Crowd Control Solution

Presentation by VIVOTEK

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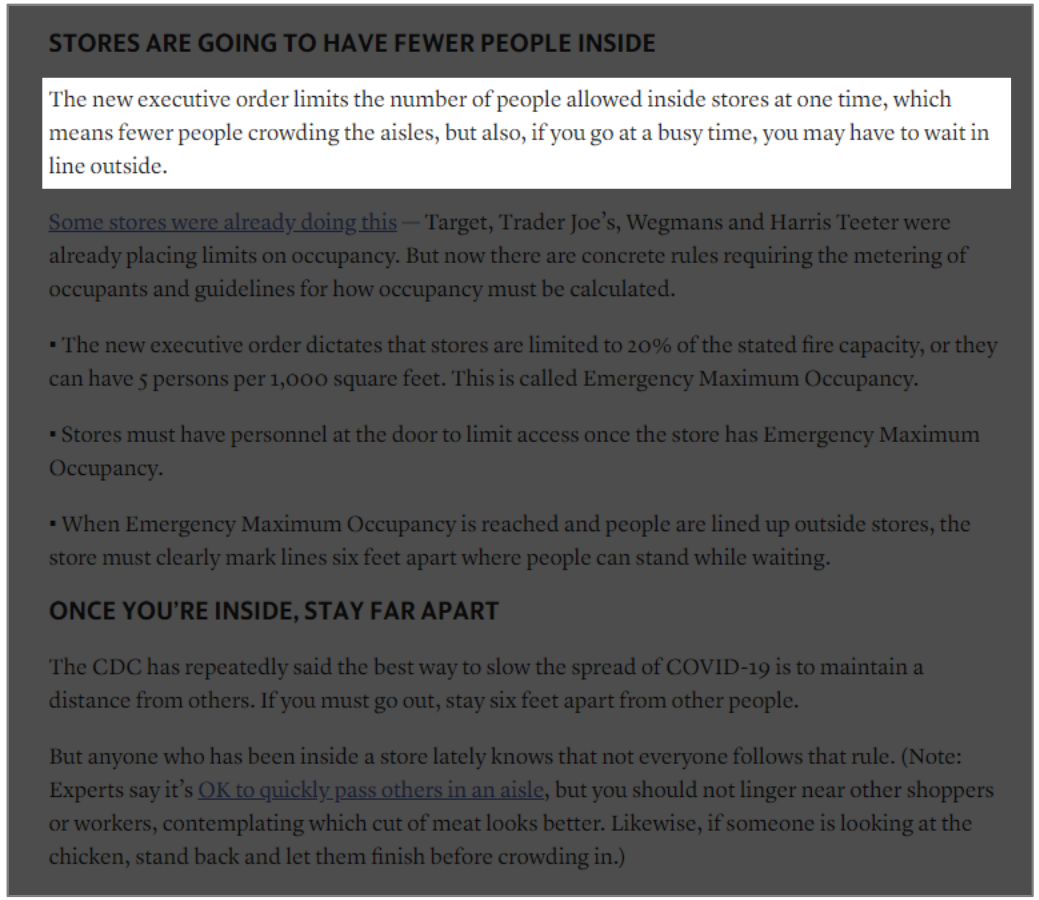
Reduced Crowd is a Government Regulation



STORES ARE GOING TO HAVE FEWER PEOPLE INSIDE

The new executive order limits the number of people allowed inside stores at one time, which means fewer people crowding the aisles, but also, if you go at a busy time, you may have to wait in line outside.

Some stores were already doing this — Target, Trader Joe's, Wegmans and Harris Teeter were already placing limits on occupancy. But now there are concrete rules requiring the metering of occupants and guidelines for how occupancy must be calculated.

