REVOLUTIONIZE W/ CROWD ANALYTICS

WaitTime™

Elizabeth Henson
WaitTime, CIO

Discover strategies that not only streamline operations and improve guest experiences but also significantly boost sales.

58%
of people willing to spend significantly more on F&B if **wait times in lines were reduced**.

42%
Opportunity to **boost revenue** on average when enhancing crowd management strategies.

Oracle Food and Beverage. "The Fan Experience: Changing the Game with Food and Beverage Technology." 2015

78%
of fans want **technology-enhanced experiences**, including mobile ordering and contactless payments.

60%
of fans are interested in **personalized experiences** tailored to their preferences.

Oracle Food and Beverage. "Stadiums without borders: Stadium technology and trends in 2022 and beyond." 2022

WaitTime™

Provides foundational crowd intelligence to transform your business and guest experiences.

accelerated by **intel**

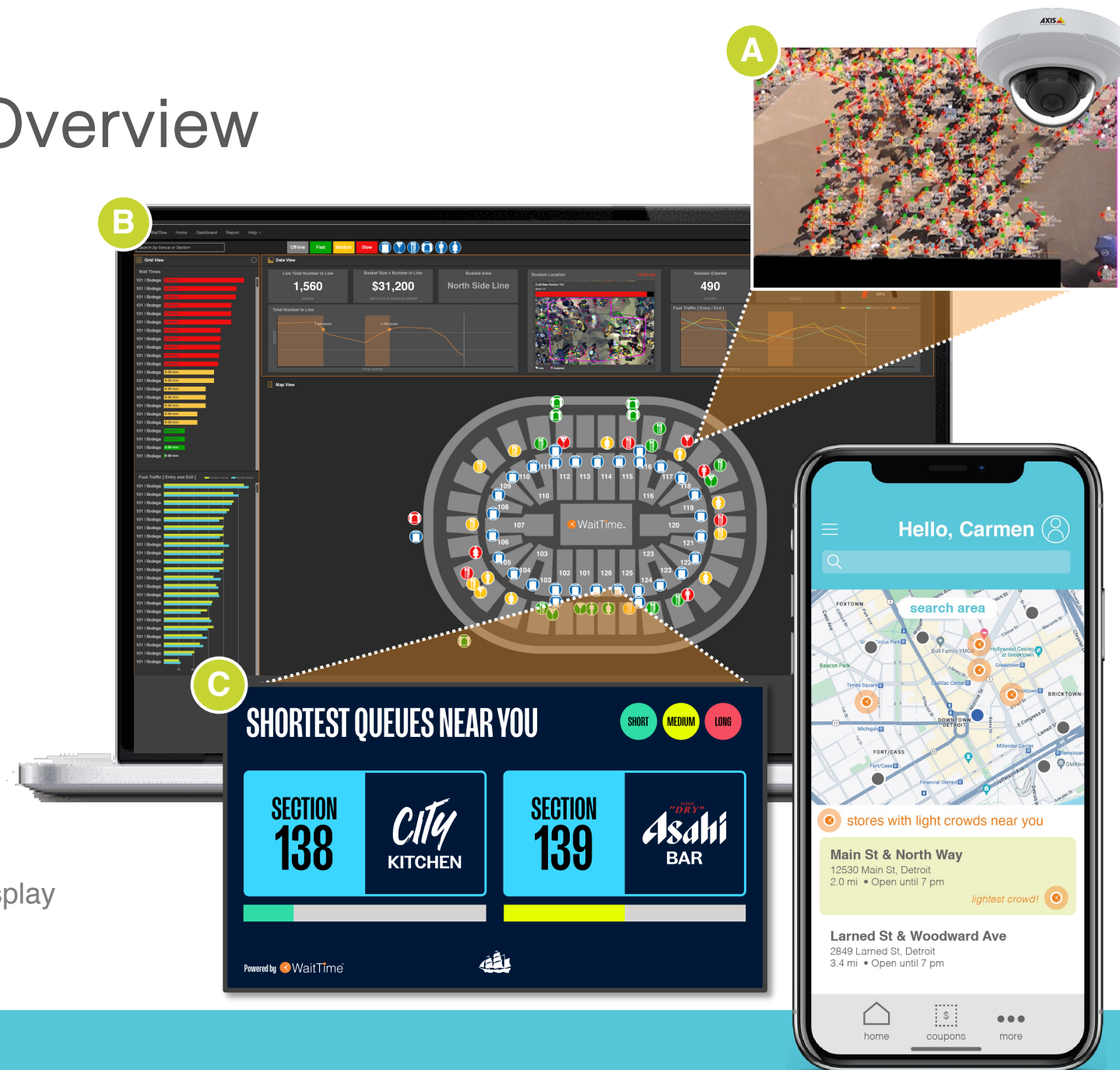# [01] System Overview

A **Four Key Algorithms**:

