

# ListenWiFi Whitepaper

# Stream Any Audio to Your Own Smartphone

The anytime, anywhere, any device revolution is elevating customer expectations. In today's video everywhere world, there is increasing demand for audio everywhere.

Technology is the currency on which people operate today. As digital technology becomes pervasive, it has become a must have for hotels to attract guests, schools to attract students, employers to attract employees and venues to attract attendees. In order to meet the demands of the tech-savvy public, venue owners are investing in state-of-the-art technology to transform and enhance the user experience.

Hotels, restaurants and sports bars use video throughout their facilities to entertain and inform.

Corporations use video to entertain and communicate in both employee and client areas.

Universities provide video in common areas, student unions and fitness centers.

Personal listening systems are not just for the hard of hearing. There are many instances where the availability of audio-on-demand enhances the customer experience.

ListenWiFi works in any location where people can watch a display or a live performance, but they cannot hear.

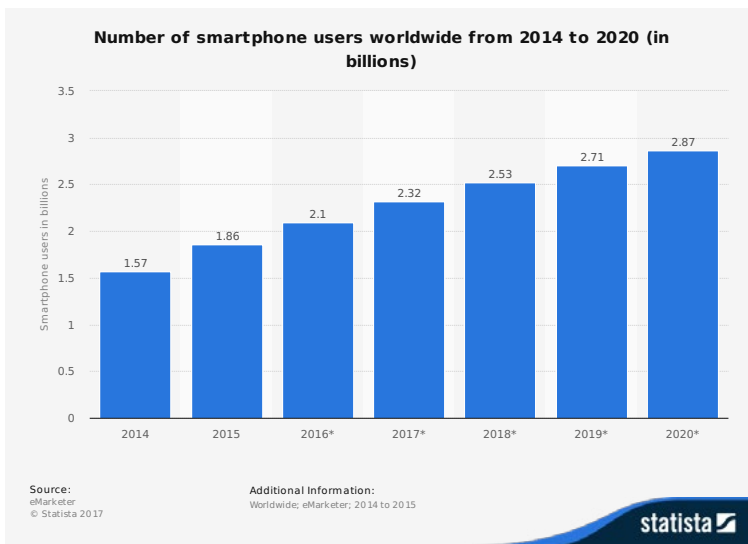
ListenWiFi is the pro audio streaming solution ideal for multi-screen, video wall, or multi-video image applications. Now it is possible to easily stream audio from any source directly to smartphones and tablets.

**ListenWiFi takes the customer experience to the next level.**

# Why Audio Streaming?

The number of [smartphone](#) users worldwide will reach 2.32 billion this year, and is expected to pass 5 billion users in 2019,

The number of [tablets](#) has surpassed 1.25 billion.



In the United States alone, it is estimated that 68 percent of smartphone users stream audio daily. As consumers grow ever more attached to their mobile phones and devices, Cisco predicts that WiFi and mobile-connected devices will generate 78 percent of Internet traffic by 2020.

The ListenWiFi app turns your smartphone into your own personal listening device.

Widespread adoption of smartphones and tablets make it possible for venue owners to embrace personal listening apps. As penetration rates for smartphones continue to rise, it will further drive demand for audio-on-demand solutions.

ListenWiFi facilitates audio-on-demand  
for a video everywhere world.

In the pages that follow, we will look at four case studies to see how ListenWiFi is being used in the real world.

**ListenWiFi... So You Can Listen**



# ListenWiFi Captures the Millennial Market Share in Caesars Palace Race and Sports Book

The [Caesars Palace Race and Sports Book](#) has been voted the best Las Vegas betting destination four years in a row by Review-Journal readers. Not ones to rest on their laurels, the venue is constantly evolving to keep up with guest expectations, and management is always looking for the next big opportunity.

[Pew Research](#) reports that millennials are now the largest living generation in the U.S., which marks a significant shift in demographics. Millennials have become a key market for the hospitality industry, and one that Caesars Palace wanted to target in their Race and Sports Book.

With this in mind, Caesars Palace partnered with Vincent King of [King Audio Video Integration and Consulting, Las Vegas](#). The challenge: capture the millennial market share in their Race and Sports Book.

It is no secret that millennials have high standards for customer experiences, but the bar has been raised. Digital transformation has had a profound impact on the hospitality industry, as digital technology is enabling venue owners to create exceptional guest experiences like never before.

King designed the space to take the guest experience to the next level by delivering cutting-edge technology that would be the first of its kind on the Las Vegas Strip. "We designed it so every seat feels like your own personal viewing experience – there are no bad seats. This is highly desirable to millennials," said King.

