QUADRON
LOCATION INTELLIGENCE™
analytics for retail

شركة إرسال السعودية
لخدمات الإتصال وتقنية المعلومات
Saudi Irsal Communication
and IT Services Company

# Executive Summary

Quadron Analytics is a cloud solution for retail directly linking customer activity at stores with sales analysts, providing business intelligence for decision making purposes.

Quadron Analytics helps decision makers devise strategies that drive more traffic, optimize customer loyalty, enable personalization and improve shopper experience.

# Challenges in Retail

## Lack of pre sales figures:

- Retailers are able to measure store performance through sales figures only
- Key performance metrics and trends are almost always not available before they show in sales

## Hard to get data:

- Effects of marketing and advertising campaigns are tedious to measure and slow to reflect in sales
- Retailers could only make guesses about shopper behavior

# Challenges in Retail

Typical questions a retailer asks himself:

## 1- Visitors Experience

- How many visitors have entered the store today?
- What are the peak visiting hours of the day?
- How many are repeat visitors?
- How much time do visitors spend at the store?
- Is the number of floor staff adequate to ensure best customer experience and engagement?

# Challenges in Retail

Typical questions a retailer asks himself:

## 2- Store & display

- What are the areas of the store that are visited the most? Which are visited the least? And why?
- Is the store layout designed for optimal visitor and inventory capacity?
- Is the store layout designed for a smooth traffic flow?
- How well are we able to capture customers from external foot traffic?
- How effective is the store’s window marketing?

# Challenges in Retail

Answering these questions through traditional methods such as occasional monitoring, surveys and random sampling are:

- Resource-intensive
- Lengthy
- Costly
- Inaccurate
- Incomplete
- Momentary

# Quadron Analytics

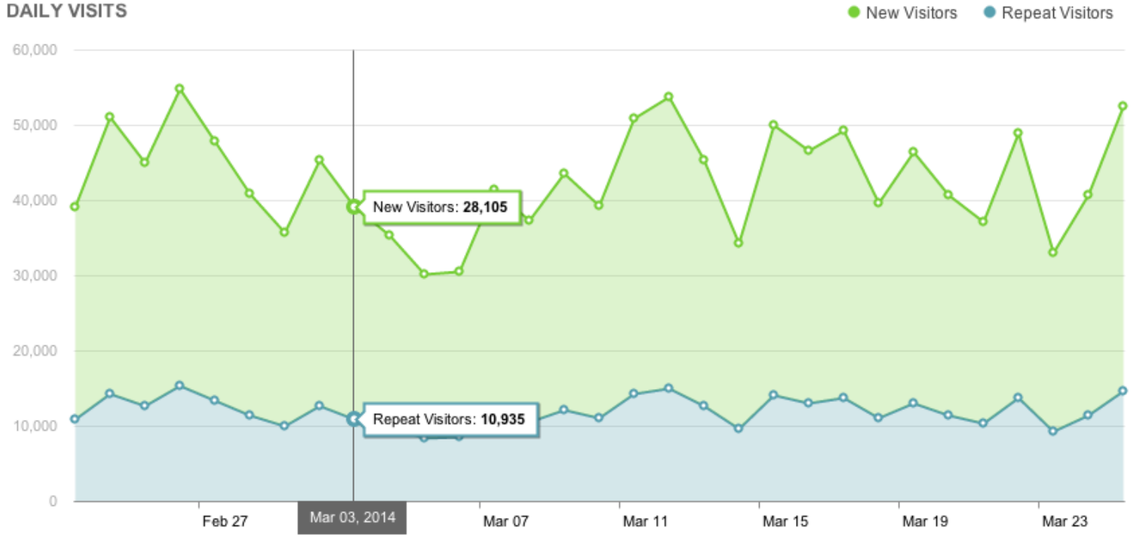
Quadron, through its extensive background in Wireless Positioning and Tracking as well as online analytics, has put together Quadron Analytics, a cutting-edge solution that bridges the digital divide between the online and brick-and-mortar worlds.

Quadron Analytics for Retail is the simplest way to measure traffic, recurrence and customer behavior inside retail spaces in order to optimize operations and enhance sales.

Dashboard
Sites
Reports
Alerts
Settings

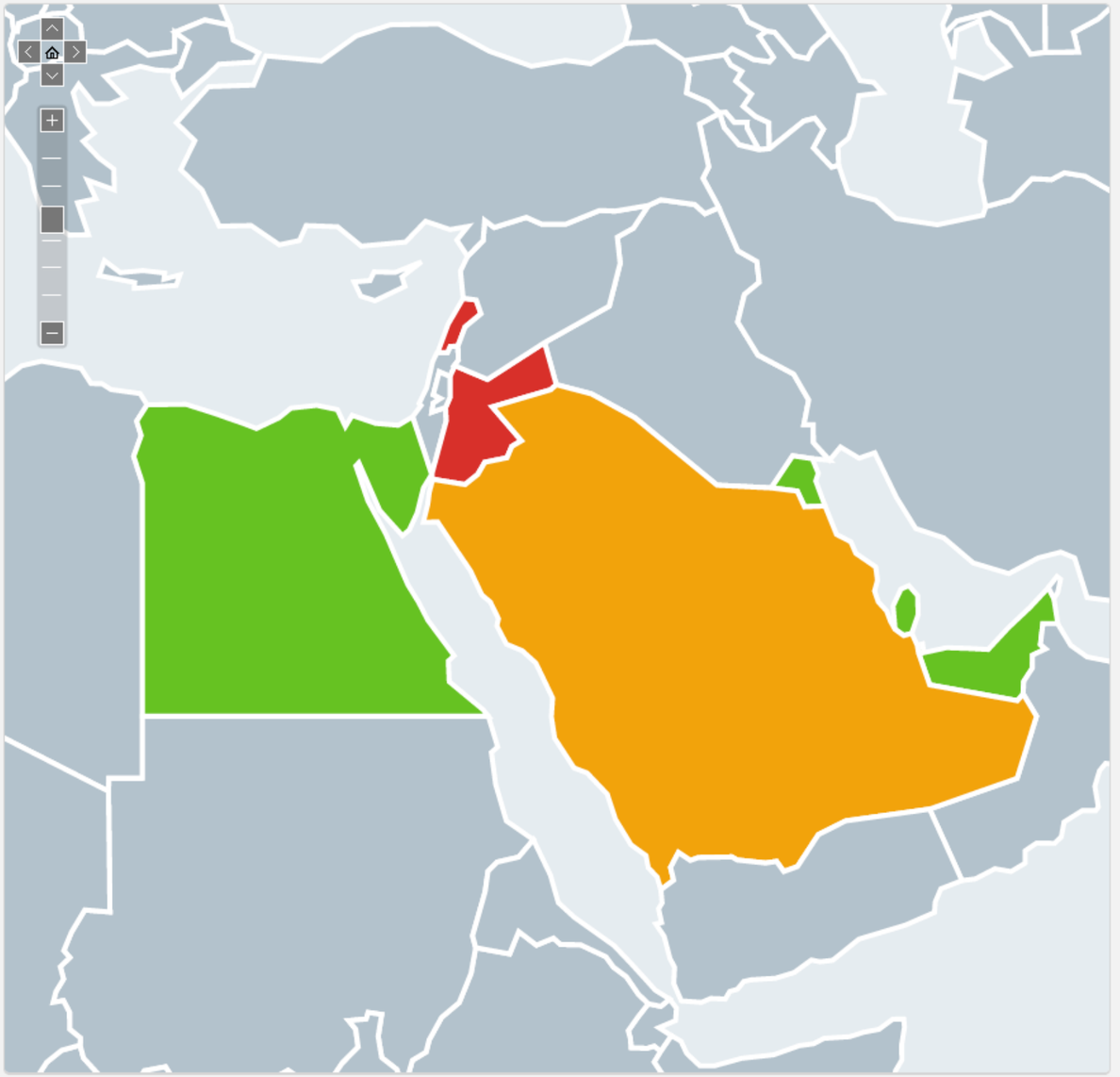
| TOTAL VISITS | NEW VISITORS | REPEAT VISITORS | DWELL TIME | CAPTURE RATE | BOUNCE RATE |
|---|---|---|---|---|---|
| 46,872 | 33,748 | 13,124 | 20.6 | 34% | 29% |
| | 72% | 28% | minutes | | |

