

Transforming Sports and Entertainment: In the Stadium and Beyond

Speed. Agility. Performance. Reliability. These are attributes of any world-class athlete, and qualities that teams rely on for success on the playing field. To showcase world-class performers, venues too must be world-class. But rising talent costs, aging facilities, and fan expectations put traditionally operated venues at a distinct disadvantage in reaching that goal.

With new stadium construction costs reaching into the billions, escalating ticket prices, and the countless consumer options for recreational spending, venues must find new ways to deliver powerful, personalized fan experiences, to support more events than just sports, and to decrease operational costs. Technology is playing an increasingly strategic role in transforming the fan experience, and in enabling team owners and facility operators to change their business processes, realize competitive advantage, and take their brands global.

Fans Accelerate the Evolution, Globalization of Sports and Entertainment

The days when stadiums could simply open their doors and crowds would come pouring in are over. Fans now have a wide variety of entertainment choices -- not just in terms of content, but also in terms of how and where they experience it -- in person, online, through mobile devices, or as video on demand. And thanks to the Internet, fans can now live anywhere from the local community to halfway around the globe. But just as fan loyalty is no longer restricted to local franchises, teams and music groups are not limited to playing only in their home city. Iconic brands such as the Rolling Stones and Manchester United command worldwide audiences for their live events, enjoy significant online merchandise revenue, and entertain large digital communities. To capture this global opportunity, leagues, teams, and even individual players and performers can harness the power of technology to their advantage.

From the Living Room to the Stadium

Next to fan demands, the primary technological force affecting sports and entertainment is the advent of high-definition (HD) video. The home theater -- complete with Surround Sound, large-format HD plasma screens and digital video recorder (DVR) controls -- represents a true alternative for fans who normally venture to stadiums, concert halls, and cinema complexes. For many fans, loyalty to their favorite team no longer requires a season ticket, at least not one that allows them to enter a stadium. An "all-access" Web subscription or a "season pass" from a cable or satellite TV provider represents another form of competition that can substantially erode attendance and revenue, unless the live, in-person experience remains more compelling.

Most modern venues already feature a primary video board, auxiliary scoreboards, ribbons of LED screens between seating levels, and smaller closed-circuit TVs that fill concourses, luxury suites, and even public restrooms with real-time coverage.

The rise of HD video has now prompted installation of multiple massive video boards, exterior video walls, dynamic video ribbons, and even some in-seat video screens. Yet, venue staff are often constrained by the capabilities of the existing infrastructure, forced to power and control each screen manually, and limited to pushing the same content to every screen.

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Given these limitations, many venue operators are rethinking their facility's underlying network architecture, looking for a more resilient technology foundation that will give them centralized operation along with the flexibility to control, target, and mix various types of video content down to the level of an individual screen. They want the type of control that enables them to reach different types of fans with different types of content, entertaining and engaging them while maximizing the effectiveness of advertising and sponsorship opportunities. These forward-thinking facility managers have the opportunity to become entertainment producers and take advantage of expanded video capabilities in a variety of ways -- everything from saturating the entire stadium with a single brand logo to notifying the winner of a promotion on the screen nearest to them, and everything in between.

In addition to in-stadium broadcasting, the Web and digital technologies offer unparalleled ways to distribute, personalize, and archive video content from events on a global scale. Game-winning goals, record-setting races, and legendary encores can become on-demand, pay-per-view content -- available anywhere, anytime, on any device. Gone are the days when people simply followed a team. Now, they expect their team to follow them, and they are willing to pay for it. Young fans everywhere take this scenario one step further by using their technical prowess and mobile devices to craft user-generated content through chats, blogs, photos, video clips, and text messages. These types of rich, multimode interactions require a highly secure, robust network platform capable of supporting the video, data, voice, mobile, and social networking applications that will define next-generation sports and entertainment experiences.

The Next-Generation "Connected" Stadium

Traditionally, sports and entertainment venues have relied on disparate, proprietary networks that controlled everything from building automation, video surveillance, and voice communications to broadband access, ticketing, and retail sales. Although this approach may meet individual business needs, it doesn't optimize operational resources or take advantage of technology investments the way that a single, unified network can.

