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ORGANIZATION OF A TOTAL FOOD INDUSTRY SYSTEM  
TO MAXIMIZE HUMAN PRODUCTIVITY:  
THE UNITED STATES CASE

By

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The author discusses the alternative methods of organizing human resources to maximize productivity in a total food industry system.

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Introduction

As an economist views a total production, processing, distribution and consumption system for food, he or she hopes to maximize total productivity from the combination of the traditional factors of production (land, labor, capital, management, and entrepreneurship, plus one for the system). Most of systems thought seems to focus upon the more tangible areas (land, buildings, equipment, technologies, information systems, etc.) and the ways that such items might be linked together to improve and/or maximize physical productivity. Along with these thoughts there is some vague presumption that man (acting in the capacity of labor, management, or entrepreneur) since he or she is the most adaptable, will somehow "muddle through" and find his or her proper place in the scheme of things.

The author would submit that planning for the maximization of productivity for the human (labor, management, and

entrepreneurship) resource is at least as important as planning to maximize productivity from the physical aspects of the system and probably even more important. To that end, this paper will discuss alternative methods of organizing the human resource to maximize its productivity in a total (production, processing, distribution and consumption) food industry system.

Why Organize People Differently?

Discussion of reorganization will normally trigger lengthy dissertations on (1) virtues of the present system, (2) strengths of those who control the system, (3) past accomplishments of the organization, and (4) enormous amounts of fear and distrust. The parting comment from this discussion will be: Oh well, we really don't need to reorganize, do we???

Our basic system of organization (variously called "chain of command," bureaucracy, industrial organization, "rule from the top down" and others) has much of its roots in the military and main line churches; and was designed to manage the "industrial or assembly line society" which flourished during most of the nineteenth and early part of the twentieth centuries. The major thrust

of this organization type was the production of goods.

We are currently in a transitional phase (somewhere between a goods oriented and a service oriented society) which some call, for lack of a better name, the "Post-Industrial Society." This is the first reason to reorganize. We are moving rapidly to a highly service oriented society, but yet are still organized as a goods producing society with basically material objectives.

Second, we in the United States are rapidly becoming aware of both energy and materials constraints which cannot be ignored. We organize our food industry to utilize technologies and processes to produce and market goods and services. As it becomes necessary to alter technologies and processes due to energy and materials constraints, it will also become necessary to reorganize the food industry to fully utilize these changes. Also, energy and material requirements to produce and market services are quite different from similar requirements for goods.

Third, the total population-resource balance in this country becomes a limiting issue. As the world's greatest per capita user of resources, we are rapidly approaching many resource constraints. The way we organize our food industry is just one of many contributors to this population-resource problem. However, as one of the nation's largest and most basic industries, and one that takes a large share of the disposable income from people with limited resources, it will be looked upon as a prime target for reorganization to more effectively utilize our dwindling resources.

Fourth, we must look at how efficiently the current organization of our food industry utilizes its human resources. Unfortunately, we have no effective measure of how we utilize human potential. However, based upon the

author's knowledge and experience in the food industry, we are only realizing a small portion of the creative potential of our people and hopefully a bit more of their physical potential. The very "weight of the system" does much to hold utilization of our human potential to a shamefully low proportion.

Fifth, and last, a bureaucratic organization is designed to handle routine or "non-change" situations. In this world of ever accelerating rates of change in most areas, the bureaucratic system becomes hopelessly outmoded before it gets settled down to a "normal routine." Hence, to some the need for more flexible means of organization appears painfully obvious. Getting enough people (including "the decision makers" of our society) to see this need and to do something about it; may well be a much greater task than devising a series of alternative organizational arrangements.

#### Role of the Individual

Peter Drucker says "The role of the individual in a system may be fixed, flexible or fluid; but it must be (1) definite, (2) functionally understandable, and (3) purposefully rational."<sup>1</sup> Literally mountains of literature have been written on how the "Industrial Society" has failed to meet any or all of these criteria. The point to be made here is that if the objective of a restructuring of the food industry is to "maximize human productivity;" full cognizance must be taken of individual potential and ways of utilizing same.

#### Keeping Organizations "Relevant"

Three short paraphrases from John Gardner are pertinent here:<sup>2</sup>

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<sup>1</sup>"The Future of Industrial Man," Peter F. Drucker, The Menton Executive Library, 1970.

1. Most organizations are established to solve problems which no longer exist or to perform functions for which the need is past.
2. Organizations don't go to seed, the people in them go to seed.
3. Most ailing organizations fail not because they can't solve their problems, but because they cannot see them. They can look straight at faults and rationalize them into virtue or necessity.

These short comments raise a host of questions relative to organization but three are paramount.

1. How does one get an organization established that recognizes its objectives and quickly develops "action programs" for reaching those objectives?
2. Once the organization knows where it wants to go and how to get there; how do we keep the people from "going to seed" and how do we aid them in keeping abreast of the situation and defining problems that need attention?
3. When an organization's purpose is completed, how in the world do we shift the resources so that priority needs are met?

The author claims no "magic answers" to these questions. However, if we are to avoid having this upcoming restructuring become one of a long list of organizational disasters; solutions to these and related questions must be found.

