General Overview of CountWise People Counting Solutions

CountWise People Counting Solutions provide tools to monitor Customer Flow and Key Performance Indicators, to optimize operational efficiency and profitability, and enhance customer experience.

CountWise People Counting Solutions consist of I-Count for Traffic Management, RFID for Team Member Identification, Q-Count for Queue Monitoring, Z-Count for Zone Monitoring, AdminCount for system management, CountWise Application Software for analysis and alerts, and CountWise Reporting Software for web-based reports and real-time dashboards.

I-Count for Traffic Management

I-Count is a traffic management device. It monitors, in real-time, the number of people entering and exiting the store, and the how people flow between departments.

I-Count delivers multi-zone, bi-directional pedestrian traffic counts by combining shape recognition and motion detection technologies in a robust and affordable product.

CountWise guarantees a minimum 95% accuracy

Benefits of Traffic Management include:

- **Identify Foot Traffic Trends**: Measure how many people walked in and out of the facility, per period of time such as hour, day, week or year.

- **Optimize Scheduling**: By scheduling only against transactions, staffing may be locked at a level of transactions, missing the benefits of converting the additional visitors to buyers.

- **Enhance Customer Service**: Monitor and align Visitors to Staff Ratio to customer service policies, to improve sales and enhance the customer experience.

- **Measure Marketing Effectiveness**: increase the effectiveness of a marketing campaign based on incremental visitor traffic to the store.
I-Count Key Features:

- **Accuracy:** Deploys Shape Recognition with Video Motion Detection algorithms, which separately counts adults, children, carts, etc.
- **Consistency:** Automatically adapts to environmental changes, using “Fuzzy logic” algorithms to eliminate the effects of shadows, light, heat. Self-Calibration of the counting zones every 2 minutes to filter out passive objects.
- **Security:** Encrypts data files as they move from the unit to the server, and performs a handshake before data is transferred.
- **Data Ownership:** Resides on the in-house network, on non-dedicated servers, providing unlimited and unfettered access to the data; data belongs to the client.
- **Teaming:** people entering together can be configured to be identified as 1 opportunity.

**RFID Device for Team Member Identification**

CountWise RFID Device is a bi-directional Team Member Identification System. It monitors in real-time the number of associates entering and exiting the store.

The solution includes –

- **RFID Transponder:** Overhead RFID device, which is installed on the ceiling next to the entrance, transmit a narrow RFID beam, in the GHz range. The system works using Power-Over-Ethernet and a standard CAT5 Cable.

- **Badges/Keys:** CountWise will provide badges or keys that would be carried by Team Members as they enter and exit the store. The Badges/Keys can be dedicated to an individual associate or generic for staff on-duty.

  The Badge/Keys emit two frequencies, first in the GHz range for use by the RFID Transponder, and second a 125 MHz range that is the standard for RFID Access Control Systems. In the future, the solution could be integrated with off-the-shelf RFID Access Control System, using the same badges/keys.

- **Data Output:** The Transponder communicates in real-time with the I-Count traffic management device, therefore benefiting from all the features, redundancies and memory backup of the I-Count unit. Data is stored, encrypted and delivered as one packet.
Q-Count for Queue Management

Q-Count is a multi-lane queue management device. It monitors in real-time the number of people waiting in a queue and their waiting times.

Queue Management can be used in different levels –

- **Level 1 - Identify when and where are the Queues.**

  Identify time frames when the queues are formed and exceeded the store’s KPI and revise the store’s standard scheduling. Basic reporting provides a real-time audit tool for manpower planning.

- **Level 2 - Notify and React to the Queues with Real-Time Alerts.**

  Provide facility managers with alerts (i.e. mobile text messages) to react in real-time to a queue.

  A dashboard is for facility management to monitor queues in real-time and some daily historical information by customer service lane.

  Since companies measure their service level by the buying units, the system implements a sophisticated algorithm that monitors customer behavior and reports not on individuals but on **buying units**.
• **Level 3- Avoid Queues with Predictive Scheduling.**

Predictive Scheduling optimizes service based on the facilities' customer service strategy, with the most efficient use of available resources.

Avoid queues by combing the information from people traffic, queue management and POS systems for real-time predictive scheduling.

Customer Service Manager Dashboard gives clear indication on how many tills will be required to be opened or closed over the next 90 minutes, in 15 minutes increments.

### Q-Count Key Features:

- **Shape Recognition.** Detects people or shopping carts as counting units.
- **Staying Time.** Provides time stamp for each person staying in the counting zone
- **Counting Zones.** Each device has unlimited zones, only limited by field of view
- **Queue or Aisle.** Differentiate between people standing in queue from people passing through.
- **Directional Queue.** Rejects staff by the direction of motion.
- ** Buying Units.** Define when a group of people is identified as 1 buying unit. For example: People interacting with the same shopping cart.

### Z-Count for Zone Monitoring

Z-Count is a Zone Management Device. Z-Count monitors in real-time, the number of people visiting a zone, the number of people staying and staying time.

Benefits of Monitoring Customer In-Store Behavior:

- **Identify Trends:** Monitor customer’s average visit lengths, volumes, trending by month, day and hour.
- ** Optimize In-Store Resources Allocation:** Optimize ROI from product placement, in-store signage and displays effectiveness, and staff to customer ratios.
- ** Review Layout & In-Store Marketing:** Monitoring customers passing through an area without stopping, can impact product placement and facility configuration
D Count for Desk Monitoring

D-Count is a Desk Management Device. It monitors, in real-time, people standing in front of a desk to receive service (such as tellers, cashiers or immigration agents) and their service time.

Benefits of Monitoring Service:

- **Serviced:** Measure the number of people serviced and their service time.
- **Active:** Monitor the number of active desk stations, in real-time.
- **Optimize Resources Allocation:** Optimize staff scheduling to customer demand.
- **React in Real Time:** Open additional stations to accommodate demand.

Customer Flow Management: Measure the Complete Customer Flow

**Traffic Monitoring:** Measure the number of arrivals and the customer flow between departments such as technical and office supplies.

**Zone Monitoring:** Monitor customer behavior in specific locations such as the support center.

**Reports:** Comprehensive customer flow reports include hourly traffic and conversion rates % per department, and the number of people staying and their staying time by zone.

CountWise People Counting Solutions provide the tools to monitor all stages of the customer flow cycle, specifically:

- **Identify Key Performance Indicators (KPIs):** Measure Arrivals, Sales Conversions, Visitors to Staff Ratio, and Number of People Waiting and their Waiting Time, historically and in real-time.
- **Optimize Resources:** Adapt resources to KPI strategy and changing demand.
- **Enhance the Customer Experience:** Monitor the success of the KPI strategy.

*By monitoring Customer Flow and Key Performance Indicators, companies can optimize Operational Efficiency and Profitability while enhancing the Customer Experience*