## DAILY VISITS




## TOP SITES

| | Location | Visits |
|---|---|---|
| 1. Brand 1 | Dubai Mall (UAE) | 1,242 |
| 2. Brand 1 | Marina Mall (Kuwait) | 1,219 |
| 3. Brand 2 | Villagio Mall (Qatar) | 1,011 |
| 4. Brand 2 | Abu Dhabi Mall (UAE) | 983 |
| 5. Brand 3 | Mall of the Emirates (UAE) | 894 |
| 6. Brand 1 | ABC Ashrafieh (Lebanon) | 882 |
| 7. Brand 4 | Alexandria City Centre (Egypt) | 865 |
| 8. Brand 4 | Burjuman Center (UAE) | 861 |
| 9. Brand 3 | Amman City Mall (Jordan) | 817 |
| 10. Brand 4 | Verdun (Lebanon) | 793 |

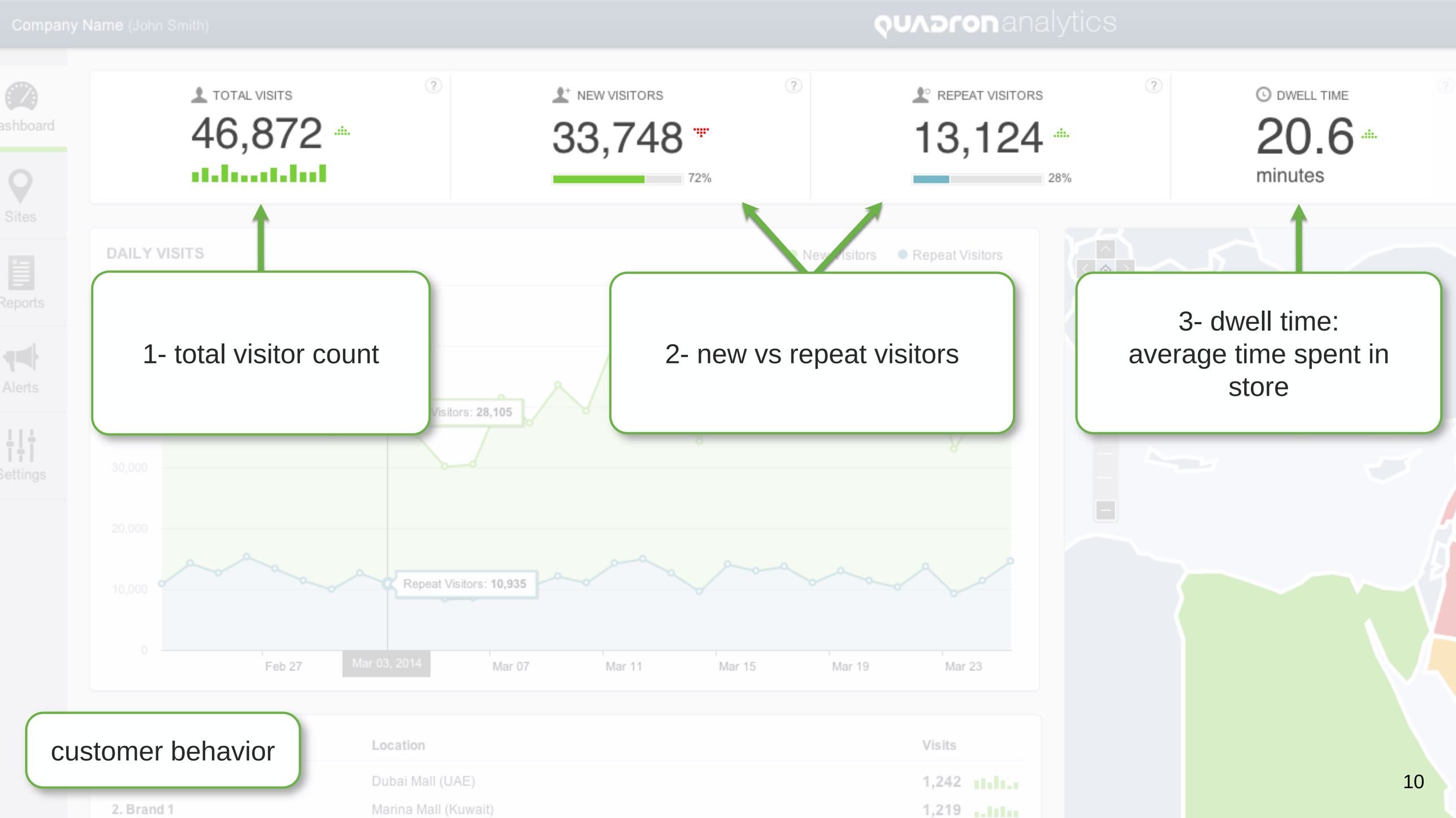


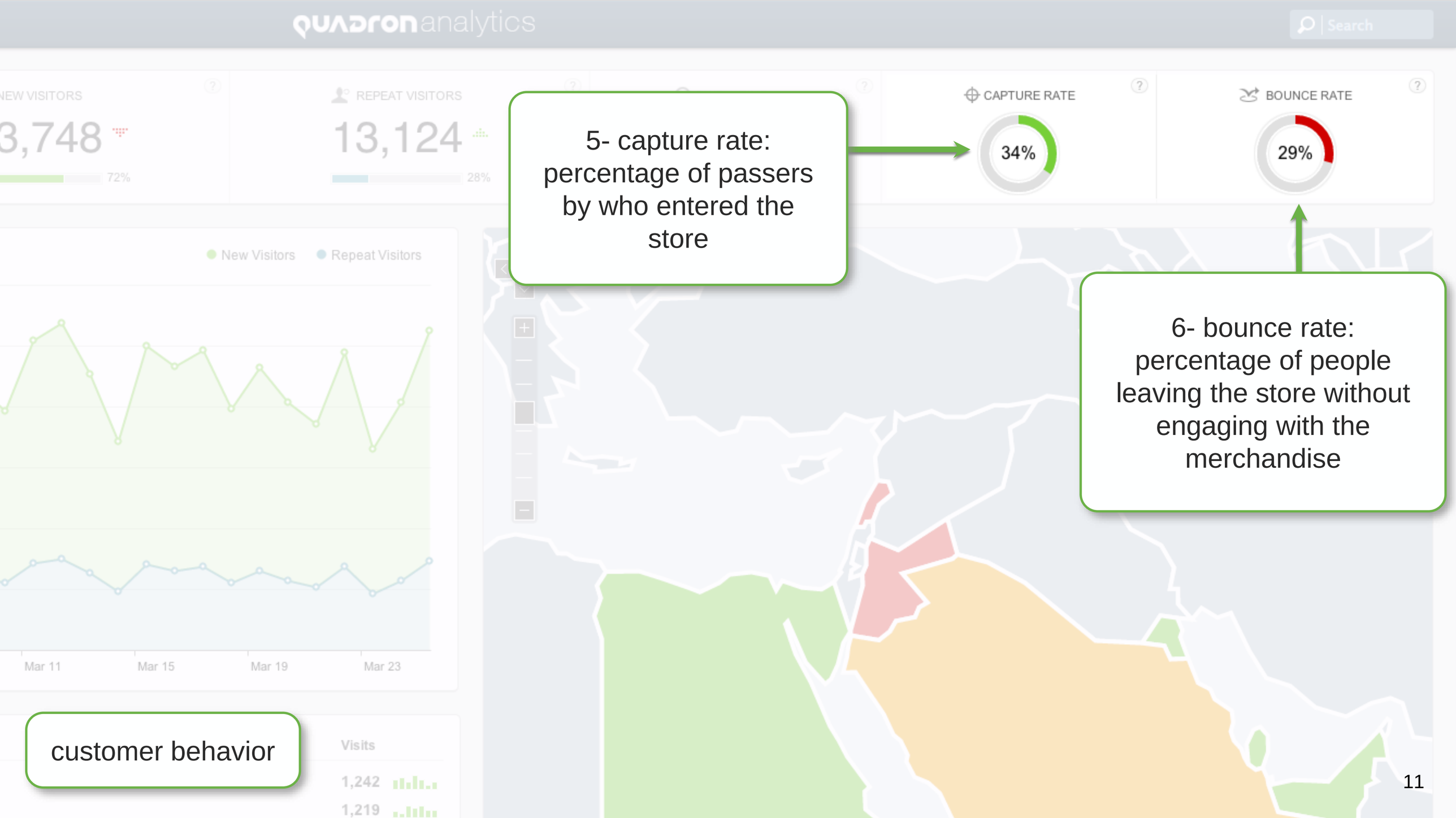
# Quadron Analytics

Tailored to retailers, Quadron Analytics allows you to access the following information:

