



# How to Digitize College Venues for Safe and Seamless Reentry

Kevin Wittnebert

Associate Director, Sports & Entertainment

# Digital Fan Experience Journey



## Connect

- Offer reliable, secure, pervasive Wi-Fi connectivity in-venue

## Monitor

- Understand mobile engagement patterns of connected user

## Engage

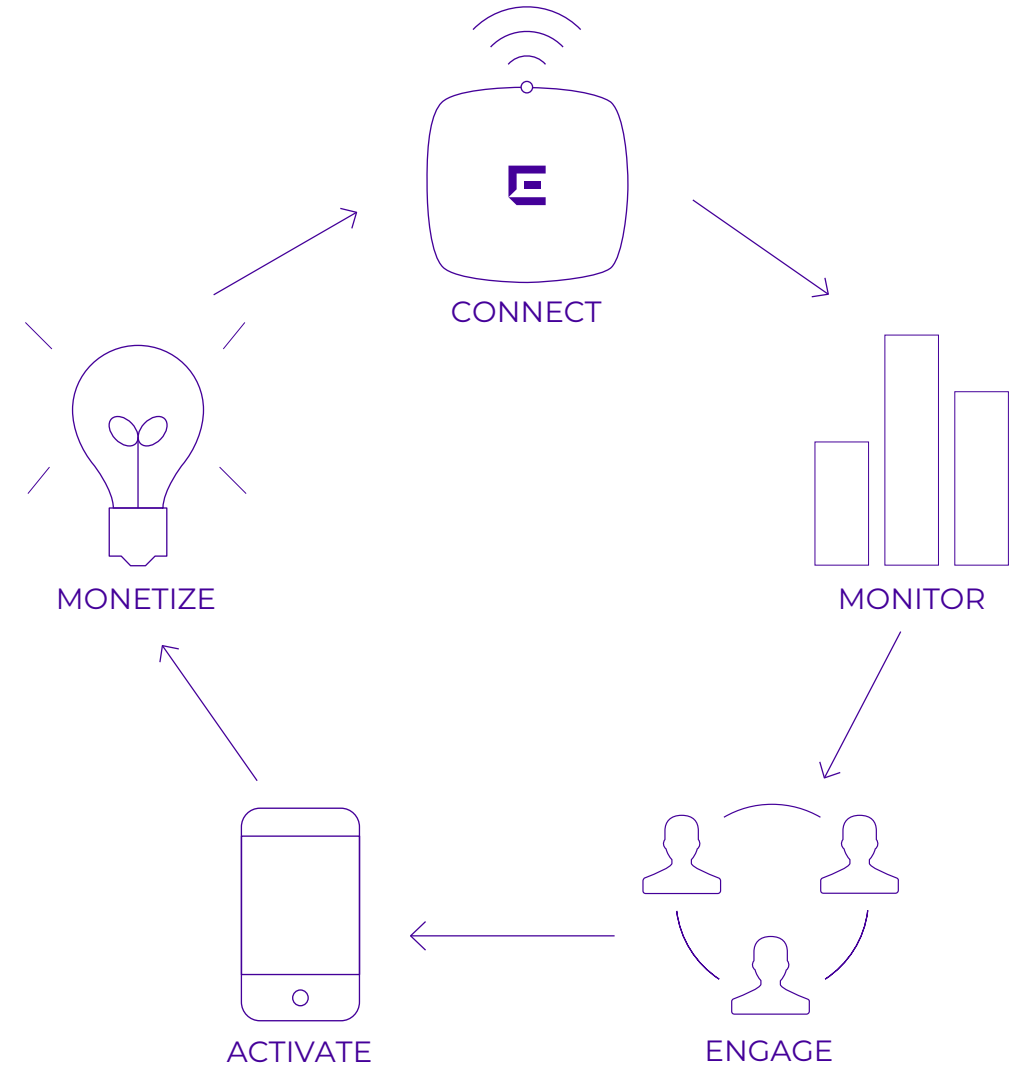
- Value-added mobile experience with access to unique content and services

## Activate

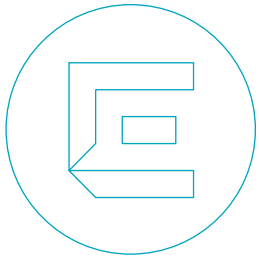
- Deliver compelling offerings to guests at the right time, at the right location, and with the right content

## Monetize

- Develop consistent and proven revenue generating opportunities tracked in real-time

