IS THE MATRIX FAD A FAST FADING FLOWER?

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Abstract

Fads come and go. Matrix has come. If it goes, it will have been a fad. Is the bloom off the matrix rose and will the matrix soon fade away?

This paper reviews current criticisms of the matrix organizational structure especially by Peters and Waterman in the best selling book, In Search of Excellence: Lessons from America's Best-Run Companies. It reviews several alternatives to the matrix and concludes that the switch to a matrix structure is often just one step in a larger process of developing an effective system for managing projects.

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Is the Matrix Organization a Fad?

In the past decade there has been an explosion of interest in the matrix form of organization. There have been a host of articles and papers on the matrix in the Project Management Journal (Quarterly) and at the PMI Symposiums. The PMI has even published a book which deals extensively with matrix organizations.(6) Many companies have adopted matrix structures and lecturers and consulting organizations have been busy telling businessmen how to set up matrix structures and how to survive within the matrix.

Recently, however, there has been increased criticism of the matrix approach. In 1982 two consultants from McKinsey and Company, Thomas Peters and Robert Waterman, wrote a best selling and influential book entitled In Search of Excellence: Lessons from America's Best-Run Companies.[1] Peters and Waterman analyzed 62 high performing companies and found that not one used the matrix structure.

As the following quotes demonstrate, the authors levy extremely strong criticism at the matrix organizational structure:

> "Our favorite candidate for the wrong kind of complex response...is the matrix." (Page 306)
> "The organization gets paralyzed because the structure not only does not make priorities clear, it automatically dilutes priorities." (Page 307)
> "The matrix response to manifold pressures on various fronts—to the overcomplexity of divisional structures, in fact—is in tune with today's realities. On the other hand, it virtually always ceases to be innovative, often after just a short while. It has particular difficulty in executing the basics (the authority structure is uniquely weak). It also regularly degenerates into anarchy and rapidly becomes bureacratic and noncreative. The long-term direction of the matrixed organization is usually not clear." (Page 314)
> "...executives around the world...were uncomfortable with the limitations of the usual structural solutions, (for organizational design) especially the latest aberration, the complex matrix form." (Page 4)
> "...the matrix, ran into continuous troubles born of complexity..." (Page 6)
> "...of the (successful) companies we have looked at, none...was formally run with a matrix organization structure, and some had tried the form and abandoned it." (Page 15)
> "To produce such superproducts, hopelessly complicated and ultimately unworkable management structures are required. The tendency reaches its ultimate expression in the formal matrix organizational structure." (Page 49)

It is ironic that Search for Excellence with its disdain for the matrix structure was written by two consultants from McKinsey and Company which for a decade advised organizations to adopt matrix structures. While McKinsey's controversial advice to adopt the matrix structure at Rolls Royce in England, and the Government of Tanzania, were probably not the cause, both organizations have since had severe financial problems, even bankruptcy in the case of Rolls.

Others have urged caution in considering a switch to a matrix structure. Davis and Lawrence in 1977 [2] strongly advised against a matrix structure unless the following three pre-conditions were all present.

"1.   Outside pressure for dual focus.

2.   Pressures for high information processing capacity.

3.   Pressures for shared resources."

Peters and Waterman know that the world is complex but their research indicates that there are better ways to deal with complexity than by creating a dual organizational structure like the matrix. The matrix organization is an attempt to combine the best of the functional organization and the best of the project or product organization by overlaying a horizontal focus on top of a vertical functional structure. But the matrix with its "two boss" syndrome dilutes authority and responsibility and often causes managers in both dimensions to feel uncomfortable and unsure of their exact roles.

The authors' questioning of the matrix poses an interesting connundrum. The latest conventional wisdom as expressed by Davis and Lawrence [2] is that a matrix organization will not work unless you also have both:

matrix systems (plans, budgets, personnel, etc.) and

matrix culture and behavior (cooperative and collaborative)

Organizations oftentimes gravitate into the matrix structure because their functional structure is not working. Jay Galbraith's information processing view of organizational design demonstrates why this happens. [5] The top management of an organization gradually becomes overloaded with information from both inside and outside the organization. To prevent complete chaos the management must either reduce the amount of information or increase the organization's capacity to handle information. One method to increase capacity is to set up a matrix organization. The project manager or coordinator in the matrix handles much of the communication across divisions for his project.

The matrix project manager also fills a role similar to a World War II "expeditor." In the process of solving problems the "expeditor" also improves management systems and the company may find in a few years that it can return to the functional organization or that the project has grown into a product division which can be spun off into a new profit center.

What are the alternatives to a complex matrix structure? What forms of horizontal coordination other than a matrix structure can be employed? Jay Galbraith [5] lists the following other forms of lateral relations:

"1. Utilize **direct contact** between managers who share a problem.
2. Establish **liaison roles** to link two departments which have substantial contact.
3. Create temporary groups called **task forces** to solve problems affecting several departments.
4. Employ groups or **teams** on a permanent basis for constantly recurring interdepartmental problems.
5. Shift to a **linking-managerial role** when faced with substantial differentiation."