## Customer Behavior

1. Total visitor count
2. New vs repeat visitors
3. Average visit frequency
4. Dwell time: average time spent in store
5. Capture rate: percentage of passers by who entered the store
6. Bounce rate: percentage of people leaving the store in under 2 minutes


Company Name (John Smith)
quadron analytics
TOTAL VISITS
46,872
NEW VISITORS
33,748
72%
REPEAT VISITORS
13,124
28%
DWELL TIME
20.6
minutes
DAILY VISITS
New Visitors
Repeat Visitors
Visitors: 28,105
Repeat Visitors: 10,935
30,000
20,000
10,000
0
Feb 27
Mar 03, 2014
Mar 07
Mar 11
Mar 15
Mar 19
Mar 23
Location
Visits
Dubai Mall (UAE)
1,242
Marina Mall (Kuwait)
1,219
2. Brand 1
1- total visitor count
2- new vs repeat visitors
3- dwell time:
average time spent in
store
customer behavior


quadron analytics
Search
NEW VISITORS
3,748
72%
REPEAT VISITORS
13,124
28%
CAPTURE RATE
34%
BOUNCE RATE
29%
New Visitors
Repeat Visitors
Mar 11
Mar 15
Mar 19
Mar 23
Visits
1,242
1,219
5- capture rate: percentage of passers by who entered the store
6- bounce rate: percentage of people leaving the store without engaging with the merchandise
customer behavior

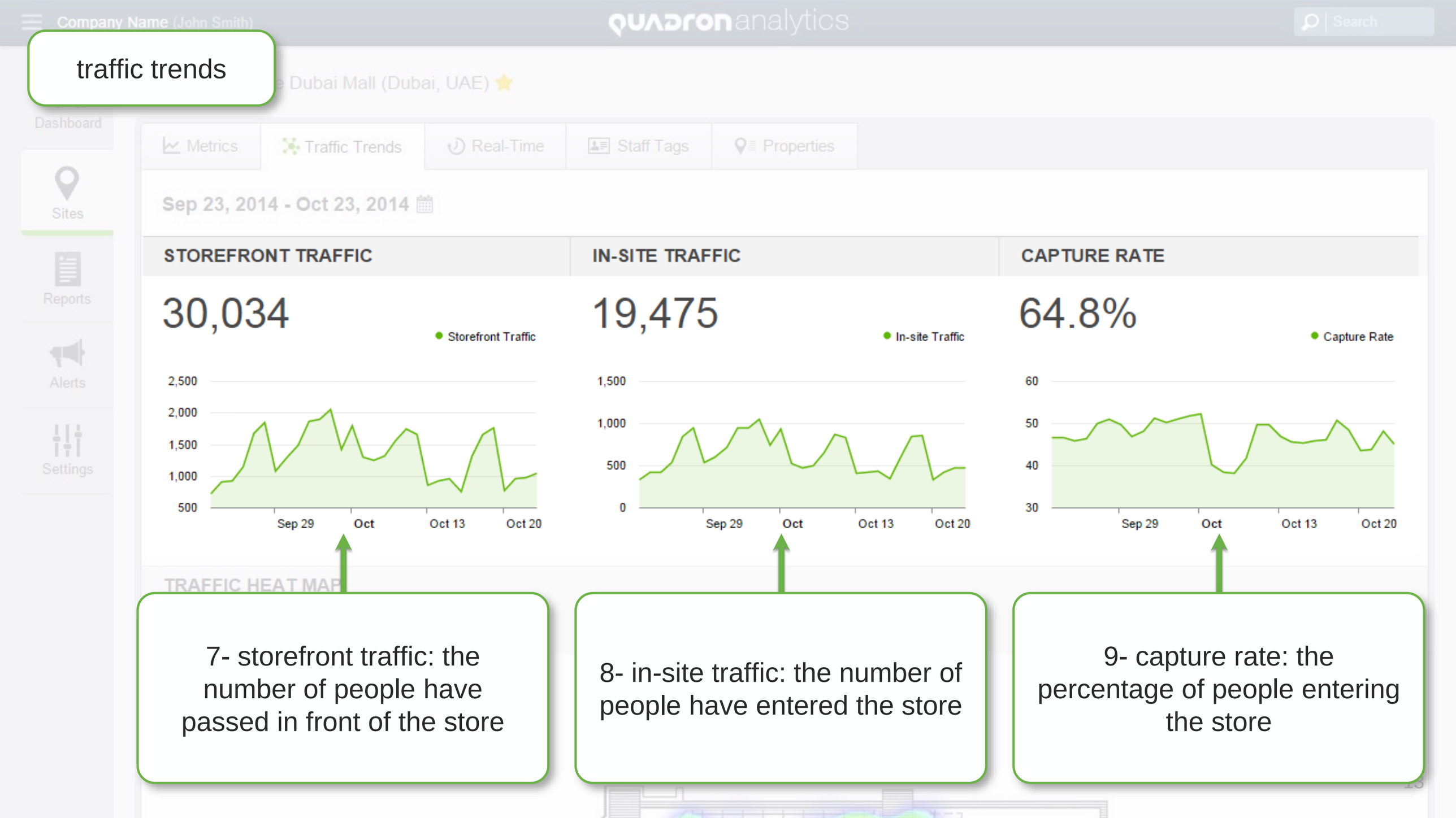
# Quadron Analytics

Tailored to retailers, Quadron Analytics allows you to access the following information:

## Traffic Trends

7. Storefront traffic: the number of people have passed in front of the store
8. In-site traffic: the number of people have entered the store
9. Capture rate: the percentage of people entering the store

traffic trends




7- storefront traffic: the number of people have passed in front of the store

8- in-site traffic: the number of people have entered the store

9- capture rate: the percentage of people entering the store

traffic trends

including a heat map that highlights the most visited parts of the store

# Quadron Analytics

Collected data can be viewed on a variety of levels

- From a bird’s eye view, on a macro level for historical and geographical data…
- …Down to detailed insights per chosen scope including historical and comparative charts (Region, Country, Brand, Mall, Store)

All Sites | Site Finder

**Mar 25, 2014 - Mar 25, 2014**

Quick filter

Displaying **1** - **10** of **10** sites

Sites per Page 20 Page 1 of 1

| Brand | Country | City | Location | Visits | New Visitors | Repeat Visitors | Dwell Time | Bounce Rate | Status |
|---|---|---|---|---|---|---|---|---|---|
| Brand 1 | Kuwait | Kuwait City | Marina Mall | 913 | 64.1% | 35.9% | 16:19 | 32.9% | PENDING |
| Brand 1 | Lebanon | Beirut | ABC Achrafieh | 666 | 57.5% | 42.5% | 16:02 | 42.8% | ONLINE |
| Brand 1 | UAE | Dubai | Dubai Mall | 1,071 | 69.8% | 30.2% | 19:56 | 40.1% | ONLINE |
| Brand 2 | Qatar | Doha | Villagio Mall | 1,108 | 61.6% | 38.4% | 16:54 | 33.7% | ONLINE |
| Brand 2 | UAE | Abu Dhabi | Abu Dhabi Mall | 909 | 71.8% | 28.2% | 15:30 | 39.8% | ONLINE |
| Brand 3 | Jordan | Amman | Amman City Mall | 1,164 | 67.6% | 32.4% | 17:07 | 35.8% | OFFLINE |
| Brand 3 | UAE | Dubai | Mall of the Emirates | 1,143 | 67.5% | 32.5% | 17:07 | 29.7% | ONLINE |
| Brand 4 | Egypt | Alexandria | Alexandria City Centre | 1,022 | 61.3% | 38.7% | 23:52 | 33.6% | ONLINE |
| Brand 4 | Lebanon | Beirut | Verdun | 1,120 | 78.0% | 22.0% | 19:41 | 39.8% | ONLINE |
| Brand 4 | UAE | Dubai | Burjuman Center | 962 | 67.2% | 32.8% | 18:51 | 37.0% | ONLINE |

Page 1 of 1

The stores' performance can be compared and benchmarked to create a more efficient operation and foster a knowledge sharing culture.

