

May 31, 2001

**A BRIEF GUIDE TO INTERACTIVE PLANNING AND IDEALIZED DESIGN**

**Russell L. Ackoff  
1021 Lancaster Ave.,  
Suite 201 Bryn Mawr, PA 19010  
Phone 610-526-9374 - Fax 610-526-9375  
E-mail: [RLAckoff@aol.com](mailto:RLAckoff@aol.com)**

May 31, 2001

## CONTENTS

INTRODUCTION	3
IDEALIZATION	4
Formulating the Mess	
Ends Planning	
REALIZATION	
Means Planning	5
Resource Planning	5
Design of Implementation	5
Design of Controls	5
IDEALIZED DESIGN	6
Mission	7
Specification and Design	8
Markets	9
Services	9
Organization	10
Management	10
Personnel	11
Facilities and Equipment	12
External Affairs and Relations	12
MAKING DESIGN DECISIONS	12
CONCLUSION	13

May 31, 2001

## INTRODUCTION

*Interactive* planning differs significantly from two more commonly used types of planning: *reactive and preactive*.

**Reactive planning** is tactically oriented, bottom-up planning that consists of identifying deficiencies in an organization's performance and devising projects to remove or reduce them one by one. It is deficient in two ways. First, it is dedicated to removing deficiencies. Unfortunately, when one gets rid of what one does not want, one does not necessarily get what one does want, and may get something much worse. Second, it deals with the parts of the organization separately despite the fact that the performance of the organization and its parts depend more on how the parts interact than on how they act independently of each other.

**Preactive planning** is strategically oriented, top-down planning that consists of two major activities: prediction and preparation. It is based on the assumption that although the future is essentially uncontrollable, with good forecasting an organization can control, at least in part, the effects of that future on the organization. Therefore, preactive planning is concerned with planning *for* the future, not planning the future itself. and the future(s) it plans for are bound to be different than anticipated in significant ways. For this reason very few preactive plans are carried out to completion.

**Interactive planning** is directed at creating the future. It is based on the belief that an organization's future depends at least as much on what it does between now and then, as on what is done to it. Therefore, this type of planning consists of *the design of a desirable present and the selection or invention of ways of approximating it as closely as possible*. It creates its future by continuously closing the gap between where it is at any moment of time and where it would most like to be.

May 31, 2001

Interactive planning has two parts: *idealization* and *realization*. These parts are divisible into six interrelated phases: (1) formulating the mess, (2) ends planning, (3) means planning, (4) resource planning, and (5) design of implementation, and (6) design of controls. Consider each of these in turn.

May 31, 2001

## IDEALIZATION

### 1. Formulating the Mess (Situational Analysis).

Every organization is faced with a set of interacting threats and opportunities, a system of problems that we call a *mess*. The aim of this phase of planning is to determine how the organization would eventually destroy itself if it were to continue behaving as it is currently; that is, if it were to fail to adapt to a changing environment, even one that is perfectly predicted. Identification of this Achilles' heel -the seeds of its self-destruction -provides a focus for the planning that follows by identifying what must be avoided at all costs.

Formulating the mess involves preparation of:

- a. **a systems analysis**, a detailed description of how the system currently operates;
- b. **an obstruction analysis**, identification of those characteristics and properties of the organization that obstruct its progress;
- c. **reference projections**, projections of aspects of the organization's future assuming (1) no change in its current plans, policies, programs, etc., and (2) the future environment that it currently expects; and
- d. **a reference scenario**, a description of how and why the organization would destroy itself if the assumptions made were true. [This scenario is a synthesis of what is learned in (a), (b), and (c).]

May 31, 2001

## **2. Ends Planning**

Determining what the organization would ideally like to be *now* if it could be whatever it wanted, determining the gaps between this ideal and the organization projected in the reference scenario. The remainder of the planning process is directed at removing or reducing these gaps taken collectively and interactively.

## **REALIZATION**

### **3. Means Planning**

Determining what should be done to remove or reduce the gaps identified in ends planning; that is, selecting or inventing the courses of action, practices, projects, programs, and policies to be implemented in pursuing the organization's idealized redesign.

### **4. Resource Planning**

- a. How much of each type of resource -facilities and equipment; materials, energy, and services; personnel; money; and information, knowledge, understanding, and wisdom -- will be required,.when and where, in order to implement the means selected;
- b. How much of each type of resource will be available at the desired times and places if there are no planning interventions; and
- c. What to do about the shortages or excesses that are identified.