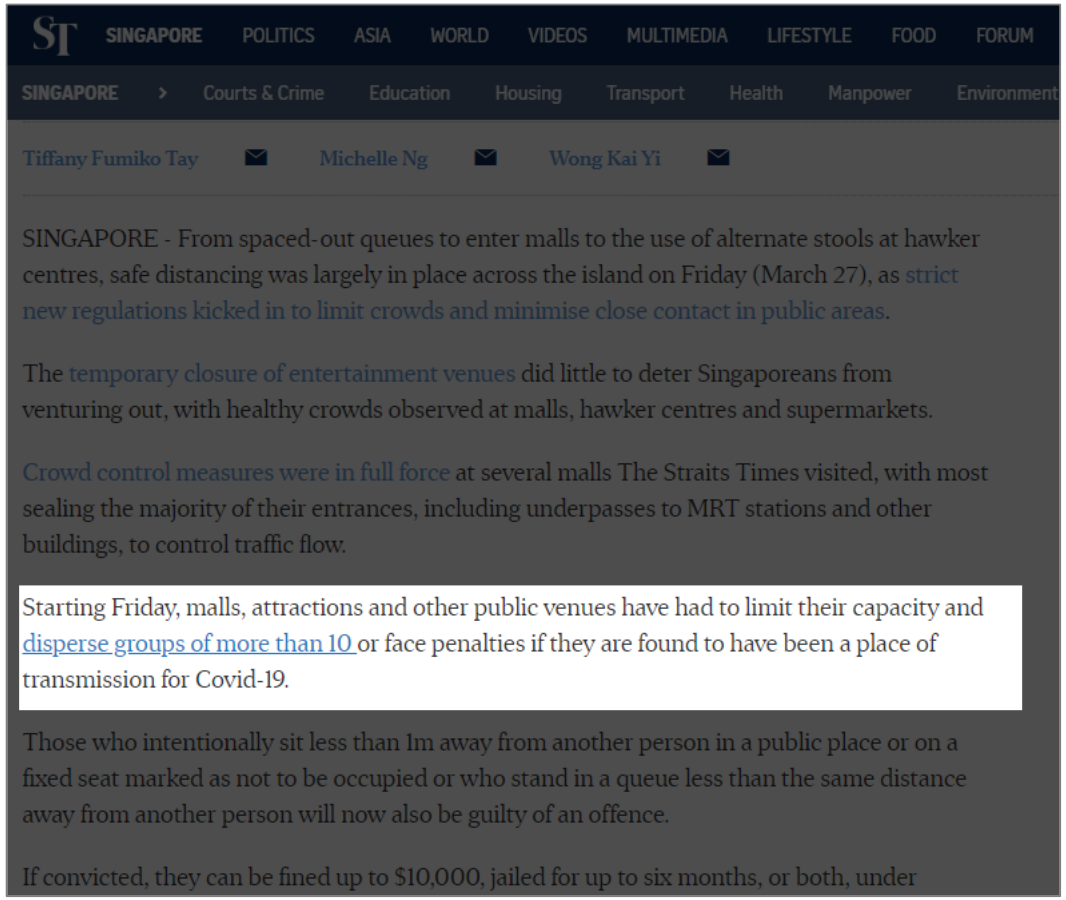
- The new executive order dictates that stores are limited to 20% of the stated fire capacity, or they can have 5 persons per 1,000 square feet. This is called Emergency Maximum Occupancy.
- Stores must have personnel at the door to limit access once the store has Emergency Maximum Occupancy.
- When Emergency Maximum Occupancy is reached and people are lined up outside stores, the store must clearly mark lines six feet apart where people can stand while waiting.

ONCE YOU'RE INSIDE, STAY FAR APART

The CDC has repeatedly said the best way to slow the spread of COVID-19 is to maintain a distance from others. If you must go out, stay six feet apart from other people.

But anyone who has been inside a store lately knows that not everyone follows that rule. (Note: Experts say it's OK to quickly pass others in an aisle, but you should not linger near other shoppers or workers, contemplating which cut of meat looks better. Likewise, if someone is looking at the chicken, stand back and let them finish before crowding in.)

Source: New Observer



ST SINGAPORE POLITICS ASIA WORLD VIDEOS MULTIMEDIA LIFESTYLE FOOD FORUM

SINGAPORE › Courts & Crime Education Housing Transport Health Manpower Environment

Tiffany Fumiko Tay Michelle Ng Wong Kai Yi

SINGAPORE - From spaced-out queues to enter malls to the use of alternate stools at hawker centres, safe distancing was largely in place across the island on Friday (March 27), as strict new regulations kicked in to limit crowds and minimise close contact in public areas.

The temporary closure of entertainment venues did little to deter Singaporeans from venturing out, with healthy crowds observed at malls, hawker centres and supermarkets.

Crowd control measures were in full force at several malls The Straits Times visited, with most sealing the majority of their entrances, including underpasses to MRT stations and other buildings, to control traffic flow.

Starting Friday, malls, attractions and other public venues have had to limit their capacity and disperse groups of more than 10 or face penalties if they are found to have been a place of transmission for Covid-19.

Those who intentionally sit less than 1m away from another person in a public place or on a fixed seat marked as not to be occupied or who stand in a queue less than the same distance away from another person will now also be guilty of an offence.