TOTAL VISITS
46,872

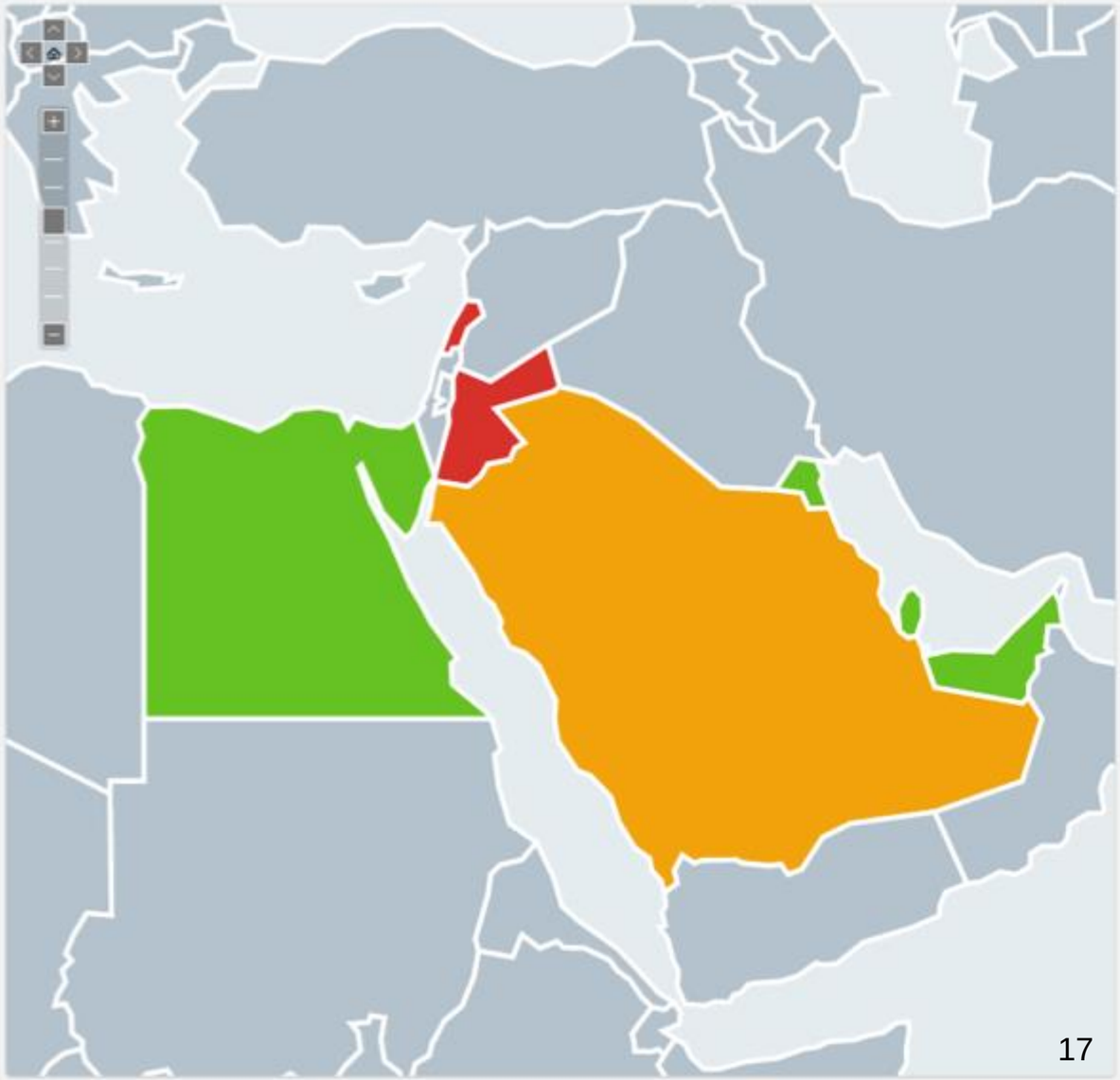
NEW VISITORS
33,748
72%

REPEAT VISITORS
13,124
28%

DWELL TIME
20.6
minutes

CAPTURE RATE
34%

BOUNCE RATE
29%



TOP SITES | Location | Visits

| | | |
|---|---|---|
| 1. B | | |
| 2. B | | |
| 3. B | | |
| 4. B | | |
| 5. B | | |
| 6. B | | |
| 7. B | | |
| 8. B | | |
| 9. Brand 3 | Amman City Mall (Jordan) | 917 |
| 10. Brand 4 | Verdun (Lebanon) | 793 |

historical and geographical data can be displayed on the macro level for a bird's eye view

All Sites | Site Finder

| Brand | Country | City | Location |
|---|---|---|---|
| Filter brands | Filter countries | Filter cities | Filter locations |
| Brand 1 | Egypt | Abu Dhabi | ABC Achrafieh |
| Brand 2 | Jordan | Alexandria | Abu Dhabi Mall |
| Brand 3 | Kuwait | Amman | Alexandria City Centre |
| Brand 4 | Lebanon | Beirut | Amman City Mall |
| | Qatar | Doha | Burjuman Center |
| | UAE | Dubai | Dubai Mall |
| | | Kuwait City | Mall of the Emirates |
| | | | Marina Mall |
| | | | Verdun |
| | | | Villagio Mall |

the scope of the insights can be refined by Region, Country, Brand, Mall, Store

Selected scope: **None**

Select | Reset

Dashboard

Sites

Reports

Alerts

Settings

Brand 1 The Dubai Mall (Dubai, UAE)

chosen scope

Brand 3 Mall of the Emirates (Dubai, UAE)

Metrics

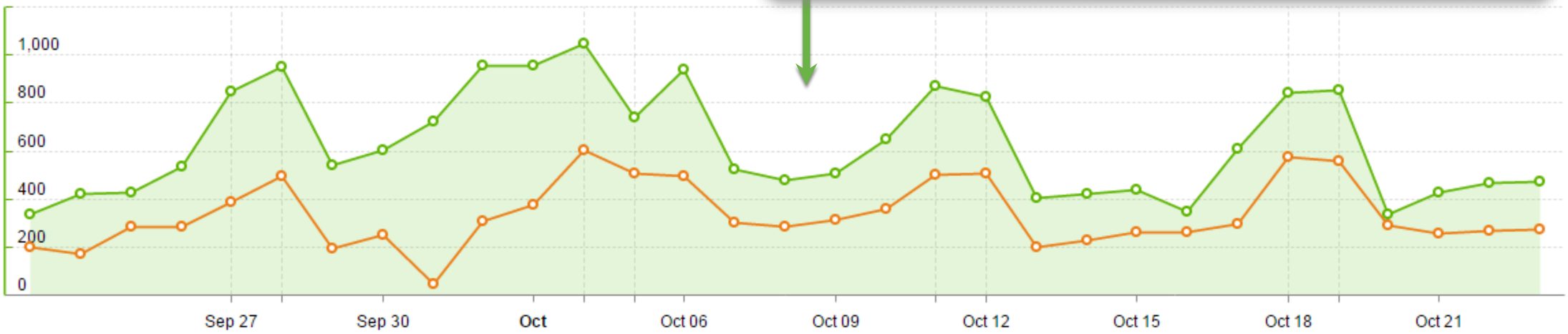
Sep 23, 2014 - Oct 23, 2014

flexible date range: to analyze the effect of a campaign or a change in the store

| TOTAL VISITS | UNIQUE VISITORS | NEW VISITORS | REPEAT VISITORS | REPEAT FREQUENCY | RETURNING VISITORS | DWELL TIME | BOUNCE RATE |
|---|---|---|---|---|---|---|---|
| 19,509 | 15,222 | 13,040 | 2,182 | 3 | 5,025 | 20:10 | 20.8% |
| 15,869 | 13,348 | 11,834 | 1,514 | 2.7 | 3,699 | 14:13 | 38.5% |