- *Queueing [Overhead]:*
  - Organized: Stanchion
  - Belly Up: Queue

- *Occupancy [Overhead]:*
  - Entry / Exit

- *Density [Z-angle]:*
  - Massing

B **Operations Dashboard**

- Real-Time Alerts
- Real-Data Reports
- Historical Reporting

C **Guest Experience Platform**

- Crowd Intelligent Digital Display Integration
- Mobile App

Verticals:

- Sports and Entertainment
- Retail
- Conference Centers
- Amusement Parks
- Education
- Airports
- Smart City
- Public Transportation

accelerated by **intel**

SHORTEST QUEUES NEAR YOU

SHORT MEDIUM LONG

SECTION 138 CITY KITCHEN

SECTION 139 Asahi "SUPER DRY" BAR

Powered by WaitTime

Hello, Carmen

search area

stores with light crowds near you

Main St & North Way
12530 Main St, Detroit
2.0 mi • Open until 7 pm
lightest crowd!

Larned St & Woodward Ave
2849 Larned St, Detroit
3.4 mi • Open until 7 pm

home   coupons   more

[02] Back End AI

Algorithm [QUEUE]: Organically forming crowds, belly up queues

Camera Mount: Overhead

QUEUE

USE CASES:

Sports and Entertainment | Gates, Concessions

Retail | Queue Optimization

Amusement Parks | Ride Queues

Airports | Security , Concessions

Conference | Show attractions

RETURN ON INVESTMENT:

Leveraging WaitTime's queue algorithm, venues have been able to **reduce gate entry times by up to 75%**

The wait time for the **MAIN ENTRANCE** is 10-15 min

POWERED BY WaitTime™ TO THE LEFT **SHORT WAIT** ATLANTIC ENTRANCE

WE HANDLE THE TICKETS

SHORT WAITS NEAR YOU | The wait time for the MAIN ENTRANCE is | 18 - 20 Mins | SHORT WAITS NEAR YOU

WE HANDLE THE SEATGEEK PLAZA

BARCLAYS CENTER
BROOKLYN

accelerated by intel.

[02] Back End AI

Algorithm [STANCHION]: controlled queue

Camera Mount: Overhead

USE CASES:

Sports and Entertainment | Concessions

Retail | Queue Optimization

Amusement Parks | Ride Queues

Airports | Security, Concessions

Education | Dining Halls

RETURN ON INVESTMENT:

WaitTime qualitative reports indicate at least **25% of stanchion queues are not large enoug**h to accommodate max crowd conditions, resulting in pinch points and guest confusion.

CISCO *Live!*

Test your skills in McLaren F1 simulators

Cisco Showcase: Grand Prix

Wait Time: **15 mins**

CISCO *Live!*

accelerated by **intel.**

[02] Back End AI

Algorithm [ENTRY / EXIT]: occupancy, entrances / exits over a threshold

Camera Mount: Overhead

ENTRY / EXIT

USE CASES:

