

Executive Summary

The Visual Image User Study (VIUS) assessed needs for digital image delivery at the Pennsylvania State University through a rigorous process of broad-based and interdisciplinary user study, through prototyping services, and assessing those prototypes. The arsenal of measurements employed provide a rich source of data for other institutions. The study documents a large, interdisciplinary, and growing market for the use of pictures – especially in digital form.

This study suggests a list of critical factors that will influence use of image delivery systems. The content of a pictorial database proves to be the most important factor in determining its use. But other factors such as potential labor savings and help with understanding permitted uses also hold importance for system users. Infrastructure and collection conversion problems currently inhibit the use of digital images for teaching but seem less of an obstruction to the use of pictures for research. Often comfort with technology in the classroom inhibits use of a system. Teaching needs require less sophisticated information retrieval and more sophisticated handling of rights and permissions. Independent learners and researchers require a larger variety of uses than do teachers. They have a greater concern for information retrieval features and for the quality of images. Collections maintained by individual faculty and students are an important resource and individuals with large collections of pictures tend to be frequent users of institutionally managed collections. Collectors want help and closer coordination between institutionally and personally managed resources. The VIUS project notes the inability of current systems to address several of these critical factors (identifying desired new content, assisting with rights management, and enabling individually managed collections).

Two services were prototyped: a traditional image database service and a more unusual, peer-to-peer service (named LionShare). The image database service demonstrates that tailoring content to local needs and close work with teaching generates substantial volumes of use. LionShare development includes features such as authentication and persistent resources that are new to peer-to-peer technology. Assessment of the LionShare prototype illustrates that peer-to-peer technologies have great promise for academic uses – particularly as a way of addressing the importance of the resources held by individuals. Finally the VIUS project underscores the importance of close work between the functional units within a university required for image delivery and probably any other aspect of digital library development.