Visits vs. Select metric

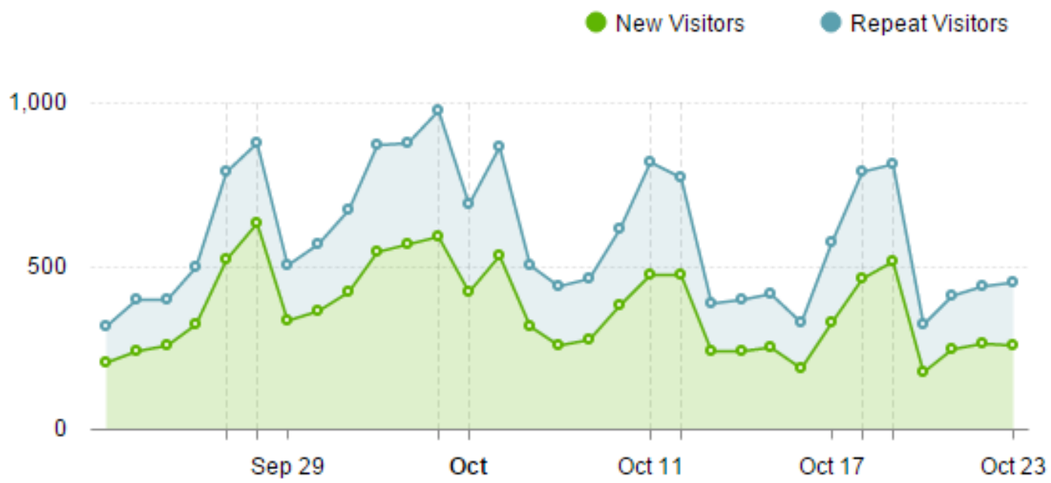
metric comparison: for deeper insights



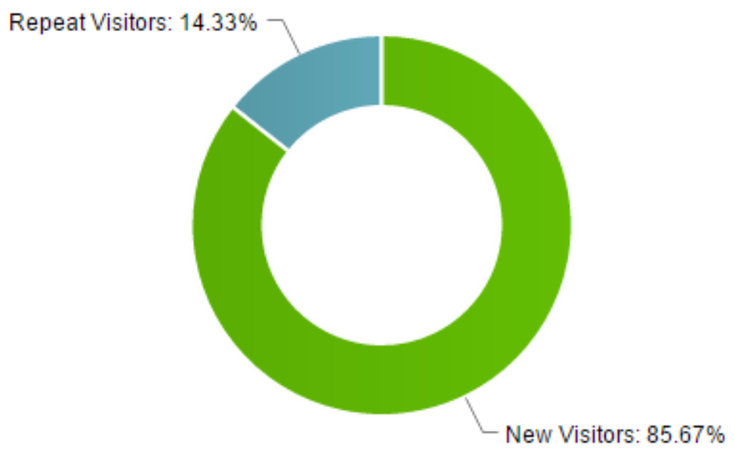

NEW vs. REPEAT VISITORS

Quadron Analytics allows you to compare the performance of different locations for deeper insights