Sports and Entertainment | Ticket scans vs exits

Retail | Sponsorship monetization, gravity models

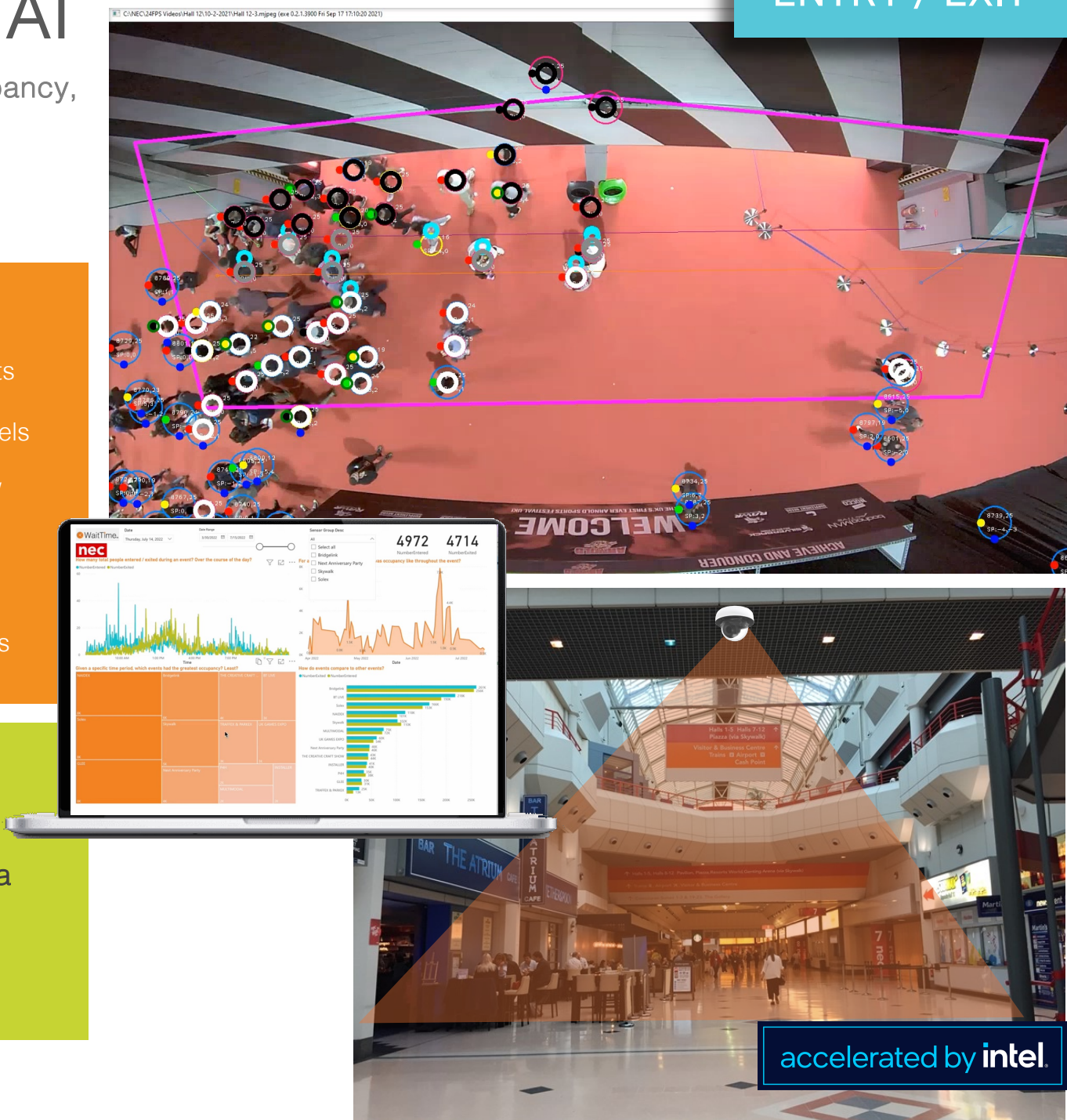*Amusement Parks* | Number of guests in park / attraction

Airports | Zone traffic

Conference Centers | Number of guests in halls

RETURN ON INVESTMENT:

WaitTime clients provide Analytics as a Service to their customers as a way of monetizing the WaitTime platform.

accelerated by intel.

[02] Back End AI

Algorithm [MASSING]: Density as %

Camera Mount: Z-Angle

MASSING

USE CASES:

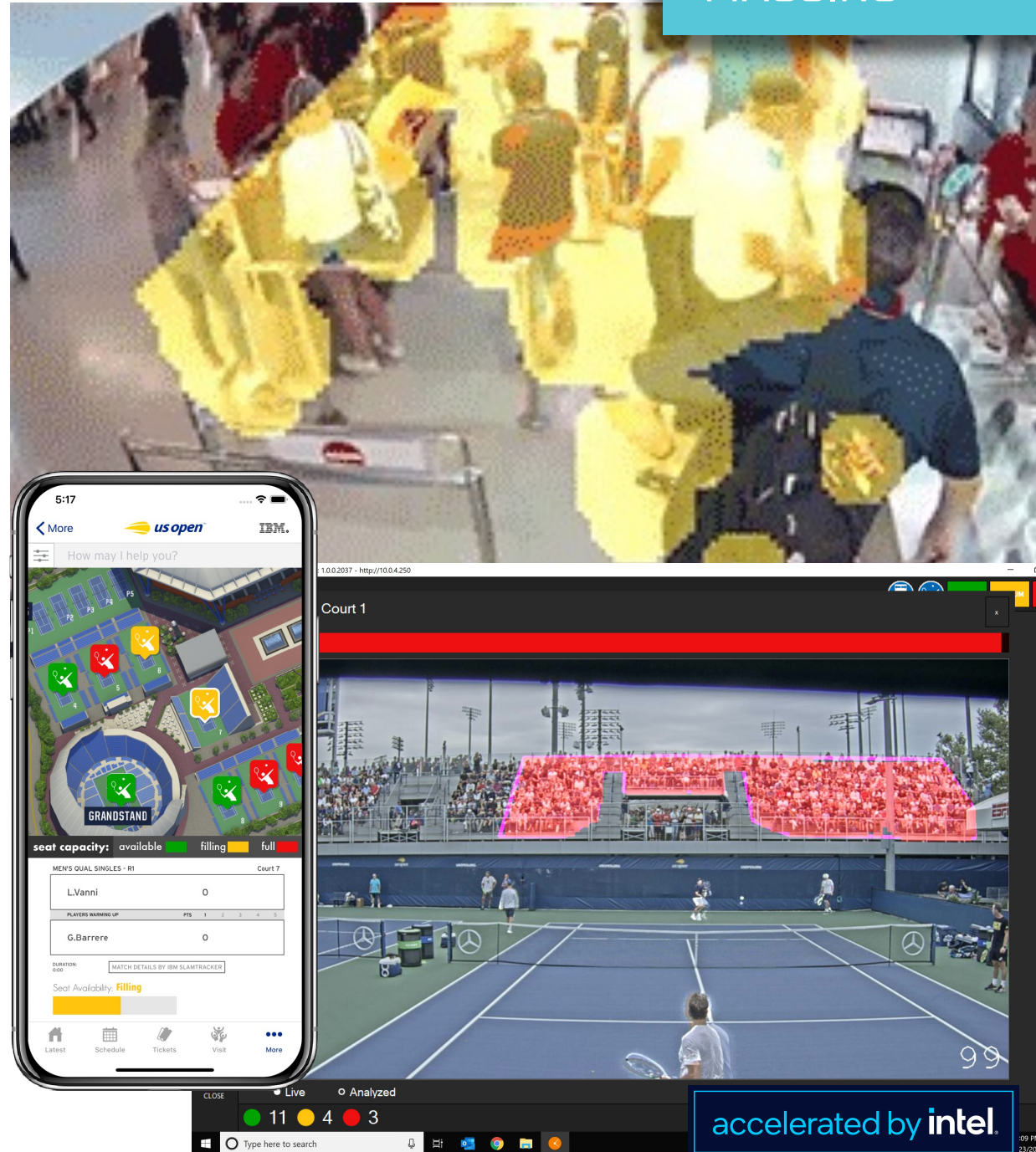*Sports and Entertainment* | Busiest seating areas

Retail | Zone gravity models
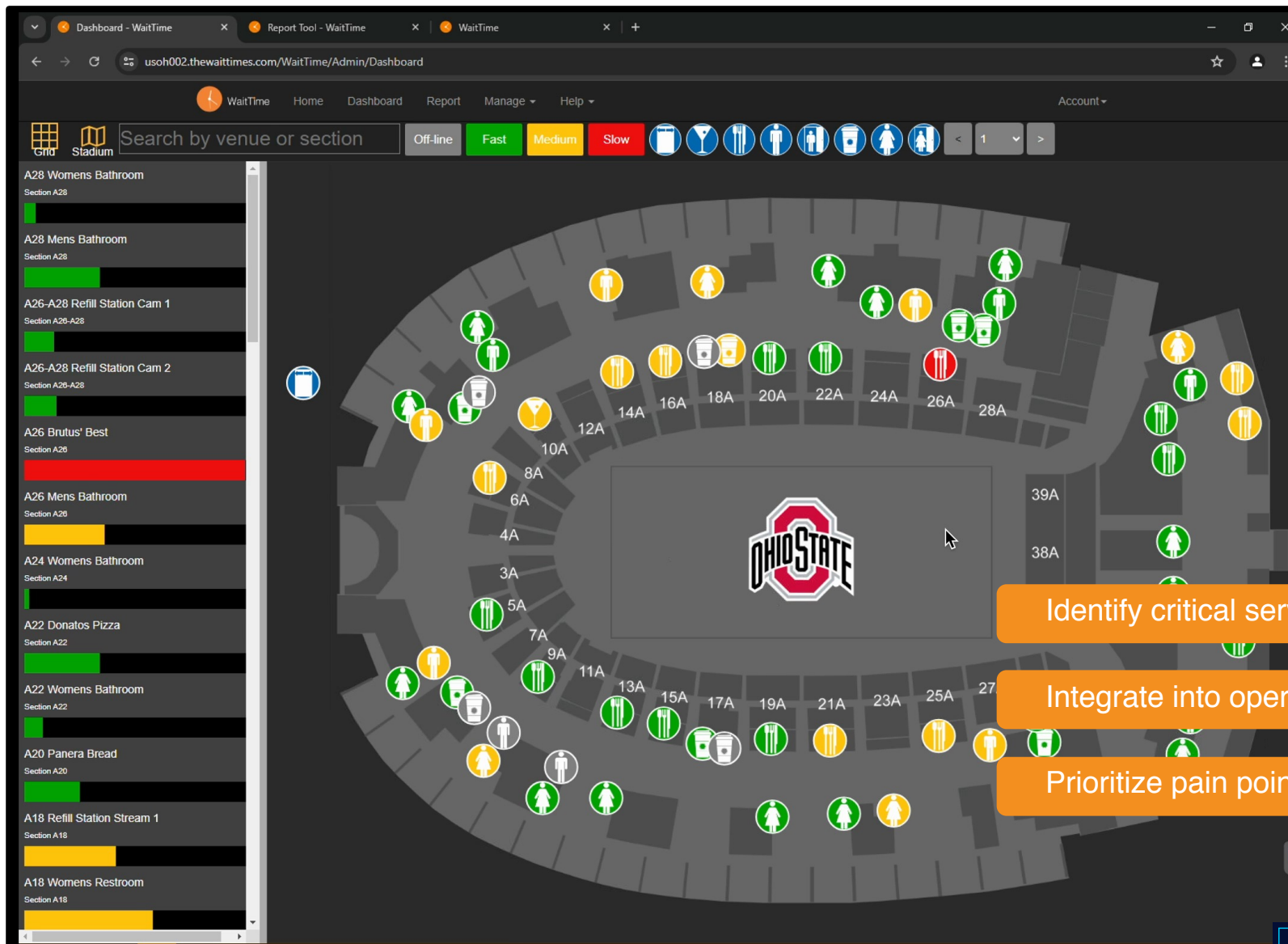
Smart City | Busiest zones

