Shopper Views (Using face detection for Unique Visitor metric)



1. Introduction to the Johnson Controls Global Privacy Office and Global Privacy Program

Johnson Controls has a Global Privacy Office and a Global Privacy Program, involved at the beginning and throughout the design and development of our processes, activities, products, services, and solutions, in accordance with internationally accepted principles of Privacy by Design.

The Johnson Controls Global Privacy Office is led by the Chief Privacy Officer, and supported by Global Privacy Counsel, Global Privacy Professionals, Global Privacy Champions, analysts, and support staff.

The Johnson Controls Privacy Program is designed with the most stringent global privacy and data protection laws in mind, including the General Data Protection Regulation (GDPR) of the European Union (EU), Brazil's Lei Geral de Proteção de Dados (LGPD), Singapore's Personal Data Protection Act (PDPA), and California's Consumer Privacy Act (CCPA).

For more information on the Johnson Controls Global Privacy Office and Global Privacy Program, please visit www.johnsoncontrols.com/privacy.



2. Overview of Shopper Views

Edge and cloud-enabled Artificial Intelligence (AI) techniques are used to create a media platform in retail environments and to bring brand messaging to life through targeted digital displays. Combining a Content Management System in digital screens with cameras and sensor technology with artificial intelligence (proximity-aware sensor technology and anonymized facial analytics), Shopper Views can:

- Communicate custom, triggered content based on who the camera "sees", either by gender or age
- Provide analytics of the digital screens in terms of audience by demographics but also in terms of shopper engagement with the content based on dwell time, proximity zones and content interaction

Shopper Views answer key questions about point of sales activity:

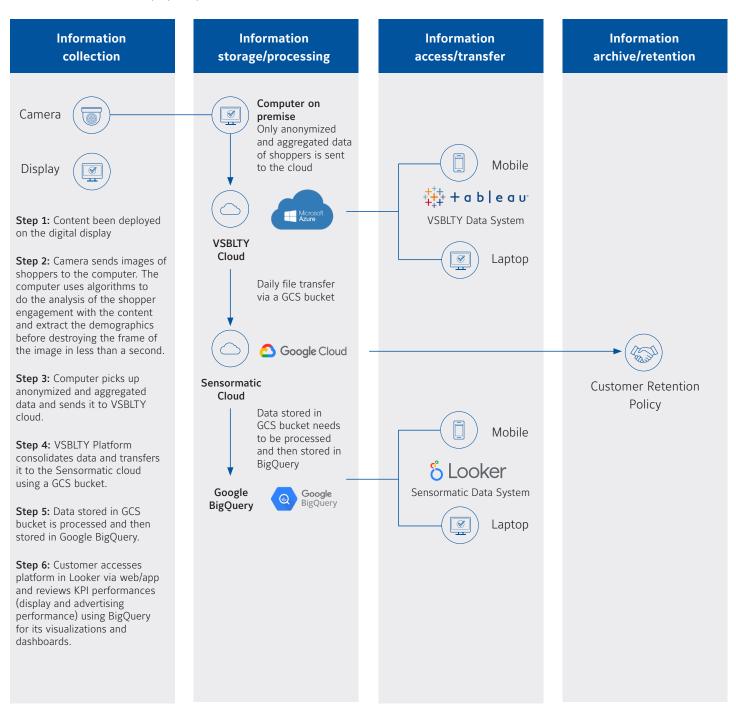
- Which stores and which display locations are driving better performance and why?
- Who are we reaching at each location and what are they interacting with? How is the shopper engaging with the content?
- Which content is performing best and why? How is the targeted content strategy working to improve Shopper Engagement with the content?
- What is the optimal time to reach our customers?

Use cases:

- Develop a media platform to advertise and create a new source of revenue for the retailers
- Deliver customized content based on the gender and age of the audience in digital displays
- Measure the performance of digital ads in terms of audience but also in terms of the shopper engagement with the content
- Attract traffic to stores with customized and impactful digital content in the window of the store

3. Information flow map for Shopper Views:

Please see below the information flow map for Shopper Demographics, identifying where information is collected, stored and processed as well as accessed and transferred. Please note the specifics of this flow depend on the components chosen and deployed by our customer.



Data Privacy Sheet

4. Personal data processing details of Shopper Views:

See below details on each category of personal data processed by Shopper Views, types of personal data within each category, and the purpose of processing each type.

S.	Personal Data	Types of Personal Data	Purpose of Processing
1	Shopper demographics	Gender (male/female)Age (absolute number)	Create the demographic profile of the audience of digital displays.
2	Unique ID	 For each person detected the system creates a vector and that vector is assigned a random Globally Unique Identifier (GUID). This GUID is used as a unique ID from the facial analysis. Unique ID feature does create a biometric template, but this template is not only transient but encrypted and stored as an alphanumeric or binary vector in such a way that, as raw data, it cannot be extrapolated in any way and the Unique ID cannot be inferred or reconstructed to aid identification in any way. This embedding vector will be used to identify if a person matches a previous vector using the facial analytics. This random unique GUID will be the only information used in data reporting as no photos or images are collected or stored. The vector resides only on local device memory and cannot be queried or shared with any other camera or database on the network. The biometric template will reside in local memory for 120 minutes then deleted. 	Identify the real number of persons watching a content within a two-hour window in front a specific location or display to avoid duplications (shoppers passing by twice or more times counted several times) within a single shopper journey.

5. Data retention and deletion

Johnson Controls has a global Records Management Program, which includes a Global Records Retention policy and procedures. The purpose of our Records Management Program is to detail the responsibilities and working instructions necessary for the use, maintenance, retention or destruction of data and to assign appropriate responsibilities to the right individuals.