### Impetus for Restructuring

According to the author's limited understanding of physics principles, once a body comes to rest, it requires a force to start it moving again. Logic would

dictate that the larger the body and the longer it has been at rest, the greater the force required to get it in motion. The analogy for the food industry goes something like this. A large, diverse and complex industry and its attendant service units has been in place for some considerable period of time. The force required for a major restructuring (movement) of such an industry would have to be of some colossal magnitude.

Not only is the size of such a force worthy of comment, but its source also merits discussion. As the author has commented extensively on this subject in earlier papers, a brief summary will be presented here.<sup>3</sup> The force to restructure a unit can come from within or from without. For many reasons, such a force will most probably not come from within. Hence, one would expect an outside force, hopefully short of violent revolution, to be required to get the job done.

Given the rather shaky assumption that the food industry is or was in control of its individual and collective destiny, one could speculate that any of a number of groups might get a chance at its control. Government (foreign or domestic), labor, citizens' groups or any one of the institutional segments within the food industry itself might try to gain control of the entire system. In reality, there has been a considerable restructuring of the food industry in recent years. The impetus has been government, helped by citizens' and labor groups.

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<sup>2</sup>"No Easy Victories," John W. Gardner, Harper Colophon Books, CN 145, 1968.

<sup>3</sup>"Entrepreneurship in the Food Industry, 1972-2000 A.D.," Journal of Food Distribution Research, Volume III, No. 2, September 1972. "Extension - 2000 A.D.," Journal of Food Distribution Research, Volume IV, No. 2, February 1973.

The impact has been dramatic; the costs have been enormous and the benefits have been highly questionable. One of the gravest dangers in a reorganization forced from without is that objectives of the "new" controlling group will be self seeking and thus lower the overall productivity of the system. This has been the case in this recent restructuring. Government, in a democracy, at its very best can guide and regulate industries (govern) and adds little utility to food products or services; while seeking to serve its various vested interest groups (government itself may become one of these groups). Thus, the food industry and consumers are forced to invest huge amounts of resources that government requires which may or may not serve the people of the nation. Hence, one can predict greater input into the food industry, with fewer outputs and a corresponding decrease in total systems productivity.

The whole issue of objectives (who will determine them and who benefits from their accomplishment); criteria and evaluation (who measures progress toward objective accomplishment and who sets and manages the controls) and the rewards and punishment arrangement attendant to them; becomes the focal point regarding who will determine the destiny of the United States food industry.

#### Objectives for United States Food Industry

As a prelude, (we must assume that) a carefully thought out and clearly articulated set of national objectives has been developed utilizing meaningful inputs from all segments of society. Also, useable criteria for measuring progress toward accomplishing these objectives have been developed. Plus, a workable system for managing and controlling it with rewards and punishment arrangements has been established. A useful objective for the United States food industry might be "to provide adequate supplies of

safe, nutritious food and food products with desired levels at prices that reflect true value to the United States consumer, at minimum total resource cost." This assumes that (1) easily measurable definition of "adequate nutrition can be developed, (2) meaningful criteria or standards in terms of total resources used can be identified, and (3) above all, a workable group can be developed to manage the rewards and penalties for progress toward accomplishment of this objective. The "free market" hasn't done it. The combination of government and industry has done precious little better. The "ultimate answer" is still up for grabs.

Under this one broad objective, it would be necessary to develop a series of short, intermediate, long run objectives and sub-objectives for each of the institutional and functional segments of the food industry. Of course, these objectives have to do with adequate nutrition and have nothing to do with all the esthetic qualities that foods may have. Also, some say that the psychological satisfactions people get from consuming foods are at least equal in value to the nutrient content of the foods. Should areas other than nutrition be considered important, then similar sets of objectives must be developed as the starting point for these areas as well.

#### The Physical Production, Processing, Distribution and Consumption System for Food

Since the subject of this paper is organization, this portion will be very short. Two points are paramount here. First, the physical part of this system must be considered as a total system to optimize on physical productivity. Second, in order to optimize on human productivity, the physical system must be an extension of man's abilities and neither incorporate man or cast man in a subservient role. What this says is that people planning

must come before planning for physical things to optimize human productivity. It is largely a subtle matter of perspective. However, it can be enormously important in terms of the contribution to total systems productivity in the food industry.

### Alternatives to Bureaucracy

Given the objectives discussed earlier, man's mind could conceive an almost endless variety of ways to organize the human resource. Three non-mutally exclusive organization forms will be discussed briefly here to give the reader an idea of some current thinking on the subject.

#### 1. Toffler's - "Ad-hocracy"<sup>4</sup>

The basic thrusts of this organization form are transience and the commitment of man to himself not to the organization. Work is task oriented according to need; and work is temporary depending on requirements of the problem at hand.

#### 2. Drucker's - "Knowledge Society"<sup>5</sup>

The central factor of production becomes knowledge and task oriented work is solved by knowledge rather than experience.

#### 3. McHale's - "Planetary Society"<sup>6</sup>

Science and technology become the primary influences in this worldwide scheme of organization designed to serve all the people of the world and to replace the nation state.

