

# Camera Analytics Platform - Formula Editor

## *Quick Start Guide*

### **Prepared By:**

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## 1- Overview

User Defined Formulas generate the data points used in metrics and viewed in the Dashboard - 'Key Performance Indicators' (KPI), and in 'KPI Cards'. These formulas allow you to break down KPI summaries by any metric, and can also generate the data points requested in API calls.

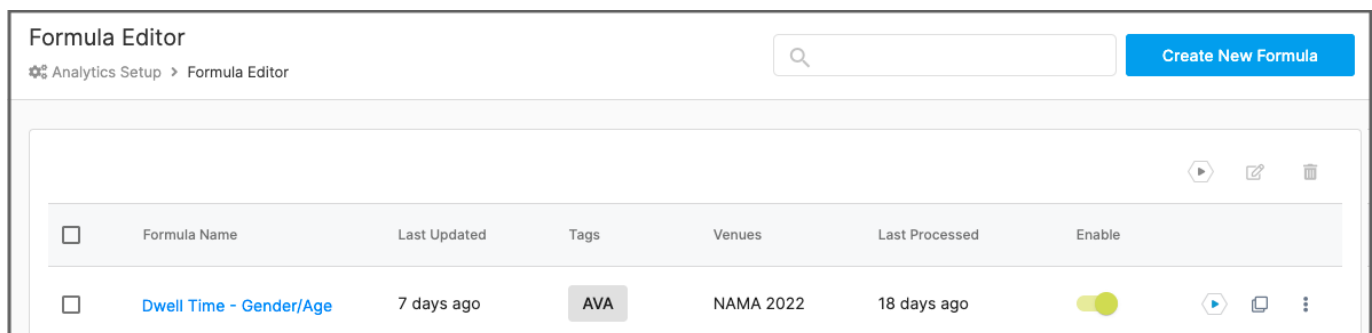
In general, formulas are used to define the math for how data points are combined into user defined records. This feature gives users the opportunity to define the conditions and events for a value they wish to monitor, compare, or visualize.

## 2- Configure Formulas

### 2.1- Analytics Setup

In the Analytics Platform, click the 'Analytics Setup' button in the main menu. Then click 'Formula Editor' in the menu.

On the User Defined Formula page, click the 'Create New Formula' button, as shown below.



In the pop-up window, select to enable the desired tools for viewing the Formula values: Dashboard KPI, KPI Cards. Enter a Formula Name. Add optional Description and Tags, and click the 'Create' button to save the formula.

### Create New Formula

Enabled in

Dashboard KPI  
  Funnel Reports  
  KPI Cards

Formula Name

Formula Tags

Description

Cancel   Create

Now that you've created the Formula, click the Name (link) or click the edit button ( ), next to the formula name you wish to edit. In the next four sections (2.2 - 2.5) we'll review the four steps to configure your new formula.

## 2.2- Data Point to Summarize

In the first section you will define a 'Formula Type', by selecting Event Count, Event Average or Event Sum. Then select the desired (Area of Interest) AOI, Datasource and Datapoint, as shown below

### *Data Point to Summarize*

**Dwell Time - Gender/Age**

1

### DATAPOINT TO SUMMARIZE

Formula Type * Event Average ▼	Select AOI * AVA ▼	Datasource * Demographics (C01F01) ▼	Datapoint * Dwell Time ▼
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## 2.3- Conditions

In the second section you will select one of the standard demographic Datapoints, such as age, proximity or gender, then select an operator, and then a value. For example: AGE > 50

### Conditions

2

CONDITIONS

Select AOI	Datasource	
AVA	Demographics (C01F01)	
Datapoint *	Operator	Value
Dwell Time ▼	>= ▼	10
		sec

### 2.3.1- Datapoints

- *Age* - Numeric value as identified by sensor
- *Proximity* - Distance from the sensor
- *Dwell Time* - Numeric value of time in milliseconds
- *Gender* - Male/Female as identified by sensor
- *Has Mask* - Person is wearing a mask (Covid)
- *Emotion* - Emotion as identified by sensor (e.g. Neutral, Happy, Surprised)
- *Person Type* - As defined in People Management (e.g. Employee, Guest)
- *Repeat Visitor* - Identified using facial pattern recognition by the sensor

## 2.4- Apply Math

In the third section you may create a math equation, by selecting an 'Operation' and 'Value'.

### Apply Math

## 2.5- Data Breakdown

And in the fourth section you can create a data breakdown, by selecting one of the Datasources, defined in step 1 - 'Datapoint to Summarize'. Then select a 'Datapoint to Breakdown', from the menu, as shown below.

