

ACCURACY IN ACTION

HOW A LARGE MULTINATIONAL FURNITURE RETAIL COMPANY COLLECTED HIGHLY ACCURATE OCCUPANCY DATA BY IMPLEMENTING BEABLOO'S SOLUTION IN ONE OF ITS STORES

THE SITUATION

The global pandemic has created unexpected challenges for businesses. To stay running, they must constantly look for solutions to comply with new safety measures.

Since limiting physical contact and maintaining social distancing are necessary for controlling the virus, businesses have to measure and limit the number of people allowed in a physical location at the same time and ensure that these people are appropriately spaced apart.

Monitoring the number of people inside a physical space is considered one of the most important health and safety measures for curbing the spread of COVID-19, but it's also likely to remain a valuable feature for businesses after the pandemic.





THE CHALLENGE: COLLECT ACCURATE STORE TRAFFIC DATA

To promote social distancing, control occupancy, and ensure that customers were properly spaced out in one of its stores, a large multinational furniture retail company opted for technological innovation.

The idea was to implement a tech solution in one of its retail stores in Spain that would improve the safety of staff and customers by enforcing social distancing through calculated data. In addition, the solution provided an in-depth view of store traffic data to help optimize business operations.

Over the years, this client has used many different systems to count customers and send reports to managers. However, they wanted to gain deeper insights into visitor traffic patterns and get a better understanding of occupancy rates over time to stay on top of in-store activity and take proactive steps to control occupancy.

The biggest challenge for the client was collecting accurate traffic data and extracting reliable analytics to understand how store traffic changed during different time slots. The client decided that an automated and intelligent system would help them gain more accurate insights into store traffic and occupancy data. They opted for a component of Beabloo's Interaction Care solution, IC Occupancy Control.

IC OCCUPANCY CONTROL

IC Occupancy Control is a component of the intelligent safety solution Interaction Care, an Intel® Market Ready Solution powered by Beabloo.

Using a combination of zenithal sensors and analytics software, IC Occupancy Control technology accurately measures and automatically controls the occupancy levels of a physical space in real time.

The system displays live occupancy numbers on a digital signage screen along with content that informs customers if they can enter or if they must wait because the space is at maximum capacity.

SOLUTION: BEABLOO'S IC OCCUPANCY CONTROL

Solution specifications:

-7 zenithal sensors, 1 NucBLKNU-C7i7DNH2E player, 7 Poe TP-LINK TL-POE150S, 1 screen, 3 4G routers, IC Occupancy Control license





IC Occupancy Control can even send out an automatic notification to the staff when occupancy levels are at or past the maximum allowed.

The system also provides powerful insights and relevant metrics for operational decision making, such as peak times and lowest performance hours.

Zenithal sensors were installed above all seven entrance areas in the client's retail store. Powered by Beabloo software, the system performed a bi-directional count of everyone entering and exiting the space to provide a real-time overview of the current occupancy of the space.



Image 1: Example of a digital signage screen installed in the client's control center, displaying real-time occupancy data to staff.

The client decided not to display occupancy data on any customer-facing screens. Instead, they installed a screen in their control center to display real-time occupancy data to staff. Information was updated constantly so staff could see the number of customers at any given moment and react when the store reached or exceeded capacity.

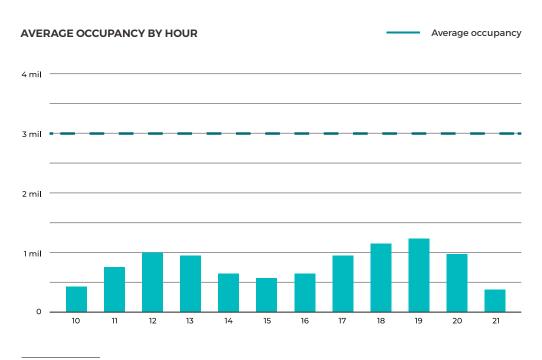
The client's Digital Project Leader highlighted the user interface design and clear messaging as some of IC Occupancy Control's strongest points. Collecting real-time metrics also provided the client with a reliable analysis of store traffic data, accurate occupancy level statistics, and better reporting capabilities.

The system generates data on the total number of people entering and exiting the space. Data can be broken down by day, time slot or entrance area for a more in-depth view on traffic and occupancy rates over time. This provides valuable insights into peak and off-peak hours, busiest days of the week, and how often people use certain entrances and exits.

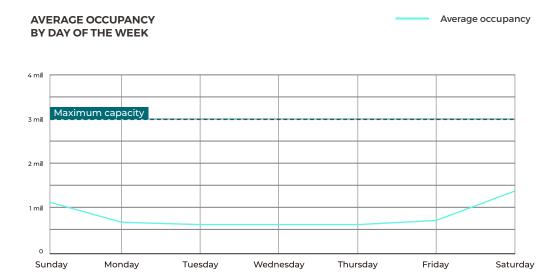
Knowing this information is very helpful for making operational decisions, like adjustments to staff allocation and cleaning schedules that boost efficiency. The system also provides insights to optimize store traffic and keep staff and customers safe by enforcing social distancing through calculated data.