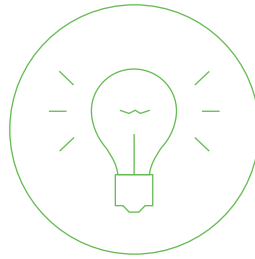


## WHO WE ARE



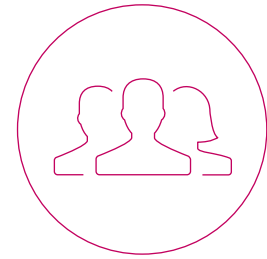
- Founded **1996**
- Revenue: ~**\$1 Billion**
- **2,800+** Employees
- NASDAQ: **EXTR**
- HQ in **San Jose, CA**

## WHAT WE DO



- **20+** years of networking innovation
- Cloud-Driven End-to-End Networking **Solutions**
- **1,100+** active patents

## WHO WE SERVE



- ~**50,000** Customers
- **7,000+** Partners
- Business in **80+** countries
- **100% Insourced** Service and Support

As of September 30, 2018  
Extreme Networks has an  
**Overall Rating**

of **4.8** out of 5



in the \_\_\_\_\_

**Data Center  
Networking**

market \_\_\_\_\_  
based on 128 ratings

**89%** of reviewers would recommend  
**Extreme Networks**  
82% would recommend Cisco  
80% would recommend HPE

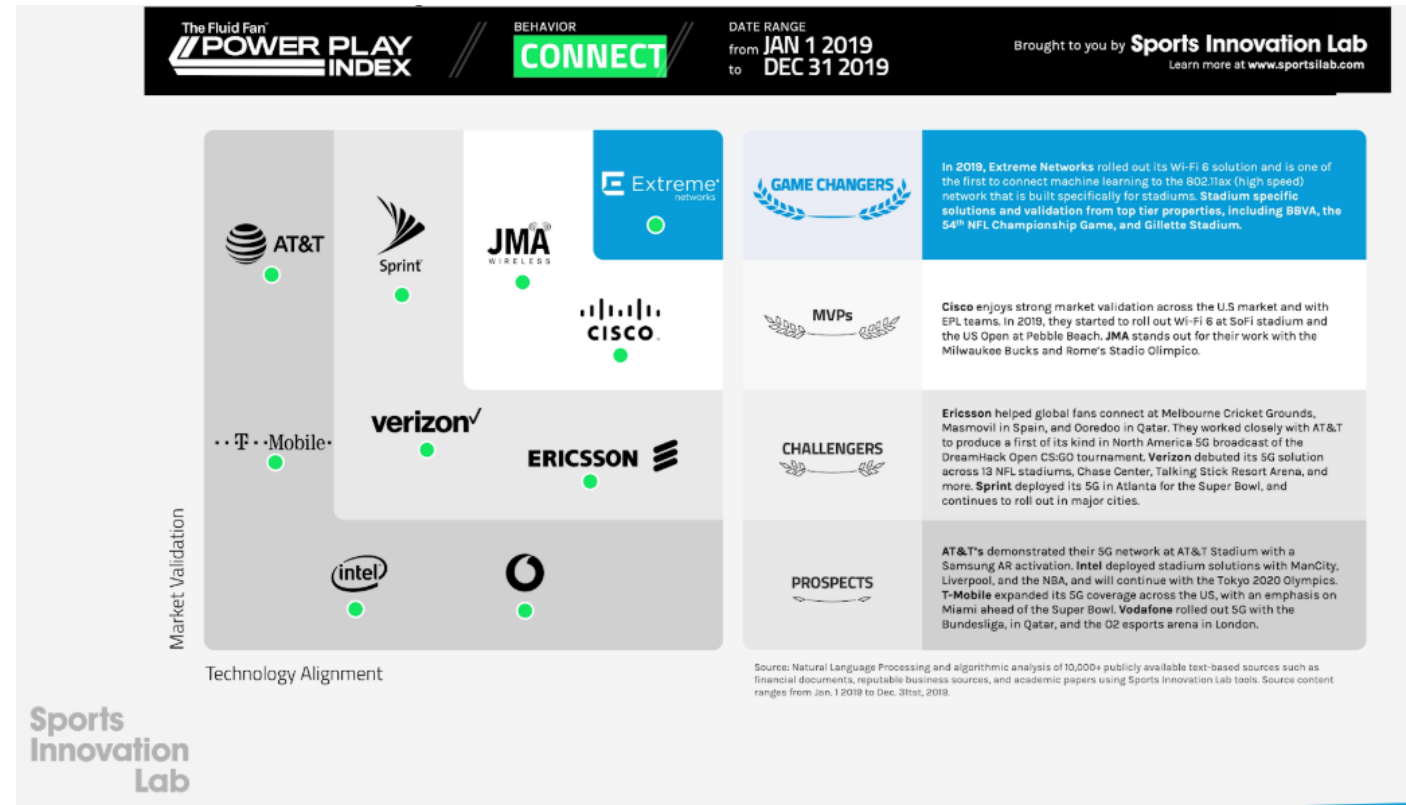
	 Extreme®	 CISCO™	 Hewlett Packard Enterprise
Ease of Deployment	4.4	4.0	4.3
Timeliness of Vendor Response	4.6	4.4	4.4

