Entertainment Technology in the Internet Age
18 – 19 June 2013
Stanford University
Stanford Graduate School of Business
Knight Management Center
655 Knight Way
Stanford, California 94305

Overview

Entertainment technology development and content deployment has historically been the purview of Hollywood and traditional broadcast media. However, rapid convergence of technology improvements in connectivity, bandwidth, and media-processing coupled with consumer interest has caused a surge in media distribution over the web.

Produced by the Society of Motion Picture and Television Engineers in partnership with the Stanford Center for Image Systems Engineering, this two-day conference at the beautiful Stanford University campus will explore the technical, creative, and business requirements for delivering a compelling, high-quality, monetizable entertainment experience over the web, covering four aspects of the ecosystem and include an evening event with keynote speaker(s).

Day 1 – 18 June 2013

08:45 - 09:00
Welcome, Introductions and Program Overview
Bernd Girod/Director, Stanford Center for Image Systems Engineering
Wendy Aylsworth/SMPTE President
Dr. Joyce Farrell/Conference Chair, Stanford Center for Image Systems Engineering
Pat Griffis/Conference Chair and SMPTE Education Vice President

Session 1: Creating Content for the Internet

09:00 - 10:00
Content Creation for the Internet: New Tools and Concepts
Session Chair: Fred Fuchs/President, Riverside Entertainment

Presenters/Panelists:
Ann Greenberg/CEO, Sceneplay
Carl Rosendahl/Faculty, Entertainment Technology Center, Carnegie Mellon
Peter Hirshberg/Silicon Valley Executive, Entrepreneur and Marketing Specialist

This session will look at the new technologies enabled by the web that allow new innovative concepts in media creation and distribution. What can Hollywood learn from the new approaches? What can the traditional creatives teach the Internet generation? Panel will include a mix of creatives from both perspectives.
10:00 - 11:00
Flash Forward - How HTML-5 and Canvas Will Become the Next Interactive Screen for Web Media
Session Chair: Dr. Jan Skoglund/Manager, Chrome A/V, Google
Presenters/Panelists:
Hugh Finnan/Director of Product Management, Google
Jet Villegas/Senior Engineering Manager, Mozilla Corporation
Dirk Schulze/WebKit Developer, Adobe

HTML-5 is the latest generation of web browser technology designed from the start to be media savvy. What are the key features it offers and when can we expect to see deployment in the marketplace? More importantly, can traditional TV services such as captioning and remote user interfaces be integrated effectively? What issues are preventing an effective marriage of the two? Will HTML-5 coupled with Canvas 2D/3D rule as the next-generation UI technology? Come hear from W3C and media technology experts.

11:00 - 11:20
Networking Break

11:20 - 12:00
Future File Formats for Entertainment Media: What are the Tech Trends and Implications for Internet Distribution?
Session Chair: Howard Lukk/VP Production Technology, The Walt Disney Studios
Presenters/Panelists:
John Hurst/President/CEO, Cinecert
Dr. Pierre Lemieux/Partner, Sandflow Consulting

This session will give selected highlights of current activities in standards to simplify premium content creation and distribution for Internet applications. Topics will include an update on SMPTE Interoperable Master Format (IMF) which is a standard to allow a mezzanine-level production quality master format that can then be efficiently translated for diverse output applications ranging from Blu-ray to Ultraviolet to Internet. What do these new approaches mean for content distribution via the Internet?

12:00 - 13:00
Gaming, Entertainment, and the Internet
Session Chair: Charlie Jablonski/CEO, On Live
Presenters/Panelists:
Bill Gardner/Partner, Digital Entertainment Insights, LLC
Charlie Jablonski/CEO, OnLive
Alex Caccia/President, Marmalade
Brett Durrett/CEO, IMVU
The distinctions between gaming and traditional linear entertainment is blurring. With the advent of social gaming popularized by companies like Zynga where will the distinctions blur further and what does the intersection look like?

13:00 - 14:15
Lunch Break (on your own)

Session 2: Distributing Content Via the Internet

14:15 - 15:00
Internet Media Delivery Formats - A DASH to the Races?
Session Chair: Richard Doherty/Director, Dolby EMedia Technology Strategy, Dolby Laboratories
Presenters/Panelists:
Mark Watson/Director Streaming Standards, Netflix
Will Law/Principal Architect, Akamai
Jesse Rosenzweig/CTO, Elemental

This session will provide a high-level overview of what adaptive streaming is all about and why it is needed. It will then discuss the technical differences between some popular technologies including HLS and MPEG’s DASH and offer insights as to the pros/and cons of each as well as an overview on the business issues and opportunities for harmonization.

