

SHIFT OF MANAGEMENT CONTROL

From the Hierarchical to the Networking Model

Anthony's (1965) model of planning and control consists of three categories: strategic planning, management control, and operational control. This model has dominated the theory and practice of business for the last 25 years. Anthony's model reflects a closed system concept of the isolated enterprise in a formatted (machines and materials) national economy. This economy was based on the division of a specialized and massive labor force similar to the military in World Wars I and II with a rigid command structure. The 1980's were the last decade when this model could be successfully applied in business without major modifications.

The 1990's are a decade of an emerging global and informed (computers and communications) economy in a post-industrial era, where "borderless-stateless," multi-national companies, and national companies compete with foreign products and services through innovation, price, and time. The competition, cooperation, and partnership among company peers, research centers, and suppliers through enterprise-wide computer information systems has shifted the management structure. It has been transformed from a tall to a flattened hierarchy of four or fewer layers with network communications subordinated to results-oriented performers within and among temporary (ad hoc) project teams. This new structure reminds one of university governance. In essence, this new multidomestic enterprise has two rules: "each person is his/her own boss" and "think globally, act locally."

The steep hierarchy in the post-industrial, Global Information Age era is no longer an adequate base of power. Today's managers get work done by building a lateral network of information-sharing relationships, and by developing commitment rather than compliance to a shared vision. They also find new sources of ideas and opportunities and broker deals across internal and external corporate boundaries. Effective managers are integrators, conductors, facilitators, and "fertilizers," not watchdogs or supervisors.

A network is a recognized group of managers (seldom more than 100, often fewer than 25) assembled by senior management. Network membership solution criterion is simple, yet subtle: what select group of managers, by virtue of their business skill, personal motivation, drive, and control of resources are uniquely positioned to shape and deliver a winning strategy? Networks, the new social architecture, are important for the change of organizational behavior: the frequency, intensity, and honesty of the dialogue among managers determines the outcome of priority tasks. The network operates at its best

when it guarantees the visibility and free exchange of information to all participating members (Halal, 1996).

In companies such as Conrail, Dun & Bradstreet Europe, MasterCard International, General Electric (some business units), Du Pont, and Royal Bank of Canada, networking plays to the participants' best interests by achieving commitment for specific tasks. Over time, the network induces emotional energy, builds commitment, and enjoys the work.

Twenty years from now, the typical large business will have half the levels of management and one-third the management personnel of the present firm. Work will be done by specialists brought together in project teams that will perform across traditional functional departments. Coordination and control will largely depend upon the employees' willingness to discipline themselves (Drucker, 1988). Behind these changes lie communications and computers. Networked computers process and communicate information faster and better than multiple layers of middle management. Traditional departments won't be where the work gets done. According to Drucker (1988), the best organizations won't have middle management at all. This outcome, however, may be too unrealistic for business as a socio-technical system, evolving constantly, with changes and shifts that must be skillfully managed. The tasks for mid-level management are shrinking, but probably won't disappear entirely.

To survive, business will have to shift from armies of clerical soldiers into organizations of knowledgeable associates (demonstrating intellectual curiosity and a global mind-set) who are flexible, and well-informed specialists or generalists unified by a shared vision, and organized into ad-hoc, interactive teams. This type of merito-crazy is called a "webarchy" (Evans and Wurster, 1997). There will also be less structured career development, with fewer assured routes for promotion, but more opportunities for recognition, innovation and entrepreneurial success. Managers will become facilitators and conductors of culture change enhanced through cross-cultural communication in a business informed environment.

Business Innovation

The strategy of trimming companies in the 1980's through massive layoffs, often executed with the finesse of a Prussian drill instructor ("my way or the highway"), has left the atmosphere at many firms alive with alienation. There is tremendous frustration and tension between employers and their employees. Mutual cynicism and mistrust seem to be at an all-time high. Into this human resources ruin comes a new breed of management expert and executive, who

preach a gospel of full worker participation in managing the company. Such a philosophy has already won reformers at Ford Motor Co., Goodyear, and General Electric. Management must stress collaboration, ingenuity and creativity, rather than internal conflict.

Management must develop new solutions and recognize a new language. They have to replace the stale culture with a new one with its own new rules and postulates. A permanent learning process must be implemented so as to prod the worker's mind to accept more innovation, competition and cooperation in a turbulent information-rich environment. Leadership must then provide atypical solutions.