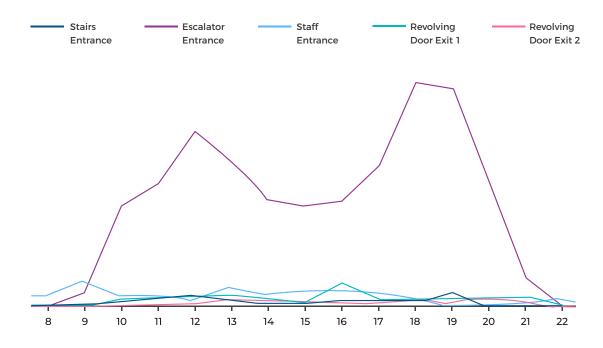
A graph of the store's average occupancy by hour. The average occupancy is highest at 7:00 PM.



A graph of the store's average occupancy by day of the week. Average occupancy is highest on Saturdays, when it is more than double the average occupancy on Wednesdays and Thursdays.





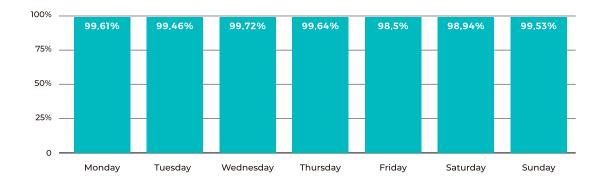


A graph of entrances by hour and entrance area. The number of entrances through the escalator entrance significantly exceeds entrances through other areas and is highest at 6:00 PM.

Along with providing relevant data and statistics for store operations, IC Occupancy Control provides incredibly accurate people counting data. The accuracy estimation for this retail space came in at over 99%.

Such a high level of accuracy means the client is getting reliable insights into store traffic and occupancy data. Additionally, the store can optimize traffic by maximizing the number of customers allowed in.

AVERAGE ACCURACY BY DAY OF THE WEEK



A graph of the average accuracy by day of the week. The average accuracy in the analyzed period was 99.3%.







VALUE DELIVERED: ACCURATE PEOPLE COUNTING AND VALUABLE INSIGHTS

Implementation of IC Occupancy Control, a component of Beabloo's inte-Iligent safety solution Interaction Care (an Intel® Market Ready Solution), provided a large multinational furniture retailer with accurate traffic data, reliable data analysis, and various metrics for one of its stores, enabling data-driven decision making.

This innovative technology solution allowed the client to get a more in-depth view on customer traffic and store occupancy data so they could take proactive steps to manage the occupancy and promote social distancing. The system also provided powerful insights, such as peak times and low performance hours, to optimize the client's business operations and boost business efficiency.

When asked about the importance of IC Occupancy Control technology, the client's Digital Project Leader said it was essential, highlighting that Beabloo's IC Occupancy Control technology exceeded expectations.

RESPECTING CUSTOMER PRIVACY

Beabloo guarantees strict compliance with current legislation, such as the European General Data Protection Regulation (GDPR), for all their solutions.

Beabloo also has ISO/IEC 27001:2013 certification, which means the data security management system associated with their Active Customer Intelligence Suite (ACIS) complies with current standards.

All devices integrated with ACIS use anonymized data, so user privacy is respected at all times.

BEABLOO INTERACTION CARE

Interaction Care (IC) measures human interactions in all kinds of spaces. It uses a unique combination of technologies to help businesses proactively protect their customers and employees from high-risk situations that could jeopardize their health and safety.

This solution can be implemented in a variety of sectors, such as pharmacies, supermarkets, banks, health care facilities, retail stores, public transportation, and the public sector.

Interaction Care provides clear business benefits even after the pandemic. When the COVID-19 crisis is over and there's no need to monitor or track interactions, companies can repurpose all Interaction Care components to enhance business performance in physical spaces.







ABOUT BEABLOO

Beabloo is a pioneering tech company that develops solutions to make physical spaces smarter. Beabloo's Active Customer Intelligence Suite (ACIS) is a Microsoft Azure-based suite of integrated solutions designed to digitally transform marketing campaigns across industries, including retail, banking, public venues, hospitality, and travel.

An Al-driven platform, ACIS combines digital signage, analytics, and Al automation to revolutionize communication, analyze people's behavior, and automate personalized experiences. Beabloo technology helps physical spaces learn from people and adapt to them in real time to provide better service.

Consolidated experience and international reach



Years digitizing business



Employees helping clients undertake business transformations



Presence in countries



Clients, from retail, large venues, banking, hospitality and travel industries, among other sectors



Certified partners are part of the global Beabloo ecosystem