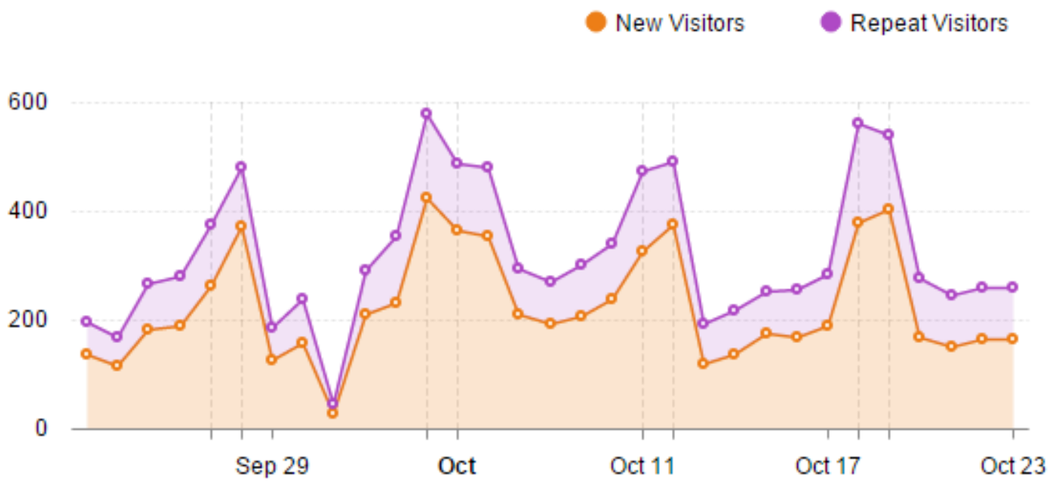
Brand 1 The Dubai Mall



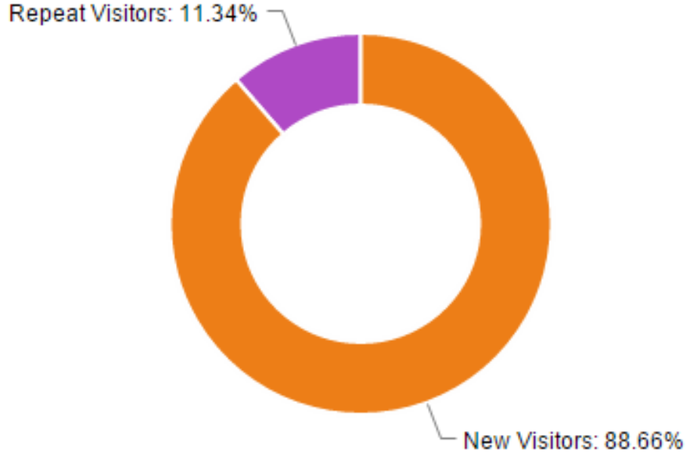

Brand 1 The Dubai Mall




Brand 3 Mall of the Emirates

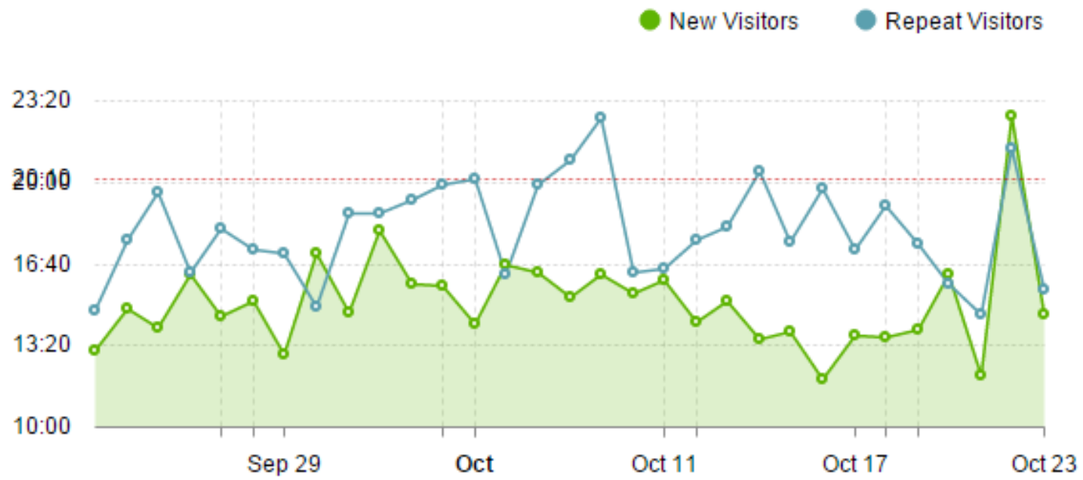



Brand 3 Mall of the Emirates

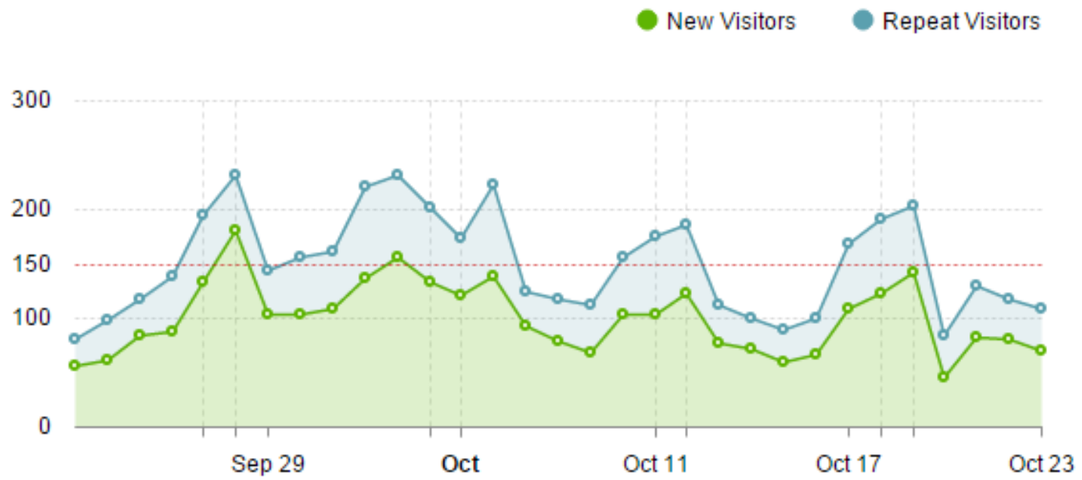


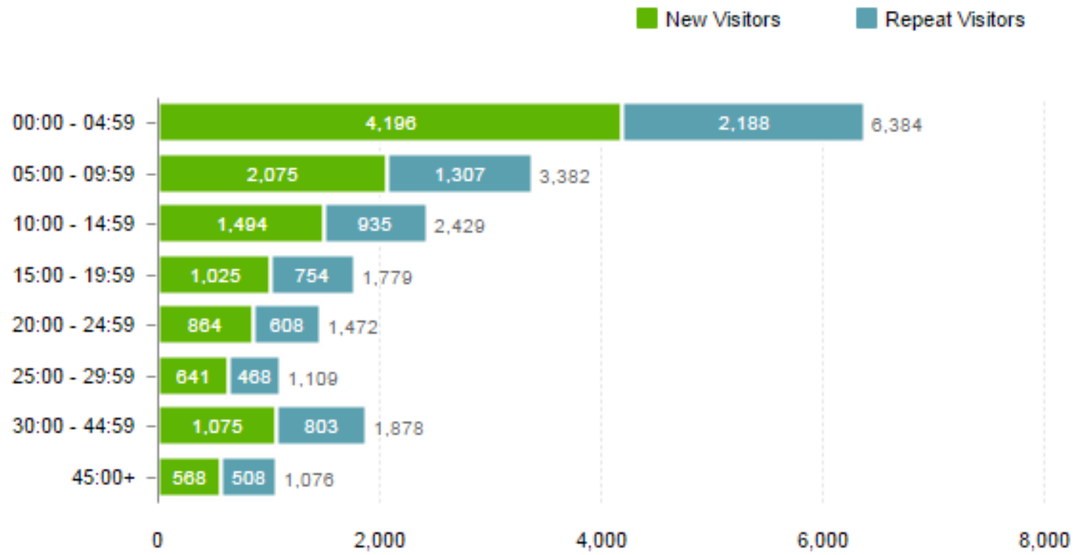
It also allows a deeper understanding of the behavior of new vs loyal customers

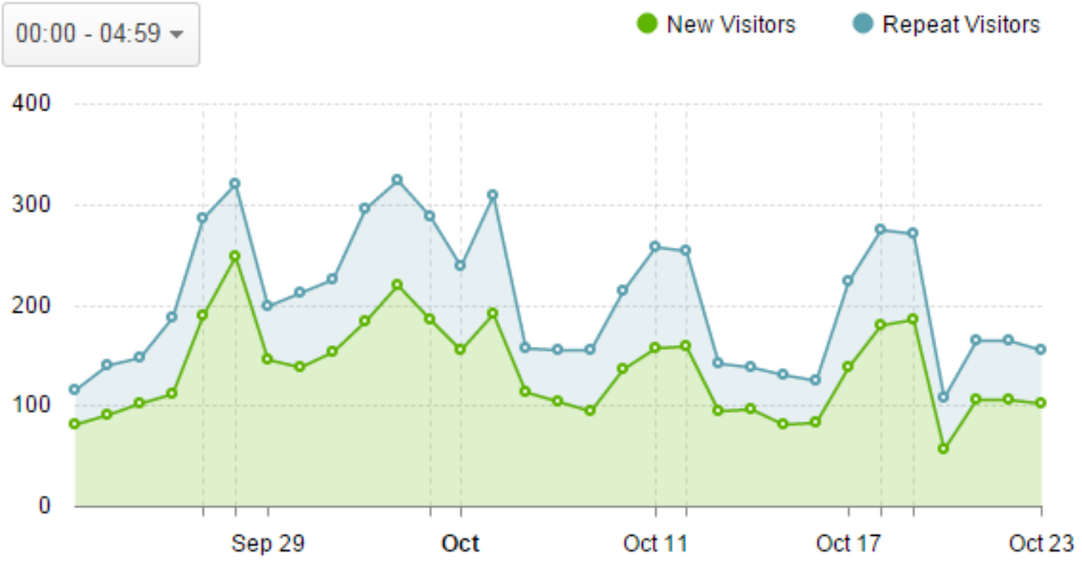
## DWELL TIME

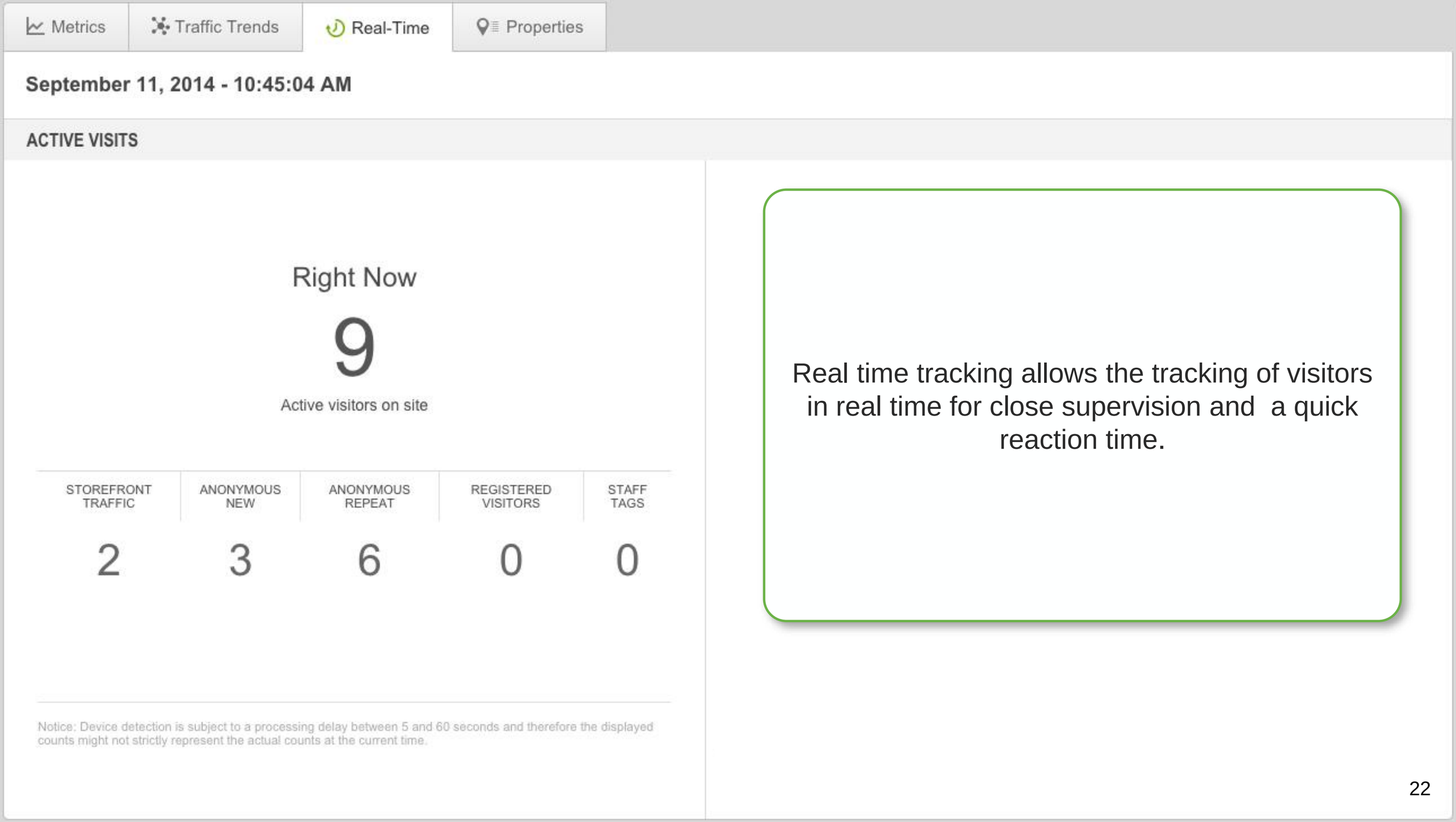



## BOUNCED VISITS






Real time tracking allows the tracking of visitors in real time for close supervision and  a quick reaction time.