Peters and Waterman recommend the task force approach. They found that the high performing companies employed many temporary ad hoc task forces to solve cross divisional problems.

> "The good news is that in organizations in which the context is right -- ready acceptance of fluidity and adhocracy -- the task force has become a remarkably effective problem-solving tool. In effect, it is the number one defense against formal matrix structures. It acknowledges the need for multi-functional problem solving and implementation efforts, but not through the establishment of permanent devices." (Page 128)

Peters and Waterman believe that the organizational structure of the future will be a hybrid combination of the functional, divisional, matrix, missionary and adhocracy organizational alternatives. The combination is based on the need for (1) Efficiency around the basics; (2) Regular innovation; and (3) Avoidance of calcification. In Search of Excellence found that high performing companies had dual characteristics of strong existing businesses plus an ability to innovate.

Their organizational structure of the future as pictured in Figure 1 meets these needs through the three "pillars" of structure and process of (1) Stability, (2) Entrepeneurship, and (3) Habit breaking. The stability pillar which provides the efficiency for the basics of the business is a simple functional structure within product divisions. Continuity across divisions is provided by the strong values of the corporate culture.

Avoidance of calcification

BREAKING
OLD HABITS
(shifting
attention)

- Regular reorganization
- Major thrust overlays
- Experimental units
- Systems focusing on one dimension

Efficiency around the basics   Regular innovation

STABILITY ———————————— ENTREPRENEURSHIP

- Dominating values   "small is beautiful,"
  (superordinate goals)   - Cabals, other
- Minimizing/simplifying interfaces   problem-solving
                                      implementation
                                      groups
                                    - Measurement systems
                                      based on amount of
                                      entrepreneurship,
                                      implementation

References: In Search of Excellence, Page 316.