Extreme is one of the **highest rated** and  
most reviewed of the 22 vendors listed

See the reviews at: <https://www.gartner.com/reviews/market/data-center-networking>

# Why Extreme: Proven Venue Results

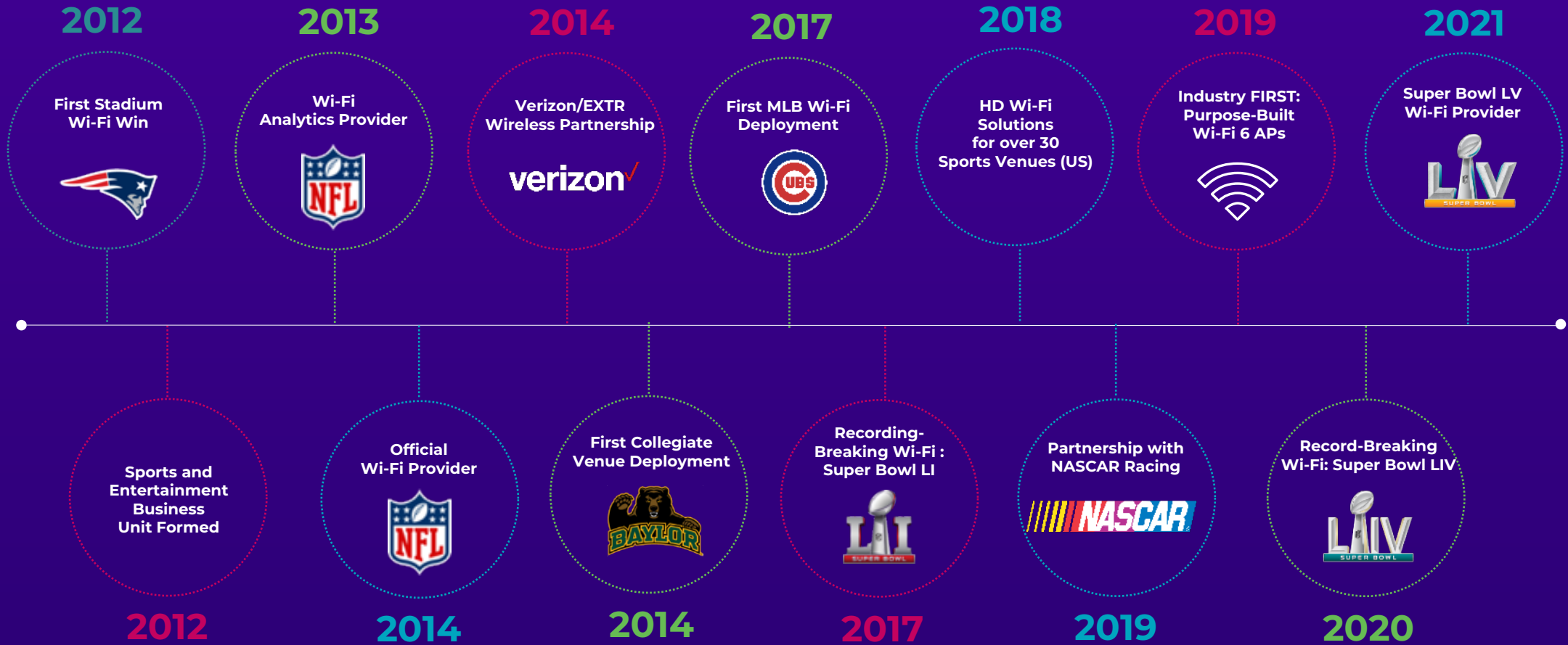
- Official Wi-Fi Solutions Provider of the National Football League
- First Vendor to Market with Wi-Fi 6 Technologies for Venues
- Purpose Built Network Solutions for Venue Environments
- Third Party Validation (Gartner, Sports Innovation Lab)
- Dedicated Sports & Public Venues Business Unit



