

FROM THE EXECUTIVE DIRECTOR

The keyword this quarter is Metadata. Almost every conversation, event and meeting touched upon the subject. Metadata is a central element in Project Cloud and a reason why The NAB Show asked us to organize a 2-day conference track in Las Vegas on Media Management in the Cloud. Metadata and its role in generating revenue was the topic of the final installment in our inaugural series of Digital Town Square meetings. This quarter ETC@USC participated in a number of industry events including MESA's Metadata March Madness and the HITS Entertainment Technology Summit.



With construction now finished on the adjacent World Building and IMAX Immersive labs, we are excited to receive our new neighbors and look forward to collaborating with them. - *Kenneth Williams*

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ETC LEADS MEDIA MANAGEMENT IN THE CLOUD CONFERENCE AT NAB



MEDIA MANAGEMENT IN THE CLOUD

Advances in Content Reliability and Security

TUESDAY, APRIL 8 - WEDNESDAY, APRIL 9

Media Management in the Cloud, a two-day conference co-produced by NAB and ETC, sponsored by Rackspace, Aspera, Equinix, Wipro, drew standing-room only crowds in the Convention Center's South Hall at the 2014 NAB Show in Las Vegas. Organized by Erik Weaver, Lead of ETC's Project Cloud, the NAB track demonstrated the increasing reliability, security and economic viability of the latest cloud-based innovations and solutions.

After a brief welcome by ETC's CEO Ken Williams, ETC's Erik Weaver opened the conference, noting that almost everything happening at NAB this year seems to have some connection to the cloud. Day one presentations and panels focused on key areas related to cloud services, such as: cost, scalability, security, production and storage.

"The key idea here is that using these systems saves money," said Weaver. "But until companies in our industry see that, they will be hesitant to change. Showing them how this tech can work is one of the reasons we are here."



Mark Ramberg of Amazon Web Services, currently the largest cloud services provider in the world, delivered the Day 1 morning keynote and stressed simple ideas that would become the major themes for the day: that the cloud is cost-effective, scalable, and secure.

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CONVENE

ETC enjoys a long-standing history as a neutral think tank and research center within USC's School of Cinematic Arts that convenes executives, innovators, thought leaders and catalysts. Part of the ETC mission is to convene industry peer groups and partners to share knowledge and experience.

PROJECT CLOUD UPDATE Working Groups Make Progress 10 Gigabyte Ethernet Test Hub Installed



Working groups meeting as part of Project Cloud continue to make progress as they address critical issues. Last quarter, the Transport and Framework team recommended the creation of a global system for media assets, essentially a universal “onramp” complete with a tracking system, to aid the flow of assets from remote and unique locations. The system includes a Sohonet 10gb secure connection which is now installed and operational for testing at ETC.

Another working group is developing a new Registry I.D. The proposed registry recognizes the increasing complexity of asset management and manages the exponential growth with a scalable and flexible solution. A metadata dashboard is also in development to provide a window into the array of unique information carried in every element.

Other Project Cloud developments and recommendations include a Framework CI (Continuous Integration) and REST (Representational Transfer State) API and a security study conducted with the Cloud Security Alliance, whose members include the World Bank, Google, eBay, Autodesk, Adobe, Cisco, HP, Microsoft, Oracle, PWC, & RSA, and the MPAA. The security team is pressing towards a Cloud Control Matrix, a star registry, and a Cloud Security certification process.

The NAB proceedings supplanted the Spring group meeting. Regularly scheduled quarterly meetings resumed May 22nd and will be reported on the next quarterly update.

ETC QUARTERLY- Spring 2014

METADATA MEETS BIG DATA: “NEW OPPORTUNITIES FOR CONTENT DISTRIBUTION”

Topic of February Digital Town Square



Metadata meets Big Data: “New Opportunities for Content Distribution,” the latest in the ETC’s Digital Town Square (DTS) series, was held at the Hollywood Roosevelt Hotel on February 27. The initial season of DTS meetings explored related topics involving metadata throughout the production and distribution process.

The forum gathered industry leaders to discuss the challenges and opportunities for harnessing metadata and “Big Data” to boost monetization of digital content. The event featured presentations of cutting-edge solutions for systemizing and optimizing metadata, down to scene and frame levels and for mining meta-tags, to enhance consumer discovery and experience.