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<sup>4</sup>"Future Shock," Alvin Toffler, Bantam Books, 1971.

<sup>5</sup>"The Age of Discontinuity," Peter F. Drucker, Harper & Row, 1969.

<sup>6</sup>"The Future of the Future," John McHale, Ballantine Books, 1969.

Each of these systems of organization has its strengths and weaknesses and they are presented not as ideals but as different approaches to the task of human organization.

### Routine versus Creative Work

One of the thorns in the side of organizational thinkers has been how to develop an organizational scheme which will effectively maximize the talents of the total human resource and deal with conflicting theories of organization. If an organization effectively handles routine work, it "stifles creativity." If an organization is flexible enough to stimulate creativity, then routing suffers. Both Toffler and Drucker have wrestled with the problem; unfortunately without a satisfactory answer. Must we have two separate and distinct organization types to handle these different situations? Or is there an organization type which can handle both. Given our objective of developing a total production, processing, distribution and consumption system for food, this issue must be dealt with and solved.

### Specialist versus the Generalist

One of the virtues of the "Industrial Society" was the strength of its specialization. However, with the "knowledge emphasis," accelerated rates of change in all areas, and the increasing complexity of life, we find ourselves suffering from "over-specialization" with its attendant loss in productivity. Toffler, Drucker, and Cleveland<sup>7</sup> have all addressed this problem. However, we have not yet fully defined the role the generalist must play or how he or she should be trained for maximum productivity in the food industry of the future. Certainly there must be some sort of blending of the two skills to maximize human productivity.

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<sup>7</sup>"The Future Executive," Harlan Cleveland, Harper & Row, 1972.

## Multiple Careers

"(a) My son - tenth generation cabinet maker; (b) my son - the doctor; (c) my son - the lawyer, merchant, social worker!!" With (1) increased longevity of the human species; (2) continuous education capabilities of the future; (3) rapidity of the change in most areas; and (4) increased flexibility of society and the individual toward career outlook; such a progression of events is entirely possible. The multiple career can manifest itself in two distinct ways. First, a person could have more than one career during his or her lifetime and in not necessary related fields. Second, the generalist over the course of his life span could really experience a long series of short careers identified by the tasks which he is called upon to work with.

The overriding issue of these last three points is not whether one does routine or creative work, is a specialist or a generalist or has several careers. The great need is to be able to utilize those with specific qualifications when and where their talents can be most effectively utilized. This is the essence of effective human resource planning. The future method of organization must not be allowed to get in the way of this process.

## Planning, Performance Criteria, Review and Evaluation

Central to the challenge of organizing a food industry are (1) establishment of objectives, (2) development of performance criteria, (3) review and evaluation and (4) most importantly, action and change if necessary based upon 1-3. Those who complain about massive, uncontrollable bureaucracies in government, education or industry, should look to any one or all of the following:

1. Objectives - not articulated clearly and precisely, not agreed upon, not committed to writing, and not communicated properly.
2. Performance Criteria - not spelled out so can be measured and communicated, not utilized effectively.
3. Review and Evaluation - not done often enough or well enough.
4. Action and Change - no one will plan and take the action necessary. Leadership is noticeable by its absence.

Critics will say there is nothing new here and they are right. We simply are not doing the things we know how to do. If we were to follow good management principles, many of our problems would disappear. Could we achieve "utopia" in a democratic society? Well, that is an entirely different subject.

## "Ideal Organization" to Maximize Human Productivity?

This section is headed by a question because the author is not sure: (1) if such a system could be developed; (2) whether it would be outdated before it could be implemented, and (3) if it would be used at all. Rather, it would be more useful to highlight some of the factors which must be improved to maximize human productivity. Some of these are:

1. Anticipation versus Reaction - a perspective of looking ahead rather than waiting to react will help us get the jump on organizational needs.
2. Flexibility versus Rigidity - strength is needed to weather storms, but too much strength leads to systems for systems sake and doesn't lend itself to needed change.
3. Physical Systems versus an Extension of Man's Intellect - the way to capitalize on man's one great talent - his mind.

4. Planning Objectives, Performance Criteria, Review and Evaluation - doing what we know how to do, as well as we can, with the courage to make decisions.
5. Organizations Are Vehicles to Accomplish Objectives - when the maintenance of the organization becomes the end or objective, we are in big trouble.
6. Leadership - knowing what needs to be done; getting it done; and making people like it. A quality sorely needed in the difficulties ahead.

Comment

The institutions with which, and around which, we organize our lives and

our food industry are slow to change, and at times approach an almost "untouchable" status. Man's mind has a seemingly infinite capacity to rationalize the existence of an organization long after it has stopped performing a useful function or has experienced a drastic change in function. Those who seek to reorganize the United States food industry to maximize human productivity should remember this fact as they labor to bring about change. Their efforts could be much more effective by offering a positive alternative (a new institution) as opposed to the agonizing process of destruction of the old and cherished ones. Efforts in smoothing the transition will be well rewarded in quicker, less painful changes with less wasted resources in the process.

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