that would permit us to carry out that function. The initial recruiting, I think, was primarily for younger people who saw some career opportunities in this field. They came from a variety of backgrounds.

B: What about the public relations aspects of that environmen-

tal movement? You must be involved in public hearings and public meetings and I suppose even workshops?

F: Normally, when we put a project together, we have a project leader out of the planning department and he would have more planning type skills. Then, he will have assigned to him part of the environmental technical staff plus money if it is needed for consultants, and so forth to put the project together. In this context, it is his responsibility to coordinate the public hearing aspects. Sometimes when there are very sensitive issues, we call in a neutral third party to serve as moderator. The leader also has the backup of our public relations department for things like getting out newsletters, seeing that the press gets the word, and getting things set up. But, I have a management philosophy; I won't let our public relations people as a general rule act as spokesmen for the port.

B: Why is that?

F: Because I think the public resents it. They know they are nothing but hired guns. That is not to say that the public relations department doesn't release figures and do all the things that public relations does, but they do not serve as a spokesman on technical studies.

B: What is the role of the port commission in this organization?

F: You work pretty hard to keep them out of the details because I think it merely fuzzes up the issues. When they start worrying about what to pay a secretary, they lose track of the bigger problem of setting an integrated wage and salary package. So that things don't get distorted, we keep them in a policy orientation and use them as a resource. They come from diverse backgrounds, and they are being hit over the head regularly by the public and port users.

B: From a manager's standpoint, you are suggesting that they provide a liaison function interfacing with the public?

F: Absolutely. That is part of their role. If some person comes in and pounds on the table making difficult demands, we send the problem on to the commission.

B: To the extent that the commission protects the integrity of

the organization, meaning you and your staff, how does that come about?

- F:* They have made the decision not to involve themselves in the day-to-day administration. They select an executive director to run the daily part of it. They are basically very faithful to that. We have had a board made up of men who have their own individual resources to operate from. Some people say they are unresponsive to the community. They are so diffused, they do not respond to any single element. The reality, however, is they respond when they collectively see a trend. They will respond to the majority of the electorate, but they do not let a 20 percent minority intimidate them.

Strategic Planning and Project Management

Conditions of high information uncertainty require a management expertise based less on competence in organization procedure and more on a coalition of personally developed knowledge bases concerning organizational strategy, technology, and environment. In filling strategic planning positions, persons with outward-directed management specialties become more essential to organizational capacity than the long-tenured operations bureaucrat. Clusters of specialized knowledge are formed according to unique skills and personality attributes such as self-motivation and creativity in response to nonroutine information-processing requirements, while the formal chain of command yields to a multilateral form of coordination in strategic planning.

- B:* Let me pursue that project director notion a bit further. The way I hear you, this person would tend not to be a department head from your operations hierarchy. How do you define that position and what sort of qualities do you look for in assigning tasks?

F: We are great at setting things up on an ad hoc basis.

- B:* That sounds like what Boeing and others have called the matrix organization where you have a project manager who really is best defined from a structural standpoint as a person who is at a node of information or communication channels.

- F:* Yes. For example, he will not only draw against the resources within his own home department where he has got a lot of clean organizational structure, but we will assign people out of engineering to work with him, people out of other elements of the port (finance, whatever is needed) so that he can put the full package together. You get the usual kinds of conflicts: people in other departments saying, "I don't know that I really want to work with this project leader. It's not my department."
- B:* Does that cause conflict with the overlay of traditional organizational positions involved?
- F:* Yes, it does create some problems. It is not an absolutely perfect system in that sense, but the alternative is not as good in my opinion. The alternative is to simply assign it to a department and then they are faced with working in a vacuum and only the skills of the people in that department to draw on.
- B:* What you are doing with the project manager is legitimizing lateral communications across departments?
- F:* That's right, and there is *x* amount of refereeing that occurs.
- B:* Who does the refereeing?
- F:* Frequently, I do or one of the senior directors.
- B:* By refereeing, do you mean that you force them to reach consensus or you take it away from them and make the decision yourself?
- F:* Probably both happen in reality. It's not a perfect system, but the project director may come in to say, "These people in operations are absolutely impossible. They do not know what is going on out there, and they are insisting that we have this." Then, in the next ten minutes, the operating person is up saying, "these clowns in planning have their heads in an ivory tower. They do not have the experience and have never had to run one of these things. I refuse to work with them because they won't take advice anyway."
- B:* So, there is a line at which conflict becomes dysfunctional?
- F:* That's right. It is in the individual's self-interest, if he is bright, to try to work the problems out. If he gets the reputa-

tion for being uncompromising or unwilling to work within and listen to other views, eventually he will be isolated in the social setting of this institution.

