

## TIS TIME TO ORGANIZE!

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October 1991

Disclaimer: Only William's perceptions follow.

### ITEM 1: Autonomy with Structure

Our problem is that staff are in mutual competition rather than in consensual cooperation. The immediate need is for organizational structure.

Model: constraint-based management. Rather than hierarchy determining policy, the idea is that management facilitates by *removing* constraints to staff freedom.

management = context

research = content

I'm suggesting that we formalize responsibilities for maintaining and growing the structure of the lab. So there is a person to go to when there are needs. The important part is that the projects/staff identify the needs and prioritize them. The "management" then does the work to solve the needs. For this to succeed, resources must be distributed into the projects. So:

Each staff member/project has complete responsibility for making the project work. All projects must have allocated resources (staff, funds, equipment) to match these responsibilities. We want to work toward each project being self-sufficient in obtaining resources.

Responsibility is anchored by CONTRACTS (personal, project, external), written documents specifying

- performance commitments
- the persons responsible for success
- consequences of non-success
- the extent of responsibility
- the allocated resources

That's the autonomy-with-responsibility part.

The management part is for us to identify the constraints in our environment and then associate people responsible for removing these. *Each project must support and fund services that it needs.* So projects, in a sense, hire management to do jobs. This assures bottom-up decision making.

In the constraint-based management model, managers are a service group for projects. Rather than initiate activity, managers respond to the needs of projects and of other staff by pushing back the constraints that interfere

with performance. (This is fairly close to what the Director is doing now with budgets. He is drumming up funds to support us, pushing back the starvation constraints on our performance.)

An example: your project needs a piece of commercial software, you have the funds to buy it. So you file the request and \$ with the *software manager*, whose job it is to coordinate the purchase, record it into the lab database, talk to vendors, get the software to you in a timely manner, install it, make sure it runs, file the appropriate paperwork with WTC etc, and make sure there is a person in the Lab to use and maintain the investment.

Note that management's sole responsibility is to make it easier for the staff.

One other essential component: CONSEQUENCES associated with commitments and resources. We need to be specific about what is expected, and what we will choose to do (as a group) should commitments not be met.

Summary thus far:

Commitments + constraints + consequences = contracts

What are the jobs that need to be done to maintain and grow our environment? Here's some old material, expanded to include needs:

**MAP**

- Structure
- Resources
- Commitments
- Staff
- Needs/Objectives

## STRUCTURE

- entry
- rules
- echelon
- finances

## RESOURCES

- Hardware
  - platforms
  - system peripherals
  - VR IO
- Software
  - commercial
  - public
  - network
  - internal
    - veos
    - worlds
    - voice
    - drivers
- Information
  - technical
  - boundary
  - electronic
  - contacts

## COMMITMENTS

- contracts
- consortium
- teaching
- vendors
- corporate
- public
- dissemination

## STAFF

...

## NEEDS/OBJECTIVES

for each piece of hardware and software, and for each association with a vendor or client, and for each contract:

one person to track, liaison, know, fix, debug, train, transfer, coordinate, and connect.

Systems Administration (see RESOURCES)

- hardware
- networks
- mail and news
- software
- worlds

Boundary Integrity

- visitors
- potential clients
- media
- news and articles database
- phones
- speakers

Once this map is constructed, we need to connect things:

- commitments to resources
- staff to responsibilities
- roles to performances
- needs to structure
- ...

This should yield stuff like:

Who is responsible to that piece of software?

What are the consequences (to the lab) when a resource fails?

What level of quality of performance do we expect for specific tasks?

How should our resources grow?

What are the obstacles to a common weal?

My fantasy is that every resource listed has a person associated with it. That person has responsibility for knowledge, bugs, documentation, training, etc. Resources get grouped (hardware, software, etc) and a \*coordinator\* facilitates the maintenance, growth, and integration of that group.

My reverie reveals another longing: Every \*project\* has explicit resources associated with it. A person is responsible for each project. Responsibility is associated with consequences.

In this dream, I unfold my deepest desire: clear responsibilities explicitly associated with resources, capabilities, expectations, and performance.

## **ITEM 2: Cycling and Recycling**

This part is an editorial that I cannot resist. In my mind, our biggest "problem" is that we are cycling and recycling on the same problems. From my notes, the need for organization was explicit 15 months ago.

That is to say, any decision at this point is better than no decision.

It is generally recognized that high tech (and software in particular) requires constant organization and reorganization. Things move too fast to find a stable management strategy. We need to be able to put into place organization prototypes rapidly, to evaluate them, and to change. In fact, we have been languishing with the same organizational model (Director as hub) since the beginning.

## **ITEM 3: Application to Students**

Here's an immediate suggestion for applying constraint-based management to our students. The idea is to associate each student with a lab need. They each then have responsibilities. We have them construct performance contracts that range over lab service, research, and school work. We commit a degree of support to them and tell them what that support depends on (consequences).

We need to associate each student with a staff member and a project.

Now, these associations cannot be reasonable without us knowing our tactical objectives. Personally, I want to anchor the description (of HITL) with what we are actually doing. So add what I have forgotten and don't add what doesn't exist.