

**Alternative Organizational Structures:
Implications for Competitiveness of Markets**

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The current lack of competitiveness in agricultural markets is a direct reflection of a national obsession with the industrial paradigm of business organization. Specialization, standardization, and centralization characterize the industrial paradigm. Specialization, with each person or unit performing fewer functions, allows each function or step of a production process to be performed more efficiently – i.e. division of labor. Standardization allows the various specialized functions to be integrated into an efficient overall production process – i.e. assembly line production. Specialization and standardization allow, in turn, efficient centralization of management and consolidation of control – i.e. economies of scale.

Economies of scale allow fewer firms or business organizations to grow larger and thus to gain greater control over the total output of an industry – e.g. allows fewer packers to gain control over total livestock slaughter and processing. As firms become fewer and larger, they acquire increasing market power – the ability to reduce buying prices and increase selling prices – leading to further economies of "size," still greater market power, and chronically declining competitiveness of markets.

An industrial organizational structure has evolved to facilitate specialization, standardization, and centralization of control. Organizations are separated into specialized units – divisions, sections, departments, etc. – so as to facilitate gains from specialization. The function of each unit then must be specified and standardized so that all units work together effectively to achieve the overall purpose of the organization.

All workers in an industrial organization have responsibilities to carry out the specific, standardized tasks associated with their particular position within the organization. Workers with more highly interrelated responsibilities are grouped together within work units to facilitate integration of their individual functions – e.g. sales representatives make up the sales department. Likewise, units with more highly interrelated responsibilities are grouped together to form higher level divisions within the organization – e.g. all sales, advertising, and promotion departments may make up a merchandizing division. Management positions carry the responsibility for ensuring that the output of a particular unit meets or exceeds the standards necessary for that unit to fulfill its specified function within the organization.

The manager of each department within a division is responsible to the manager of the overall division for the performance of his or her department. Thus, management is

centralized at each level of organization, but decisions of mid-level managers are narrowly bounded by the demands of the overall organization. Within industrial organizations, the ultimate responsibility for all decisions is centralized in the position of the chief executive officer of the organization. Mid-level managers certainly may have input in decisions made at higher levels in the organization, as do boards of directors, but ultimate responsibility for management lies with the chief executive officer.

By its very nature, the focus of industrialization must be on functions, procedures, and positions rather than people. Each person who fills a position within an organization, including the chief executive officer, must perform the functions associated with their position according to prescribed procedures in order for the organization to function effectively. Any significant deviation from the prescribed standards by any person – no matter how innovative, creative, or potentially productive – detracts from the overall functioning of the organization. All of the individual parts must work together in a prescribed manner for the good of the organization as a whole.

Each organization must have a purpose; otherwise there is no logical reason for bringing people, money, and other resources together. If a purpose can be achieved as effectively and efficiently by a collection of unrelated individuals, an organization is unnecessary. The organization is designed so that its specific functions, procedures, and responsibilities, if carried out properly, will ensure that the purpose of the organization is achieved. In a sense, the purpose is designed into the organization.

A well-run industrial organization works like a well-oiled machine. Each machine is designed to fulfill a purpose – which may be as simple as drilling a hole or as complex as assembling the body of an automobile. Each part of a machine is designed to perform a specific function by a specific process so that all parts working together allow the machine to fulfill its purpose. Each machine is controlled by an operator who may do something as simple as flipping a switch or as complex as guiding the machine through a series of intricate maneuvers. However, the role of the operator is matched with the design of the machine – together they fulfill a purpose.

A machine must be maintained if it is to continue to perform effectively. A poorly maintained machine is vulnerable to breaking down and wearing out. Even under the best of care, individual parts may wear out and have to be replaced. Machines with interchangeable, replaceable parts can be repaired rather than replaced, and thus, have a tremendous advantage over machines that are manufactured as single units. Eventually however, any machine will become obsolete – it will no longer be able to fulfill its purpose as well as some newer design. Eventually any machine must be either redesigned or discarded and replaced with a newer model.

An industrial organization, like a machine, is designed to fulfill a purpose. Each position in the organizational chart, from chief executive officer to production line worker, is defined so as to fulfill a specific function in achieving the purpose of the organization – just as each part of a machine is designed to contribute to the purpose of the machine.

An organization requires constant maintenance to ensure that each person in the organization performs his or her function in support of the overall organization. Even in the best of organizations, individuals eventually “wear out,” – become disabled, retire, or simply lose their commitment or usefulness to the organization – and will have to be replaced. However, a “new person” can be hired to fulfill the specific responsibilities of the “old person” – the parts are interchangeable – and the organization will again function as before.