If convicted, they can be fined up to $10,000, jailed for up to six months, or both, under

Source: Singapore Times

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Current

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Crowd Controlled Market

Maximum Occupancy
15 people

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Crowd Controlled Market

Maximum Occupancy
15 people

Reduced Entrances

- Simplify crowd control
- Reduce workforce for each entrance
- Reduce risk of employee health

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Crowd Controlled Market

Maximum Occupancy
15 people

Manual Counting

- Single entrance and exit
- Assign employee for crowd control
- 1-in and 1-out

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Crowd Controlled Market

Maximum Occupancy
15 people

High Health Risk

- Long time exposure to customer
- Queued line is difficult to remain social distance
- If infected, all staffs quarantined

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Crowd Control Solution

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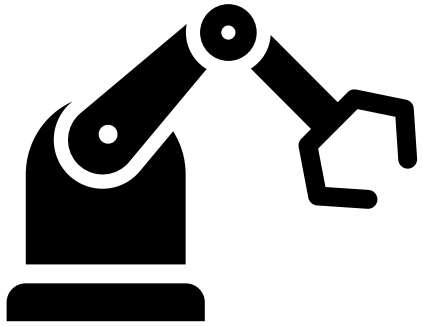

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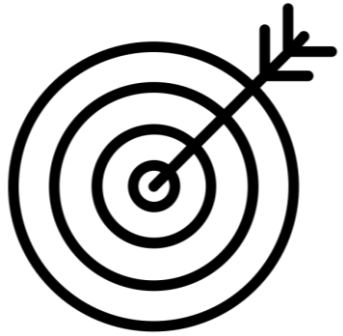
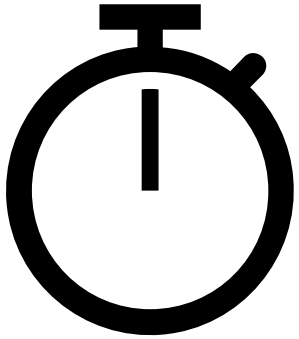


Accurate



Simple

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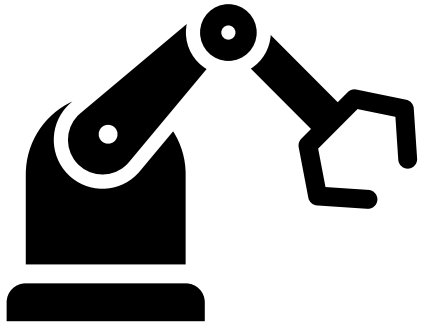
VIVOTEK Crowd Control Solution



Automatic

Accurate

Simple

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Crowd Controlled Market

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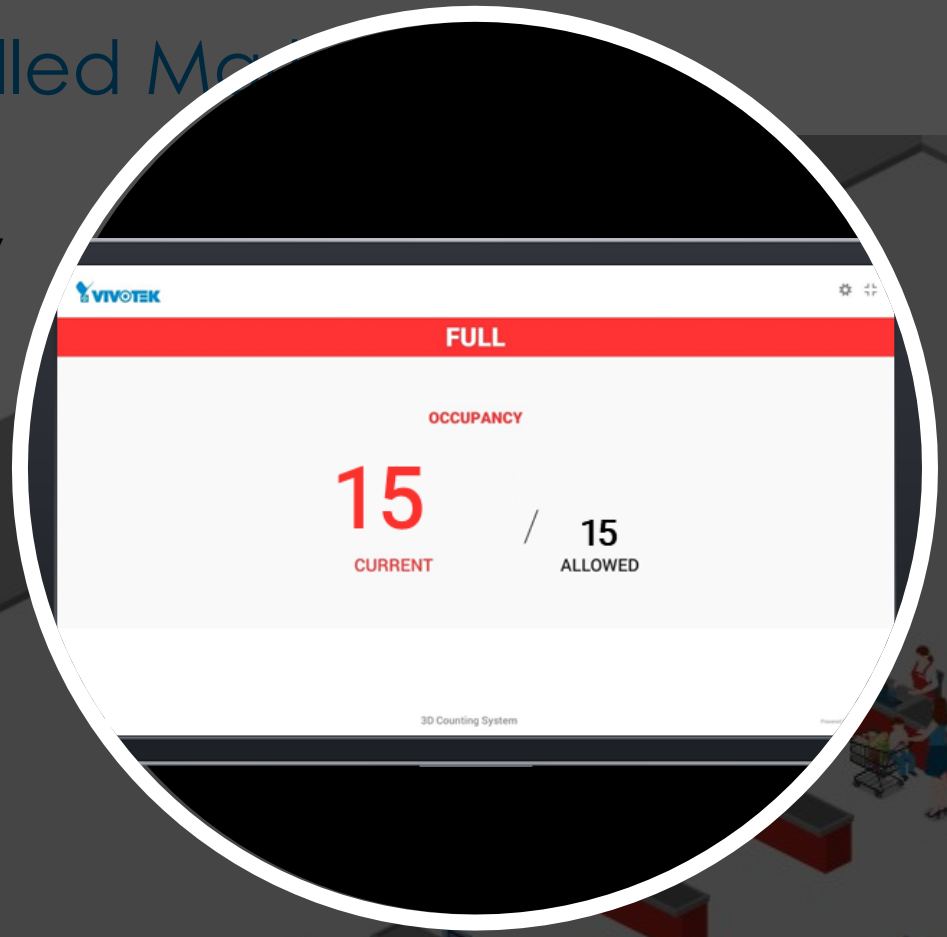

