



To: Alison White, Corporation for Public Broadcasting
From: Bill Keens
Date: November 14, 2001
Re: CPB Asset Management Caucus – Facilitator’s Memo

CPB’s Asset Management Caucus on November 13, 2001 in Chicago, Illinois, brought together representatives of public television stations, CPB staff, and others to address the challenges of managing rich media. Their common purpose was “to find the shortest path connecting asset management know-how in the field to others who can benefit from that knowledge” with help from CPB’s Media Department staff.

Themes and Observations

Reflecting on the summaries of asset management activities that each station contributed to the briefing book, participants recognized a number of themes that ran through many of their experiences. These themes and attendant observations were as follows:

- We need ways to agree on goals and tasks within and among us.
- Organizational change is often required to recognize the value of asset management and make it a priority.
- Asset management is a form of service to our constituents and communities.
- Focusing on the user’s needs is a good way to think about asset management.
- We need to learn how to maximize these assets both by using them in our work and by developing business/service strategies that promise a return on investment (ROI).
- Open standards would make our job easier.
- We need to find ways to pay for the people, services and technology that asset management requires.

Commenting on these themes, those in the meeting made a number of additional observations:

- We incur costs if we *don't* collaborate around asset management, because inevitably we will duplicate the efforts of others while making our own efforts less cost-effective manner.
- Thinking of ourselves as “unique” is a trap. The more independent, isolated and “unique” our respective asset management efforts, the less likely we are to benefit from off-the-shelf applications and collaboration.
- Across the public television field, stations are at very different places with respect to how high a priority asset management is for them and what they know about it. This “chasm” will need to be bridged for the entire field to benefit.
- The case for asset management based on ROI is not as clear and compelling as it needs to be, especially if we want to convince our stations and others to support its financial cost.
- Stations have a love-hate relationship with vendors when it comes to asset management, because vendors often try to convince stations that their “unique” needs and problems require “unique” software and service solutions. The result is systems that don't talk to one another, thereby undermining the benefits of collaboration.
- Public broadcasters are not alone in grappling with asset management issues and strategies. With that in mind, public television should seek to learn from the commercial sector, the military, education, various nonprofit institutions (e.g., libraries), and others.

Preliminary Asset Management Goals

The agenda asked participants to identify the goals that public broadcasters should have in asset management, and what the priorities are among them. In the course of discussion, it was clear that goals and strategies alike were being identified by the group; people described not only what they wanted to achieve, but also how they might achieve it.

Among the preliminary goals cited by participants, several were acknowledged by the group as being particularly critical. They included:

- The need for standards for asset management databases.
- The importance of compatibility among and between various systems and programs.
- The value of having a clearinghouse for information of value to the entire field.

- The importance of community partnerships to identify needs related to asset management, to contribute content, and to share the work involved in asset management.
- The need for incentives that encourage station staff and content providers to engage in good asset management practices.
- The value of having selected agencies or organizations oversee and manage functions that require field-wide coordination.
- The importance of thinking in terms of “knowledge asset management” and not just asset management as we strive to share what we know and have learned.
- The need for “roadmaps” to guide us in the work of asset management – knowing that some destinations will require prescribed routes to reach them, while others may be reached in a variety of ways.

“What I Need”

In light of the themes, observations, and preliminary goals identified to this point, station representatives were invited to create a catalogue of their most critical asset management needs. These priority needs provided another way to identify important asset management goals for the field in general. They included:

- Metadata standards (fields, guidelines to describe them) and standard “views” of data for specific media.
- Prototypes, including both best-practice and worst-practice information.
- Advocacy on behalf of public television’s asset management requirements with other public and private institutions and agencies.
- Actual working groups with access to the “intellectual property” of station metadata teams (working on templates, terms, vendors, partners, etc.)
- Knowing if the asset management standards relevant to stations already in place at PBS, NPR, and CPB are compatible.
- Layered approaches to developing asset data, with higher layers needed by many and lower layers of increasing detail needed by some.
- Worldwide unique identification data (ISBN).
- Positioning asset management not only as a station operating system, but also as a tool for content-sharing partnerships.
- A product that can be used in a collaborative manner to create or expand upon a central library database.
- Searchable/retrievable video and audio archives and scripting systems; single-entry logging for traffic (enter once, use everywhere); and a flexible client/member management system.
- Maps describing the routes to various asset management destinations, and Technical Operating Specifications.
- Vastly improved NOLA (codes used to identify shows).

