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Information Systems and Service Design

A4. Individual Assignment 3 - Service Brainstorm

Important Concepts from Initial Technology Review

- There are many products and services that aid sports media companies in delivering content to various digital platforms, but this technology is rarely integrated with other services that fans access.
- Customer (i.e. fan) loyalty technology is available, and widely used in other industries, but it is being used sparsely in sports media.
- Technology that aims to increase fan engagement with sports media is often focused on a single platform. For example, FanChatter's live event photo sharing technology does not integrate with KickApp's web-based photo sharing application (see descriptions of these services below).

Potential Concepts for Services that Address Technology Gaps in Sports Media

An Integrated Fan Loyalty Platform: Current sports media loyalty programs (see Accelitec's RFID tracking technology, below) are focused on providing discounts when fans buy certain products. This type of customer loyalty system could be expanded to all team branded touch points that a fan may encounter. These points could include sports websites, fantasy sports systems, and stores and bars in which sports fans purchase related products. Similarly, fans rarely follow a single team, and fan loyalty information could be collected and shared across leagues and even across different types of sports. Such a system could uncover affinities and advertising opportunities for the sports media industry, while at the same time allowing fans to collect rewards for continued loyalty to their favorite sports brands.

Smartphone Applications to Augment the Live Sports Experience: Technology exists to augment live sporting events with customized content delivered via smartphone. While wiseDV makes a handheld device for providing live video coverage of sporting events for on-site fans (see description below), there are many opportunities for live sports to add engaging multimedia content to devices that many sports fans already own: smartphones. Examples include allowing fans to express live messages of support of dismay on public scoreboards and the availability of live, but behind the scenes, views of the current action. This technology could provide an increased fan experience at games by allowing the crowd to take part in unique social interactions.

Technology to Improve Connections with Sports Organizations: Many sports organizations are experimenting with technology to allow fans to interact more directly with sports organizations, as well as with each other (see FanChatter and KickApps, below). Social media technology could

be expanded to engage with fans to build loyalty by, for example, crowdsourcing decisions about sporting events, or allowing fans to send messages to players and coaches.

Standards for Information Sharing in Sports Media

CableLabs VOD: Video-On-Demand Content Specification Version 2.0
http://www.cablelabs.com/projects/metadata/primer/
CableLabs, a non-profit video broadcasting trade consortium, has developed a metadata standard for video information interoperability. CableLab's VOD Metadata project "is a cable television industry and cross-industry-wide effort to specify the metadata and interfaces for distribution of video-on-demand (VOD) material from multiple content providers to cable operators."[1]

iTunes RSS 2.0
http://www.apple.com/itunes/podcasts/specs.html#rss
Apple's iTunes store uses an XML format based on RSS 2.0 for describing media data. Apple adds several iTunes specific tags to the RSS 2.0 standard, which can be accessed via the iTunes Podcasting Namespace.

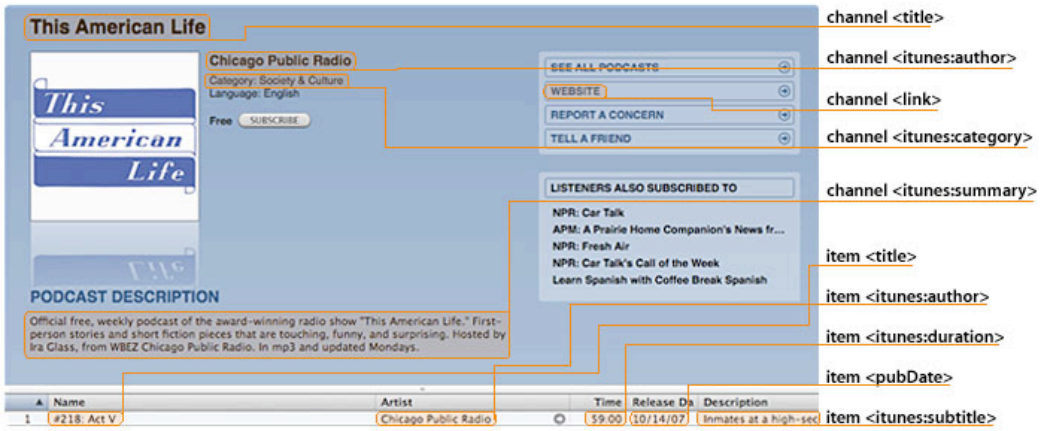

Figure 1: How iTunes Metadata is used to describe audio media (from: http://www.apple.com/itunes/podcasts/specs.html#rss).

Sports Markup Language (SportsML)
http://xml.coverpages.org/SportsML200211.html
SportsML is "the only open, global XML standard for the interchange of sports data." SportsML can be used to describe not only the results of a competition, but also a wide range of sports media, including news reports about games, league standings, or a combination of these types of data for individual or team sports.

Technology that Facilitates Engagement with Fans During Games

1. http://www.cablelabs.com/projects/metadata/

KickApps
http://www.kickapps.com/sports.html
KickApps is a software company that allows user to engage in social networks using widgets added to a team website. The platform captures metrics about user behavior using a proprietary "Social Graph Engine" technology, which can be used to deliver behavioral advertising to users. Clients of this system include the San Francisco 49ers.[2]

FanChatter: Mobile App for Sharing Photos During Games
http://www.fanchatter.com/photosharing
FanChatter makes an interesting product that allows fans to post live photos and videos to a game's scoreboard using their cellphones. Photos may also appear on a website. The product includes administrative moderation so that unacceptable photos do not appear to the general public.