If the organization becomes obsolete – is unable to perform its purpose as effectively as some competitive organization – it must be reorganized, restructured, or redesigned so as to make it run more effectively. The ultimate responsibility for redesign lies with those who own the organization, the stockholders in the case of a corporation, but may be delegated to top level management. Regardless, someone must decide when an organization has become obsolete and thus must be redesigned or discarded.

Many of the problems of industry today arise from the unfortunate combination of the industrial model of organization combined with the corporate model of ownership. Corporate ownership has become the dominant ownership structure because it complements the industrial model of organization. Corporate ownership allows firms to centralize decision making by becoming ever larger and increasingly powerful in their respective markets. Industrialization provides the motive for separation of management from ownership, and incorporation allows it to happen. However, while industrial organization has allowed the management to become concentrated in the hands of a few high level managers, the corporate financial structure has caused ownership to be dispersed among many individual shareholders, each of which has relatively little if any control over the companies they collectively own.

Corporate managers have little incentive for reorganizing the companies they control – particularly if reorganization might mean they would have less power, a smaller paycheck, fewer stock options, or no “golden parachute.” It’s easier for top management to use their market power to discourage or destroy would-be competitors and to extract profits from suppliers of raw materials or consumers of their products rather than to reorganize or liquidate. Shareholders are far more interested in dividends and growth in the value of their portfolios than in either the true efficiency or ethics of the companies they own. So as long as a corporation shows quarterly profits and continues to grow, no one demands that it be reorganized or disbanded -- no matter how inefficient or obsolete it may become. Inefficiency and obsolescence become apparent only if markets are open to new entrants – but this requires competitive markets.

The current competitiveness crisis in agriculture markets is a symptom of obsolete organizational and ownership structures. The industrial organizational paradigm not only dominates corporate agribusiness structure but also now dominates even the public institutions with responsibility for monitoring agribusiness and maintaining the competitiveness of agricultural markets.

Under current conditions, no one is capable of wresting control of agricultural markets from corporate agribusiness – not even the top managers of agribusiness firms themselves. Stockholders demand profits and growth, not just over the long run, but quarter after quarter. So there is no opportunity for management to stop, reorganize, or redesign a corporation in any substantive way, even if they wanted to. In general, no individual stockholder has the power to restructure, redesign, or to liquidate the corporations in which they own shares. So industrial corporations can only continue to do what they were designed to do – nothing more or nothing less. Corporations are designed to make profits and to grow.

Government can't stop the corporations, because politicians too have come under their power. Politicians are strongly influenced, if not controlled, by the agribusiness corporations through their large contributions to political campaigns. Agricultural constituencies are influenced, if not controlled, by the general farm organizations and commodity groups. These groups are far more concerned with maintaining production and profits for agriculture as an industry than in maintaining competitive markets or viable family farms and rural communities. The USDA and the rest of the government bureaucracy have an organizational structure much like industry that responds far more to agribusiness interests than to the needs of family farmers. Consequently, government either supports or at least offers no meaningful resistance to corporate consolidation and ultimate corporate control of agricultural markets. Thus, American agricultural is dominated by an obsolete organizational structure that is essentially out of control.

The crisis of competitiveness in agriculture markets will not pass unless or until the current industrial organizational structure is replaced with an alternative self-regenerating, post-industrial organizational paradigm. Such a paradigm quite likely will emerge from the dozens of different ideas that are currently being tested in the twenty-first century marketplace. Ultimately a new, post-industrial organizational model will replace industrialization as the dominant paradigm for organization of productive resources.

We are at that very point in time when a 400-year-old age is dying and another is struggling to be born – a shifting of culture, science, society, and institutions enormously greater than the world has ever experienced. Ahead, the possibilities of the regeneration of individuality, liberty, community, and ethics such as the world has never known, and a harmony with nature, with one another, and with the divine intelligence such as the world has never dreamed. (Dee Hock)

Dee Hock, the founder of VISA Corporation, is perhaps the most effective critic of the old industrial, hierarchical model of organizational control, and the most vocal advocate of organizational change. Hock advocates what he calls a “chaordic” organizational paradigm as the replacement for industrialization. However, Hock most certainly is not alone in his belief that the industrial model is obsolete, at best – that industrialism must be replaced with an alternative system of resource management if we are to have a sustainable human society.

Alan Savory advocates a “holistic” approach to resource management. Peter Senge promotes a “learning systems” approach to business organization. Peter Drucker writes about a “post-capitalist” economy, and Alvin Toffler of a “knowledge based” approach for economic development. Fritjof Capra focuses on living organisms, rather than machines, as the appropriate paradigm for living organizations. These and others share a common belief that the industrial era is ending and a new post-industrial era is emerging – a new era that will require a new and different organizational paradigm.