*Sports Innovation Lab: EXTR a "Game Changer" in 'Connect' Annual Index*



# LARGE PUBLIC VENUE BUSINESS UNIT MILESTONES



## Dedicated Venue Team

- Single Team **100%** focused on Venues
- Sales, Design, and Support

## Extreme Networks Venue Validated Design

- Manufacture assisted design
- iBwave Certified

## Install and configuration resources

- Manufacture lead or assisted install and configuration
  - Project Management
  - Lead RF Engineer
  - Lead Network Engineer
  - Construction Coordination PM





# OPEN-AIR STADIUMS AND ENCLOSED ARENAS WITH WI-FI







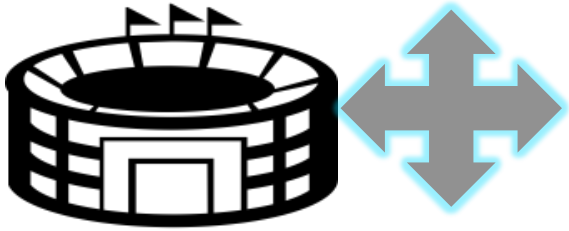
# Extreme EVO Kits: Event and Venue Operations Kits

## *Enabling Digital Ticketing and Contactless Payments*

# Sports Venues Dynamics & Challenges



## Physical Demands



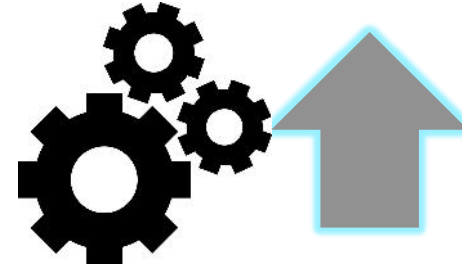
Large High-Density Spaces  
Limited # of Entry/Exit Points  
Multi-Use, Multi-Tenant Environments

## Mobile Demands



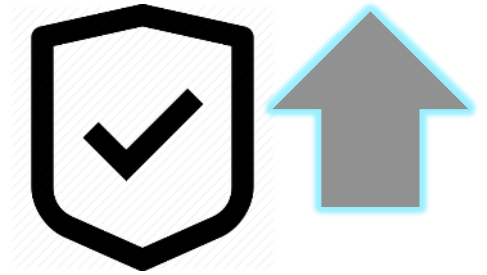
Enabling Digital Ticketing/Entry  
Contactless Payment Readiness  
Team/Venue App Adoption

## Operational Demands



In-Seat Ordering and Delivery  
IP Surveillance Systems  
IPTV and Digital Signage

## Safety Demands



Fan and Staff Health  
Cleanliness of Public Surfaces  
Overcrowding Prevention

# #NewNormal: Heightened Venue Demands



## Operational Demand



Digital Gates & Entrance  
Digital Concession

## Safety Demand



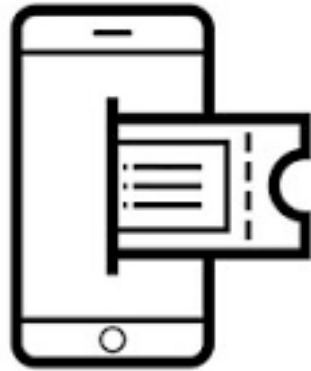
Cleanliness of Public Surfaces  
Optimize Movement and Flow

## IT Demand



Infrastructure Readiness  
Secure Connectivity  
Increased Network Capacity

## Digital Ticketing



- Reduce Physical Contact
- Improve Entrance Efficiency
- Reduce Ticketing Costs
- Collect Fan Insights