As you approach the Sports Book, the first thing to capture your attention is the 138' X 10' curved LED video wall, capable of 96 different configurations, and the largest on the Strip.



The 4K video wall definitely draws people in, but the quality audio is what keeps fans engaged. From the beginning, King planned to include a personal listening system to supplement the installed audio. King knew that a personal listening system would bring a high level of customization to the guest experience, while increasing engagement.

The free Internet and ListenWiFi app make it easy for guests to have an interactive experience; they can check stats and analyze their team's performance in real time, while listening to their preferred audio channel and watching all the action on the video wall. Personalization has become more important than ever before.

## ListenWiFi Captures the Millennial Market Share in Caesars Palace Race and Sports Book Cont.

“ Today, when you walk through the Sports Book at Caesars Palace, you see everyone has a smartphone, most people are multi-tasking on the phone, and almost everyone is wearing earbuds. We see this as the future of sports books. ListenWiFi makes this a truly tailor-made experience that is not available anywhere else on the Strip. (Vince King, King AVIC)



The Sports Book broadcasts up to 32 games simultaneously, and requires a personal listening system that can support that many channels. Traditional assistive listening systems, Loop, IR and RF, support a maximum of 10 channels, whereas ListenWiFi can support up to 48 different channels. This makes ListenWiFi the ideal choice for sports books.

ListenWiFi also eliminated the need for staff to manage receivers. Millennials have a high use of mobile phones, but this is especially true of those that visit the Sports Book, and they prefer to use their own earbuds, which makes it easier for everyone. If guests had to check out a receiver, there would be far lower utilization of the ListenWiFi system, according to King.

Without a doubt, the technology upgrade has increased customer engagement, but the ROI is equally impressive. Caesars Palace was willing to transform its business in order to thrive in a changing landscape, and it has paid off.

Since the renovation, the Sports Book introduced a VIP seating area, whereby guests select their seat and purchase it for the day. The reserved seating is regularly sold out, guests stay longer, and spend more money than before. Revenues have increased substantially as a result.

King says that ROI is key for sports books to invest in technology upgrades. It took just a few months for the Sports Book at Caesars Palace to recoup the \$8 million it cost to do the renovation – a rather rapid return that will likely have other sports books racing to invest in similar technology upgrades.

# ListenWiFi Enhances the Employee Experience at Kaiser Permanente

Kaiser Permanente has embraced video for internal communications, which is used to both inform and entertain employees. The updated breakroom in their Centennial, Colorado office is one of the ways video is being deployed by the organization.

AVI-SPL did the design and installation of the video wall, and configuration of the ListenWiFi system. Gary Sutton acted as Design Engineer for the project, and Aaron Johnson was the Project Manager.

"I want to watch the news."

"But the game is on!"

When there is only one channel in the breakroom, who gets to choose?

**With the new 2X2 video wall and ListenWiFi app, now everyone in the breakroom gets to enjoy their favorite program!**

The 2X2 video wall plays up to four video feeds. However, Sutton did not want to broadcast all four audio feeds simultaneously, and looked at personal listening systems to provide the audio solution.

According to Sutton, "From the beginning, Kaiser Permanente requested a BYOD system." Since there are no employees there to manage the breakroom, or check out audio receivers, the most practical option was to get employees to BYO-headphones.

The BYOD culture is well-entrenched in the corporate world. The productivity and efficiency gains it brings about, coupled with increased adoption of apps are making BYOD the established norm in many enterprises, including Kaiser Permanente.



"This is very much a BYOD culture, all the employees have smartphones and earbuds," said Johnson. This makes ListenWiFi a natural fit for the breakroom environment.

ListenWiFi offers the ideal audio-over-WiFi solution for video wall applications by turning your smartphone into your own personal listening device.