B: But, are there more subtle ways that you use so that conflict remains functional?

F: When we have a project director, I try hard to make sure the staff which is working with him understands that in the final analysis he will have top management support. There is *x* amount of coercion from the top that you better work into the system if your tenure here is important to you. There is also an effort to balance out the personalities a little bit. At any point in time, we try not to have a project leader in a situation where he has to cope with too many strong characters who know the ropes too well. You assign people who are more on the same level so the project leader doesn't feel intimidated by having, say, a high-powered chief engineer directly involved.

B: Project management is a more difficult way of keeping an organization together than the traditional chain-of-command procedures. What was it that made you come to realize that you needed something like this?

F: Now remember, we are talking about the developmental level of the project. So we keep things in perspective, we are not talking about day-to-day operations. You still have a fairly rigid military once things get into the operating mode. We have to have a diverse group of skills and in an organization of our size, we cannot staff up with all those skills in one place under one nice clean chain of command. For example, we cannot permanently detach operating people of the quality needed and assign them to the project. Plus, I have a client-oriented philosophy about this. I try to remind our people in the development stage who our constituency and clients are. We have a lot of them. We might be able to produce a nice neat study from our perspective, but it might be one no one would buy. Neither the politicians, the shippers, the community, nor the bankers might accept it. So, you might as well start out solving the problems from the

client perspective—not just tying up the package in a ribbon and dropping it. This requires a project integration process different from a rigid military chain of command.

General Organizational Flux

In addition to the creation and linkage of boundary-spanning units and project-planning teams, conflicting external demands on the organization require a more complex capacity to coordinate management's strategic information-processing activities. Such capacity involves not only the mechanics of integration but also an intraorganizational climate tolerant of information ambiguities, nonroutine administrative decision processes, and flux in managerial relationships. In this catalytic atmosphere, people proactively fill vacuums with their talents and expertise to meet processing requirements.

B: The notion that “we cannot assign high-quality people permanently to a project because the project doesn't last forever” connotes a feeling that the organization is to some degree in a state of flux.

F: That's true.

B: Why is that?

F: Because your emphasis shifts. We are in a changing world.

B: Marketing emphasis? Technological emphasis? How do you mean that?

F: You can identify some of them, but any list you give would be incomplete. The requirements of our main clientele are changing. The political dynamics of the community are changing. The technology itself is changing. It may be incremental in the view of a historian, but in terms of all these things going on at various points, they impact the organization. So, I think you need to have a very fluid organization to avoid a situation in which change is the most difficult thing people have to deal with. We want to keep our people fairly flexible. I have seen the opposite situation where management was not sensitive to this. Things were moving along well, so they allowed things to solidify. Then, when they had

to change, the internal organization simply could not cope with it. I am accused of deliberately inciting a certain amount of conflict. I believe in constructive conflict as the way to get the best results because I don't believe there is any perfection in life. There is no great final sound solution to problems. What there is are groups of well-intentioned people working toward solutions and a series of compromises because there are so many forces working on these things. You never can satisfy all of them perfectly. There are not enough resources to do that. Moreover, people have vigorous separate views on how to accomplish a task, obviously weighted by their experience and their backgrounds. By that, I don't mean just in a technical or professional way, but even their upbringing; whether they are more socially sensitive or less so—all of these kinds of things. You get the issues percolated up where you can really get a hold of them and try to sort them out to come up with a working solution.

B: Are you saying that the conflict generates the kind of innovative thinking you want?

F: Exactly.

B: That would probably not happen from other forms of coordination.

F: That's right, but some people find this form of coordination very difficult to work with. They see conflict as something disruptive.

B: You used the term *ad hoc* earlier. Is it also true that in addition to you assigning responsibility that through their activities in these projects, the staff people come to acquire responsibility?

