

Offsite20050321Notes.doc

Duane:

John:

Visualization and Integration

SR: Can you give specific examples:

KJG: Samples on Bathymetry

FC: Shouldn't it be intergration first then visualization?

JG: Sometimes people just want to visualize their data, but generally, yes, integration should happen first, then visualization

Data Organization

BR: Did people not know tool existed?

JG: It varied, but yes, often time it was a learning curves.

SH: I was one that asked for that, but it is not at a level that I can use

BR: Broader question, do scientists not know they are out there, or they don't meet their needs?

SH: Probably it does not meet their needs.

Dan – Results of SWOT

Opportunities

#1 opportunity is in the leadership realm

most opportunities have to do with what's going on in community

Threats

how do we stay connected with outside community?

Questions:

FC: Why are opportunities external? Just the way it is

What if scientists don't participate with us? (Why is this not addressed?)

Shouldn't happen unless we mismanage it.

But what is scientists just don't care? Users have to be willing to evaluate it.

We're coming to the point that scientists have to go beyond their own work.

Kevin — Directions, Issues

group not that large, need to find the right pressure points
idea of googling for data, not just their own data

now have greater dependency than times past
what are expectations if we say “we want to work on visualizations”?

Cyberinfrastructure:

Steve Haddock: When you’re talking about interface, you mean a software interface or GUIs and tools? Both, actually.

Charlie P: What do Inst X, PnW mean? examples of projects

SSDS Case:

our communication models broke, required reworking to get rid of impedance mismatches

new mismatches now appearing

Brent: having trouble with exporting raw object, instead we want to export interfaces?

What we did was, instead of java objects, we removed the custom elements and defined more standard interfaces

FC: Isn’t it also the case of listening too much to external community? One of the most crucial things we should come to grips with is how much do we deal with internal scientists and how much with external? Recommends dealing first with internal scientists, with ear to the ground, or else tail will wag the dog.

One of fundamental reqts of SIAM was moving data within the system.

FC: Still thinks discussion of internal vs external merits discussion.

KG: Yes, especially for us.

FC: Being part of external community can be damaging, because we’re an ant among thousands.

DD: Have the general problem of watching the disconnects.

Tom O: Actually, we did have kind of a system engineering process. How can it work better?

Jim B: Favorite case study was AOSN, lots of different estimates up to years. Finally on MBARI side. Mike Godin put something together in a few months that generates feedback.

Brent: SIAM development process antithetical

JG: That not bad

Mark C: trying to get mooring out

Doug: Could benefit now from System Eng group that plays a role with understanding of the road map.

Mark: Kind of system engineering we’re talking about is very complex, would take investment.

Doug: Talked about using DMO, but has heard about buy-in. Any talk about how you can include them? KG: We've talked about it, not a huge connection. Doug: Maybe should be stronger.

Brent: Talk about community interfaces to improve interoperability. Will community really develop an interface, are we at that point?

Kevin: We are close to that point. LOOKING is trying to define service-oriented and GRID architectures.

Gene: What level of standardization are you talking about? My understanding is they aren't trying to specify the exact sequence of bits and bytes, but a general mechanism. People just don't understand what level of standardization is required?

Charlie P: Seep Search

Type of project which runs across the fabric of MBARI, using our assets and tools.

Picture is only valuable if you can find it.

Knowledge base: "a little bit esoteric"

SH: How much of this was able to use off the shelf?

CP: Much of this turned into major subprojects. 6 months reprocessing. Will be easier next time.

JGB: In order to make use of this, had to reach across into bathymetry data set. More useful to focus on the one set, or make cross-archive searches possible?

Brian S: Getting position of seeps was very easy. Getting positions of ROV on bottom was very hard. Tools were written but not packaged up.

JGB: Can this work be applied in real time? Multiple issues.

There' are 2 issues, logging

CP: Do quality control on the 1.2M data points, that will probably be weakest link. Is comfortable with navigation problem resolution. Also quality of lexicon.

SH: Also applications with mining midwater data (Raskoff). Tools needed to improve access to data,

Lance: Database itself, the video imagery, wasn't the driver, it started with the annotation DB?

CP: Spot sampling of database thought it was pretty good, so not a bad problem generally. But need to understand the biases, perhaps especially for the more common.

SH: Frame grabs in database are only ROV ones. Lots of annotations don't have framegrabs. If we digitized video to give immediate access to any frame that'd be great. (Need instantaneous access.)

SH: Are we pushing to science pull or not?

JG: Depends on MBARI's attitude. For SSDS it was a must to keep the project from going away.

SH: What does Jim think?

JGB: At some point technology push needs to become science pull. If you can sketch the picture of how we're getting to the pot of gold, you can maybe get the mgt team to stick

with you for the ride. Engineering should be much more advocates of cutting things off, going to high impact things, not hanging on.

CP: Question is what is level of commitment? Often we're going down a line where there's no local commitment, even though everyone agrees it's good in a general sense.

Mark C: Another painful part is that project approval implies some science pull, but then when do you go back?

Jim B: That isn't how project approval works. (JG: Why not? Why would it?) FC: Is that a problem with the way management is dealing with project? Yes, could be.

Dan D: When annotation project began, it was entirely a tech push idea. No one really was aware on day to day basis. That's an example of a really tough call. In the past, was done on individual level. How do you make those calls?

Gene: Pick topics that are lined up with plannign processes. How do we find out what the 5 year plan is for individual groups or the department? We've heard about broad themes, not details.

FC: See External Review packet.

SH: Science backing might be useful in proposal process. But also need to appreciate

JGB: Believe mgt team thinks there is science support or it could happen.

Doug: Important point is that it's engineer's job in tech push projects to entrain scientists to appreciate science push? That is goal of strategic plan.

Jim B: And perhaps to tune the project to meet that

Kevin: Road map is the mechanism for making that come together.

SH: Is proposal process nurturing high risk projects? How are science priorities communicated into that mechanism?

JGB: Are there ways you'd prfer to interact?

SH: Leery of road map thing, forces science into certain things or off the road map.

Keeping that danger in mind, have more communication into proposal process.

George M: Proposal process used to have interactions between PI and management group. What happens in process has become a little bit less transparent.

Mark: High risk in resource environment also means high schedule risk. Project stretching out to 4 years have very different cost/benefit results, harder to manage at MBARI.

FC: How do we recognize which are successful projects? Is there anything we can learn from recognizing which ones are? Most of them are grass roots driven, yes?

JGB: Maybe we should be thinking about a yearly activity to review results with science. In engineering tried to create blame-free environment, this would lead to frank and open discussion.

Kent: Idea of joint review of projects, trying to determine what's been successful, compare values of science *and* engineering, came up in planning activities.

Gene: If scientists here in room, what are MBARI's most successful projects.

Steve H: Really good feedback from their paper. Would be reallty good to have on-site presentations of everyone together.

Wayne: Could add emerging technology trends to make it more useful to science.

Gene: Need more time than 15 minutes.

Hans: Have project reviews in place, but people don't attend. More insitutional emphasis, submeeting afterwards to discuss project more in depth.

Haddock: 6 weeks before abstracts due have an internal DOST

FC: Could have everyone present proposals.

SH: Don't want to present goofy ideas then, want brainstorming.

JGB: Institutional event to get dialog on the table.

George: Couple of ways of doing it, updates are not well attended. Monday's are not heavily booked. Try to figure out how to get greater attendance at the project updates.

Tom: Crux comes down to too many projects, too much work to do. Schedules are too heavily loaded. Focus on fewer things that we can do really well.

Kent: Frame that problem as making more impact with less project.

Mark: Not completely convinced that free time is the complete answer.