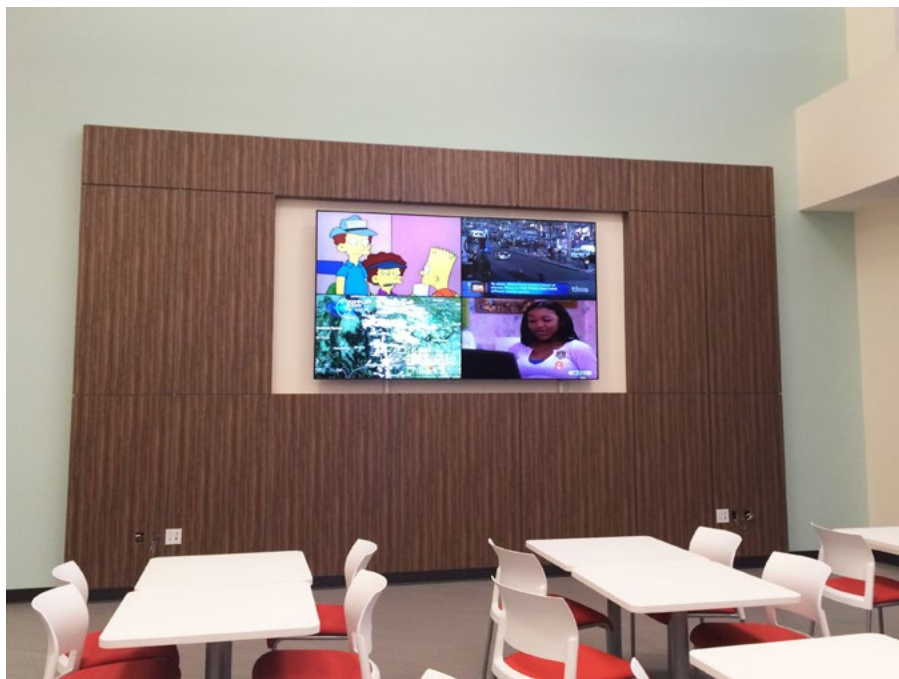
## ListenWiFi Enhances the Employee Experience at Kaiser Permanente Cont.

For employees that do not have a smartphone, there are four input plates to plug in a headset, and there is a hard-wired connection available. However, the employees prefer ListenWiFi, which allows them to move around untethered to the furniture, while listening to their preferred audio channel.

The ListenWiFi app has been a real hit with employees at Kaiser Permanente. The system is easy to use, and switching audio channels is fast, with less than a two second delay.

“The ListenWiFi system let us manage and customize the channel names, and the preconfigured server settings made it easy to set up and install. Maintenance is also easy because ISP connectivity allows for automatic software updates.” said Johnson.

With no monthly fees or contracts, and automatic software updates, the ListenWiFi system is easy for Kaiser Permanente to maintain and operate.



# ListenWiFi Brings Students Together at the University of California, Riverside

In 2014, the University of California, Riverside (UCR), completed an 80,000 square-foot Student Recreation Center. The recreation center offers a 21,000 square foot weight area, 100 cardio machines, a wide variety of fitness and recreational classes, a 237,000-gallon pool, drop-in basketball, volleyball and badminton games, intramural sports and clubs, and a 32-foot climbing wall called "The Rock."

Today's students bring all the latest gadgets with them to school, and are driving the anytime, anywhere, any device revolution. As a result, the students have high expectations for quality video and audio on campus. Delivering a cutting edge technology experience is one of the key ways students are engaged in the recreation center, according to Dusan Stancic, Recreation Marketing Manager, UCR.

High-Tech Electric of Clovis, California, was brought in to install a large multi-screen medial wall for showcasing school events, sharing news, broadcasting sports games, and for other entertainment and educational purposes. The 7x7x28.5 foot media wall connects 18 channels of content, including cable channels, static digital images, and messaging as well as DVD and other media inputs.

UCR wanted an audio solution that would allow students easy access to audio content through their headphones using their mobile devices.



With the ListenWiFi app, students can stream audio directly to their mobile devices, and move freely throughout the recreation center with a seamless audio experience.

The media wall has become the hub of activity in the recreation center. It is located close to the fitness center, so students can see the video wall while working out. It is not uncommon to see students gathered by the media wall watching the game while working out, especially during events like March Madness, it really brings the students together.



# ListenWiFi Brings Students Together at the University of California, Riverside Cont.

Since the majority of students in the fitness center are wearing earbuds, ListenWiFi is the ideal streaming audio solution. Students typically bounce between apps on their phones, and ease of use is part of what makes ListenWiFi popular.

Students can easily switch from listening to their own music, to streaming audio for any of the displays in the recreation center, all with the push of a button.

All pieces of cardio equipment include a screen. With ListenWiFi, students can move between pieces of equipment while following along with their program. As an added plus, ListenWiFi has eliminated the need for costly repairs to broken audio jacks.

The key to getting students to use ListenWiFi is letting them know that it is available. UCR does this in a number of ways:

- 1 Listen Technologies provides stickers with simple instructions, which have been placed on each piece of cardio equipment and in sit down locations around the recreation center.
- 2 The ticker tape on the media wall tells students about the ListenWiFi app and how to download it free on their mobile devices.
- 3 During student orientation, the staff in the recreation center let students know about the ListenWiFi app.
- 4 UCR has created a [video about ListenWiFi](#) and posted it to YouTube.
- 5 Stancic is planning to create a video segment to promote the ListenWiFi app and will run it on the video wall news segments.

