IQ-Retail
Total Solution

iOmniscient
Hi-iQ Analytics

The solution for all your retail needs

(Parking, Business Analytics, Logistics & Security)

Designed for Supermarket & Shopping Centres

Multi-Applications Video Analytics in a Crowd (Real-Time)

from a Single Camera

Privacy Protected - GDPR Complied

System Implementation at Zero Incremental Cost

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Business Analytics Solution

Customer Data Analytics

IQ-Retail Total Solution accurately measures the duration your customers spend in areas, their path in the store, recency & frequency of their visits, and measure the percentage of customers leaving without spending sufficient time in it, providing you with consistent and highly accurate customer insights to make those informed business decisions.

Dwell Time

Understanding the duration of time that customers spend in a specified area is crucial to improving customer engagement with the products enabling you to design the retail experience around that information. Understanding the percentage of customers who enter but leave quickly is important to boost the customer conversion rate.

IQ-Retail Total Solution offers insightful metrics including the average time spent per customer in the store, how long they spend in each specified zone and their engagement and bounce rates.

Customer Flow

Knowing how customers move throughout a store (or cross-shopping in a large retail mall) will provide you insightful information on movement patterns between specified zones (or between stores). You can strategically optimise the layout of your real estate to boost sales and conversion rate. Cross-Shopping analytics can also help you better identify who your competitors are as customers may visit different stores to compare similar products .

IQ-Retail Total Solution offers a heatmap of customer concentration across a timeline and the normal path taken through a store, the average number of stores visited by a customer and the correlation matrix heatmap between similar store sections (and/or stores).

VIP Customer

Identifying VIP customer can be beneficial to a business when it comes to improving customer experience by which may translate to higher sales. Store staffs can leverage on the alerts of VIP customer visits to provide them with better customer service or special offer which is a key component of customer retention. It not only builds brand loyalty and customer advocacy, but also encourages other customer to strive to reach VIP status to reap these benefits.

IQ-Retail Total Solution offer metrics including number/percentage of VIP and non-VIP customers, average duration between visits by VIP customers, and VIP visit alert via app or SMS.

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In-store Data Analytics

To manage your business, IQ-Retail Total Solution offers you comprehensive and accurate insights on what is taking place in your store with real-time updates and alerts to keep you informed continuously so that you can react to specific issues and opportunities as they occur. Insights include store traffic and staff & queue management to help keep your customers happy and your business optimised.

Store Traffic

Higher traffic tends to translate into higher sales. IQ-Retail will differentiate customers from staff to accurately measure your real customer footfall enabling you to make informed business decisions for planning your operations, logistics and inventory.

IQ-Retail Total Solution will provide you with information on the number of customer visits (per hour of day/ per day/ per week/ per month/on a seasonal basis) as well as the option to integrate external data like weather to determine key significant factors to your business. At any time, it can provide the actual number of customers in the store.

Staff Management

Understanding when your store's busiest hour is and which are the busiest days of each week, the busiest weeks of each month, and the busiest months of each season, you can better plan your staff deployment. IQ-Retail Total Solution deploys a hybrid capability system that uses heuristics and deep learning to identify specified items (e.g. abandoned baggage, liquid spills, etc.) and suspicious behaviours (e.g. loitering, theft, fights, etc.) so that you can take appropriate actions to prevent or address the issues as such events occur.

IQ-Retail Total Solution will help you identify your average peak hours, the average busiest day of the week/ week of the month/ month of the season/ season of the year depending on your needs. Staff management data including staff -to-customer ratio.

Queue Management

Customers' in-store experience is important in establishing a long-term relationship with them especially when it comes to their checkout experience. Long queue during checkout is a key factor affecting satisfaction. With real time information on the length of queues and waiting times you can take immediate action to enhance the customer experience.

IQ-Retail can not only provide you with the live queue length, calculated approximate wait time , its average length and wait time for checkout, but also alert the Store Manager in real-time via app or SMS when queue lengths and waiting time exceeds desirable lengths.

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Marketing Data Analytics

Marketing budgets are a significant cost for most retail businesses, and it can be a challenge for businesses to measure the effectiveness of campaigns or store window displays. IQ-Retail Total Solution (TS) can help you capture these outcomes and provide you insights into which campaigns or store window displays are contributing to customer conversion. Behaviour analytics can capture the reaction of passers-by to understand the effectiveness of marketing campaigns.