The Campus Model

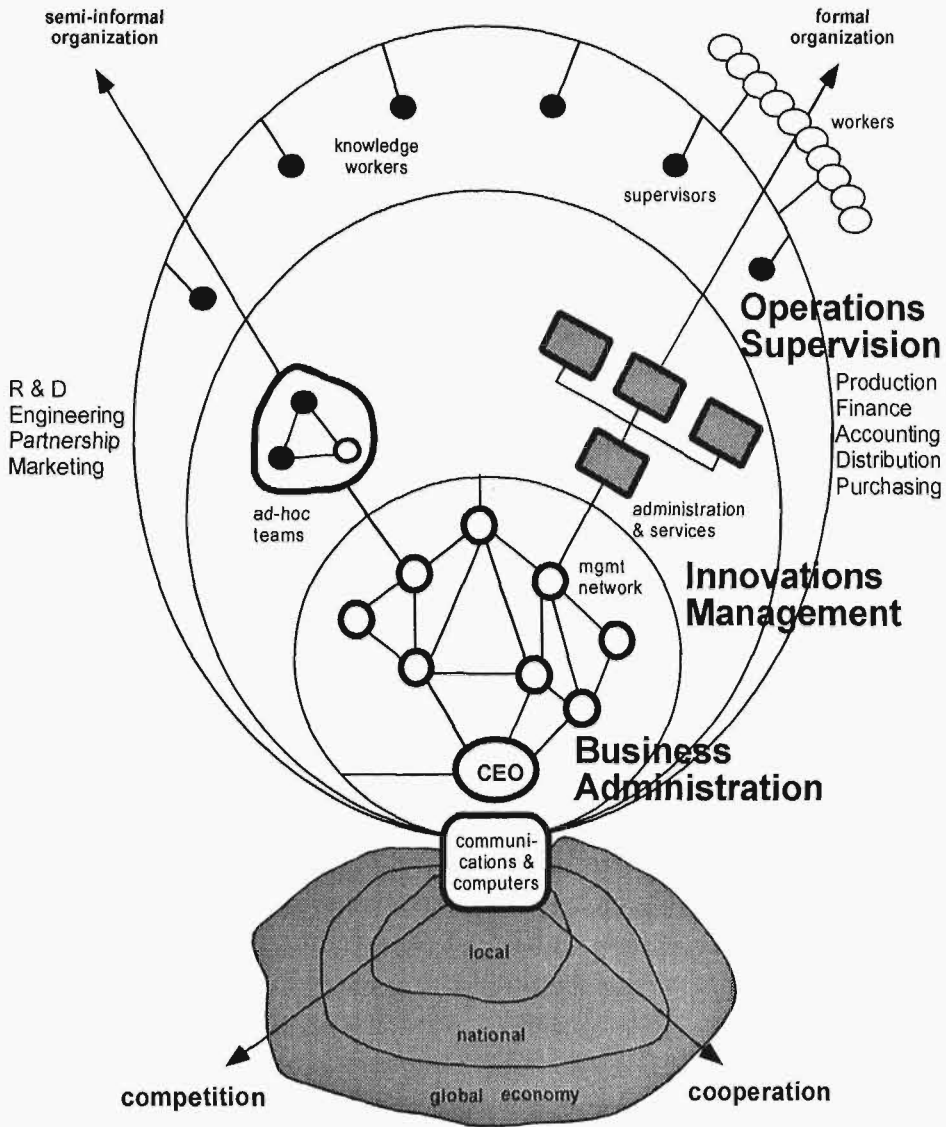
Figure 1-4 depicts a synthesis of existing practices and postulates solutions for a new campus structure of management in the network-cooperative enterprise. Since knowledge becomes a strategic resource, knowledge-based firms will evolve into university-like organizations (Davis and Botkin, 1994). As such they will turn to a campus-like organizational structure with a dual process, a formal administrative one and an informal one for the faculty. The campus administration provides procedures, funds and services to the faculty and students, while the typical president is more a facilitator than a powerful czar.

The faculty produce knowledge, solve problems, discover new theories, and teach students. In the campus structure for business organizations the old, steep hierarchical structure is inverted and flattened. The new structure is divided along three time dimensions: long, medium, and short range. It is also electronically integrated by an enterprise-wide communications and computer information processing system. Outside the halls of academia this model has been fully embraced by Microsoft.

In the campus model, business administration must provide the vision, motivation, corporate culture, agenda, goals and strategy, communication, profitability, discipline, and equilibrium. Business administration is a long-term management function carried-out by a CEO and managers who ensure a spirit of competition and cooperation. They must also provide new opportunities and customers. The skills required are intellectual, with a global strategic conceptualization of the business.

The new campus organization revolutionizes the *modus operandi* for business, the economy, and government, as well as the workers and executives who during the 1990's and beyond must learn to apply new knowledge and

Figure 1-4: The Architecture of a Campus Management Apparatus



techniques. These new techniques mean that the administrative level of management is one of service and facilitation for other managerial levels. In other words, business administration is now like the roots of a tree feeding a dynamic, innovative, and productive enterprise whose leaves are green through-

out the seasons. The ancient Chinese emperors who were in service to their citizens fully understood leadership as a service occupation. The critical layer of global business, to the surprise of many, is the highly knowledgeable middle manager, who creates and implements the innovations that ultimately decide business survival and success. Of course, the middle manager who is only involved in information collecting and processing has no guarantee of survival since this position itself is being computerized.

This new managerial role requires open-minded CEO's, CFO's, COO's, and CIO's who can build networks for motivated "associates" who collaborate to achieve innovation, productivity, customer satisfaction, and profitability. The network starts locally, becomes national, and more frequently emerges globally. A new type of executive is necessary, not one who can only use a computer, but one who can learn to communicate easily with collaboration-oriented performers and who is not intimidated by the expertise of others. These executives are not necessarily the youngest or the oldest, but simply the best.

From Tasks to Culture Control

Management has shifted from Goals-Objectives-Tasks to Vision-Culture-Results Management. Once a worker becomes his or her own boss and the manager becomes a facilitator, managerial control shifts from quantitative to qualitative aims. To support this new orientation and work ethic, executives must learn how to become leaders to provide a vision, to negotiate from the bottom-up with top-down goals, and to create a culture supportive of excellent performance.

A corporate vision must be provided by business leadership which integrates long-term value and architecture (a multi-dimensional, harmonic configuration of the company and its customers) with a defined philosophy, goals, and culture. This vision should also be generated by all the "associates" from within the firm. Such a generation of vision requires better horizontal communication which will energize the employees' spirit and joy for work.

SHIFTS OF INFRASTRUCTURE

From Formative to Informative Products and Economy

A shift from formative to informative products and economy, and a shift from hardware to brainware, is driven by a shift from traditional materials and