When Johnson Controls processes personal data for our own purposes, the Johnson Controls Records Management Program applies to all records, on all media, and must be maintained in accordance with the Johnson Controls Records Retention Policy and Records Retention Schedule for the specific country and business in which the record has been stored. The Records Management Program applies to all worldwide locations and legal entities controlled by Johnson Controls.

Similarly, when Johnson Controls processes personal data on behalf of a customer, or when our products are operating on customer site, those offerings can be configured to meet customer data retention periods.

See below the default retention periods applied to Shopper Views:

S.	Data Category	Retention Period	Reason for Retention
1	Demographics: • Gender • Age	 Once an analysis on a frame of video is conducted on premise and the gender and age defined, the frame is destroyed. This takes less than a second. With respect to the reporting level data there is no single process for deletion as the information retained is anonymized and aggregated data. 	 No retention of the images of shoppers. Data is retained to provide historical evolution of data for three years (four years of data available).
2	Unique ID	Unique ID or the biometric template resides only on local device memory for 120 minutes (two hours) then deleted and cannot be queried or shared with any other camera or database on the network.	Unique ID or the biometric template is retained to check a new face detected by the camera and avoid duplications when counting the people in front of the displays in the two hours after being created. Unique ID data cannot be extrapolated and cannot be inferred or reconstructed to identity people in any way.

6. Sub-processors for Shopper Views:

Please see below the list of current sub-processors utilized for Shopper Views:

Sub-Processor	Personal Data	Service Type	Location of Data Center	Security Assurance
VSBLTY uses Microsoft AZURE as a primary hosting provider	Only anonymized and aggregated data regarding:	Third-party cloud hosting	Microsoft Azure physical location (country by country) ensures that data residency is assured. Please see link for physical locations: https://azure.microsoft.com/en-us/global-infrastructure/data-residency/#select-geography	For information regarding Microsoft Azure security see: https://azure.microsoft.com/en-us/ overview/security/
Sensormatic uses Google Cloud as primary hosting of data	Only anonymized and aggregated data regarding: Age Gender	Third-party cloud hosting	Google cloud physical location (country by country) ensures that data residency is assured. Please see link for physical locations: https://cloud.google.com/about/locations	For information regarding Google Cloud security see: https://cloud.google.com/security

7. Cross-border data transfers

Many countries and jurisdictions have laws governing the transfer of personal data. As a multinational organisation, Johnson Controls has substantive experience in dealing with cross-border transfer issues and restrictions. When Johnson Controls processes personal data for our own purposes or on behalf of a customer, we utilize the following transfer mechanisms that can assist our customers:

Binding Corporate Rules (BCRs)	The Johnson Controls BCRs are designed to ensure an adequate level of protection of personal data no matter where in world it is processed by Johnson Controls. With respect to the European Union, the Johnson Controls BCRs have been specifically approved by the European Union Data Protection Authorities (DPAs) for transfer of EU personal data globally within Johnson Controls.
Asia-Pacific Economic Cooperation Cross-Border Privacy Rules (APEC CBPR)	The CBPR is a government-backed privacy certification which demonstrates that Johnson Controls complies with internationally recognized data privacy protections and is the framework approved for the transfer of personal data by Johnson Controls between participating APEC member economies: United States of America, Mexico, Japan, Canada, Singapore, Republic of Korea, Australia, Chinese Taipei, and Philippines.
EU Standard Contractual Clauses (SCCs)	Johnson Controls incorporates the EU's approved standard contractual clauses, also referred to as the "Model Contract," into the Johnson Controls Data Protection Agreement located at www.johnsoncontrols.com/dpa to afford the contractual protection under the SCCs to our customers.
EU-US Privacy Shield Framework and Swiss-US Privacy Shield Framework	Johnson Controls was and continues to be certified under the EU-US Privacy Shield Framework and the Swiss-US Privacy Shield Framework. Although the Privacy Shield Framework has been invalidated by the Court of Justice of the European Union (CJEU), Johnson Controls intends to continue to maintain its certification for the foreseeable future, until a replacement framework is created.

8. Privacy certifications

Johnson Controls has substantial experience with global privacy issues, and has achieved the below global privacy certifications that demonstrate our commitment to creating solutions that respect global fair information practices and Privacy by Design.

Asia-Pacific Economic Cooperation Privacy Recognition for Processors (APEC PRP)	The PRP certification enables Johnson Controls to demonstrate to customers our accredited enterprise-wide Privacy Program, and to transfer data processed on behalf of our customers (including our cloud solutions) between the USA, Mexico, Japan, Canada, Singapore, Republic of Korea, Australia, Chinese Taipei and the Philippines. Please see the PRP Directory for more information.
Asia-Pacific Economic Cooperation Cross-Border Privacy Rules (APEC CBPR)	The CBPR is a government-backed privacy certification that demonstrates that Johnson Controls complies with internationally recognized data privacy protections. Please see the CBPR Compliance Directory and the Johnson Controls CBPR TRUSTe validation page for more information.
TRUSTe Enterprise Seal	The Johnson Controls TRUSTe Privacy Certification Seal demonstrates our responsible data collection and processing practices consistent with regulatory expectations and external standards for privacy accountability. Please see the <u>Johnson Controls TRUSTe validation page</u> for more information.

Please note that this document is for customer guidance purposes only and is not legal advice. Johnson Controls is not a law firm and does not provide legal advice. While Johnson Controls products and solutions are designed for use in compliance with applicable law, implementation and deployment of Johnson Controls products and solutions should be reviewed by appropriate customer advisors and stakeholders for such compliance.

