

SECTION 3

THE SURVEY MECHANICS

As stated in section one this study proposes to take a “snap shot” of the current ability for members to take advantage of emergent services provided by NJEDge.Net ipVideo initiative. The members are currently a subset of institutions of higher education in New Jersey. Of the 59 colleges and universities currently listed at the New Jersey Commission on Higher Education website, 45 are currently members and 43 of those have subscribed to the NJEDge.Net state-wide intranet, over which the video services run.

The initials “IP” stands for Internet Protocol, which is the standard set of rules and descriptors by which data travels over the Internet. Specifically, this paper involves the transmission of video as data packets. The term “ipVideo” is a popular contraction of the formal descriptive phrase, “video over IP.” The abbreviation was adopted as part of the working title of a consortium of educators and technology companies from around the world funded by Vinnova that are working towards resolving issues with and promoting the use of video over data networks, which has lent some legitimacy to the term.

This paper focuses on the hardware, software, and required configurations that each institution must have in order to take advantage of specific services being offered. These services are: videoconferencing, video broadcasting (or webcasting), point-to-point broadcasting (unicast transmissions), and video on demand (VoD). Each service requires

a unique set of hardware and software, and they may be combined with other multimedia as elements of what is known as “Interactive Video.” The degree of interactivity is dependent on which elements are utilized for a specific project.

The quality of ipVideo is dependent on the limitations inherent in the network. The commercial Internet, with its “bursty” traffic and limited prioritizing capabilities can not provide the best video service, but its popularity and use is increasing nonetheless. However, the NJEDge.Net backbone has been designed for commercial grade video by providing appropriate bandwidth and priority tags. In addition, the initiative is addressing access to video data by providing centralized management and indexing services.

As mentioned in Chapter 2, there has been much activity across the nation and globally with regards to video services over data networks. With all this activity, ipVideo is positioned to be the “next big thing” in education and the technology is improving at a rapid pace. NJEDge.Net has already presented case studies and show cases that exemplify the capabilities and resources of the network. *The pace of innovation is swift. New commercial technology which promises to distribute video over ultra wideband wireless are sure to have an impact on video services and data centers everywhere (Iwatani, 2004). This study will serve as a good baseline to measure future enhancements to supported services.*

Comment: I just read that there will be a wireless standard for cable TV

Design of Study

This study is descriptive, focusing on the state of University readiness to take advantage of the video services provided by the NJEDge.Net initiative. It is, in essence, a snapshot, a description of conditions as they exist today. Change in status is inevitable.

Over time, the members will come to utilize these services in all aspects of business, from teaching to administrative tasks.

Evaluation data will be derived through the completion of an online survey by the VRG representatives. Most of the data to be gathered will be quantitative in nature, yielding percentages that will intricate the level of readiness of all members as a whole. However, there will be some qualitative questions in the form of Likert scales, to get a sense for the level of usage by instructors and the level of support provided by management. There will be some open-ended questions that will help disclose which services are used and by which departments in an institution. As in keeping with Descriptive research, throughout the process, the researcher will keep the manipulation of research context to a minimum (Henrichsen, Smith & Baker, 1997).

General Procedures

The researcher first sought the approval of George Laskaris, Executive Director of NJEDge.Net before continuing with the study. Mr. Laskaris agreed to the research project, and assigned Sherri Prupis, staff Educational Technologist, as primary liaison and advisor. The study involves all institutions of higher education who are members of NJEDge.Net and have chosen to participate in the state-wide intranet. In addition, Charlie McMickle, Assistant Director of Technical Services will serve as technical advisor. Mr. Laskaris, Ms. Prupis, and Mr. McMickle are the researcher's informants.

The study involves a survey with the possibility of follow-up interviews. The questions cover hardware and software availability, required configuration, usage statistics, and support issues. The questionnaire also allows for short answers that will allow participants to clarify answers or provide additional information that relate to a

specific question. The survey participants are a closed group, consisting of the 43 member's VRG representatives, who will be invited to take part in the study by Mr. Laskaris on the researcher's behalf. It is expected that the majority, if not all, of the representatives will complete the survey as all participants have a vested interest in the results of the project.

The survey will be given electronically, over the Internet using SelectSurveyASP Advanced, version 7.3.0, by ClassApps.com, provided by the Office of Information Technology Services, Web Unit at New Jersey City University. Survey respondents will be allowed to view the summary results for the duration of the survey and for a minimum of one year after it is closed. Access to the final report will be sent to the Email address provided at the beginning of the survey. Summary information and the final report will be available at the researcher's website for a minimum of three years. The survey and research methodology were submitted to the NJCU Institutional Review Board, along with this application to ensure the safety and well-being of the participants. It is currently under review.

Two meetings with Mr. Laskaris & Ms. Prupis were held during the planning stage and development of the thesis proposal and will continue throughout the development of the survey questions and final report. In addition, the material will be reviewed by Mr. McMickles to ensure the accuracy of the survey technical information and questions as the study progresses.

Like other methodologies, descriptive research has a unique set of pitfalls that could derail the study. According to Baldwin (1969), surveys can be subject to bias in the way the questions are raised that can influence the outcome. In addition, surveys are

not very effective for issues of a sensitive nature. Another way for errors to be introduced is in how the questions are interpreted by the participant. Finally, errors in reporting the survey, the recording of the responses or in the collection of data can occasionally bias the study as well (Cattagni & Farris, 2001). The researcher will keep these issues in mind while completing the questionnaire.

Documents Used in this Study

The technical survey questions will be developed using documents that can be found at the NJEDge.Net website. Additional documentation in support of the study was found as noted in the bibliography. Sample surveys questionnaires will also be researched to get a better understanding of Likert-type questions.

Resources

The instruments created for the study are a data and questionnaire planning table developed in Microsoft Word and provided as Appendix C, and the aforementioned survey application. Reporting and basic statistics will be calculated automatically through the application. However, the survey data is stored in a Microsoft Access database that can be accessed directly, which allows for advanced data analysis and reporting. In addition, the data can be imported into Microsoft Excel for more extensive data analysis and charting. Finally, the researcher has developed a website to track documentation and data as the study progresses, and to present the final thesis and findings.

References for Section 3

- Henrichsen, L., Smith, M., and Baker, D. "Taming The Research Beast: Research Methods in TESL and Language Acquisition," retrieved December 26, 2003 from <http://linguistics.byu.edu/faculty/henrichsen/researchmethods/>
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