Discussion centered on how to maximize core as well as valued-added and promotional content; how to develop efficient, interoperable distribution systems in a highly-fragmented, constantly evolving landscape; tapping the vast pool of meta-tags and audience data to build audience share and to personalize search and recommendations; standards and best practices; and more.

Dolby’s Content Relations, Mark Turner moderated the proceedings which featured participation by Mark Fleming, Manager of Partner Operations for Google, Ellen Goodridge, Vice President, Global Digital Operations & Product Development, Sony Pictures Entertainment, Mark Hodges, Senior Managing Account Director, Acxiom, Kevin McEntee, Vice President, Digital Supply Chain, Netflix, Michael Pollard, Sr. Manager, Distribution Operations, Disney/ABC Networks Group, Brendan Sullivan, Executive Vice President, Global Operations and Technology, Vubiquity.

The panelists were particularly candid in revealing the challenges of dealing with sometimes incomplete, conflicting or incompatible data that is delivered in formats varying from Excel spreadsheets to JPEG photos. Both Netflix and Google noted that ingesting asset information assets is largely a manual process due partly to the inconsistent nature of the information.

ETC provides insight and perspective on emerging media habits of consumers and understanding of the impact of technology on the consumer experience and the creative process.

SPROCKIT EVENT AT NAB SHOWCASES INNOVATION



ETC began an association with SPROCKIT, a year-round innovation program in partnership with National Association of Broadcasters (NAB) and the World Series of Startups that shines the spotlight on industry game-changers. At NAB, Sprockit “showcased today’s media and entertainment entrepreneurs to the industry’s iconic companies” through exhibits and demonstrations on the show floor and featured lively panel sessions on the changing industry landscape and the innovative products and solutions that are powering the future of media and entertainment.

As part of this association with SPROCKIT, Ken Williams moderated “Creating the ‘Watch ABC’ Product” panel. This Disney/ABC Television Group panel included EVP and Chief Product Officer, Digital Media, Disney/ABC Television Group Albert Cheng, Skarpi Hedinsson of the Disney/ABC Television Group, Ralf Jacob of upLynk and Doug Knopper of FreeWheel. The discussion focused on content creation, advertising, distribution workflow, technology integration and vendor relationships.

The Watch ABC product itself was several years in the making and represented the culmination of both technical, programming and business innovations. Today, Watch ABC provides viewers with a seamless, streaming TV anywhere experience.

George Lucas Endows 3 Chairs Bruce Block, Mike Fink and Alex McDowell Welcomed in Campus Ceremony



In a ceremony at the Ray Stark Theater on USC’s Cinematic Arts campus, Dean Elizabeth Daley joined George Lucas in welcoming three USC film professors to their new endowed chairs. Made possible by a generous gift from Lucas, the three new chairs — The Sergei Eisenstein Endowed Chair for Cinematic Design, the George Méliés Endowed Chair in Visual Effects, and the William Cameron Menzies Endowed Chair in Production Design — are now held by Bruce Block, Michael Fink, and Alex McDowell respectively.

The evening began with remarks by Dean Daley, who praised the professors, and the film pioneers for whom the chairs were named. “In the mold of the filmmakers they are named after,” she said, “these new chairs represent innovation in the cinematic arts.” Daley went on to point out that the School of Cinematic Arts now boasts a total of 24 endowed chairs, more than any other cinematic arts program in the country. Lucas spoke next, saying in part, “I’m pursuing my own agenda about the school and what I think they should teach.” Lucas, an SCA alumni and longtime contributor to the school, has made a series of substantial gifts over more than a decade. The building where the event was held is named in his honor.

After reminiscing briefly about his time as a student at SCA, Lucas issued a word of caution that seemed directed at both the honorees and the industry as a whole. “Don’t get too enamored with the new technology,” he said. “The art of what we do is exactly the same.”

For their part, the evening’s honorees were unanimous in praising Lucas’s continued generosity, and in honoring the film pioneers for whom their respective chairs were named. Block, a producer whose credits include “What Women Want” and “As Good As It Gets,” praised Eisenstein’s visionary techniques, which “influenced all of Hollywood’s filmmakers.”