RETURN ON INVESTMENT:

Deploy services and security in real-time based on crowd density as a proactive tool. Best algorithm for existing cameras.

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[03] Front End

[Operations Dashboard, Real-Time and Historical Analytics]

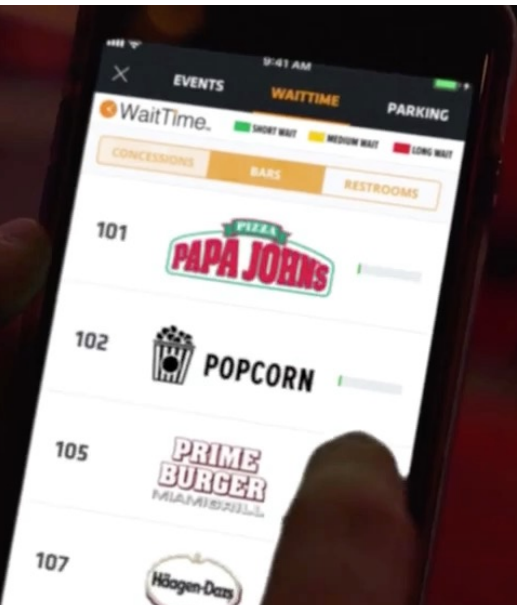

Identify critical service throughput issues

Integrate into operations / security alerts

Prioritize pain points based on loading

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WaitTime™

[03] Front End

[Crowd Intelligent Digital Displays, Mobile Integration]
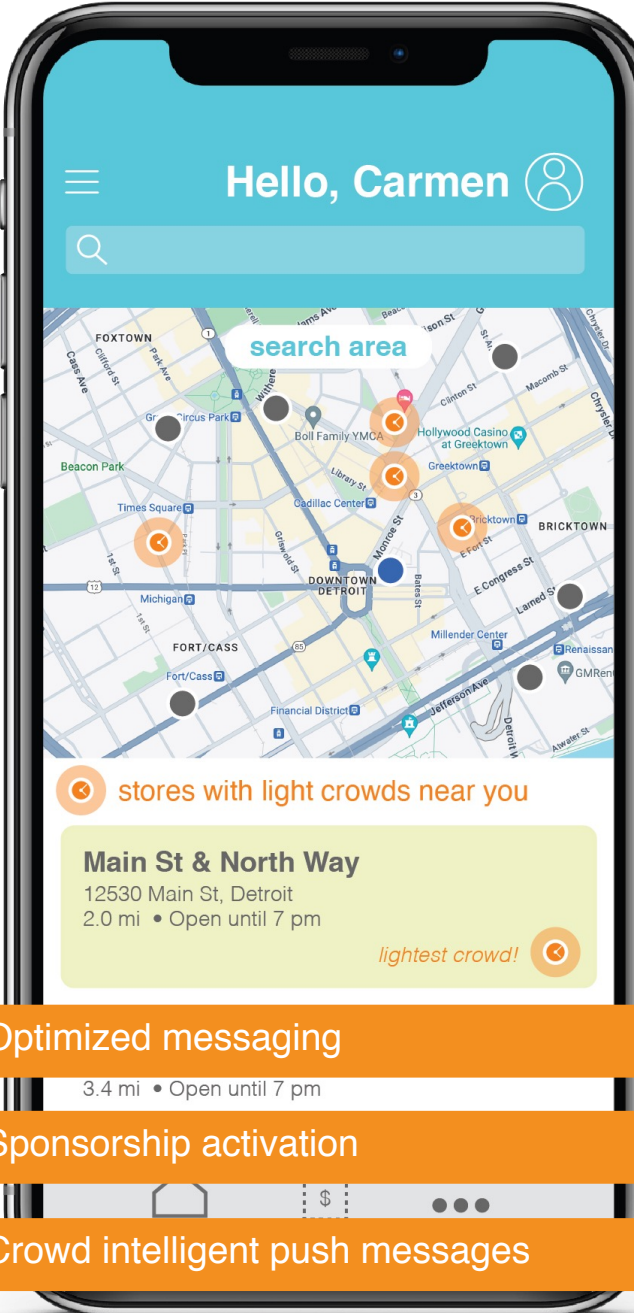
SHORTEST QUEUES NEAR YOU