## Contactless Payments

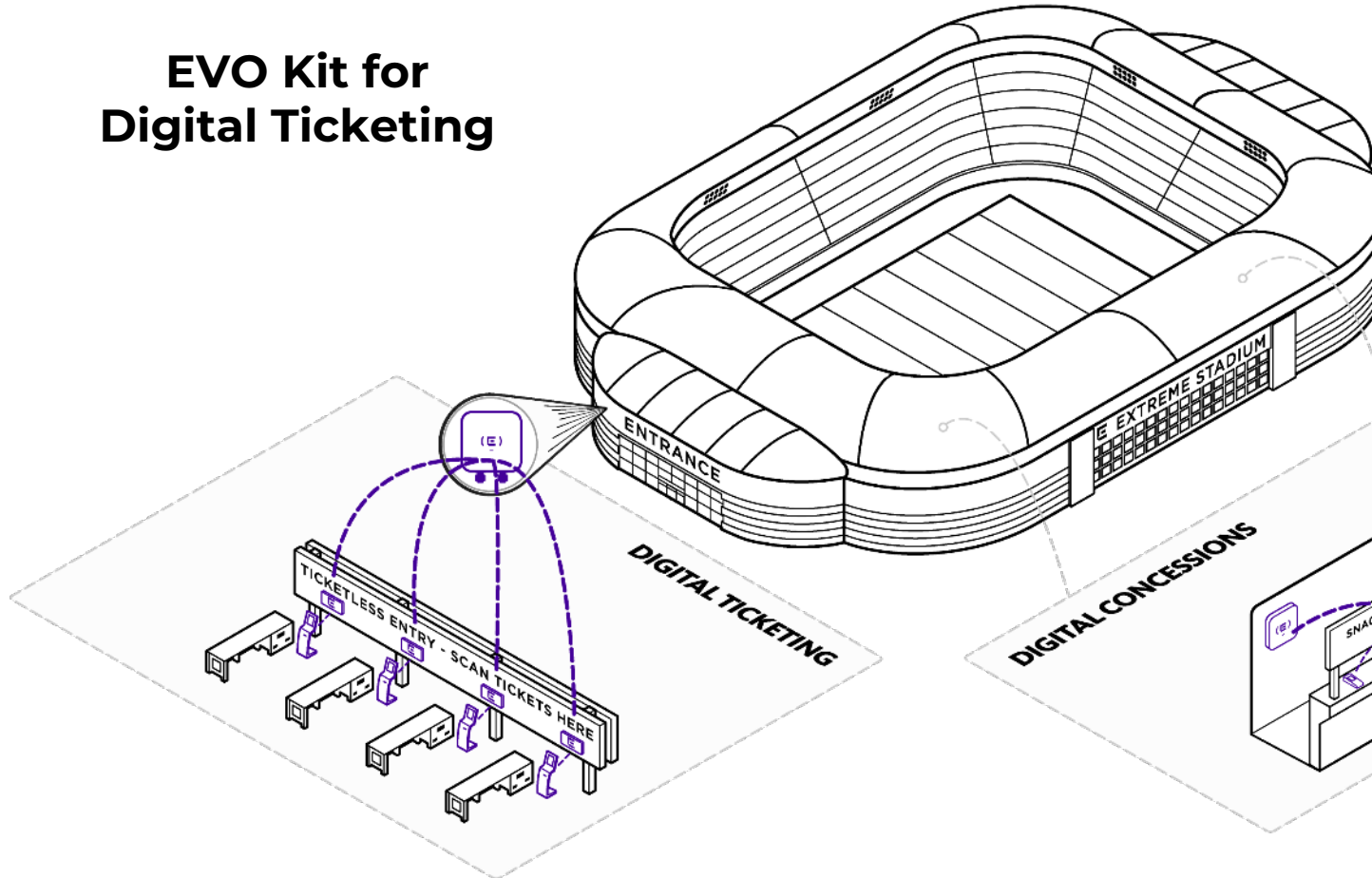


- Reduce Physical Contact
- Process Payments Faster
- Reduce Line Wait Time
- Seamless Fan Experience

# The Solution: Event and Venue Operations Kit

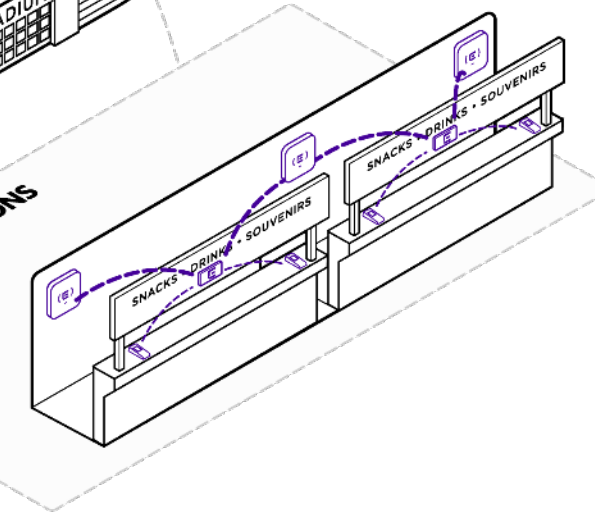


## EVO Kit for Digital Ticketing



Connectivity For Mobile Fan Devices and Ticket Scanners that delivers rapid entrance

## EVO Kit for Contactless Payment



Connectivity for Mobile Fan and POS devices that delivers secure payment transactions

**“5G will probably satisfy all of our connectivity needs....along with solving world peace.”**

5G is LICENSED SPECTRUM:

- Access to the data and analytics
- Device adoption cycles are slowing
- Carriers are investing selectively
- Focused on the seating bowl and on the campus