Fink, a legend in the world of visual effects, noted that Méliés, the French film pioneer who invented many of the first special effects seen on film, was a personal hero of his. And McDowell, the last honoree to speak, said that Menzies had “single-handedly transformed the craft of art direction into the art of production design.”

In an evening largely devoted to paying tribute to the aspects of filmmaking that are timeless and immutable, the event also looked forward to the emerging technological future. All three honorees praised the liberating possibilities of new technology, with McDowell suggesting that technology was “shortening the distance between imagination and creation.”

McDowell also noted that all three honored professors were founding members of the 5D Institute, a research unit within the school dedicated to help foster the “future of narrative media.”

EXPLORE

ETC provides insight and perspective on emerging technologies and understanding of the impact of technology on the consumer experience and the creative process

HPA Tech Retreat

The HPA Tech Retreat® is an informal gathering of the top industry-engineering, technical, and creative talent, as well as strategic business leaders focused on technology, from all aspects of digital-cinema, post-production, film, television, video, and related technologies for the exchange of information.



This year, ETC sent three reporters to the HPA Tech Retreat to provide coverage of the event. Our staff provided daily coverage of the event including original reporting, and was able to increase the circulation of our daily news bulletin to include all registered attendees at the retreat. During the week of the event, we observed a marked increase in our web traffic, suggesting that this type of original coverage is both popular and valuable to our audience.

EXPLORE

ETC provides insight and perspective on emerging technologies and understanding of the impact of technology on the consumer experience and the creative process.

World Building Topic Of Entertainment Technology Roundtable



Alex McDowell is one of the most innovative and influential designers working in narrative media. With the impact of his ideas extending beyond his background in cinema, he advocates an immersive process that acknowledges the key role of

world building in storytelling. In a special presentation to The Entertainment Technology Roundtable, McDowell not only explained his World Building design process but previewed the new World Building Lab opening in the Zemeckis Center and showed some of the latest implementations of virtual production. McDowell articulates a dynamic, inclusive design process that creates entire worlds and facilitates, richer, deeper narrative and character development.

ETC QUARTERLY- Spring 2014

ETC NAB Cloud Conference

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Panels and case studies centered around various aspects of the use of cloud services in media and entertainment. Topics included uses of the cloud for independent film production, use of the cloud for post-production services, questions of how best to transport data in and out of various clouds, and issues of both short and long-term cloud-based storage. Panelists included senior executives from studios, vendors, and associated companies.

Nearly all of the panels eventually began to circle around a core group of issues, including the need for better and more consistent use of metadata, the belief that content in the cloud is far more secure than is commonly believed (and perhaps more secure than many current storage systems), and the assertion that our industry has been slower than others to adopt cloud technologies.

Day 2 of the conference focused on reliability, security, and return on investment. Brian McKay, EVP of Production Operations at Warner Bros., interviewed by Variety's technology editor David Cohen, discussed the challenges and opportunities of moving the studio's archive into the cloud. McKay explained Warner Bros. decision to form a partnership with the Shoah Foundation at USC to house the archive. He noted the extensive architecture developed by the Foundation within the University for the preservation of digital content.

The entire Media Management in the Cloud Conference is now available On Demand through the NAB website and their media store.



UPCOMING EVENTS

June 5 th	Mega Session
June 11 th	SMPTE/ETC
June 12 th	Digital Town Square

The Entertainment Technology Center @ the University of Southern California (ETC) is a think tank and research center that brings together senior executives, innovators, thought leaders, and catalysts from the entertainment, consumer electronics, technology, and services industries along with the academic resources of the University of Southern California to explore and to act upon topics and issues related to the creation, distribution, and consumption of entertainment content. As an organization within the USC School of Cinematic Arts, ETC helps drive collaborative projects among its member companies and engages with next generation consumers to understand the impact of emerging technology on all aspects of the entertainment industry, especially technology development and implementation, the creative process, business models, and future trends.

For membership information, contact Edie Meadows at emeadows@etccenter.org

Sign up for the ETC's Daily Bullet daily news brief, especially compiled for the media, entertainment and technology professional: <http://eepurl.com/tBFDf>