15:00 - 15:30
Next Generation Content in the Cloud: Ultraviolet
Session Chair: Mark Teitell/General Manager, UltraViolet (DECE)
Presenters/Panelists:
Craig Seidel/Vice President, Distribution Technology, MovieLabs
Mitch Singer/Chief Digital Strategy Officer, Sony Pictures Entertainment

Ultraviolet is a new generation of content delivery via the cloud. Consumer’s buy “rights” which stored in the cloud and then fulfilled via a variety of mechanisms. This panel will discuss Ultraviolet concepts and technology.

15:30 - 15:45
Networking Break

15:45 - 16:45
Mobile Internet Media: Content on the Go!
Session Chair: Leszek Izdebski/Managing Director, Cisco Internet Business Solutions Group
Presenters/Panelists:
Nishad Pai/Principal, Global Alliance Development, Google, Inc.
Eric Wolf/Vice President, Technology Strategy & Planning, PBS
Erik Moreno/SVP Corporate Development, Fox Networks Group / Co-GM Mobile Content Venture
Jim DeFilippis/CGO, TMS Consulting
Explosive growth of consumption of mobile video is creating new challenges and opportunities for media companies and distributors. Rapid rate of innovation in end-user devices and broad rollout of 4G infrastructure is enabling new mobile media businesses and is changing behavior of consumers. This panel will discuss many of the challenges and opportunities that this new ecosystem is creating. It will examine current trends in monetization of mobile media, challenges in production for mobile distribution, and current trends in broadcast (linear) vs. on-demand services. It will also discuss current growing rates of Wi-Fis. 3G/4G consumption and implications of increased penetration of 4G to that trend.

16:45 - 17:15
Summary/Adjourn

17:15
Networking Reception

Special Evening Session

18:30 - 20:00
Legal and Illegal Distribution over the Internet: Can We Find Common Solution(s)?
Session Chair: Pat Griffis/Executive Director, Technology Strategy, Dolby Labs and SMPTE Education Vice President
Moderator: James M. Burger/Partner, Thompson Coburn LLP
Presenters/Panelists:

Mitch Singer/CTO, Sony Pictures Entertainment
Steve Weinstein/CTO, Deluxe Entertainment Service Group
Chris Odgers/VP Technology, Warner Bros.
Stephen Balogh/Technology Policy Specialist, Intel
Fred von Lohmann/Legal Director, Copyright, Google
Eric Klinker/CEO, BitTorrent

The IP clause of the US Constitution instructs Congress: “To promote the Progress of Science ... by securing for limited Times to Authors ... the exclusive Right to their ... Writings ....” How do we implement an over 200-year old concept in an age where processing power and communication speed increase at a rapid rate? The last major revision to the Copyright Act was in 1976, with patches, among others, to protect CDs (1992) and to deal with circumventing devices and online infringement (1998). There doesn’t appear to be much disagreement that these laws have, so far, failed to stem massive online infringement. Some claim this infringing activity threatens the future of entertainment content and drastic measures need to be deployed. Others claim online infringement has little impact on the production of copyrighted entertainment content and drastic measures threaten the future of the Internet and the dissemination of knowledge the Constitution intended. This panel examines whether there is a middle ground of legal and/or business models that could ameliorate any economic damage caused by such online infringement without harming the Internet.

20:15+
Informal Networking
Day 2 – 19 June 2013

08:45 - 09:00
Welcome and Review
Dr. Joyce Farrell/Conference Chair, Stanford Center for Image Systems Engineering
Pat Griffis/Conference Chair and SMPTE Education Vice President
Barbara Lange/SMPTE Executive Director

Session 2: Distributing Content Via the Internet (Continued)

09:00 - 09:30
Preserving Artistic Intent in an Internet Device World
Session Chair: Pat Griffis/Executive Director, Technology Strategy Dolby Labs and SMPTE Education Vice President
Presenters/Panelists:
Rod Bogart/Color Scientist, Pixar
Richard Motta/CTO and Distinguished Engineer, Mobile Business Unit, NVIDIA

This session will be a tutorial on common practice in rendering artistic intent with the variety of tools in the movie creation world and then a discussion of challenges of maintaining artistic intent when delivering to a growing category of internet-centric devices with different rendering capabilities. Is there a device independent solution or are we stuck with optimizing on a device by device basis? What role can standards play to help signal and preserve artistic intent?

09:30 - 10:30
Achieving Quality on the Internet: How Can it Be Done?
Session Chair: Dr. Joyce Farrell/Stanford
Presenters/Panelists:
John Apostolopoulos/VP & CTO, Enterprise Networking Group & Director of Enterprise Networking Labs, Cisco
Scott Daly/Principal Member Technical Staff-Applied Perception, Dolby Laboratories, Inc.
Dr. Sunil Bharitkar/Director of Technology Strategy, Office of the CTO, Dolby Laboratories, Inc.