SHORT MEDIUM LONG

SECTION **138** — BAREFOOT WINE & BUBBLY

SECTION **139** — Häagen-Dazs

Powered by WaitTime™

Hello, Carmen

search area

stores with light crowds near you

Main St & North Way
12530 Main St, Detroit
2.0 mi • Open until 7 pm

lightest crowd!

Optimized messaging

3.4 mi • Open until 7 pm

Sponsorship activation

Crowd intelligent push messages

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[04] ROI

[reference install: Denver Broncos]

Significantly reduced wait times at key tailgate areas (up to 75% reduction).

Sports and Entertainment

Optimizing Operations at Gates
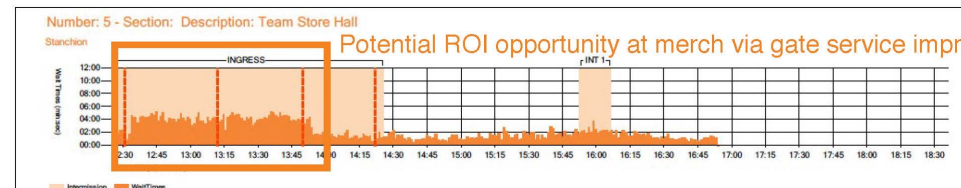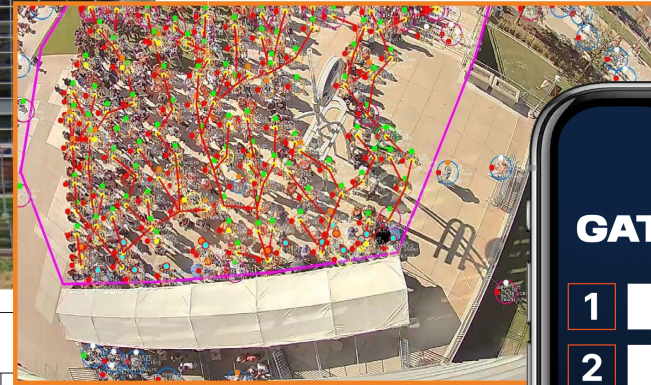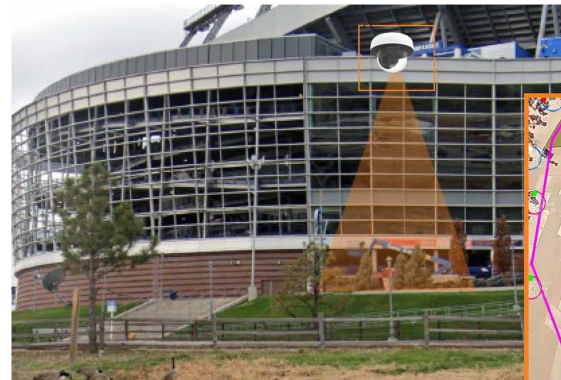
Overview

(7) Cameras

• Operations Platform
- Operations Dashboard
- End of Event Reports
• Algorithms
- Queue
- Stanchion
- Massing
- Entry Exit

WaitTime was installed with the Denver Broncos to monitor crowd behavior at gates. Guests tail gate in the parking lot an head into the stadium at the last moment creating operations and security issues.

WaitTime helped to identify opportunities for improvement and prove out use cases for guest engagement. In addition, it was identified that merchandise queues have a similar crowd profile as gates as they get busiest prior to the game-identifying opportunities for improved ROI.

Number: 2 - Section: Description: Gate 8

Number: 1 - Section: Description: Gate 10

Ingress prior to game start.

Number: 3 - Section: Description: Gate 3

Ingress post game start.