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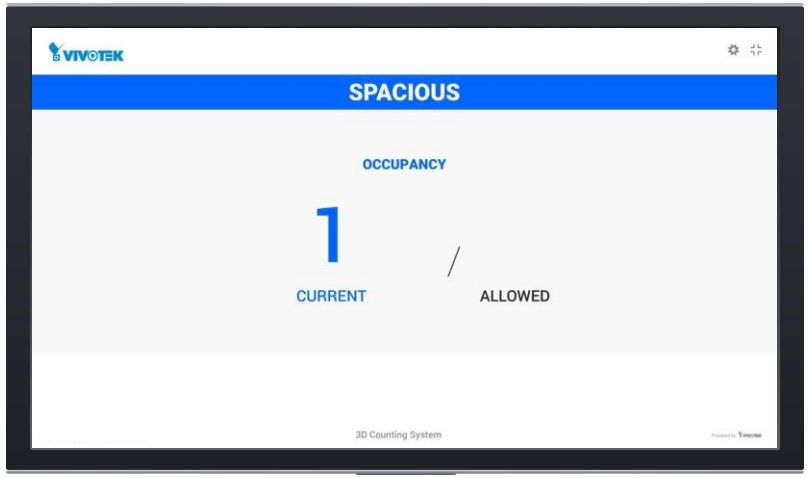
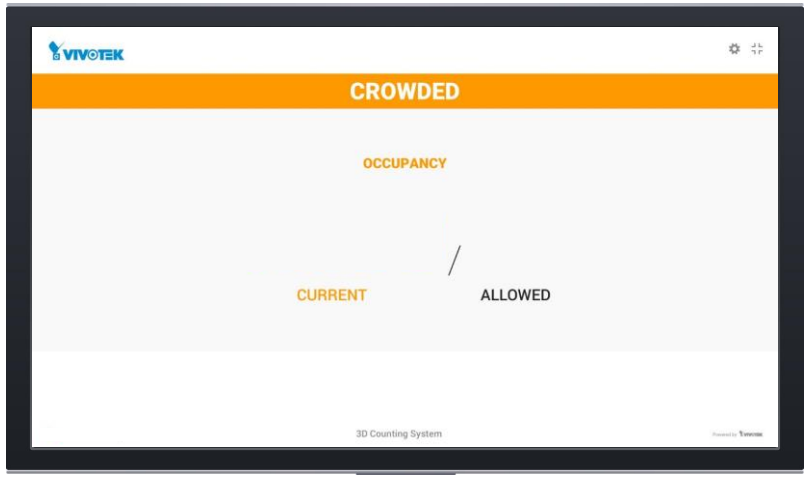
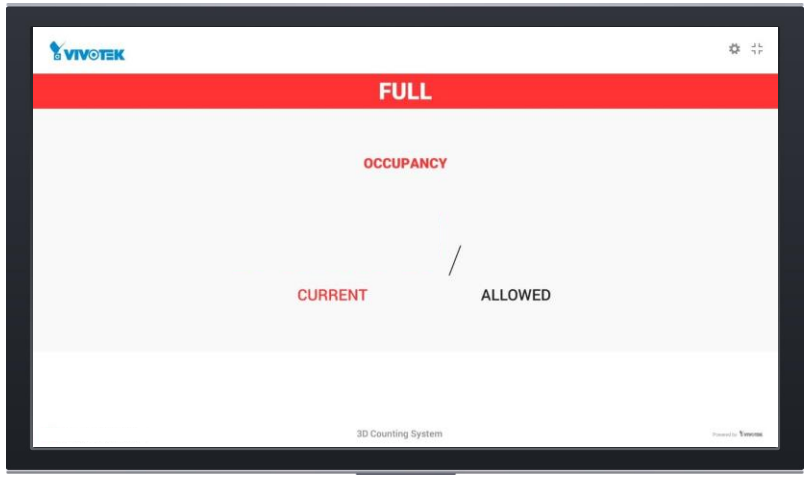
Cold-Warm-Hot Dashboard