**Wi-Fi and 5G (or LTE) are complimentary, not competitive**





# Tested... to the Extreme





# Tested... to the Extreme

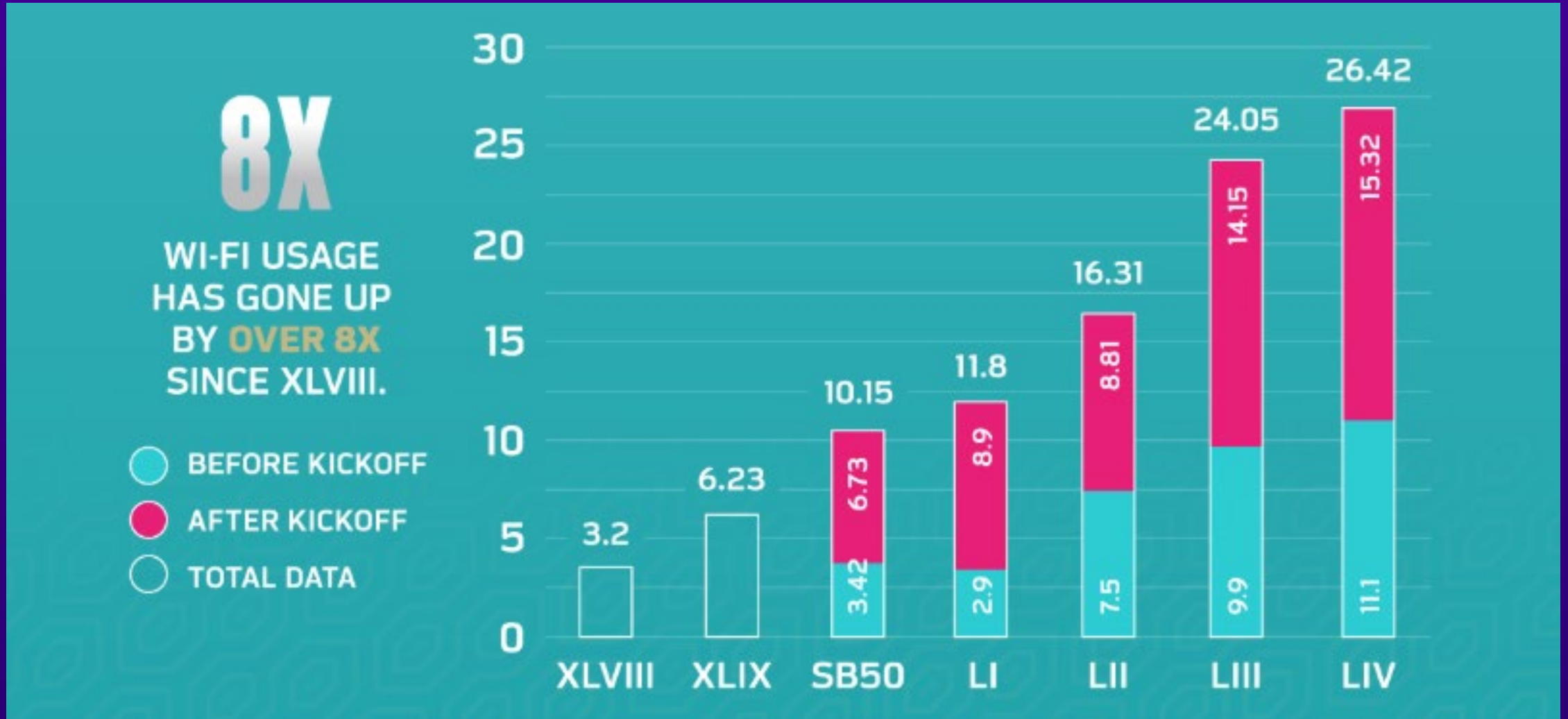




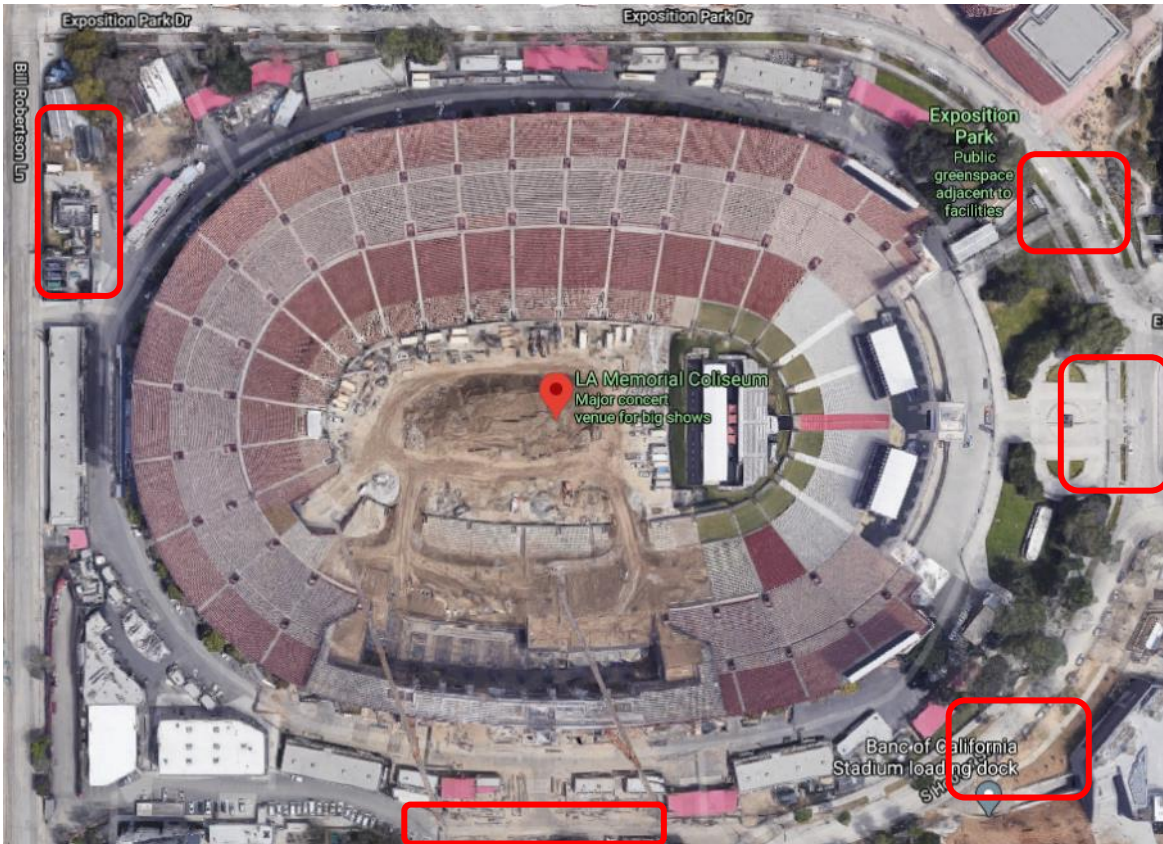
# Data Transferred via Wi-Fi (TB)