Number: 5 - Section: Description: Team Store Hall

Potential ROI opportunity at merch via gate service improvements

GATE WAIT TIMES
Powered By WaitTime

1	5 - 10 Minutes
2	5 - 10 Minutes
3	5 - 10 Minutes
4	5 - 10 Minutes
5	5 - 10 Minutes
6	5 - 10 Minutes
7 YOU ARE HERE ►►►	5 - 10 Minutes
8	5 - 10 Minutes
9	5 - 10 Minutes
10	5 - 10 Minutes

accelerated by intel

[04] ROI
[reference install: NEC]

Analytics as a Service provided to shows offsets WaitTime licensing.

nec

Convention Center

Occupancy Counting at Conference Halls

Overview

(26) Cameras

• Operations Platform
    - Operations Dashboard
    - End of Event Reports
• Algorithms
    - Entry Exit

NEC is leveraging state of the art WaitTime technology and data to inform smart operational decisions throughout their event spaces.

With WaitTime, the NEC is able to granularly and accurately track guest traffic in and out of the exhibition center to inform smarter business decisions and in turn provide a more efficient guest experience.

The NEC aligned a CCTV refresh to provide better operational insights and guest experience. The data from the WaitTime system is packaged and shared with NEC clients.

Hall 8 Occupancy

Hall 8 Entered

Hall 8 Exited

Hall 8 Occupancy

End of the day data report

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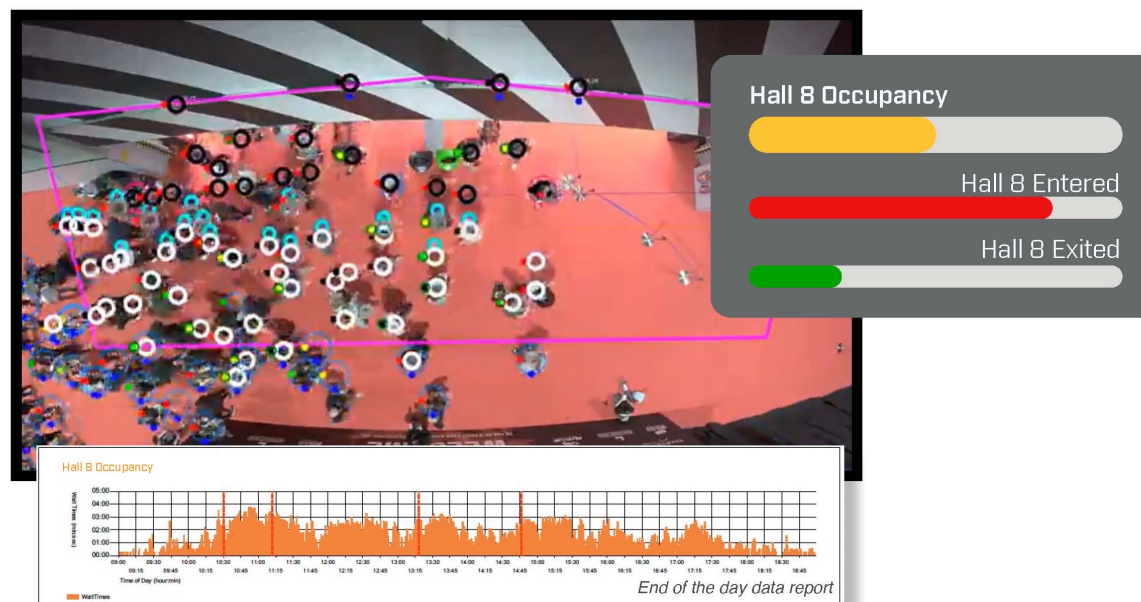
WaitTime Operations Dashboard

[05] Intel

Software:

- *Ecosystem based co-selling*
- *Channel Based GTM*

Hardware:

- *Intel 5th Gen Xeon Scalable Processors*

intel XEON®
5th Gen
Intel Xeon Scalable Processor
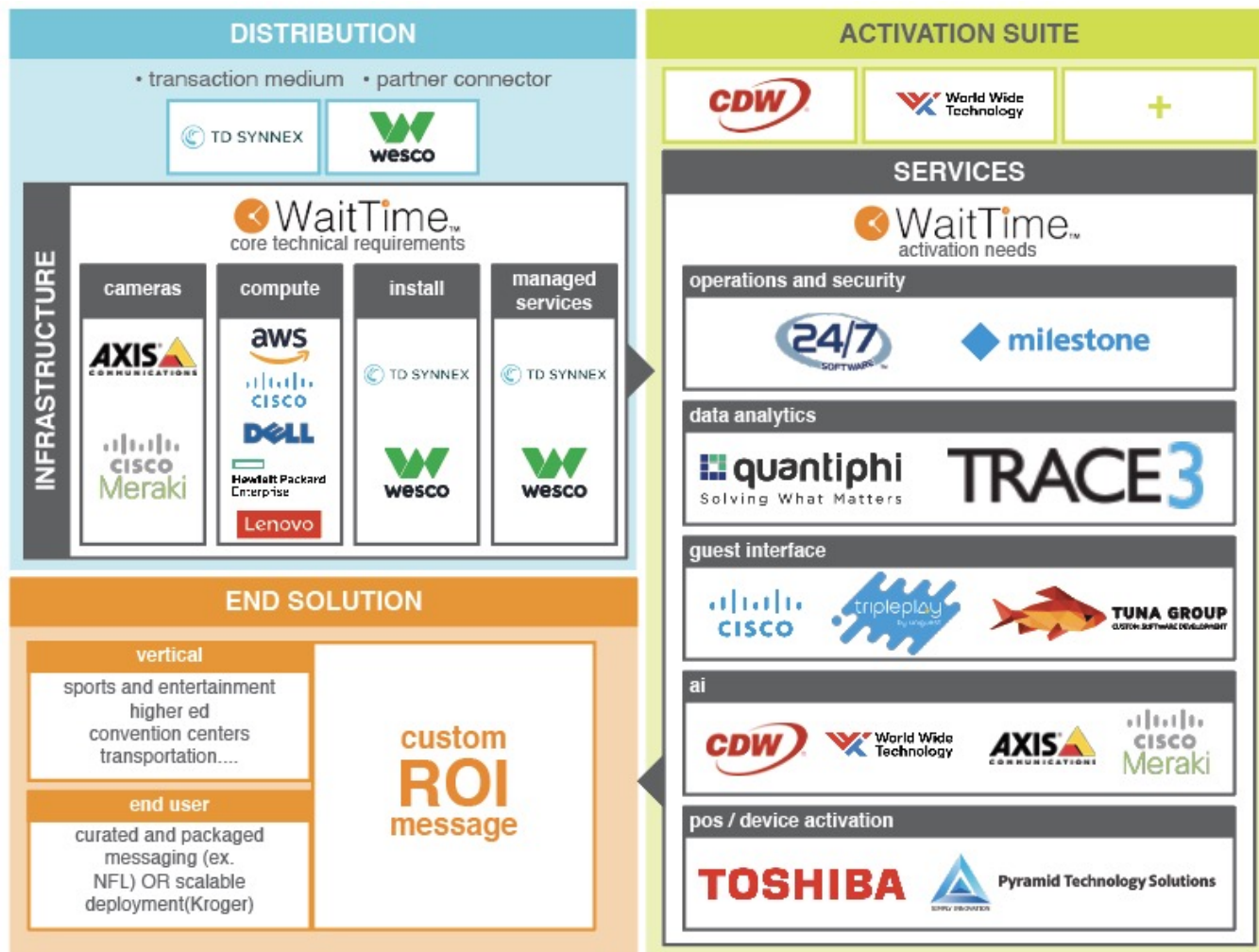
Software:

VTune

1 oneAPI

intel. GeTi™ OpenVINO™

CLIENT ACTIVATION ECOSYSTEM

DISTRIBUTION
- transaction medium
- partner connector

TD SYNNEX   wesco

INFRASTRUCTURE

WaitTime™ core technical requirements

cameras	compute	install	managed services
AXIS COMMUNICATIONS	aws	TD SYNNEX	TD SYNNEX
CISCO Meraki	CISCO	wesco	wesco
	DELL		
	Hewlett Packard Enterprise		
	Lenovo		

END SOLUTION

vertical
sports and entertainment
higher ed
convention centers
transportation....

end user
curated and packaged messaging (ex. NFL) OR scalable deployment(Kroger)

custom **ROI** message

ACTIVATION SUITE

CDW   World Wide Technology   +

SERVICES

WaitTime™ activation needs

operations and security
24/7 SOFTWARE   milestone

data analytics
quantiphi Solving What Matters   TRACE3

guest interface
CISCO   tripleplay by uniguest   TUNA GROUP CUSTOM SOFTWARE DEVELOPMENT

ai
CDW   World Wide Technology   AXIS COMMUNICATIONS   CISCO Meraki

pos / device activation
TOSHIBA   Pyramid Technology Solutions

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MIAMI HEAT

SYDNEY CRICKET GROUND

MCG

MALL OF AMERICA

nec
thenec.co.uk

CISCO Live!

OHIO STATE

BARCLAYS
CENTER
BROOKLYN

T Mobile ARENA

WaitTime™

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THANK YOU