### **4. Design of Implementation**

Determining who is to do what, when and where,

May 31, 2001

## 5. Design of Controls

- a. How to monitor these assignments and schedules and adjust for failures to meet the schedules; and
- b. How to monitor implemented planning decisions to determine whether they are producing expected results and, if not, determining what corrective action should be taken. These six phases of interactive planning need not be carried out in the order presented, but they are usually initiated in this order. Because they are strongly interdependent, they usually take place simultaneously and interactively. In continuous planning, and interactive planning is continuous, no phase is ever completed; all outputs are subject to subsequent revision. Plans are treated as, at best, still photographs taken from a motion picture.

## IDEALIZED DESIGN

In this process the planners assume that the organization being planned for was completely destroyed last night, but its environment remains exactly as it was. Then they try to design that organization with which they would replace the existing organization *right now*, if they were free to replace it with any organization they wanted subject to only two constraints (technological feasibility and operational viability) and one requirement (an ability to learn and adapt rapidly and effectively).

**Technological Feasibility.** The design must not incorporate any technology not currently known to be feasible. This does not preclude new uses of available technology. It is intended to prevent the design from becoming a work of science fiction.

**Operational Viability.** The organization should be designed so as to be capable of surviving in the current environment, but it need not be implementable in the current environment.

May 31, 2001

**Learning and Adaptation.** The organization should be designed so as to be able rapidly to learn from and adapt to its own successes and failures, and those of relevant others. It should also be capable of adapting to internal and external changes that affect its performance, and of anticipating such changes and taking appropriate action before these changes occur. This requires, among other things, that the organization be susceptible to continual redesign by its internal and external stakeholders.

It should be noted that the product of an idealized design is *not* an ideal organization; because it is subject to continuous improvement -it is neither perfect nor utopian. The design produced should be that of the best *ideal-seeking system* of which its designers can currently conceive. (They may, and probably will, be able to conceive of a better one later.)

The idealized design process has three parts: (1) the formulation of a mission statement, (2) specification of the properties the designers want the designed organization to have, and (3) design of an organization that has these properties.

## **Mission**

An organization's mission statement should be a statement of its reasons for existence and its most general aspirations. It should (a) identify the way(s) by which the organization will seek to be effective and unique, (b) unify all its stakeholders in the pursuit of one or more common purposes, and once formulated, (c) make a significant difference in what the organization does, and (d) make progress toward the organization's objectives measurable. If it doesn't do these things, it should be discarded.

If a mission statement cannot be used in evaluating an organization's performance, it is hollow, at best a piece of propaganda. It should *not* state what the organization must do to survive; it *should* state what it *chooses* to do to *thrive*. For example, to say that a corporation seeks "to make an



May 31, 2001

adequate profit," is like saying that a person's mission is to breathe enough air.

*An organization's mission statement should be unique, not suitable for any other organization.*

It should establish the uniqueness of the organization. If an organization wants nothing that others do not want, then there really is no reason for its existence.

*A mission statement should define the business that the organization wants to be in, not necessarily is in.*

However diverse its activities, in its mission statement an organization should try to formulate a unifying concept, one that covers all it wants to do, enlarges its perspective, and makes it aware of as-yet-unexploited opportunities.

*A mission statement should be relevant to all of the organization's stakeholders.*

It should state how the organization intends to serve each class of its stakeholders. Most mission statements address the interests of only the organization's managers and stockholders. A very serious deficiency from which a mission statement can suffer is failure to appeal to the organization's non-managerial employees. If these employees do not make a commitment to the mission, it has no chance of being achieved.

*A mission statement should be exciting, challenging, and inspiring.*

If it fails to excite, challenge, and inspire, then, no matter what its other properties, it will fail to serve its purpose.

May 31, 2001

## **Specifications and Design**

Specifications consist of a statement of the properties that the planners want the idealized organization to have. The design states *how* the properties specified are to be obtained. For example, a family that decides to build a house may specify the number and types of rooms it wants, the number of floors, the architectural style, and a cost not to be exceeded. The architect whom they employ prepares a design that describes how these properties are to be obtained.

Put another way: specifications are aspirations; a design is a set of instructions on how to realize those aspirations.

The subjects to be covered in specifications and design are matters of choice by the planners. However, the following questions may help stimulate the kinds of questions and answers required to produce a comprehensive idealized design of an organization. It should be kept in mind that *they are only suggestive*.

## **Markets**

- What kinds of users of its output does the organization desire? In what geographical regions should they be sought? How should they be approached? By whom?
- Should they be exposed to the organization and its outputs by use of print and broadcast media? Once a relationship is established with a user, how should that relationship be maintained and nurtured? How should feedback from, and suggestions by, users be encouraged and collected, if at all?
- Who would the competitors be? How should the newly designed organization differentiate itself from its competitors?

May 31, 2001

- How should the services provided be charged for?