“ ListenWiFi is one way we have enhanced the environment, to make the recreation center a place students want to be, to pursue an active, healthy lifestyle. (Dusan Stancic, Recreation Marketing Manager, UCR)

# ListenWiFi Save Lives in the Hillsborough County Emergency Operations Center

In 2004 when hurricanes Charley, Frances, Ivan and Jeanne bared down on Florida, the Hillsborough County Emergency Operations Center literally became home to workers near the Bay area. Today, emergency preparedness and response efforts have evolved. More agencies are working together, and the old facility had become overcrowded and outdated. Now those workers have some brand new digs.

The \$36.1 million complex has brought all of Fire Rescue's facilities and buildings into one location. The facility features room for more personnel, a large media area, more sleeping quarters, state-of-the-art technology, and has been built to withstand a category five hurricane.

The 52,000 square foot main building houses Fire Rescue's administrative staff and training center, the 911 Emergency Dispatch Center and a high tech Emergency Operations Center with a \$900k AV installation.

The AV system was designed by Santiago Beron, Principal, TLC Engineering for Architecture. AVI-SPL was the systems integrator.

Up to 150 people can work in the EOC Incident Command Room, and there are six breakout rooms. There are a lot of moving parts, with different groups simultaneously coordinating evacuation routes, law enforcement, emergency relief and delivery of supplies.



“ The AV system is mission critical – it has to work, and it has to be easy to use in a high stress environment. (Rebecca Criswell, Account

Manager at AVI-SPL)

# ListenWiFi Save Lives in the Hillsborough County Emergency Operations Center Cont.

The EOC broadcasts 10 video feeds to 8 displays and 2 projectors. There are 20 channels available, primarily news, weather and local channels. It would be unintelligible to broadcast 10 audio streams to such a large space, so Beron looked at personal listening systems for the best audio solution.

Hillsborough County selected ListenWiFi because it offers mission critical reliability, is user-friendly and can support up to 48 channels.

ListenWiFi also fits with the BYOD policy in Hillsborough County, "This is a BYOD environment, people show up with the equipment they need and ready to work. They all have smartphones and earbuds," said Beron.

The EOC is largely unused when there is not an emergency; it sits empty more than 90 percent of the time. There is no staff present to manage receivers, and when the EOC is activated, there would be no time to charge the receivers, so a BYOD solution that makes the staff responsible for their own headset makes the most sense.

The building officially opened February 23, 2017. Over the last few months, the EOC has executed training situations and emergency simulations, with great success. To date, there have been no storms or emergencies to put the EOC to the test, but Hillsborough County stands ready, confident that their new state-of-the art complex will save lives.





# How Does ListenWiFi Work?

ListenWiFi puts the power of great audio in the palm of your hand by allowing you to listen to up to 48 channels via the ListenWiFi Access Point using your own smartphone.



## 3 Easy Steps



Download the FREE ListenWiFi app from ListenWiFi.com.

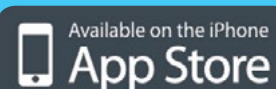


Connect to the ListenWiFi wireless network.



Audio is delivered to your smartphone.

Android 应用



# About Listen Technologies

At Listen Technologies, we deliver exceptional listening experiences. Listen connects people to positive experiences by helping them hear.

The company's products equip users with the personalized solutions they need to hear the world around them, whether they're in a house of worship, tour group, fitness center, stadium, or other venue.

Picture being able to hear every word a leader is saying as you go on a guided tour of an industrial facility. Imagine being able to listen to your favorite sports event as it is being broadcasted live from TV screens at the gym, sports pub, or casino sportsbook. View students being able to hear clearly what the teacher is saying across a noisy classroom. Envision the preacher being able to inspire everyone in the congregation, including the elderly who have difficulty hearing. Consider conference presenters able to convey their messages to all the participants clearly and securely in multiple languages. Theme park visitors can walk around the facility freely while listening to relevant messages that enrich their experience. That's what Listen Technologies does.

Unlike other companies that provide similar solutions, Listen Technologies products are simple to setup, use and maintain – ensuring a seamless listening experience.

Listen Technologies delivers exceptional listening experiences to everyone, anytime, everywhere.

For more information on ListenWiFi,  
please visit <https://www.listenwifi.com/>



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