Thanks to the open standards of Internet Protocol (IP), however, all of these disparate, proprietary networks can be converged into a single, integrated technology platform capable of delivering next-generation sports and entertainment services. Imagine a scenario in which a stadium network can share voice, data, and video capabilities across all business functions. Now, imagine an intelligent network that becomes "smarter" as it learns and adapts to a fan's personal preferences by displaying favorite menu choices, controlling the luxury suite climate, reserving parking locations, offering tickets to upcoming events of interest, or displaying statistics about a favorite player.

With a connected network platform, opportunities abound for teams, leagues, and venues to transform the fan experience with a variety of new services. For example, with a converged architecture in place, teams can now offer fans at the stadium faster access to the venue, the ability to upgrade and resell their tickets, and get directions to their new seats on their mobile device. As they move through the venue, digital signs can communicate where the shortest lines are for favorite foods or merchandise, or even the nearest restroom, making it easier and faster for fans to get what they want, and where they want to go. From the comfort of their seats, fans can enjoy a variety of new video options, including multiple camera angles and personal instant replays. They can order merchandise and concessions and be notified when it is ready for delivery or pickup, enabling them to spend more time enjoying the game and less time in line. They can even stay connected to the Web for work or personal use. And it's not just for fans at the venue. Fans everywhere can enjoy the same camera angles and replays simultaneously at home or on their mobile device. Preshow interviews and postgame wrap-ups can become interactive to engage stars and their fans in a real-time conversation as pay-per-view content. And, teams and leagues can create "connected communities" online where fans can chat, blog, and share photos or video, while the organization generates merchandise and advertising revenue.

Beyond Sponsorship, Business Transformation Creates New Revenue Streams

Although media partnerships, sponsorships, ticketing, and merchandising have long been revenue mainstays, few teams or venues are able to maximize their full potential. Using networking and communications technology within the venue allows traditional revenue streams to evolve, enabling next-generation business models that exceed what sponsorship dollars alone represent. For example, electronic ticketing encourages ticket upgrades and creates profitable secondary ticket resell value. Dynamic high-definition video offerings enable customization of digital content for each stadium level, type of fan, and type of event to maximize effectiveness. Live game video can be mixed with advertisements, targeted promotions, and information about upcoming events to encourage sales. Previously static concession boards can become customized digital signs that reflect the event and its demographics -- offering sodas and juices for kid-friendly afternoon events and alcohol and gourmet foods for evening adult events. They can even be linked to inventory systems so that out-of-stock menu items are removed and prices automatically changed toward the end of the event to move excess supply. Even luxury suites can be outfitted to put all venue services at fans' fingertips during games, creating a premium price for the suite and transforming it into a fully equipped business center for non-game days. Network-based technology can also help generate new revenue by making it easier for the venue to accommodate a wider variety of new tenants, and linking customer data can improve everything from ticket sales to inventory management to advertising. Let's examine some real-world examples of new opportunities made possible by the network infrastructure.

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An open, flexible, and scalable technology platform helps venues adapt to a wide array of audiences and play host to a year-round schedule of sports, music, corporate events, and community programs, for increased profitability. The University of Phoenix Stadium, home of the National Football League's (NFL's) Arizona Cardinals, functions year-round as a unique destination for an array of non-football events. Because of their deployment of an integrated voice, video, data, and wireless network infrastructure, a variety of unrelated tenants can operate within the venue securely, even simultaneously, making it an even greater attraction for marquee events such as the Super Bowl. The reliable, flexible infrastructure makes it easy for staff to adjust to changes in audience, capacity, and event requirements, and needs 40-percent fewer people to manage it.

Meanwhile, Manchester City Football Stadium in the United Kingdom uses its converged network to facilitate faster fan entry to the venue, while capturing access and individual purchasing behavior in its fan database. In addition to improving security, the club is able to market special offers and ticket upgrades to fans that net the organization more than 300,000 GBP in additional revenue per season. The club has also wireless-enabled all of its staff devices to provide better customer service at points of entry and points of sale. The secure wireless infrastructure enables them to easily add new technologies and support new types of events. The next step is to enable electronic purchasing of tickets, food, and merchandise, betting, and fan reward programs.

With the growing market penetrations of Near Field Communication technology (a short-range wireless technology), radio-frequency identification (RFID), and the proliferation of personal devices such as cell phones and personal digital assistants (PDAs) -- the possibility of deploying digital signs that "recognize" individual fans and display personal advertising or promotional content is both real and potentially very lucrative. Today's dull, concrete concourses -- with their stale, static advertising, forgettable directional cues, and single-channel closed-circuit TVs - can instead evolve into personalized shopping malls, interactive information hubs with rotating advertising content, and dynamic video-rich extensions of the live action. Not only does advertising and sponsorship space significantly increase, but the ideal of one-to-one marketing becomes attainable, far exceeding what can be done today.