### **Services**

- What services should the organization provide? How should these services differ from those currently available to the intended users?
- How should these services be improved over time? How should new services be designed, developed, and initiated? Who should be responsible for new-service design, development, and initiation?
- How and when should services be discontinued, if ever?
- How should the quality of the services provided be assured? Should the organization seek a reputation as an innovator or as a follower who improves significantly on the innovations produced by others?
- How should the organization go about determining if a competitor has ~ introduced a new and superior product? How should the organization respond to such introductions?

### **Organization**

- What services required by any part of the organization, or the organization as a whole, should the organization provide itself, and which ones should it acquire from external sources?
- Should internally provided services be charged to the users? How? Should internal users of services be free to obtain them from external sources even where an internal source exists? Should an internal source of service be free to seek external customers?
- What functions must the organization perform in order to produce the outputs it desires to produce?

May 31, 2001

- What organizational units should be created to encompass the specified services and functions to be carried out internally? How should these be related?
- What should be the organization's structure? How should the performance of units be measured? How should new units be initiated and old ones terminated?
- Should acquisitions, joint ventures, or mergers be pursued and, if so, how and by whom?

### **Management**

- How many levels of management should the organization have and how large should the managers' spans of control be?
- How will planning, and policy and decision making be vertically integrated and horizontally coordinated?
- What authority and responsibilities should be assigned to managers? Who should be responsible for planning, policy making, performance evaluation, etc. ? How should these be carried out?
- With what types of support systems should managers be provided? In particular, how should they control their decisions and systematically learn from their experiences and adapt to internal and external changes?
- How should environmental surveillance be carried out and how should environmental and organizational changes be anticipated?
- How should non-managerial personnel be involved in management processes, if at all?
- How should managers be evaluated? By whom?

May 31, 2001

- Should managers who are not supported by their subordinates be allowed to manage? How should managers be compensated? .
- What perks, if any, should be provided to managers? At what levels? .
- What types of internal communication should be required? How frequently? What means and media should be used in providing it?

### **Personnel**

- How should personnel be recruited, hired, oriented, trained and educated, developed, evaluated, promoted or demoted, compensated, reassigned, fired, laid-off, retired?
- What contact, if any, should be maintained with retirees? How should resignations be handled?
- What should be the policies covering vacations, and voluntary and involuntary leaves? To what types of rewards and punishment should various levels of employee be subjected?
- Who should be responsible for monitoring quality of work life? How should they do it? What OWL programs, if any, should be provided?

### **Facilities and Equipment**

- What types of facilities and equipment should be provided to each type of personnel in the organization? Where should they be located?
- Who should decide what to acquire and where to locate it? How should resources be allocated for such acquisitions?

### **External Affairs and Relations**

- How should relations be maintained with the larger organization of ~ which the organization being designed is to be a part? To what

May 31, 2001

extent should representatives of the containing organization (or organizations) be involved in management of the organization being designed?

- What should be the organization's policies with respect to its involvement and that of its employees in external affairs. ?
- What types of involvement, if any, will it support, encourage, prohibit, etc.? Specifically, how should the organization relate to educational institutions, professional societies, and industrial associations?

## **MAKING DESIGN DECISIONS**

An idealized design is a group product. Therefore, the group preparing such a design requires a procedure for reaching design decisions. Such decisions should be made *by consensus*. Consensus means *complete agreement*. but agree in practice, not necessarily in principle. Agreement on what is the best thing to do is not required; only agreement on what is worth doing.

For most design decisions, complete agreement is easily obtained. But there are always some for which it is difficult to obtain. In such cases there are two recourses. The first consists of design of a test of the alternatives, a test to the results of which all agree to abide.

If agreement on such a test cannot be reached or there is not enough time to carry out a test, the following procedure can be used.

1. *Each participant is asked to summarize his or her position on the issue very briefly.*
2. *When all have done so, the manager whose planning group it is, reveals what he/she would do if it were up to him/her.*

May 31, 2001

3. *Each participant is once again asked to state his or her position briefly but now with the following understanding: if all the participants other than the responsible manager agree, even if they do not agree with the responsible manager's previously stated preference, the position on which they agree will be the one incorporated in the design. If they fail to reach agreement, the responsible manager's position is incorporated into the design.*

## **CONCLUSION**

Once completed, idealized designs should be distributed for comment, criticism, and suggestions to as many of the stakeholders, who have not been involved in its preparation, as possible. Wherever possible their inputs should be incorporated into the design. When this is not done, an explanation should be provided to those who offered the relevant comment, criticism, or suggestion.

Implementation of an idealized design or an approximation to it involves a qualitative change in the organization planned for, a *discontinuous* change. Improvement of that design over time, however, should be *continuous*.