- A list of required fields and key field “unique names.”
- Security-controlled access to our databases.
- Expertise in how to organize information and assets effectively (i.e., a digital library science program).
- Return on investment success stories.
- Standardized metadata structures, “best of breed” vendors, simplified system architecture, and understanding of common digital rights management needs.
- Complete specifications for asset management that address current and future production and release requirements for resale, reuse and original productions.
- Tangible examples of the value of asset management for producers and potential partners.
- A compelling business model to justify asset management investment.
- Strong leadership (a “go to” person or agency) similar to the DTV Strategic Planning Office at PBS.

What We Want (Goals) and What We Need to Succeed

Informed by a preliminary discussion of some of the impediments to achieving what the individual stations want, the facilitator summarized the key goals (what we want to achieve) and obstacles (what we need to address to do so) as follows:

What We Want

- Standards (e.g., for metadata)
- Prototypes
- Compatibility
- Layered data
- Protocols (e.g., T.O.S., NOLA, ISBN)
- Accessibility
- Case for – and return on – investment
- Simplicity
- Leadership (for advocacy, clearinghouse functions, management)

What We Need to Succeed

- Priorities made clear – so that we can pace ourselves
- Agreement on terms
- Buy-in – a belief that asset management is important
- Information (e.g., who’s doing what, what works)
- Infrastructure and support
- Incentives for doing the work of asset management
- Partners to work with us
- Funding

Charge to the Working Groups

Three working groups representing a cross-section of the participants were asked to illustrate the discussion of hypothetical asset management projects. Each of the three groups had the following assignment:

Develop a hypothetical but viable asset management project that achieves at least one of our “wants” (goals) and satisfies at least one of our “needs.” In so doing, answer the following questions:

- What is the most compelling case you can make for investing time and money in this project?
- What return on investment do you foresee?
- How will you know if you have succeeded?

Working Group Reports

Each of the three working groups – constituted as teams – presented the outcomes and recommendations from their respective discussions.

TEAM ONE

The first working group to report debated the merits of several hypothetical projects before arriving at one: the localization of On Course to allow for the local distribution of national content. The group anticipated that there would be “a lot of productive work to do” in conjunction with this project, including creating local tags; defining the business relationship among partners; establishing the role of metadata service bureaus; developing standard formats; supporting the creation of local video materials; and more.

The project’s appeal was also because of the direct impact that localization of On Course would likely have on users, as well as the fact that it would result in a new, highly visible service. As in other projects identified by the working groups, community service figured prominently in this recommendation. The project would also help OES and On Course stations get local partners in place, thereby getting their own work underway, and would provide a basis for funder interest. Working group participants also saw a link between their project and standards development. Finally, the localization initiative would be a selling point for Internet2 (I2).

In the balance of their presentation, the group touched on a number of different aspects of the work to be done, followed by questions and answers:

Tasks – the project would “help force the creation of national metadata standards, so that fields can be filled in locally.” Inputting into the OES database would be just part of the metadata work involved in “localizing.” Building partnerships was also cited as an important task.

Addressing wants – the project would be standards based, and would work with and extend the standards through local partnership. It would stimulate leadership at the national, local and school levels. The project represents a prototype of the sort that caucus participants said was needed. And it would foster the development of layered databases of a national, regional, local, or content-specific nature. Compatibility among these databases would be essential.

Addressing needs – the project would help define common terms; stimulate outreach in building partnerships; provide the incentive of being able to put a local face on national content; promote buy-in by staff and others; result in teaching tools and templates; and help set educational priorities at the local level.

The case for investment – the project would provide open access to education; put a local face on national content that is mission-based; and return stations “to our original public service mandate.”

ROI – the localization project would be fundable as a license or subscription service, one that local education entities will either buy or not. It would position public television stations inside the education community. The project by design “taps into the rhetoric of funders, government agencies, and others.” It promotes collaborations among staffs. It may reduce some costs. And it has the potential to generate profitable “education-commerce” opportunities.

Success indicators – acceptance of the prototype, demonstrated in a growing number of local subscribers to the service.

Q: Are state education standards readily accessible?

A: They have all been published. But although the standards are in place, the labor to package or create rich media content that satisfies those standards isn’t always available. In fact, one of the incentives to doing this locally – as the project envisions – is that the workload is more manageable.

Q: Your local success seems to be tied to the success of a national project, On Course. Where will the local initiative be if the national project is slow to deliver, or doesn’t deliver at all?

A: An approach like this is “several-able.” Local needs and requests could be satisfied by other sources and providers.

TEAM TWO

The second team to report from the breakouts proposed the development of a digital co-production prototype among multiple university licensees in different locations, using I2 to facilitate the exchange of production elements. This prototype project could also be used to identify and illustrate what is essential in a metadata exchange system.

The team then addressed several aspects of the envisioned project and turned their attention to the questions posed to their breakout group.