THREE PILLARS OF THE ORGANIZATIONAL STRUCTURE OF THE 80s
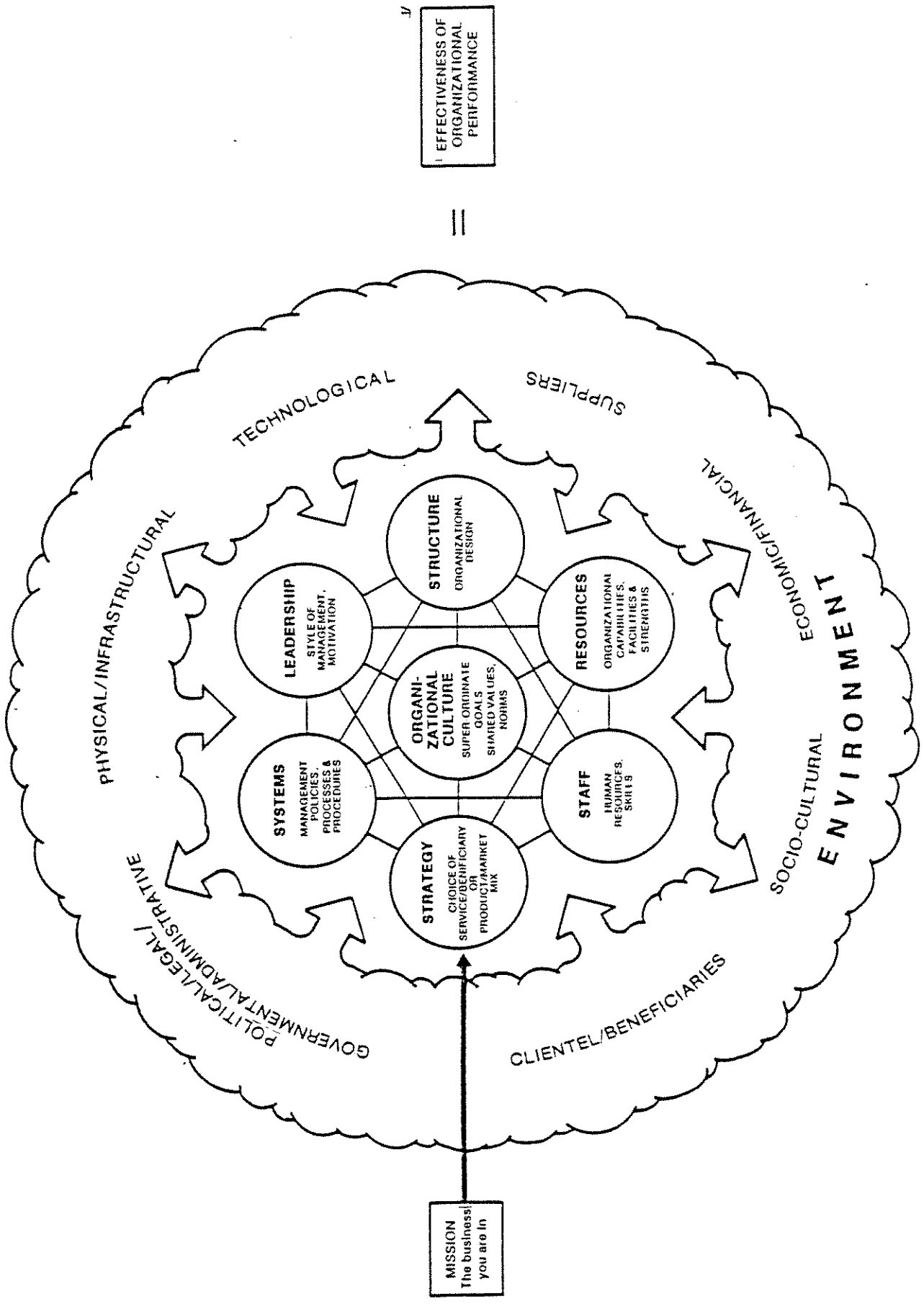
FIGURE 1

They are basically recommending product divisions internally organized by function, that hive off new product divisions as growth occurs. The habit-breaking and the entrepreneurship pillars are elements of the corporate culture that encourage ad hoc task forces and frequent reorganizations to meet changes in the environment.

> "These three pillars, then, represent, a 'theoretical' response to the issues that lead to the matrix organization in the first place and to the pathologies that emerged in the matrix structure as it responded to those conditions." (Page 317)

The design of the structure of an organiztion is just one of several inter-related factors which must be considered to improve performance. Figure 2 depicts eight of these variables in a Relationship Model of the Key Elements of Institutional Performance. This diagram is similar to the McKinsey 7 S Model presented by Peters and Waterman.[1] The seven S's have been sacrificed in the interest of clarity. Also the critical element of the surrounding environment has been added. This model is useful for analyzing temporary projects as well as permanent organizations. It is similar to, and an out growth from, a number of similar but less comprehensive models developed over the last decade. In addition to the environment the other seven factors are strategy, systems, leadership, structure, resources, staff and culture.

The most important aspect of the relationship model is the congruence or coherence and mutual support between the eight elements in the model. The congruence among the elements is more important than the technical excellence of any one element.

A RELATIONSHIP MODEL OF THE KEY ELEMENTS OF INSTITUTIONAL PERFORMANCE

EFFECTIVENESS OF ORGANIZATIONAL PERFORMANCE

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ENVIRONMENT

TECHNOLOGICAL

SUPPLIERS

PHYSICAL/INFRASTRUCTURAL

ECONOMIC/FINANCIAL

GOVERNMENTAL/ADMINISTRATIVE

POLITICAL/LEGAL/

SOCIO-CULTURAL

CLIENTEL/BENEFICIARIES

STRUCTURE — ORGANIZATIONAL DESIGN

LEADERSHIP — STYLE OF MANAGEMENT, MOTIVATION

RESOURCES — ORGANIZATIONAL CAPABILITIES, FACILITIES & STRENGTHS

ORGANIZATIONAL CULTURE — SUPER-ORDINATE GOALS, SHARED VALUES, NORMS

SYSTEMS — MANAGEMENT POLICIES, PROCESSES & PROCEDURES

STAFF — HUMAN RESOURCES, SKILLS

STRATEGY — CHOICE OF SERVICE/BENEFICIARY OR PRODUCT/MARKET MIX

MISSION
The business you are in

Source: Modified from the 7S Framework of McKinsey & Company.
Working Group on Institutional Development Training, World Bank 6/84

1/ Underlying Premise Organizational Effectiveness Depends on Congruence Among Variables

To quote from my 1977 article, "It is not possible to decide on the organizational design without also deciding whom to select as the project manager (leadership) and ... the planning and reporting systems."[3] The same is true for the culture, strategy, staff and resources. The matrix structure is an attempt to maximize one variable instead of optimizing the mix of the seven variables in relation to the situational environment. For example a matrix design requires a collaborative culture.

What is the future for the matrix organization? Are Peters and Waterman correct in recommending a series of temporary process steps for improving horizontal and vertical communication instead of a structural change to a matrix organization? Are they and Sinclair [4] correct in saying that it is better to use project structures or set up new product divisions rather than matrix structures?

My conclusions are as follows:

1.   Davis and Lawrence are correct that you should not utilize the matrix structure unless you absolutely have to.

2.   Peters and Waterman provide useful guidance that it is advisable to use process steps such as temporary task forces and team building rather than setting up a formal matrix.

3. If you do go to a matrix it may be a temporary structure for two
    or three years after which you move on to a product division or
    return back to a simple functional structure.

4. And finally, in a narrow range of situations, such as aerospace,
    where there are complex sets of disciplines and a continuing
    series of projects, the matrix structure will continue to be
    used.

5. For the vast majority of organizations, however, the matrix will
    prove to be a fad and in a few years we will see that "the bloom
    is off the matrix rose."

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