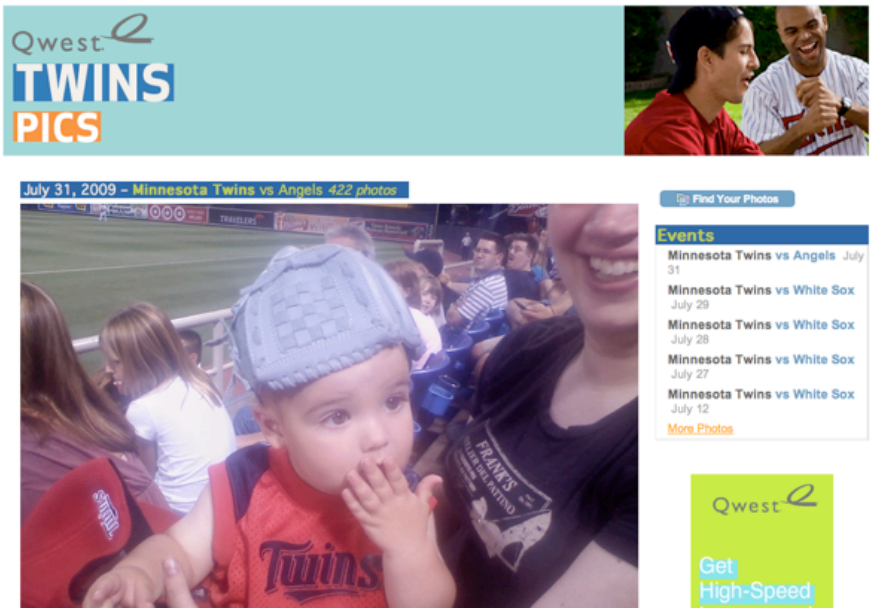

Figure 2: FanChatter allows fans to post live photos and videos to the game's scoreboard using their cellphones. Photos also appear on the website of the team (from: http://www.stanleywong.org/rss/author/Jason_Kincaid).

ScorePAD Billboard Statistics Technology
http://prev.scorepad.com/index.lasso?fuseaction=mlb.stadium
ScorePAD has developed technology that allows interesting sports statistics beyond basic score to be displayed on scoreboards during games. Possible data that can be displayed include scores from other games, video, and data visualizations. This scoreboard technology has been used by Major League Baseball teams, such as the San Francisco Giants.

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2. http://49ersfaithful.net/

wiseDV LVIS hand-held device
http://www.wisedv.com/
Handheld device maker wiseDV offers LVIS, a portable device that allows patrons to stream video and statistics from other locations at the sporting event while they are watching their favorite player live. The device is well suited for sports such as golf, and was recently featured at the 90th PGA Tour Championship.[3] While many people have access to smartphones that are able to stream live video, the wiseDV device features a large screen, a shadebox for viewing outdoors, and a very large battery that can last for 8 hours. Many smartphones cannot match either the larger screen viewing experience, or the long battery life.

Customer Tracking and Loyalty

Accelitec RFID Card Customer Loyalty Systems
http://www.accelitec.com/files/acc_datasheet.pdf
Accelitec provides a customer loyalty database system implemented using RFID-enabled loyalty cards. The database is a hosted software-as-a-service solution that allows customer information to be tracked and collated.

Ringleader Digital: Media Stamp
http://ringleaderdigital.com/our-technology/rld-media-stamp
Ringleader's "Media Stamp" attempts to track individual digital devices and online sessions, in order to personally identify unique users based on their online content consumption behavior. This information can then be used to send the user personalized content and advertisements.

Sports Digital Media Management and Delivery

Note: there are many companies that specialize in digital media production and delivery. Here are just a few examples who specialize in various aspects of the industry.

Telestream FlipFactory
http://www.telestream.net/flipfactory/features.htm
FlipFactory is enterprise software that focuses on solving transcoding and metadata interoperability challenges for broadcast media. The software is able to take in video described with metadata in various formats, and convert it to other formats that include CableLabs VOD or iTunes RSS metadata.

Sportsmedia.com
http://www.sportsmedia.com/
Sportsmedia is the industry leader in providing enhanced broadcast tools for sporting event coverage. Their technology allows broadcasters to add visual data augmentation to sports broadcasts, including statistics data, live racing telemetry, and visual enhancement of field

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3. http://www.pga.com/pgachampionship/2008/news/myleaderboard_080508.html

markers, among other things.

Neulion Streaming Internet Video
http://www.neulion.com/?clients
Neulion specializes in Internet television delivery. Their value proposition is the ability to take broadcast input from sources such as live camera feeds, or HDTV video, and transcode them into online or mobile formats.

4. http://prev.scorepad.com/index.lasso?fuseaction=news.detail&id=43
5. http://www.pga.com/pgachampionship/2008/news/myleaderboard_080508.html
6. http://www.telestream.net/pdfs/whitepapers/wp-preparing-video-metadata.pdf