The commonality of all these new post-industrial approaches is a focus on purpose, principles, and people. The post-industrial organization, like any organization, must have a purpose. However, the purpose is much more prominent and important to the post-industrial organization. For the industrial organization, purpose was of primary importance in designing the organizational structure. However, once the structure was in place – each position identified, given a specific function, and placed within the management hierarchy – the purpose became secondary. If the responsibilities of each position were performed effectively, the organization would fulfill its purpose. With post-industrial organizations, however, the purpose of the organization must remain continually in the consciousness of everyone in the organization. The focus is on the people who fill the positions rather than on the position descriptions.

The structure of post-industrial organizations is dynamic rather than fixed. Positions, departments, divisions, organizational units, take on new meaning. They are continually changing and evolving, forming, and dissolving as the organization transforms and renews itself to meet the ever-changing demands of a dynamic marketplace in an ever-changing economic, social, and natural environment. This is the *chaotic* part of Hock's *chaordic* organizational model. The *order* part of the *chaord* is embodied in a set of organizational principles. The purpose and principles of the organization remain unchanging -- leaving the structure to evolve as needed to maintain the effectiveness and efficiency of the organization.

The post-industrial organization is embodied in its principles of operation rather than its organizational structure. The principles of an effective organization must embody the standards of individual conduct that are both necessary and sufficient for the organization to fulfill its purpose. If a principle is not necessary for the functioning of the organization, it will unduly constrain the ability of the organization to adapt to changing needs. If the set of principles is not adequate or appropriate to ensure success if followed completely, the organization may not function effectively.

Principles are fundamentally different from the specific functions that make up a position description. A person in a post-industrial organization may still have specific responsibilities, but will be free to meet those responsibilities by any means consistent with the principles of the organization. The person in a position, not the position description, will determine the most appropriate means of pursuing the purpose of the organization. And the person may change their means of fulfilling their responsibilities at

any time to adapt to different situations or changing organizational environments. Thus the focus of post-industrial organizations is on purpose, principles, and people.

The differences between industrial and post-industrial organizational paradigms are much like Capra's description of differences between dead and living systems. A machine is a dead system – it has no life of its own. A human body is a living system – it can function autonomously.

Capra contends that all systems have three basic characteristics: pattern, structure, and process.

The pattern is the conceptual framework for the system. For a dead system, the pattern is the blueprint or design. For a living system, the pattern is embedded in the DNA – in the genetic code. The pattern is constant, unchanging, or fixed for both dead and living systems. A machine always is a machine and a person always is a person.

The structure of a system is the physical embodiment of the pattern. For dead systems the structure is the thing you see or touch – the machine, the building, the road, etc. For a living system the structure also is the thing you see or touch – the plant, the animal, the human body, etc. The primary difference between dead and living systems is found in the structure. For dead systems, the structure is fixed – it can never change on its own. It may wear out or it may be rebuilt or redesigned, but it has no autonomous ability to change. A machine keeps its same physical structure for all of its useful life. However, the structures of living systems are in a continual state of change. Living things are born, they grow, they mature, they reproduce, and they die. This continual change is a fundamental characteristic of life.

Process also is different for dead and living systems. Dead systems perform their purpose or tasks by linear sequential processes of input, transformation, and output. The fundamental purpose of dead systems is to transform some input into a more useful or desirable output. A person rides a bicycle to transform kinetic energy embodied in leg muscles into mechanical energy that turns the wheels and propels the bike down the road. An engine transforms the kinetic energy in fossil fuels into mechanical energy to perform some useful task. Input results in output.

Living systems perform useful purposes or tasks as well, but living processes are self-renewing and self-regenerating as well as functional. Living processes are circular and simultaneous rather than linear and sequential. Living systems operate in cycles of birth, growth, and reproduction – before death. Function and regeneration occur simultaneously for living system – they renew themselves in the process of fulfilling their purpose.

In summary, dead systems are designed to accomplish some purpose according to some blueprint or pattern, they function for the duration of their usefulness, and then they are either redesigned or discarded. On the other hand, the pattern and purpose of a living system is embedded in its genetic makeup, in its Dante processes of a living

system include both functional usefulness and self-renewal. Living systems continually change and renew their structure in accordance with the unchanging genetic code embedded in their DNA.

