VIUS Reports 3.3
Faculty Focus Group on CONTENTdm™
June 2002
Michael J. Dooris

INTRODUCTION

As an intermediate step in the assessment portion of the Virtual Image User Study (VIUS), the VIUS team organized a demonstration on the Penn State University Park campus on May 29, 2002 at which faculty were asked to evaluate the commercial digital imaging system CONTENTdm™. This was the fifth faculty software evaluation session; earlier in Spring 2002, James Madison University’s DID package and the Luna Insight™ package were evaluated.

CONTENTdm™

The CONTENTdm™ Software Suite is a product of DiMeMa, Inc. It is based on more than six years of development and collaboration with archivists. It is a multifunction package that provides tools for most aspects of digital collection management --- creating and organizing collections, searching and accessing collections, and managing collections. It is a relatively flexible and generic package. For example, it is 100 percent Web compatible; servers and collections can be administered from remote desktops, item and metadata entry can occur from remote locations, collections are accessible through standard Web browsers, and so on. It supports common tools and standards, such as Dublin Core and the Visual Resource Association Core, XML, Access, Excel, FileMaker Pro, and Mac, PC, and Unix client systems. Data can be imported using delimited ASCII. CONTENTdm™ is a content-free software package for managing purchasers’ image collections of any common file format, including JPEG images, WAV or MP3 audio, and AVI or MPEG video. It is scalable up to millions of images. Access (via Web browsers) by an unlimited number of end users is permitted, but access can also be controlled in various ways so that collections are available to a limited audience.

PARTICIPANTS

Participating in this sessions were seven Penn State faculty members from a variety of disciplines. These individuals had mostly been identified through earlier work of the VIUS team as likely “intense users” of images in their teaching, research, and/or service work. With one exception, all had participated in previous software evaluations. The 90-minute session included a demonstration of the CONTENTdm™ system; discussions were moderated by members of the VIUS project team and audiotaped.

WRITTEN SURVEY

After viewing the demonstration, participants completed a one-page written survey. Table 1 presents responses to the written survey. Because small samples such as this are not suitable for parametric statistical measures (mean, standard deviation, t-tests, and the like), only simple, descriptive, summary techniques are methodologically appropriate.
Table 1
Faculty Evaluation of CONTENTdm™: Written Survey Responses (N=6)

<table>
<thead>
<tr>
<th>Q.1 I feel that it would be worth my time to familiarize myself with the integrated presentation tools that were demonstrated.</th>
<th>Strongly Agree or Agree</th>
<th>Neutral</th>
<th>Disagree or Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q2. Difficulty in incorporating my own images into a presentation would be a serious enough drawback that I would not be able to use the integrated presentation software.</td>
<td>3</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Q 3. The difficulty of downloading images from the database to use with third-party software (e.g., PowerPoint) would be a serious drawback that would prevent my use of the system.</td>
<td>1</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Q 4. In general, if I had the choice of only one, I would prefer using integrated presentation software over third-party software (e.g., PowerPoint).</td>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Q 5. Being able to have my students use the integrated tools to view, outside the classroom, presentations that I have created would be valuable.</td>
<td>3</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Q 6. Even though I could use the integrated presentation software, I would still need to download images.</td>
<td>6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q 7. I currently use, or plan to learn in the next year, one or more third-party presentation packages (e.g., PowerPoint).</td>
<td>5</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Q 8. Based on my understanding of the capabilities and drawbacks of this package, if Penn State made it available I would be likely to use it in my professional work.</td>
<td>1</td>
<td>1</td>
<td>4</td>
</tr>
</tbody>
</table>

DISCUSSION OF ISSUES

Faculty participants commented on what they saw as the strengths and weaknesses of the system.

**Speed**
As was the case in the Luna Insight™ and DID demonstrations, participants in this session emphasized the importance of speed for classroom use. They were the least critical of CONTENTdm™ in this regard. Perhaps because it runs from a local server, CONTENTdm™ seemed to run quickly. (Luna Insight™ definitely was the slowest performer of the three packages demonstrated to date.)

**Reliability and Control**
Faculty members continue to voice serious concerns about the necessity for Internet access to fully utilize presentation software. Reliability and ease of use for classroom and other presentation settings is a significant, basic issue. Again, in this respect, CONTENTdm™ and DID are preferred over Luna, although ideally, faculty members would like to have the option to store and run presentations completely from portable, permanent storage (such as a hard drive or zip disk). Clearly, it is very important to faculty members that they have portability and control of their presentations without relying on an online connection.
Collection Availability
The participants all seem to appreciate the capability to, at least theoretically, allow many faculty members to contribute to and eventually share in a large pool of images and metadata through CONTENTdm™. Questions continue about how, in practice, images will get moved into databases (the plan for the VIUS team to handle this during the prototype was received positively; some long-term consideration needs to be given as well).