Enter ***Control*** ***Stop***

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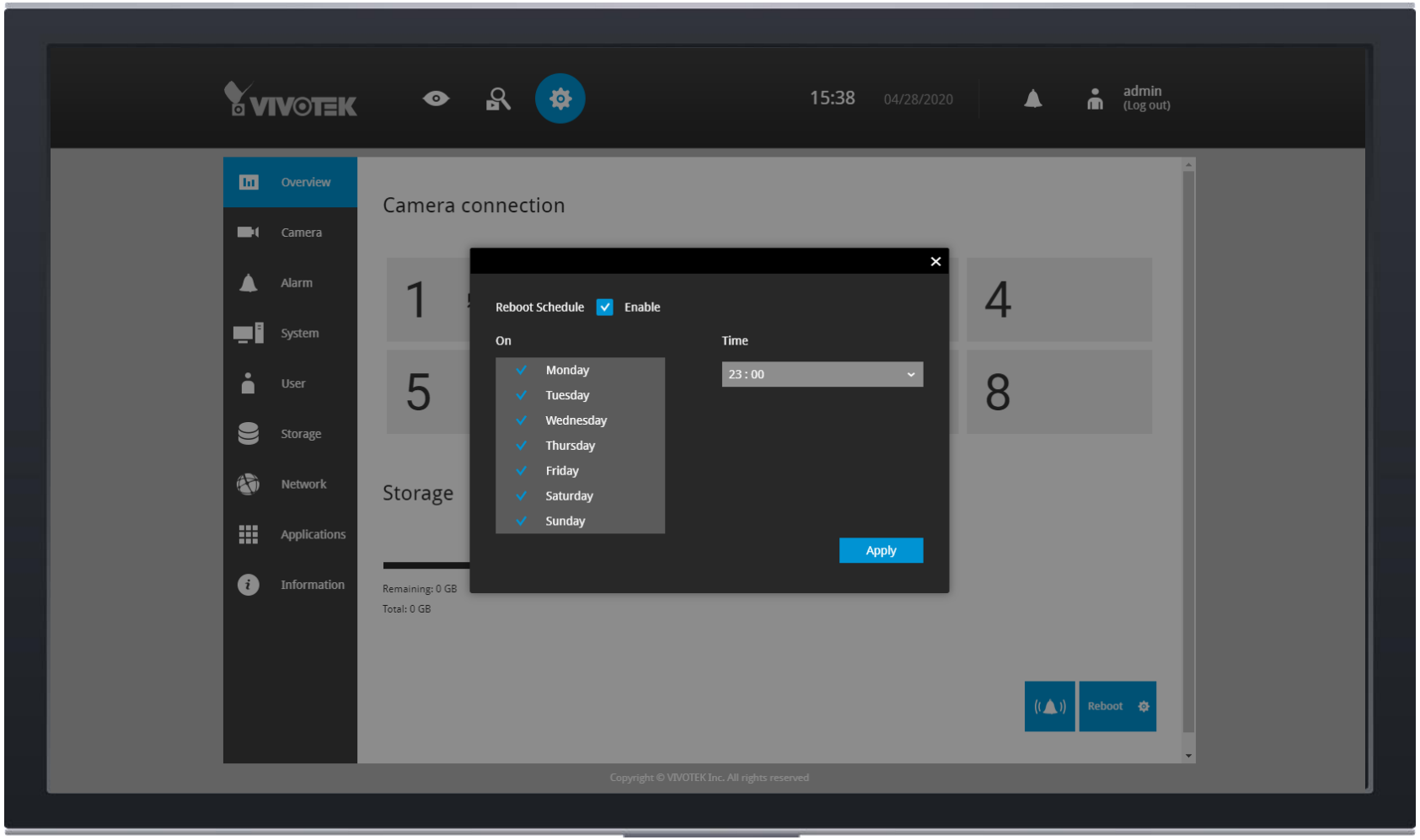
Auto Reset Count to Zero