With the right technology foundation in place, teams, leagues, and venues can also transform their internal business processes. Venue staff will enjoy improved communications capabilities, mobile access to applications from anywhere, and even collaborate more effectively with staff in other locations. With greater automation, central administration, and improved efficiency of routine tasks, staff members are instead free to focus on fan-facing customer service applications and strategic projects capable of generating new revenue and competitive advantage.

Measurable Operational Benefits Translate to Real Business Returns

Instead of viewing technology as a necessary and intimidating cost center, enterprising franchise owners and venue operators recognize that the strategic application of technology can produce both revenue gains and measurable operational benefits, including:

- A lower total cost of ownership of the venue
- Decreased staffing requirements and the ability to make staff more mobile
- Greater staff productivity through more efficient, centralized operations
- Energy and building management capabilities to support green initiatives
- Comprehensive surveillance and security for faster, proactive incident response
- Better customer service to promote fan loyalty and increased sales

- The ability to deploy low-cost wireless kiosks or handheld devices for ordering food or merchandise and placing bets anywhere in the venue
- Centralized management of multiple sites, including customer service centers
- Flexibility for multiple uses and diverse audience types and sizes
- Scalability for future events and new requirements

Strategic Uses Yield Real-World Benefits

Cisco® Sports and Entertainment Solutions are based on the premise that the network -- a converged highway for voice, video, data, and mobile communications -- delivers a secure platform upon which new business models and enhanced fan experiences are built. These innovative solutions are already in use at premier venues worldwide, including:

- **Allianz Arena:** This Munich, Germany, stadium hosted the 2006 FIFA World Cup with 99.999-percent network reliability. The ease of remote venue management and the flexibility of a secure wireless network allow the staff to support a wide variety of events.
- **Ascot Racecourse:** England's most renowned racecourse integrated voice, data, and video, as well as building automation, onto a single, highly reliable converged network. Ascot can now broadcast 30 channels of video content to nearly 1300 video screens, process more than 1,000,000 GBP of betting transactions daily through highly secure wireless devices located throughout the facility, and handle all customer service inquiries through a network-based IP contact center.
- **Estadio Santiago Bernabéu:** The newly refurbished home of Real Madrid Club de Fútbol deployed video, voice, data, and wireless over its entire seven-site complex; stadium operations are now centrally run by just eight staff, and the club has saved nearly 50 percent in implementation and maintenance costs. Fans and staff alike benefit from new dynamic video message board and video surveillance capabilities, and video is available for team training anywhere in the complex.
- **University of Phoenix Stadium:** Home to the NFL's Arizona Cardinals, the stadium deployed a converged network that now supports a wider range of events with ease, requires 40-percent fewer network staff to run, and has generated 30-percent more transactions through its wireless e-payment kiosks.
- **Churchill Downs:** Home of the Kentucky Derby, the racecourse and its affiliated sites upgraded its core network to include security, wireless, and IP telephony to provide ticketing, catering, wagering, and video content to crowds of up to 200,000 fans. The centrally run system has eliminated unnecessary capital expenditures per site, enabled easy addition of new technologies, and helped create competitive advantage by reducing the time to market of new services. Payback was realized in fewer than 18 months.

Your Partner for Innovative Solutions

Since 1984, Cisco has been changing the way people live, work, learn, and play. The worldwide leader in networking and communications technology, Cisco recently announced a 30-year partnership with the Oakland Athletics to create Cisco Field, which will be the world's most technologically advanced professional baseball venue and take the fan experience to a new level. In designing custom solutions for sports and entertainment venues, Cisco takes a holistic approach, combining innovative network-based products, consulting services, and the offerings of certified technology partners to connect fans, performers, sponsors, event staff, management, and the media in new ways. Having successfully consulted with teams, leagues, and venues worldwide,

Cisco's experience shows that organizations that make strategic investments in their network platform deliver back-of-house and fan-facing results that differentiate their venue, increase fan loyalty, and even create competitive advantage for the teams that play there.

To learn more about Cisco Connected Sports and Entertainment Solutions, visit <http://www.cisco.com/go/sports>. To schedule a customer briefing or a business requirements workshop, please contact Cisco at ask-ciscosports@cisco.com.



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