Outside Foot Traffic

Measuring the outside foot traffic of a store can provide information on the effectiveness of the store window display or visual mechanising changes in attracting passers-by into your store. This enables the store manager in understand product trends and make more informed visual merchandising choices.

IQ-Retail Total Solution offers metrics including the real-time number of passers-by, window conversion rate, and dwell conversion.

Marketing Effectiveness

To ensure profitability a business needs to understand its customer acquisition cost and campaign ROI from any program such as the use of a kiosk. IQ-Retail can track the passage of the customers' journey as they go from being passers-by → customer → engaged → checkout, thereby, allowing you to extract key metrics from this to enhance business success.

With its Nuisance Alarm Minimization system (NAMS), IQ-Retail makes big data small reducing your infrastructure costs. By providing you with easily comprehensible information, you can better understand the conversion funnel at each stage. Moreover, display advertisement engagement rate.

Target Customer

KYC, Know Your Customer is crucial as a catalyst for sustainable business growth. Knowing who your customer really is allows you to identify your primary customer, find better solution to serve their needs, predicting trends, and target marketing. With facial recognition, IQ-Retail Total Solution can accurately identify the gender and age of your customers. Such data combine with point-of-sale data, allows you to determine the products bought by your customers and thereby studying the product trend based on demographic factors.

IQ-Retail Total Solution provide you with gender and age demographics statistics of each stages in the customer conversion funnel.

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Store Performance

For businesses to grow and stay competitive, accurate store performance measurement is key in keeping track of business goals. IQ-Retail Total Solution (TS) can combine all the above data with sales data (from your Point-of-Sale system) to give you insights into your store performance using your own KPIs (e.g. no. transactions/100 visitors) and easy comparison across multiple stores.

🏬 Smart Logistic Solution

Automated Entry System

IQ-Retail Total Solution uses tailgating, Face Recognition, License Plate Recognition systems to ensure access to the right people and vehicles while preventing unauthorised access so that to automate the entry access process.

Perimeter Protection & Intrusion Detection

IQ-Retail Total Solution is able set up virtual perimeter fence identify intrusion for restricted zones (e.g. warehouse, storage rooms, etc.) at all time or after hours. With Facial Recognition, the system can also differentiate between authorized and unauthorized individuals, allowing the system to accurately notify security personnel only if there is a perimeter breach by unauthorized individual.

🛡 Smart Security Solution

Crime Deterring

With behavioural analytics, IQ-Retail Total Solution can detect a variety of suspicious activities including theft, loitering, kidnapping, vandalism, graffiti, fights, violent outburst, abandoned bag and more. Serving as a watchdog, the system can alert you and relevant personnel in real-time if such events were to occur via notification/alarm.

Crime Investigation Assistance

Crime investigation is more efficient than ever with "Jump to Event" capability. The capability allows you to go back (at the click of a single button) to the start of the event. Thereby, making investigation and evidence collection quicker and easier.

Accident Detection & Prevention

IQ-Retail Total Solution can detect liquid spills as well as people slipping and falling or even attempting to commit suicide, and alert appropriate personnel via notification/alarm. Thereby, preventing an accident from occurring or potentially escalating. Moreover, for parking management, the system also offers accident detections despite obstruction

where the involved vehicles' license plate and the individual/s can be identified (given that the camera was able to capture the scene of the accident).

Missing & Lost Child Assistance

Reuniting parents with lost child has been made more efficient with advanced facial recognition and real-time movement tracking capability. In a case of a missing and lost child, authorised personnel can use their mobile phone loaded with IQ mobile to take a picture of the parent or guardian and enrol their face in the facial recognition system to identify their missing child, followed by autonomously determining the current location of their missing child.

Automated Event Response

With iOmniscient's internationally patented Automatic Surveillance Action Platform (A.S.A.P), the system significantly improves the speed of response to events (e.g. crime, accident and lost child) by automatically locating the nearest relevant personnel available and sending the relevant information including a short clip of the event and its location of occurrence to him so that appropriate action can be taken within just a mere few minutes in the most efficient manner.