F: It depends again on the individual. If management allows vacuums to occur, aggressive people move into those vacuums like a shot. I frequently get a department head in to complain about another department head trying to run the complaining head's staff. I tell him if he is not capable of running his department, someone will encroach on his responsibility.

B: That seems to be particularly important in the case of external flux and adoption of new technologies where you do not

always know what all the responsibilities should be at a point in time.

F: That's right. A lot of it you learn as you go along.

Expertise and the Strategic Career Ladder

During times of significant change and increased complexity, the meaning of expertise for strategic management may vary considerably from skills needed in operations management. This often is reflected in personnel policies concerning career advancement criteria. To the extent that an openness toward learning and change is an essential attribute for strategic planning, those personalities who demonstrate broad analytical and large integrative capabilities are likely to be favored over members of a seniority system focused more narrowly on operational skills.

B: Let me go back then to my initial question. It sounds as if what you said is that the evolution of the organization is less a function of changing the guard in executive directors and more one of the overall organization, including yourself, responding to a number of factors: technology, environment, markets. Is that true?

F: I think that's right. For example, let me tell you how I got into management. I came to the port as a lawyer, and the first couple of years, the legal side is essentially what I handled. At that time, the port was about to build its first container pier. In the beginning, the port was going to build it without a tenant to use it. Then, the Japanese Six Lines came shopping in the Pacific Northwest for a terminal. The general manager got them to agree to negotiations and they sent a delegation over to hammer out the agreement. I was with the general manager when negotiations started. After about an hour of discussion, he said to me, "I've got to get out of here. I can't spend days negotiating this thing. You take it over; you negotiate it." That was my first strategic responsibility, and I negotiated the deal for our first container terminal. As things started to take more time, the general manager had to relinquish more of the activities he had had over the years. We

started to get delegation by default, I suppose. Responsibility got delegated outward from the general manager to people who seized it and could prove reasonably well they could handle it. Then, we went through the old bureaucratic thing where you rewrite job descriptions to fit what they do.

B: Why all of a sudden is it important to have very detailed elaborate negotiations for leases, whereas it was not to a great extent prior to that?

F: The steamship lines themselves were the container operators and the large carriers, at least, wanted to control the terminal as part of their operations. They saw the terminal as an integral part of the container technology which could not be separated from their ship operations. The ships became much more expensive and they had to have guaranteed cranes to avoid transshipment delays. In other words, they wanted commitments from the terminal owner that also required them to make return commitments which eventually got identified in the lease.

Strategic vs. Operational Processing Capacities

As the organization tries concurrently to maintain efficiency in its current position and search for new strategies of competition and adaptation, performance often depends on maintaining a balance between routine processing capacities for daily operations and the more fluid processes engaged in strategic planning. Moreover, as transitional change gives way to a period of more stability, this balance will shift to meet the new processing requirements. Knowing the cues that signal the need for a shift in administrative capacity may be an important ingredient to effective management.

B: I sense that while you have a traditional type of organization in your operating activities, the overall flow of the organization currently tends to be rather fluid and flexible.

F: In operations, we run pretty much by the book. We have to have a routine because we basically have repetitive tasks, even down to sweeping the decks. It's done on a cycle.

- B:* The traditional organization would probably have a written set of rules or a manual. Would this be an instrumental part in the way decisions are made or is such formality peripheral?
- F:* For probably 90 percent of what happens on the operations side, formalization is important. If you are a department head, for example, you just do not go out and buy a new truck.
- B:* Where does the ad hoc aspect of decision making come in then, if 90 percent of what you do comes out of the book?
- F:* I'm saying that in the method by which we study development projects, we put together structures that are ad hoc for that particular project. Both in marketing and in the planning and research department, we are trying to identify trends in the industry. When we talk of the developmental side of the port, we try to say: if these are the growth trends in the industry, what do we need to have in place to respond to them? That comes from a whole series of things. Part of it is done in a rather careful research manner. Part of it is perhaps just a salesman in Spokane calling to say, "The apple crop is huge. How are we going to take care of it or are we reducing our participation in that market?" All of these filter in and we try to develop some long-range plans to respond to the variations and opportunities.
- B:* It seems to me that if you look at your setting over the last decade or so, you have been very development oriented. The bulk of your time as well as that of many people at the port has been in activities where the flexible ad hoc kind of organization has had to exist or prevail. Is that true?
- F:* Yes.
- B:* What do you anticipate happening, then, if and when your development phase slows down or stops? Will you become a more rigid organization and shift back to a traditional operations structure?
- F:* I suppose, if we were not building anymore, we would switch. I think, however, changes are there all the time. I can remember things that we built and later tore down. I was here

when we built them and I was here when we tore them down to rebuild for other uses.