This session will explore the technical challenges of improving the delivery and quality of multimedia over the Internet and to mobile devices, with comparisons to traditional distribution methods. Speakers will address how joint audio-video coding, Internet streaming, wireless communications and display properties affect the user’s experience.

10:30 - 11:00
Networking Break

Session 3: Paying for Content Via the Web
**11:00 - 12:00**  
**Where are the Eyeballs? A Fireside Chat**  
Session Chair: Colin Dixon/Founder and Chief Analyst, nScreenMedia  
Presenters/Panelists:  
Vivek Khemka/Vice President Customer Technology, Dish Network

Keeping track of the eyeballs is becoming increasingly difficult. In the space of just a few years television operators have had to expand their focus from one screen - the television - to multiple screens. Reacting to the fundamental shifts in viewing behavior is not just a customer convenience feature; it has become a matter of survival. In this fireside chat, we will examine the challenges of not only keeping up with a consumer’s changing needs but anticipating them. What will an operator need to provide in five years to deliver a compelling user experience? How do you prepare for devices that haven’t even been invented yet? How do you continue to help content providers make money through all these changes? These and other questions will help you get a clearer picture of not only where we are but also where we are going.

**12:00 - 13:00**  
**Paying for Content Over IP? How is it Changing?**  
Session Chair: Allan McLennan/CEO, The Padem Group  
Presenters/Panelists:  
Dr. Alan Messer/VP, Head of Advanced Technology Lab, USA, Samsung Silicon Valley R&D Center (SISA)  
Taras Bugir/Worldwide Managing Director-Media & Cable, Microsoft  
Wayne Ruting/CEO, Decentrix Inc.

How is the Internet embracing new forms of multiplatform advertising? How do these new platform ads differ from the traditional approaches and how can user viewing be tracked? Is Nielsen or old school still in command of this new model and what goes into developing compelling advertising that’s associated with the specific interests of a program's audience now that targeting is real.

**13:00 - 14:15**  
**Lunch (on your own)**

**Session 4: Enjoying Content (The Users' Experience)**

**14:15 - 15:15**  
**Internet, the Second Screen and Beyond**  
Session Chair: Al Kovalick/Founder, Media Systems Consulting  
Presenters/Panelists:  
Colin Dixon/Founder and Chief Analyst, nScreenMedia  
Trevor Doersken/CEO, Mobovivo  
Khris Loux/CEO and Co-Founder, Echo  
Hardie Tankersley/VP Digital Platforms, Fox Broadcasting
The use of second screens such as PC's, iPad's, etc., to control or complement a main screen viewing experience in the home is a growing phenomenon. In this session, we will examine innovative developments in this area and their impact from both a Hollywood creative and technical perspective in enhancing an over-the-top content experience by collaborative efforts.

15:15 - 16:00
Analytics on the Internet
Session Chair: Dr. Dulce Ponceleon/Manager, Content Protection, IBM Research
Presenters/Panelists:
Dan Russell/Uber Tech Lead for Search Quality and User Happiness, Google
Rajasekar Krishnamurthy/Research Scientist, Computer Science, IBM Almaden Research Center

The new generation of analytics technology can provide powerful context clues on user behavior that can be used in a variety of media applications, including better contextual search and content identification. In this session we will discuss some of the latest technology developments and relevance to entertainment applications.

16:00- 16:15
Networking Break

16:15- 17:15
Content Discovery and Personalization
Session Chair: Florian Pestoni/Entrepreneur and Technology Executive
Presenters/Panelists:
Adam Powers/VP of Media Technology & Solutions, V2 Solutions
Alex Holub/Co-Founder and CEO, Vidora

As the lines between linear and on-demand continue to blur, television is becoming more personal and social. In a world of near-infinite content, connecting users with relevant content is emerging as a key differentiator. From established players with large content libraries to new entrants, companies are pursuing different approaches to discovering content, including search, collaborative filtering, machine learning, scene-level metadata and social sharing. In this panel, we will explore these trends with some of the leaders in the space.

17:15 - 18:00
Closed Captioning of Internet Delivered Content - Why, When, and How?
Session Chair: Pat Griffis/Executive Director, Technology Strategy, Dolby Labs and SMPTE Education Vice President
Presenters/Panelists:
James M. Burger/Partner, Thompson Coburn LLP
Mike Dolan/President, TBT Inc.

As more and more media content moves to the Internet, governments are increasingly putting regulations in place to mandate the same accessibility features that exist for traditional broadcast services. This panel will discuss some of the
technical issues facing the industry, work that has been done to address new FCC requirements for Internet-delivered content, as well as future synergies between the legacy and Internet captioning technology approaches.

**18:00 - 18:15**  
**Conference Summary and Take-Aways**  
Conference Chairs and Audience

**18:15**  
Adjourn

*Program subject to change!*