- Reset counter each day
- Automatic restart to counter page without configuration

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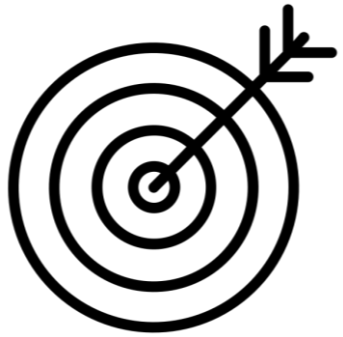
VIVOTEK Crowd Control Solution

Automatic



Accurate

Simple

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Counting camera

- VIVOTEK's 3D Depth Technology
- **Up to 98% counting accuracy rate**
- Real-time data
  (system/counting/daily reports; time/region reports)
- Object tracking path
- **Filter carts, children and strollers**
- **Bi-directional counting on definable flow**
- Detection of U-turns to avoid double counting
- Not Influenced by shadows, reflections or glare conditions

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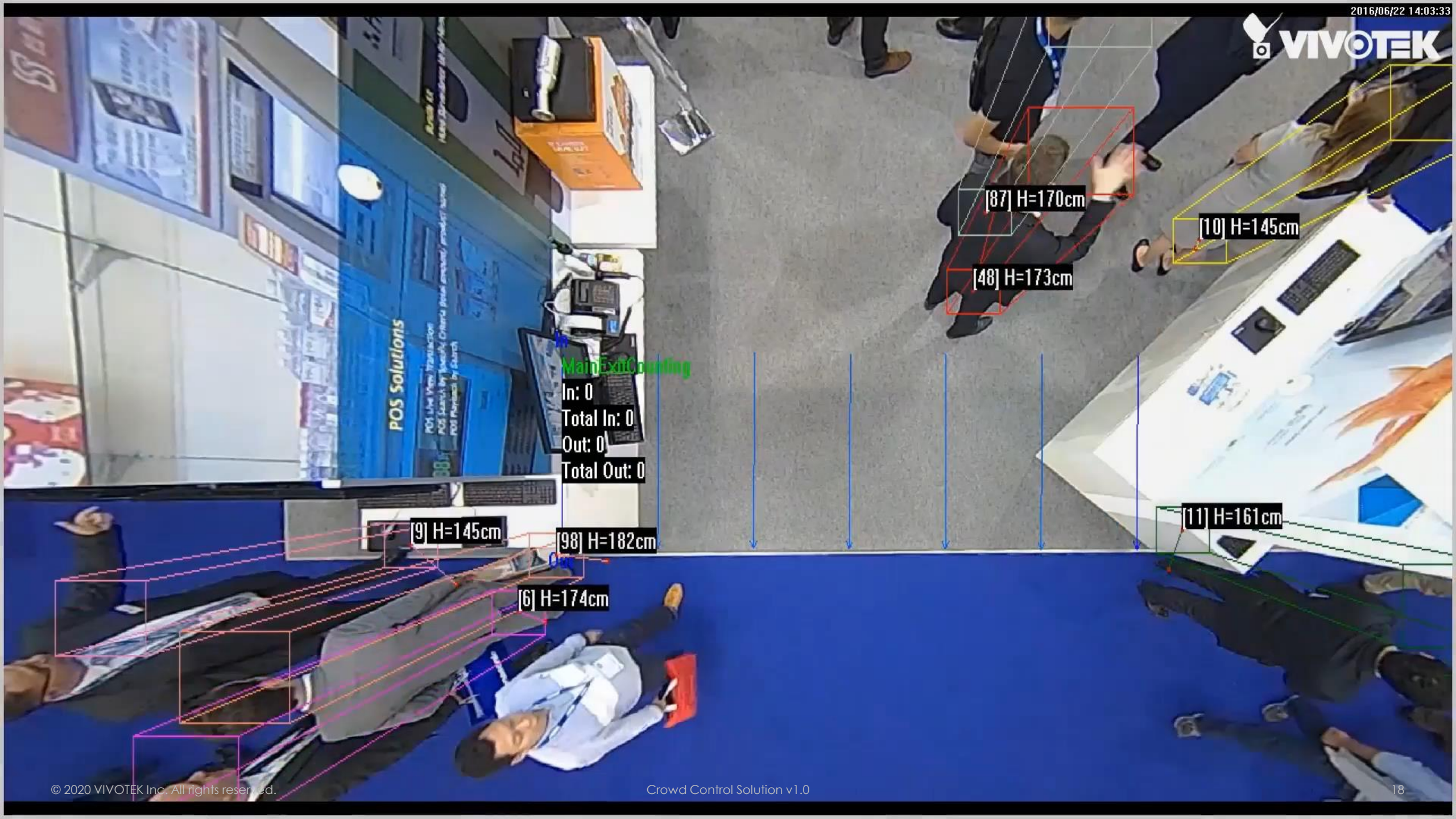