Software development process – the team proposed talking to end-users in order to identify how they might use software and what they need from it. Scalability, and the ability to accommodate future needs and maintenance, would be requirements. With this information in hand, the next step would be to decide if an existing software that meets specifications is out there to buy, or if it needs to be created. If the software needs to be custom-made, it would be essential to test it early and often with users, thereby minimizing unpleasant surprises when it is introduced.

Metadata Part of the work recommended was to develop a proposed standard for metadata. The team cited libraries as a useful illustration. They understand that the metadata needs to be layered, allowing degrees of granularity for descriptions at various levels, depending on the needs of the user. In the same way, the standards and structure for asset management metadata would likely require multiple levels, and public broadcasting can learn from how libraries have handled this challenge.

ROI – the range of returns that we might look for were “exemplified by the various perspectives” represented on this team. Each team member saw another reason for making the investment required. For example, this project would aggregate talent pools, encourage collaboration, and brings us all one step closer to a common metadata standard. The project would also result in a broader body of intellectual property on which public broadcasters and their partners could draw.

Success indicators – success would be evident in the decision of others to adopt at least the number of fields of metadata needed to transfer video for editing. It would be a victory if the development of metadata standards actually begins, and if users employ the system they propose. After awhile, favorable user evaluations and a “best practice” reputation would confirm that the project had been a success.

Q: Is what you are proposing sustainable?

A: That’s really a matter of build-out, whereas this team was focused on creating the metadata itself. But certainly as more people use our metadata standards, this initiative will be increasingly more sustainable.

TEAM THREE

The final team to recommend a “hypothetical but viable” project that would advance asset management proposed an “HD Exchange Network.” The team imagined a prototype network that could demonstrate “how to leverage HD content to public television stations and their community partners.” The prototype itself would include participants who are involved in some form of HD production, including perhaps two I2-connected public television stations, two non-connected, and two museums. Others aspects of the project described by the team included:

Features: shared HD content and metadata elements; searchable; retrieve proxy (DRM); distribution element – I2 and other; data mining capability.

Case: HD sells in Congress; the shift to HD creates the need for HD products to put on the air; this project comes at the right time and doesn’t have the baggage of “legacy” – it can start with a clean slate; it’s scaleable to the needs of other products and partners; and it will foster partnership among and between the public television stations, museums and communities.

ROI: the prototype would result in a proven model for cooperation, standards, and inter-operability before other television stations invest in HD, and would yield both good usage and enhanced data mining.

Metrics for success: volume of bandwidth; how the prototype is used by stations and museums; how it’s used by constituents; the development of a growing body of material in HD libraries; whether new ideas are generated for new applications; lessons and positive feedback about quality of service; the development of more precise estimations of cost; and the extent to which new and additional sources of funding are attracted for this partnership-based project.

Other benefits: shared costs; larger content pool; wider community partnerships; public television becomes a vital community hub; access by public television stations to museum relationships with the K-12 community; increased general visibility for all parties; and community good will demonstrated in part through additional support.

Q: Will Congress really support HD with dollars?

A: Yes, because HD is attractive from both a supplier and consumer perspective. Congress should be willing to provide dollars to support DTV station conversion, because that results in more HD programming, which in turn sells more HD television sets. At the very least, prototype funding should be available from those who would benefit commercially.

Q: What about HD through I2 – is that viable? Would the quality be good?

A: Yes, that's certainly possible. Our team debated the whole distribution piece. That's why we're recommending a mix of prototype participants – to test various means of distribution.

Q: Does this distribution model create enough of a market to stimulate more content?

A: Just look for a moment at the idea that 300+ digital public television transmitters are going up, without the attendant production facilities. There might be an exchange capacity among them, thereby attracting interest and stimulating demand. As more outputs are created, it's logical to assume that they have to be fed. Some stations have made an investment in HD content – but that won't be enough to reach every locale. This discussion underscores the value of a distribution network. Whatever system we build, however, it has support multiple forms of DTV – and that's why this approach would be scaleable.

Next Steps

Representatives of CPB drew the Caucus to a close by asking those present to “spread the word” about asset management. It was interesting, they said, that the three breakout teams had designed essentially three new activities. Each of those proposed projects was couched in a collaborative, community-based construct as well, and the value of partnerships was evident in the ideas that came forward. “We should send a thank-you to the National Science Foundation for its focus on I2 as well,” one person added. “That's resulted in a very big pipeline” for the content we imagine developing.

The staff thanked everyone who had taken time to participate in this Caucus, and promised to build on the discussion by considering how the Future Fund might invest in asset management. Those present were urged to continue to stay in touch with one another – and with the Corporation for Public Broadcasting – in the months ahead.