Metrics | Traffic Trends | Real-Time | Staff Tags | Properties

**Oct 23, 2014 - Oct 23, 2014**

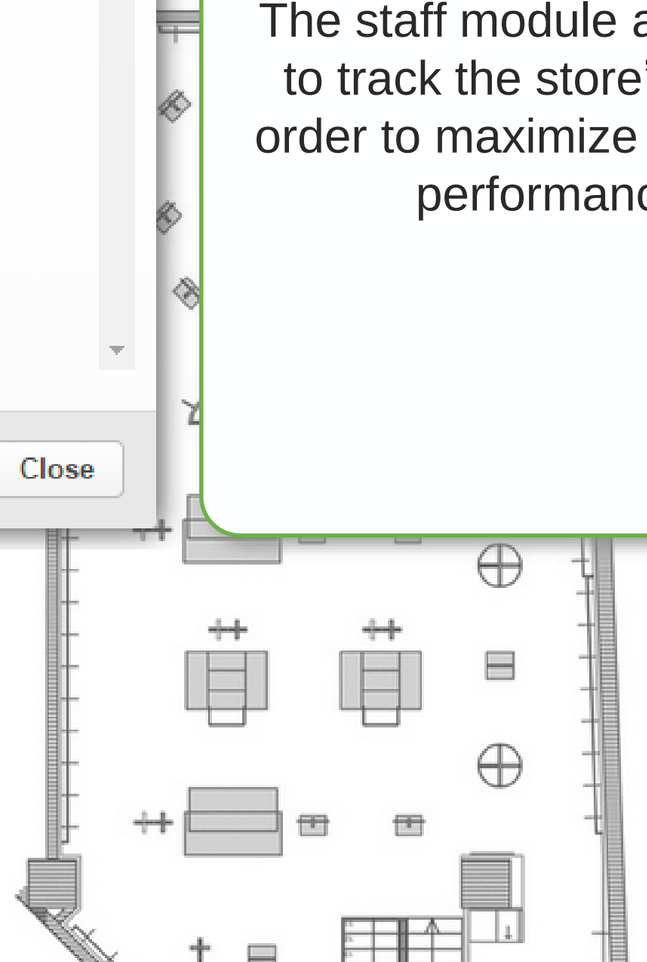
## STAFF TAGS

| | MAC | Name | | | |
|---|---|---|---|---|---|
| | 000CCC310B02 | Najib Na | | | |
| | 000CCC310B04 | Miyaz Ha | | | |
| | 000CCC310B08 | Ubaida M | | | |
| | 000CCC310B2A | Zelije Ce | | | |
| | 000CCC310B40 | Daria Ko | | | |
| | 000CCC310B4E | Rozsa M | | | |
| | 000CCC310BA7 | Alice Se | | | |
| | 000CCC310BC2 | Meiki Ta | | | |
| | 000CCC310B1D | Ata Abdul-Samad | 2214 | Sales | |
| | 000CCC310B2D | Biniam Isaias | 908 | Sales | |
| | 000CCC310B8D | Asfaha Abrha | 6654 | Sales | |
| | 000CCC310B5A | Nurdi Masaev | 9018 | Sales | |
| | 000CCC310B47 | Maliyah Rubio | 7650 | Sales | |

**STAFF TAG LOG: Biniam Isaias**

| Date | Start Time | End Time | Duration |
|---|---|---|---|
| 2014-10-23 | 09:58:35 am | 12:53:45 pm | 02:55:10 |
| 2014-10-23 | 01:32:00 pm | 02:46:25 pm | 01:14:25 |
| 2014-10-23 | 03:04:10 pm | 04:02:25 pm | 00:58:15 |

Close



The staff module allows you to track the store's staff in order to maximize workforce performance.

# Notifications and Reporting

Quadron Analytics allows you to create custom alerts, delivered by email or SMS, to track your organization's KPIs and keep the operation running smoothly.

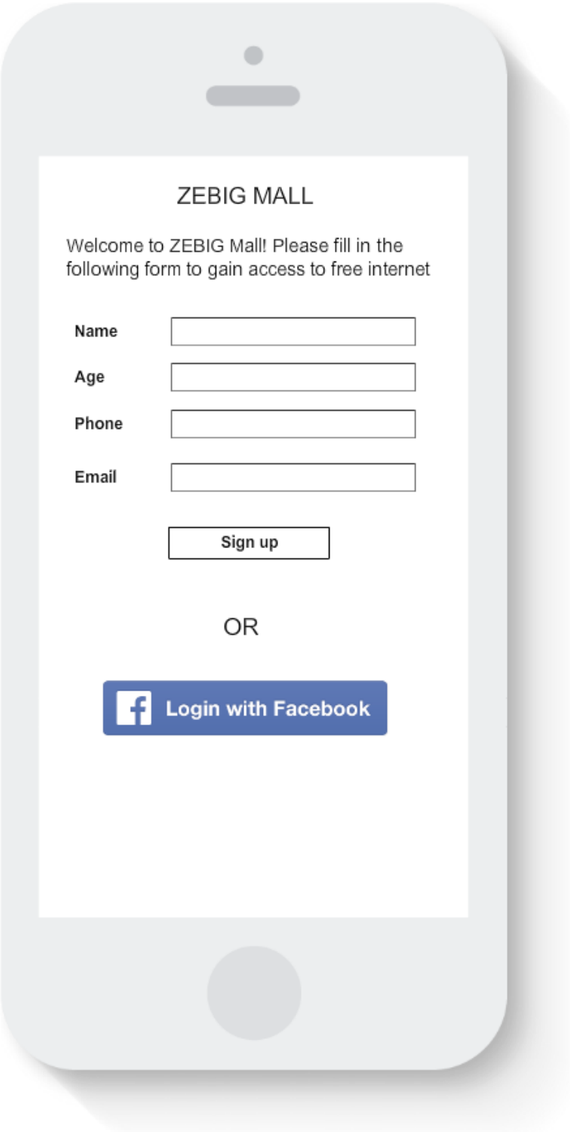
| Name | Metric | Condition | Value | Period | Start Date | Notification | Status |
|---|---|---|---|---|---|---|---|
| **25,000 visitors mark** | Visits | Exceeds | 25,000 | Month | Nov 28, 2013 | Email | ON |
| **Low visit duration** | Dwell Time | Drops below | 16:00 | Day | Dec 4, 2014 | Email | OFF |
| **Low bounce rate** | Bounce Rate | Drops below | Monthly average | Day | Jan 8, 2014 | Email, SMS | ON |

Quadron Analytics also allows you to create customized reports that are delivered periodically to the relevant members of the organization.

# Social Wifi and Customer Engagement

Quadron’s wifi network is the most cost effective way to provide your customers with an internet connection.

Customers can be asked to provide personal information in exchange for free internet. This information can be used to create customer profiles and enable you to individually target each customer based on their behavior when you detect them inside your premises.



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# Location-based loyalty

Quadron Analytics gives you the ability to reward your customers on their visits, their visiting frequency and the time spent on your premises. This will allow you to drive more traffic to your locations and encourage people to spend more time exploring your premises.

In order to achieve that Quadron Analytics can be integrated with any loyalty system and will act as a trigger for rewarding points and activating programs.