A faculty member repeated a point made in an earlier demonstration --- that Penn State’s Instructional Resource Server (CAC) has several thousand images now available for academic use. Some consideration should be given to how this collection will be maintained, and how it will be migrated to the collections to whatever system Penn State adopts.

File Formats
There is no one best file format. Even a single faculty member may want to use different formats for different situations (for example, sometimes needing many small, low-quality images, and at other times needing very detailed, rich, high quality images.) CONTENTdm™ is very flexible or managing purchasers’ image collections of most common file formats --- known to include JPEG, WAV, MP3, AVI MPEG, and TIFF--- and this is a significant feature. A question was asked about how well CONTENTdm™ handles PDF files, which at least one faculty member relies upon for some teaching uses that require highly detailed images.

Image Quality
Again, the ability to store and show extremely high-quality images is not necessary for all situations, but the potential should be there. This is not only a concern about specific software packages; it might relate to the quality of classroom projectors, for example. But a good software package, nonetheless, should make it easy for faculty members to easily set levels of image size and quality.

Can Faculty Control Images and Metadata?
Participants basically like the idea that they and their colleagues can contribute images and then share in a collection or collections. However, there were questions as to, once contributed, whether an image could be removed by the contributing faculty member, and about who could edit associated metadata edited. Although it is certainly true that not anyone can change any image or text, it is not exactly clear how CONTENTdm™ handles these matters.

Metadata and Schemes
Faculty seemed to like CONTENTdm’s™ basic approach to cataloging data, in that it uses common tools (Dublin Core, predefined vocabulary) while also providing customization capability (individuals can add indexes and fields). In comparison to the demos of the other two packages, in which faculty raised concerns about metadata constraints (for example, DID’s categories for culture, style, period, and so on) there were fewer concerns raised about CONTENTdm™. Individual faculty members, or groups of faculty within a given discipline, could create their own respective metadata schemes in CONTENTdm™.

Flexibility in Using Other Software Tools
Participants want to be able to manage images and design presentations using tools of their own choice, such as PowerPoint, Photoshop, ImageMaker, or whatever. Both CONTENTdm™ and DID appear to allow this flexibility; it would be desirable to keep and maximize that sort of openness. The presentation tools of CONTENTdm™ were seen as pretty weak.
Building Shows versus Image Viewing
The two packages that faculty generally seem to prefer among the three evaluated to date are DID and CONTENTdm™. A perceived difference is that DID clearly provides different functions – a slideshow builder for searching the database, selecting slides, and so on, versus an image viewer for, say, in-class presentations. CONTENTdm™ is perceived as having a strong database tool but relatively weak presentation tools.

The following quote is from the DID evaluation summary; it seems relevant after the CONTENTdm™ evaluation:

“The (DID) demonstration very usefully highlighted and clarified one finding in particular: Faculty are much less interested in, and have less need for, a university-level solution for image presentation. These needs can be handled and handled well by PowerPoint and other packages. Faculty are much more interested in, and see more value in, the database management aspects. That is, there is a greater need for a package (with related support) that uploads images and text, searches across a database and multiple databases, allows downloading images, and so forth.”

Because CONTENTdm™ has flexible and high-powered search features (such as Dublin Core support; Boolean operators; searches by defined fields, across all fields, across multiple collection databases, and by phrase, the CONTENTdm™ approach is a good one in this respect.

Copyright Issues
As has happened in virtually every focus group the VIUS team has conducted, questions were asked about copyright and related matters. There is no single best approach. The CONTENTdm™ approach of placing decisions and responsibilities on image providers and image users (it does allow contributors to watermark and/or band images) seems to be at least reasonably acceptable.

Overall CONTENTdm™ Evaluation
The evaluation to CONTENTdm™ was fairly positive overall. Participants seem to like CONTENTdm™ and JMU DID about equally well --- and better overall than Luna Insight --- and to raise many of the same issues. One major difference between Insight versus both DID and CONTENTdm™ is that Insight links image management to specific, controlled collections, while DID and CONTENTdm™ are much more flexible. Participants strongly prefer the latter approach – that is, they like being able to divorce the image data bases from the image management application. Database management in particular is a relative strength of CONTENTdm™.

Faculty Sharing Collections/Peer-to-Peer Approaches
It was pointed out, again, that many faculty have images they would be willing to share, and that others would like to use, especially within Penn State. The VIUS team should sponsor a structured conversation about this and related concerns. For example, while there are many images, they may not be well organized. There may not be associated textual data. There is no, or uneven, quality control. Perhaps CAC (or some other similar unit) could provide support (with “a roomful of scanners and wage-payroll operators”) for digitizing analog images, support a particular image management system, provide server/storage space, offer guidance on how to organize text data and setting up protocols and vocabularies, and so on. Several participants said they would be willing to participate in a conversation about a peer-to-peer (probably in-house at Penn State) image management system.