Intraorganizational Communication

Communications are an important aspect of most strategic management concepts, but they are central to the information-processing model. If conflicting external changes require the assimilation of a greater magnitude of complex information, the consequent rise in decision-making uncertainty would demand a capacity based on less formality to encourage perspectives other than "the party line." Here, uncertainty requires the capacity to learn and conceive of alternative strategic actions.

B: Regarding the kind of flexibility you have described, I also suspect you are implying something about the way you communicate with each other in the organization. For the traditional organization, formal written communications may be proper procedure. Is that also true in the project director type of organization?

F: Certain things are better put in writing than left to interpretation, agreement, and comments. I probably tend to get into too many things and handle things verbally too often. That may be a management style that would be better left behind. On the other hand, the virtue of it is that you respond quickly, you get things done, you don't fool around worrying. It's a balancing act between recognizing when it makes sense to memorialize it on hard copy and when it makes sense to solve things in a more informal, verbal communications environment. Until we are pretty far down the road and start to nail down the details, we keep it loose by trying to encourage people to deal on a very informal basis. Once it is in writing, people who have some different views and a contribution to make tend to back off. They say, "The decision is already made. It's there in black and white. What is left for me to say?" You can lose a lot of good input that way. I spend a lot of nights up in the bar with the staff just talking about issues,

but not getting down to the hard and fast specifics. That is the way we give and take. We also do a lot of that in the conference room and in the halls. I know you can have too much flexibility and we may be a little guilty of that, but I still think that good organizations are able to respond quickly to the opportunities and problems they have during times of change.

B: The critical point you are making is that formal communication to some degree stifles the innovation that you are really after.

F: That's right.

Conclusion

In the public port industry, the more successful organizations can be seen in terms of growth in their market shares over the last two decades and in their relative ease in dealing with environmental protection agencies. Reflecting an enterprising spirit, the annotated conversation suggests that Ford, as prime mover, perceived a need for strategic planning and adaptation in the context of new information-processing requirements. Problems in workload allocation, insufficient knowledge about the changed environment, misinterpretations of external actors' intentions, and the appearance of a crisis or strategic opportunity became indicators of changing information-processing requirements, signaling the need to redesign or enlarge strategic capacities. From a structural perspective, this involved (1) the creation of new boundary-spanning activities (in this case, a new environmental group and a more aggressive board of commissioners), (2) design of a strategic project management system, (3) acceptance of more ambiguity in staff assignments and interactions, (4) allowance for those with needed personal skills to rise up the career ladder ahead of less strategically important expertise, (5) a balancing of processing capacities between strategic and operational requirements, and (6) the encouragement of a more open communications network related to planning and development needs.

Drawing generalizations from this CEO's experience in this

particular industry may be a hazardous venture. One certainly would not offer a "boilerplate" prescription for success that simply includes the six strategic design factors mentioned here. They are context specific to the domain and task environment of the Pacific coast multicargo port industry. Moreover, the article is not intended to be an empirical proof of theory, but only an illustration of theory's compatibility with practice. Nevertheless, the sensitivities and awareness expressed by Ford do provide some interesting clues. The comments suggest not only a need for a catalytic leadership role for the CEO in times of conflicting change, but also the kind of organizational atmosphere and strategic processes that need to evolve or be initiated. In this latter respect, Ford provides a concluding insight to innovative management involving a degree of coincidence:

Seattle was extremely fortunate to have a publicly inspired grassroots campaign to revitalize the port which occurred right at the time the technology was changing. In 1958, a television exposé was aired called "Lost Cargo," and the port was in trouble. That led to the formation of community groups and the expansion of the port commission, which passed a bond issue and reorganized management. Part of this reorganization involved the hiring of [the general manager prior to Ford]. He was an extremely astute individual, a product of his time in many ways, but he understood about as well as anyone the dynamics of what was happening.

