EDUC 891, Spring 2009
Colleen Bell
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CASE BRIEF: ONLINE CASE STUDY, THE CHRONICLES OF ROCKET BOY

1. ***Who* is/are the decision maker(s) in the case (you might be one of them) in terms of the work that you are responsible for?**

   This is a team project, but as in all successful teams, someone has to be the leader – and by extension, the lead decision-maker – and in this case, I believe it's Cynthia, for the following reasons:

   - she proposed the project to management and got the green light (and the budget) to hire me and develop an employee performance support system (EPSS) – management will be looking to her to report on the project's progress and ultimate success
   - she is the main contact between supervisors and the training department, between vendors and the training department, and between animators and the training department, which puts her in the best position to know what will work and/or be acceptable to the employees who'll be using the system

   Bill keeps track of the budget, which is an important function, but not necessarily a main decision-making one. However, he and Cynthia have worked together for a long time, and Cynthia will probably rely upon his recommendations more than mine or Susan's. He and Cynthia seemed pretty tight in the first project meeting I attended.

2. ***What* appears to be the primary issue(s) (concern, problem, challenge or opportunity)? What has happened or what situations have arisen because of this issue(s)?**

   Primary issue: DAI needs to turn a profit, and to do so must increase employee performance, which in the pipeline appears to be measured by output (number of completed shots or shot elements). According to Ellen Petersen, current industry benchmarks show that DAI productivity is 20% below the industry average. Costs continue to outpace revenues, and while the parent company, Media World, expected to incur substantial start-up costs, their patience won't last forever.

   Factors contributing to below-average productivity (according to my interviews):

   - Old-timers are great artists, but struggle with the digital technology; newer employees ("techies") are great with the technology, but lack skills as artists and have no experience on actual sets – understanding set lighting and how light hits objects seem to be particular weaknesses ("Too many of the animators have no ideas what reality is like because they've spent their lives looking at monitors. They

need to know how a shot is handled on an actual set so that can picture the contrast, the lighting, or create an image with the correct weight to make it look like it is floating in space or anchored to the ground.")

- Many shot elements created by techies are lacking in artistic quality and require multiple takes and revisions
- Digital technology increases temptation to tweak animations unnecessarily ("let's try shifting the lighting angle a few degrees")
- Software is complex and ever-changing, requiring frequent training and retraining
- Tasks performed by animators are highly specialized, but the training can not always be tailored to these specialized tasks, since the audience may contain people whose jobs are quite varied
- The *time* for training comes between productions, but the *need* for training is during production, when the software is being used for real tasks
- Intranet has good content, but it's difficult to find what you need when you need it – same holds true for online support provided by vendors ("too much to wade through…*to* match with a problem you're trying to solve…too much time wasted looking")

3. ***When* do I have to decide, resolve, act or dispose of this issue(s)? Is there urgency?**

   Have just under 9 months to develop and implement an EPSS; Cynthia seems concerned about the timeline – she reminds me every time I see her; I have to present my needs assessment and design treatment at the end of the week

4. **Have I (or others) already taken any steps to resolve the issue(s)? If so, what are they? Have they been successful – why or why not?**
   - Bill created the Intranet as a means of sharing technical expertise (software tutorials, tips) – seems to be valued, but several folks I interviewed indicated that it was difficult to find what they needed when they needed it
   - Training department offers workshops, schedules vendor presentations and workshops, and assists pipeline employees in designing and delivering workshops – most employees think the workshops are good, but the timing is not effective

5. **Specifically *how* will you proceed from here? For each point, be sure that you provide the reasoning behind your thinking and how it directly links to the primary and secondary issues you have identified.**

   The Raybould article shared by Cynthia suggests that a good place to start is to design a knowledgebase. There is the genesis of one in the Intranet, but it seems the organization and structure of it does not work for employees – several folks I interviewed noted that it's

difficult to find what they're looking for. As I've been pondering the task before me, my mind keeps circling back to Xerox Corporation and their Eureka project. They created a knowledgebase – problems and solutions contributed by technicians and subjected to peer review – for photocopier repair technicians. The software designers worked with the technicians and field supervisors to design a system that would give them the support they needed in the field.

Like the Xerox technicians, DAI animators are accustomed to learning from each other, to peeking over their colleagues' shoulders to learn what they need at that point in time. We need to develop a way to capture those learning opportunities and make them part of the knowledgebase – then ensure that these lessons can be retrieved when needed. I recommend an iterative (formative) design process for developing the knowledgebase, where incremental developments in the interface and process are reviewed by both old-timers and techies in a number of departments to ensure that we are addressing the multiple and various needs of our pipeline employees.

Part of this lies in providing a quick and easy way to digitally capture both the software manipulations and the conversation between the animators, then add it to the knowledgebase. Time is limited, so to make it feasible and attractive, it needs to be something that can be accomplished with just a few mouse clicks. I know of several software packages that can do this, and since we're currently in production, there should be any number of opportunities to test the system.

Another aspect that I think we need to address in the short term is the desire for access to experts, particularly while in production. I got the impression from those I interviewed (I need to go back and verify this) that this need is related to the software. This would likely be a budget item – but I believe it would be worthwhile looking into arranging live support from our vendors during production.

One area that seemed to be of great concern to supervisors – three of them brought it up – is the lack of art training among the techies. We provide plenty of software training, but no one has mentioned workshops on other aspects of animation. There's not much we can do right now while the animators are in production, but we should be thinking about ways to address this once production has wrapped up and the techies have some time. Perhaps we could enlist the old-timers in helping to design (and even deliver) training opportunities. This might begin to address the causes of the multiple, numerous re-takes and revisions, and may even start to bridge the divide between the two camps – to build community and the knowledgebase. And my background in multimedia may come in handy here, in translating this training to an online environment.

Notes from class discussion:

- Vendors – what can they contribute
- Survey animators – how do they evaluate software?
- Capture in-house expertise & resources
- How to address issue of lacking artistic skills
- Face to face interaction; need for community, mentoring
- Include job shadowing in initial week of training

Needs to go to senior management; need to account for:

- Timeframe
- Cost (some $ already approved)
- Outcomes
    - Training
    - Productivity
- **Assessment/Evaluation**

Notes from Debrief, March5

- Decision-making in hierarchical organization
    - How much needs assessment is doable?
    - Previous training – issues?
    - Context knowledge
    - What is already working?
    - EPSS already approved and funded
    - What prevents efficiency?
- Design of performance/instruction
    - Everything costs time/money
- Evaluation – embedded in the design
    - Demonstrate change in efficiency