*Super Bowl XLVIII – Super Bowl LIV*



# Don't get stuck in the connectivity moat!



# ExtremeAnalytics Offers Unmatched Wi-Fi usage Visibility

100% Application  
Visibility of entire wired  
and wireless network

Capture and record  
every application  
flow network-wide  
>100M Sessions

Quickly Identify  
Operational  
Bottlenecks



Location awareness for  
guest entry, position  
tracking and  
engagement

Measure and Trend  
Traffic Behavior

Compare and Trend  
Usage

# Digital Fan Experience Journey



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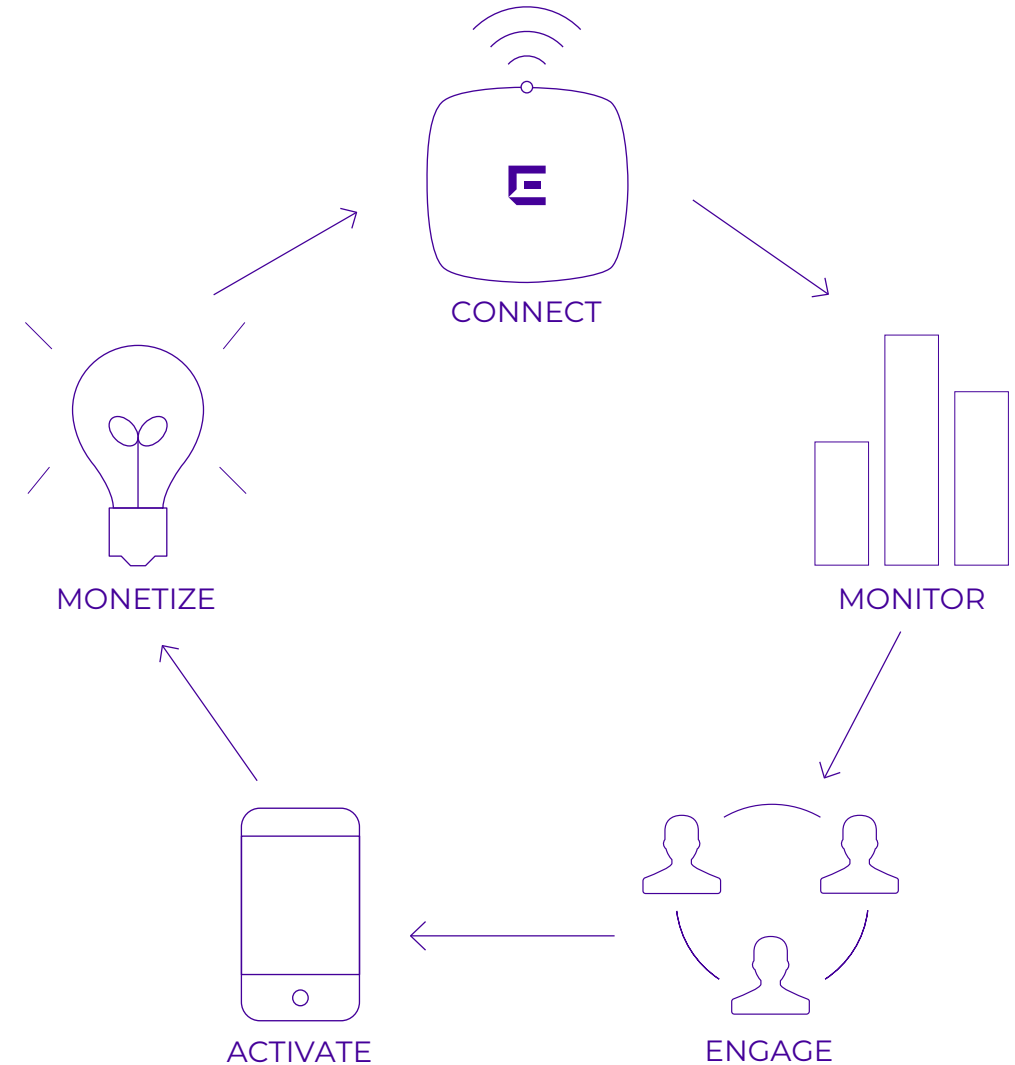
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## Wi-Fi Venue Access Points

- ✓ 4x4:4 radios with support for dual 5 GHz and OFDMA technology
- ✓ Equipped with integrated BLE 4.2 or 802.15.4 radio
- ✓ Outdoor IP67 rated from -40C to 55C temperatures

### AP560h



Integrated 30°/70° Directional Antennas  
(software programmable)

### AP560i



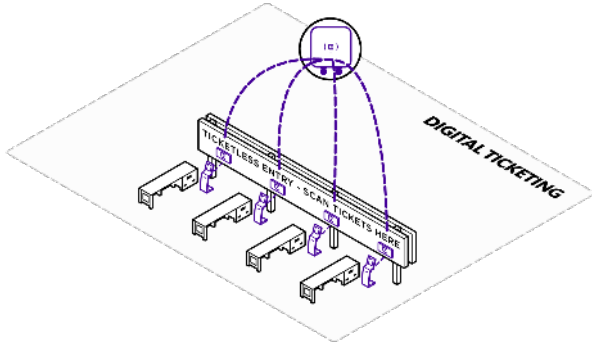
Integrated Omni Antennas



# The Offer: Ready To Deploy



## EVO Kit for Digital Ticketing



560h



QTY: 4x

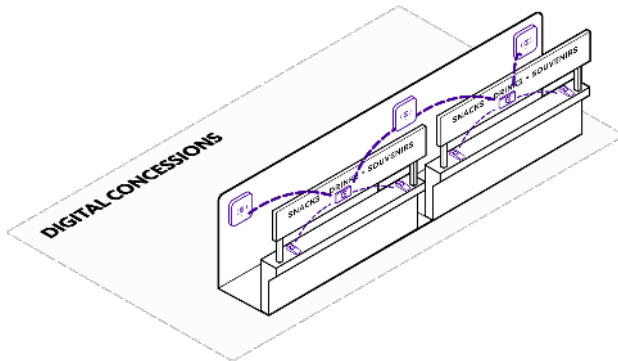
+

560i



QTY: 1x

## EVO Kit for Contactless Payment Kit



560h



QTY: 2x

+

560i



QTY: 3x

**Purchase 5x or more  
EVO Kits and receive 1x  
XCC Stadium Appliance**



A \$60,000 list price value !

**Future Planning:** XCC Appliance is designed to scale public-facing Wi-Fi throughout your entire venue!

*Offer valid to August 31, 2021*