Undoubtedly, this combination of events enhanced the port's capabilities for redesigning its information-processing capacities. Prospectors tend to be born out of industry laggards and recognize opportunity rather than threats from their performance gap (Miles, 1982).

Acknowledgment

My thanks are given to Lloyd D. Musolf of the University of California at Davis for the valuable suggestions he provided for revisions to an earlier draft. They resulted in a much improved article. Any remaining flaws are of course those of the author. Gratitude is also expressed to the Federal Sea Grant Program, which provided funding.

References

- Aldrich, H., and D. Herker. 1977. "Boundary Spanning Roles and Organization Structure." *Academy of Management Review* 2: 217-30.
- Astley, W. G., and H. Van de Ven. 1983. "Central Perspectives in Organization Theory." *Administrative Science Quarterly* 28:245-73.
- Benson, J. K. 1975. "The Interorganizational Network as a Political Economy." *Administrative Science Quarterly* 20:229-49.
- Boschken, H. L. 1982. "The Demands of Conflicting Change on Public Enterprise: West Coast Seaport Development and Environmental Regulation." *Public Administration Review* 42:220-26.
- Boschken, H. L. 1987. *Strategic Design and Organizational Change: Managing Growth and Conflict at Pacific Rim Seaports* (forthcoming). University, Ala.: University of Alabama Press.
- Callahan, R., and P. Salipante, Jr. 1979. "Boundary Spanning Units: Organizational Implications for the Management of Innovation." *Human Resources Management* 18(2):26.
- Child, J. 1972. "Organizational Structure, Environment and Performance: The Role of Strategic Choice." *Sociology* 6(1):1-22.
- Cleland, S. 1960. "A Short Essay on a Managerial Theory of the Firm." In *Linear Programming and the Theory of the Firm*, ed. Boulding, E., and W. A. Spivey. New York: Macmillan.
- Egelhof, W. G. 1982. "Strategy and Structure in Multinational Corporations: An Information-Processing Approach." *Administrative Science Quarterly* 27:435-58.
- Gore, W. J., and F. S. Silander. 1959. "A Bibliographical Essay on Decision Making." *Administrative Science Quarterly* 4:104.
- Hrebiniak, L. G., and W. F. Joyce. 1985. "Organizational Adaptation: Strategic Choice and Environmental Determinism." *Administrative Science Quarterly* 30:336-49.
- Miles, R. H. 1982. *Coffin Nails and Corporate Strategy*. Englewood Cliffs, N.J.: Prentice-Hall.
- Miles, R. E., and C. C. Snow. 1978. *Organizational Strategy, Structure, and Process*. New York: McGraw-Hill.
- Organ, D. W. 1971. "Linking Pins Between Organizations and Environment." *Business Horizons* 14:73-80.
- Pfeffer, J., and G. Salancik. 1978. *The External Control of Organizations*. New York: Harper and Row.
- Scharpf, W. 1977. "Does Organization Matter? Task Structure and Interaction in the Ministerial Bureaucracy." In *Organization Design: Theoretical Perspectives and Empirical Findings*, ed. Burack, E. H., and A. R. Negandhi, pp. 149-67. Kent: Kent State University Press.
- Schmidt, S. M., and T. A. Kochan. 1977. "Interorganizational Relationships: Patterns and Motivations." *Administrative Science Quarterly* 22:220-34.

- Selznick, P. 1949. *TVA and the Grass Roots*. Berkeley: University of California Press.
- Stout, R., Jr., 1980. *Management or Control?* Bloomington: Indiana University Press.
- Thompson, J. D. 1967. *Organizations in Action*. New York: McGraw-Hill.
- Thompson, J. D., and W. J. McEwen. 1958. "Organizational Goals and Environment: Goal Setting as an Interaction Process." *American Sociological Review* 23:28.
- Van de Ven, A. H. 1976. "On the Nature, Formation and Maintenance of Relations Among Organizations." *Academy of Management Review* 1:24-36.