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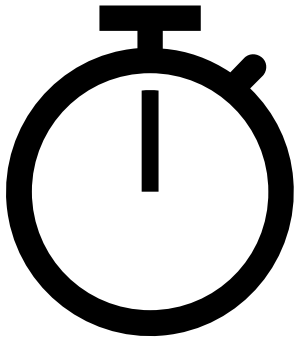
VIVOTEK Crowd Control Solution

Automatic

Accurate



Simple

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Architecture

Counting camera

Power over Ethernet

Ethernet

AW-FET-060C-065

4-port unmanaged PoE switch

DC 12V

ND9312

H.265 8-ch NVR

HDMI

Monitor

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Quick Deployment

4 Phase 9 Steps

Installation
- Camera
- NVR
- Display monitor

Camera
- Input height
- Draw rule

NVR
- Add camera
- Occupancy limit
- Reset time

Monitor
- Connect HDMI

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Before
vs
After

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Crowd Controlled Market

Maximum Occupancy
15 people

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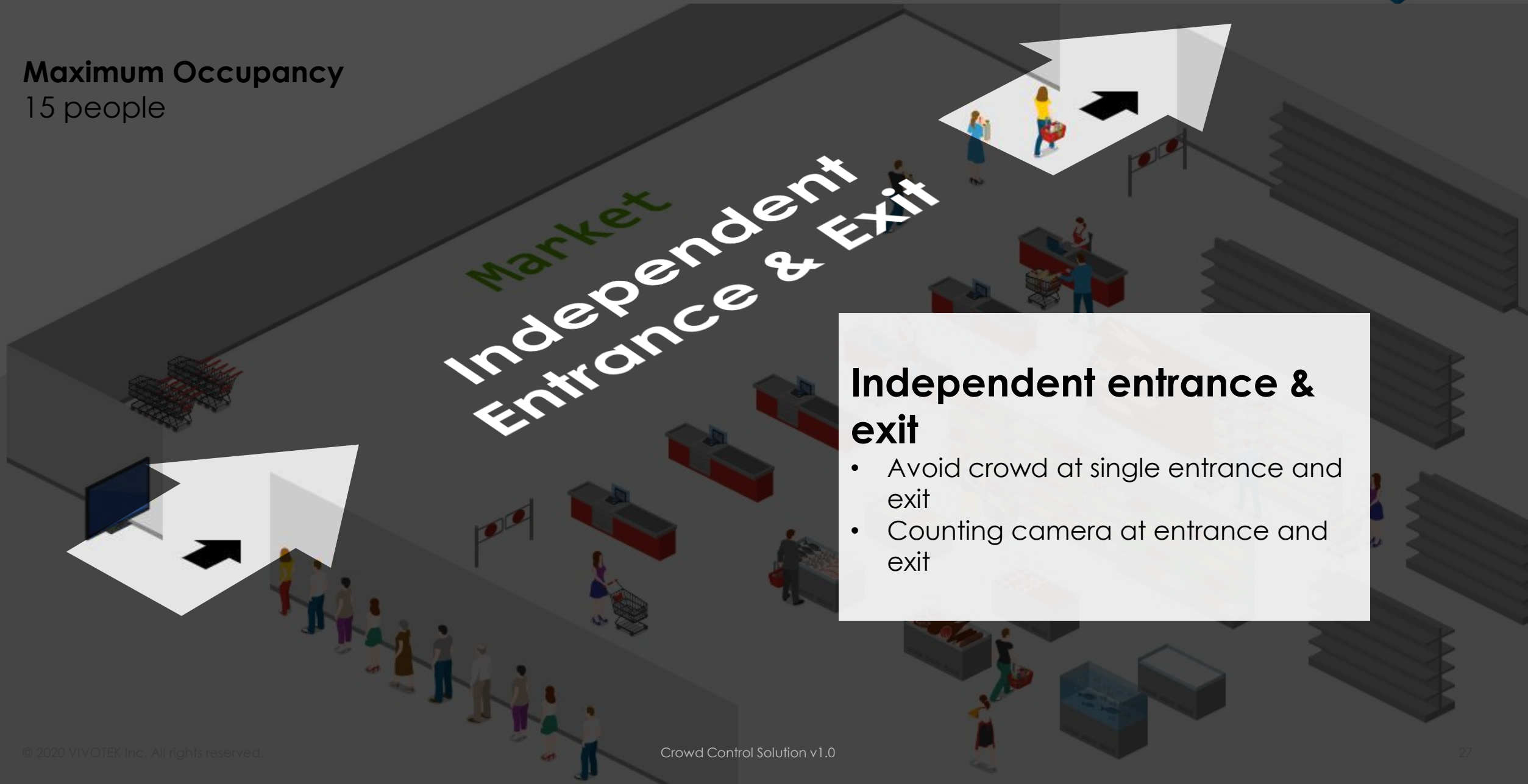