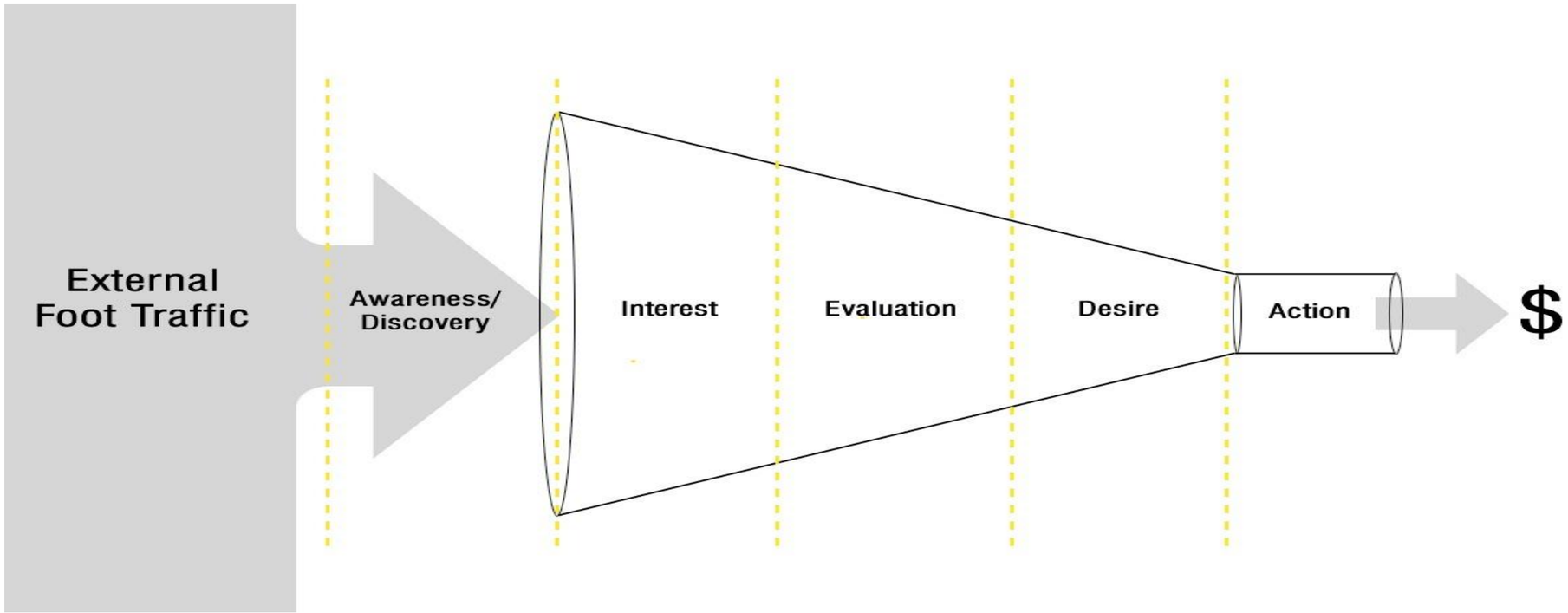
# The Quadron Solution

Armed with such exhaustive data, you can make informed decisions on:

- Window displays
- Product placements and displays
- Staffing requirements
- Floor layout
- In-store promotional activities
- Advertising and marketing campaigns

# The Quadron Solution

…and get a better understanding on shoppers' level of engagement and the stage of the purchasing process at which they are exiting the most



# The Quadron Solution

Quadron Analytics' metrics have a direct impact on key activities:

| | | |
|---|---|---|
| 1 | Customer Behavior | Impact |
| | Total visitor count | Marketing activities, visual merchandising, storefront window design |
| | New vs. repeat visitors analysis | Marketing activities, visual merchandising, loyalty management |
| | Visit frequency averages and distribution | Marketing activities, visual merchandising, loyalty management |
| | Dwell time: average time spent in store | Visual merchandising, floor layout, staffing |
| | Capture rate: percentage of passers by who entered the store | Storefront window design, retail location performance |
| | Bounce rate: percentage of people leaving the store without engaging with the merchandise | Visual merchandising, pricing |
| 2 | Traffic Trends | |
| | Storefront traffic v/s In-site traffic | Storefront window design, retail location performance |
| | Heat Maps determining in-store hot spots and dead zones | Visual merchandising, pricing, floor layout, staffing, in-store promotions |
| | Peak hours and seasons | Staffing |

# The Technology

- Today, over 80% of mobile phones are smart phones that have Wi-Fi enabled at all times
- These phones are continuously broadcasting publicly visible Wi-Fi signals
- Quadron radio sensors capture these signals and relay them to the Quadron Analytics Server, which in turn uses proprietary algorithms to calculate the user’s position, visit length, visit frequency and a lot more
- The process does not require any action from the user and does not interrupt or interfere with his shopping experience in any way

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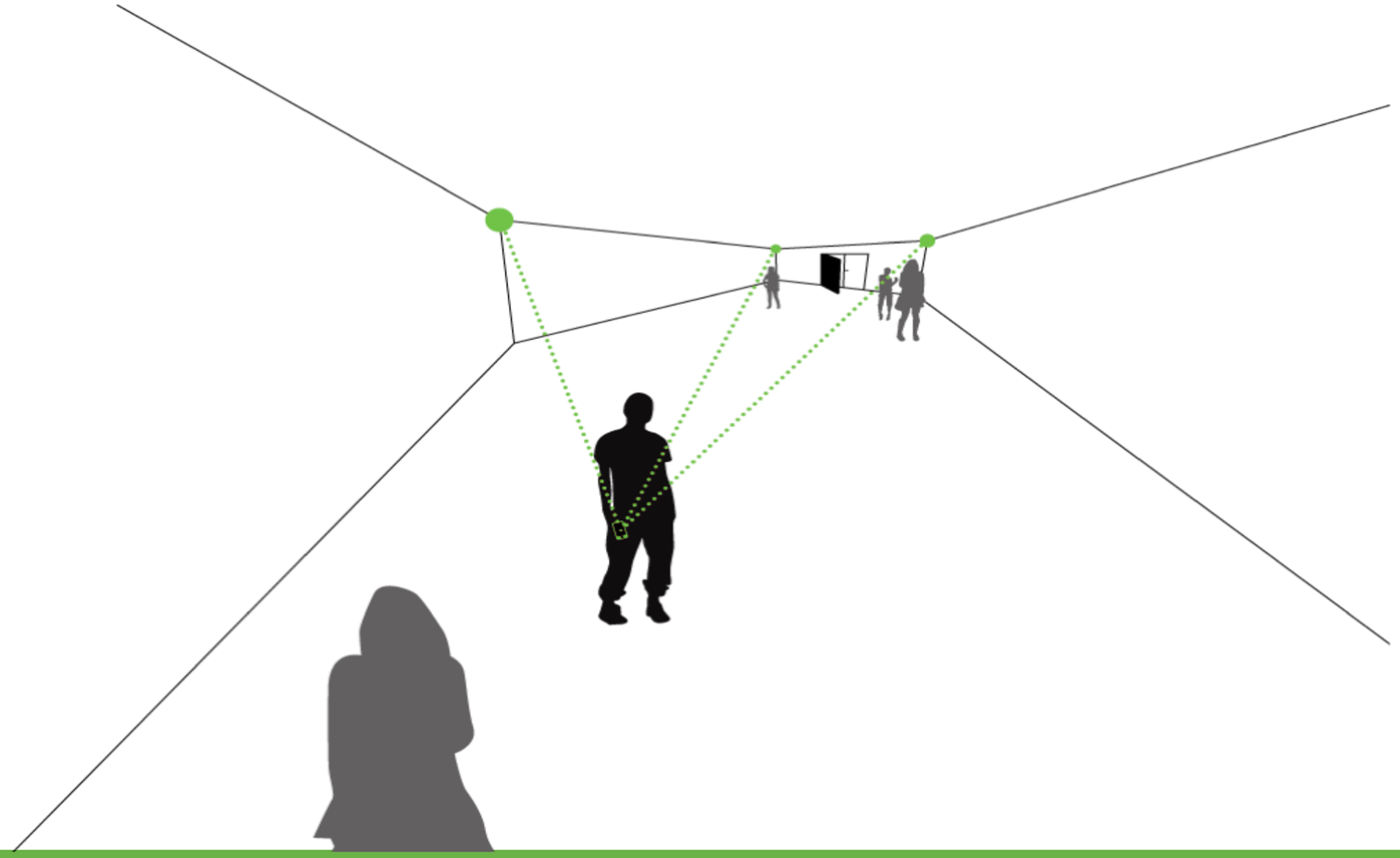
# The Technology



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# The Technology

- Quadron sensors are specially configured  Wi-Fi access points
- After studying the store’s floor plan, they are installed in a mesh configuration that allows the complete coverage of the floor space
- Each sensor requires only access to power, but only one sensor requires Internet access
- Sensors are housed in an elegant enclosure that conveniently hides the unit, antenna and cabling

# Visitor Privacy

- Visitors are always totally anonymous: Wi-Fi signals transmitting from their smart phones do not include any private information such as their name or mobile number or any other data on their device. They only include their device’s public MAC address (e.g. 40:B3:95:73:BE:82)
- All gathered data is hashed and stored in a secure cloud environment
- Quadron presents only aggregated data from the patterns of anonymous users

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# thank you

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