The industrial organization is a dead system. Post-industrial paradigms are living systems. The purpose of the post-industrial organization is encoded in the principles by which the organization functions. Principles rather than structure ensure that the post-industrial organization will function so as to fulfill its purpose. By organizing around principles, the structure of the post-industrial organization can continually change and evolve as needed to continue fulfilling its purpose. The conceptual DNA of the post-industrial organization is encoded in its organizational principles.

The post-industrial organization doesn't have to be reorganized, restructured, or liquidated by some outside force. It is self-making, self-renewing, and even self-liquidating. Once a living organization loses its ability to adapt sufficiently to fulfill its purpose it will reproduce itself as another organization. Or if its purpose is no longer relevant to society, the post-industrial organization quite simply will die. Unlike the industrial organization, a living organization has no fixed structure to keep it on "life support" long after it is "brain dead."

The corporate industrial organizational structure evolved to meet the apparent needs of the industrial era of economic development, but the industrial era is rapidly coming to an end. New economic activity – investments, jobs, income – is not being generated in the industrial sector of the economy, but is rising from post-industrial technology, information, and service based enterprises. New economic activity is not being generated by the large, industrial firms of the past, but instead by small entrepreneurial enterprises which employ a handful to a few dozen people. The old industrial firms still exist, but they are not the source of true innovation or new economic growth.

While many of the large technology and service based businesses have adopted the old industrial organizational paradigm, most top managers now realize that the industrial organizational paradigm has become obsolete. They are desperately seeking some way to make their organizations more dynamic and flexible without having to discard entirely the archaic structure of which they are a part. The world is changing at an accelerated pace and they are falling behind. Today's corporate managers are like the southern plantation owners of Civil War days who knew that slavery was a thing of the past, but they were simply unwilling to give up their familiar way of life without a fight. The new information based firms, regardless of size, have all but abandoned the industrial model of hierarchical command and control. And smaller businesses of all kinds are finding it more effective to focus on purpose, principles, and people rather than structure, functions, and positions.

Agriculture was industrialized last because it was poorly suited for specialization, standardization, and centralization – the requirements of industrialization. Agricultural systems are living systems. As a consequence, industrialization of agriculture has generated fewer benefits and has created more negative environmental and social side

effects than has the industrialization of any other industry. Agriculture is just entering the final stage of industrialization – corporate consolidation. However, most of the rest of the American economy already is moving into a new era of post-industrial development. Hopefully, the industrial era in agriculture will be brief – for the good of all concerned.

The industrial agriculture of today did not evolve in a neutral public policy environment. Public policies at all levels were designed to improve the operational efficiency of agriculture through the basic processes of industrialization – specialization, standardization, and consolidation of decision-making. Nearly all government farm programs of the past 75 years – commodity price stabilization, farm credit, subsidized crop insurance, investment tax credits, accelerated depreciation of equipment, grades and standards, export enhancement, etc. have all subsidized adoption of the industrial paradigm of business organization. The current corporate takeover of agriculture and the government's lack of willingness to maintain competitive markets are but the natural consequence of past agricultural policies.

A prerequisite for restoring the competitiveness of agricultural markets will be a fundamental change in public policy, first to remove the subsidies for industrialization and then to provide incentives for changing to a paradigm more appropriate for the organization of living systems. To achieve this objective, the policy process should adopt a living-systems approach as well. New agriculture policies should spell out clearly the purpose of the legislation and the principles that must be pursued for the legislation to be effective. The rules and regulations should be dynamic and flexible allowing them to be adapted to different situations and to the ever-changing economic and natural environment. In the future, meeting the letter of the law should never be considered adequate or sufficient; complying with the principle will be the only acceptable evidence of compliance. The focus should be on empowering people of principle to fulfill the purpose of the law.

Moving from the industrial to post-industrial organizational paradigm will be not quick or simple – neither for corporate agribusiness nor for government. Both are locked into a hopelessly out-of-date system that is essentially beyond their control. However, it is unrealistic to expect that competitiveness will be restored to agricultural markets, or to any other markets, unless and until society breaks free of the grip of the corporate, industrial organizational mentality.

Change is inevitable, and society will continue to transform itself as it enters a new, post-industrial era of human progress. The primary question is whether this will be an orderly evolutionary process of logical and reasonable change or instead will be a revolution sparked by some economic or social catastrophe. Policies that address symptoms without addressing cause will bring society no closer to real and lasting change. The relative magnitudes of the tasks will likely result in far more efforts being focused on restoring competitiveness of agricultural markets, a symptom, than on changing the industrial organizational agricultural paradigm, the cause. However, the most optimistic results from such efforts will be a temporary relief from the symptoms. A

lasting cure can be achieved only by removing the cause – by changing the organizational paradigm.

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