Independent entrance & exit

- Avoid crowd at single entrance and exit
- Counting camera at entrance and exit

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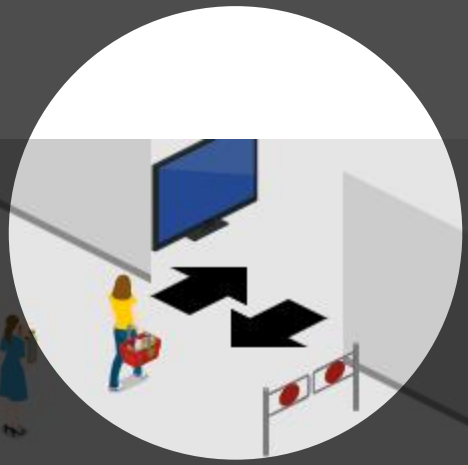
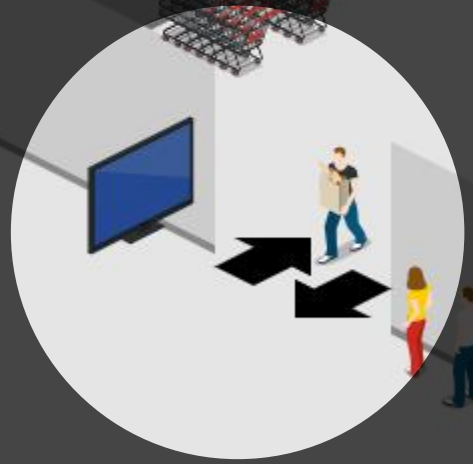
Crowd Controlled Market

Maximum Occupancy
15 people





Market
Multiple
Entrances & Exits

Multiple entrance & exit

- Avoid crowd at single entrance and exit
- Centralized crowd control system
- Dashboard at each entrance and exit

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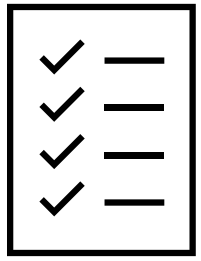
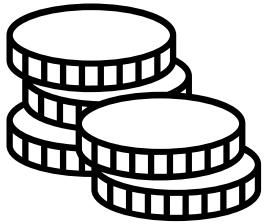
Benefit for all parties

Government



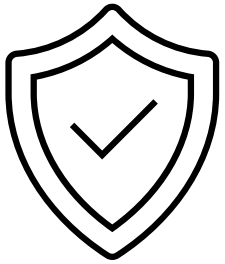
Regulations are followed

Store Manager



Cost is lowered

Customer



Store is safer

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2021

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What happens after COVID-19 ends

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ND9312

- H.265 Compression Technology
- Up to 8 Channel IP Camera Input
- HDMI Video Output up to 4K Resolution
- 1 x 3.5" SATA HDD
- Up to 8MP Camera Live View and Playback
- Trend Micro IoT Security
- Multiple Browsers Supported
- Live and Playback Fisheye Dewarp
- VIVOCloud App & Portal for 24/7 Viewing
- Compact Size with Fanless Design

***Crowd control solution does not require HDD installed.*

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VIVOCLOUD Retail

- Stores Long-Term Counting Data up to 2 Years
- Customize Counting Data Reports
- Supports Web Portal and App
- Direct Use of VIVOCloud Account
- Supports VIVOTEK Counting Cameras

In the future

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Purchase Guide

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Crowd Control Bundle Kit

Mouse included

Counting camera

100137200G

ND9312

100218100G

AW-FET-060C-065

100179400G

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