🚗 Smart Parking Solution

Ticketless Parking System

IQ-Retail Total Solution (TS) recognises the customers' car license plate upon entry and tracks the period of stay of that vehicle. Thereby, allowing customers to enter without the need to obtain a ticket and pay at exit, creating a seamless customer journey. The iOmniscient multi-lingual License Plate Recognition (LPR) supports LPR for over 120 countries.

Parking Space Monitoring & Guidance

IQ-Retail Total Solution can calibrate the number of occupied and unoccupied parking spaces. When coupled with digital parking signs, the system can indicate the number of available parking spaces at every direction and every floor, which could direct customers to the available parking spaces.

Car Locator

IQ-Retail Total Solution can assist car owners to locate their parked car in a large and multi-story car park environment by entering specific license plate information into a kiosk.

Illegal Parking Detection

IQ-Retail Total Solution offers illegal parking detection including detect parked vehicles in no-parking zones/special reserved zones, detect double-parked vehicles that would cause obstruction, and multi-space parking. In such an event, a notification/alarm can be automatically triggered, and/or automatically blacklist that particular vehicle.

Car Park Safety & Rules Enforcement

Ensuring the safety of your customer in car parks is also a crucial component to the overall customer experience, by enforcing the car park safety and rules, you reduce probability of an incident. IQ-Retail Total Solution can identify if a vehicle exceeds the speed limit or drive in the wrong direction, automatically blacklist that particular vehicle and/or automate the generation of tickets and the administration of fines processes with IQ Hawk.

Tailgate Prevention

Repairing damaged boom gates (due to collision) can be costly. IQ-Retail Total Solution can help you prevent tailgating at boom gates with its Smart Revenue Generation technology.

Blacklist Management

IQ-Retail Total Solution system automatically alerts you when a blacklisted vehicle enters the premises via notification/alarm.

Camera Infrastructure Solution

Smart Compression

IQ-Retail Total Solution is equipped with iOmniscient patented Smart Compression that intelligently determine what's important and what's not important in a video, and record only the important bits (e.g. every face, license number & significant event) in high resolution while the rest in low resolution. This system has the advantage of saving over 90% of the network bandwidth and storage needed so that you can save money without the need of sacrificing quality.

Video Utilities

Large organizations often have multiple stakeholders with different objectives and require different types information. Invariably each group would be required to implement its own infrastructure (on the assumption that their data is confidential and can only maintain this confidentiality through a separate, isolated system), multiplying the costs for the organisation as a whole. With the iOmniscient Video Utilities, IQ-Retail Total Solution can allow multiple users across different departments access to the same video but in different ways, providing information that is only relevant to each user. Thereby, maintaining confidentiality and reduce the costs by an order of magnitude.

Self-Diagnosis & Health Check

In any large network of cameras, on average 20% will not be operational at any one time. However, the user usually does not know which ones are not working until there is an event. The iOmniscient Health Check system can not only indicate if a camera is not operational for a number of reasons (e.g. tampered, sabotaged, lost focus, moved due to vibration), but also provide warning if the camera is working but image cannot be seen due to bad weather or if it requires cleaning.

Complete Privacy Protection

The privacy of your customers is of paramount importance and privacy protection is in-built into the system by design.

Though the system uses video without individual's face or details can be identified by any user of the system. The information generated is statistical in nature and can help you provide better service to your customers without in any way impinging on their privacy.

If the marketing system is also used for Safety or Security applications only authorized personnel are able reverse the redaction in case of an incident.

Uniqueness of the System

IQ Retail Total Solution is armed with an artificial intelligence-based nuisance alarm minimization system, (NAMS) to help eliminate false alarm while maintaining detection accuracy.

iOmniscient has 70+ interlocking, international patents, and a significant amout of trade secret Intellectual Property that make us unique in the way that there are certain things that no one else can do. The range of patented technologies cover areas including Behaviour Analytics (e.g. detection of abandoned objects, theft, graffiti, vandalism, and car accidents despite obscuration), Facial Recognition in a Crowd, Dwell Time Analytics, Automated Response systems (locate the nearest appropriate responder, instruct him where to go and what to do), Video Utilities (allow extraction of different types of information by multiple stake holders that is relevant to only themselves from a common infracstructure) and many more.