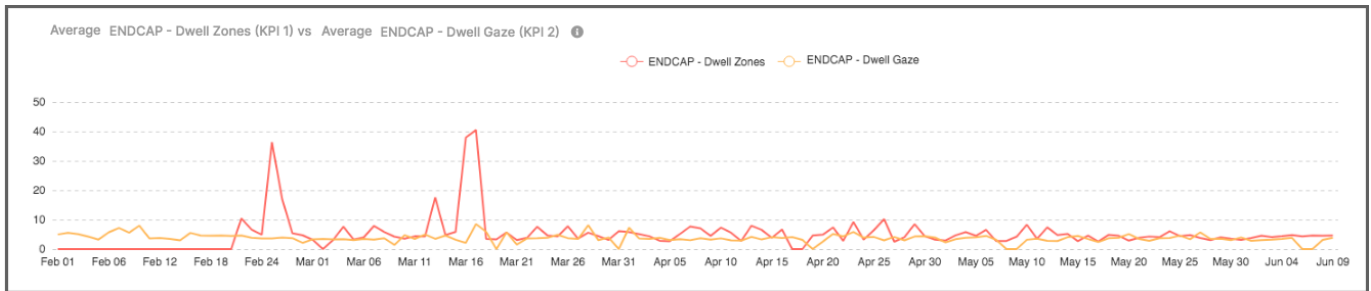
### Data Breakdown

# 3- Viewing Formula Output

## 3.1- Key Performance Indicators (KPI)

From the Dashboard, you can view bar charts and line graph comparisons of any two selected KPIs. In addition to four bar charts, comparing the KPI's Average by Day and by Hour, a line graph displays a comparison of any two KPIs.

### Line Graph comparison of KPI-1 vs KPI-2



### Bar Chart comparison by Day and Hour of KPI-1 vs KPI-2

**Key Performance Indicators**  
This section shows the metrics of the KPIs you wish to see Choose KPIs

Select Venue: ATLANTA | Select KPI 1: ENDCAP - Dwell Zones

Average ENDCAP - Dwell Zones by weekday

Day	Average
Sun	5
Mon	5
Tue	13
Wed	5
Thu	10
Fri	5
Sat	5

Average ENDCAP - Dwell Zones by hour

Hour	Average
12am	14
2am	7
4am	5
6am	5
8am	5
10am	5
12pm	5
2pm	7
4pm	8
6pm	10
8pm	9
10pm	9

Select Venue: CHARLOTTE | Select KPI 2: ENDCAP - Dwell Gaze

Average ENDCAP - Dwell Gaze by weekday

Day	Average
Sun	4
Mon	4
Tue	4
Wed	6
Thu	4
Fri	4
Sat	4

Average ENDCAP - Dwell Gaze by hour

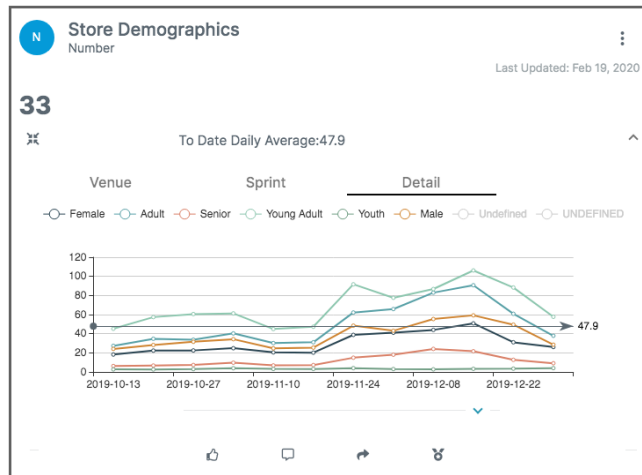
Hour	Average
12am	4
2am	9
4am	3
6am	5
8am	6
10am	6
12pm	4
2pm	4
4pm	3
6pm	3
8pm	4
10pm	4

### 3.2- KPI Cards

InReality’s user defined analytics allows you to view and configure ‘KPI Cards’. At the main menu, click ‘KPI Cards’. The ‘KPI Cards’ are easily configured to provide timely key metrics data to users on a recurring basis. They are designed to allow you to monitor KPIs on a daily basis. The cards may be viewed on your mobile and leverage AI to identify important correlations and relationships. The cards may also expose anomalies, which you can quickly respond to as they occur.



You can create a *Card Deck* and individual *KPI Cards*. Cards may be shared with any number of associates. To create a new *Card* or *Deck*, click on the ‘Create New Deck’, or ‘Create New Card’ button. Click the ‘Share View’ button to share the defined data with others.



### 3.3- API

InReality’s measurement subscription packages allow users to view the data via formulas setup in InReality’s Analytics Portal via Dashboard - KPIs, and KPI Cards. In addition the data is also available via InReality’s API (Application Programming Interface).

InReality offers an extensive data extraction API for our customers and partners to access your metrics data from InReality’s platform. Raw data, along with data from User Defined Formulas can easily be integrated into your Business Intelligence (BI) platform or Visualization tools.