



Data Transparency Standard

Independent Validation

September 30, 2020



Pandora Media, LLC is a music and podcast discovery platform. The Company offers personalized audio content available to stream on computers and mobile phones. Pandora offers services that allow users to search for their favorite music and non-music artists and entertainers to create "stations" that stream content similar to their search and are tuned to their ongoing feedback.

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BPA – Pandora Media LLC Transparency Report

Transparency Standards V1.0

Data Transparency Compliance Guide 1.0

I. Data Label Dissonance Control Objectives

Test No.	Control Area	Tests	Comments
Section: Data Summary			
1.1	Name of Data Provider	Data provider organization is incorporated / functioning in market as a data seller	Supported
1.2	Provider Name	Data provider has the right to use the name / trademark	Supported
2.1	Provider Contact Info	Email address provided is a real / functioning email	Supported
3.1 & 4.2	Segment Name	Cross-check content in following fields: A. Segmentation Criteria B. Standard Segment name C. ID Type D. Audience Precision Level E. Geography	Supported
4.1	Standardized Segment Name	Ensure legitimate entry from IAB Audience Taxonomy 1.0	Supported
5.1	Segmentation Criteria	Check that the criteria described addresses business rules for ID inclusion, and is not overly reliant on peripheral segment description. This description should address: A. Data provenance, B. frequency at which attribute needs to be observed to be associated with ID, C. and how long ago the attribute was observed. If business rules for inclusion are proprietary / algorithmically driven, describe algorithm behavior as it relates to the above items.	Supported
5.2	Segmentation Criteria	Cross-check content in following fields: A. Audience Refresh Cadence B. Source Lookback window C. Data Sources	Supported
6.1	Audience Precision Level	Cross-check content in following fields: A. Segmentation Criteria B. Standard Segment name C. Segment name D. ID Type	Supported
7.1	Id Count	The count is disclosed (Figure is variable depending on seasonality, activation platform match rates, and other factors)	Supported
8.1	ID Type(s)	Cross-check ID content in following fields: A. Data Sources B. Segmentation Criteria	Supported
9.1	Geography Standard country list is used.	Cross-check content to the Segmentation Criteria	Supported
10.1	Privacy Policy	Link is functional and leads to indicated privacy content	Supported

I. Data Label Dissonance Control Objectives			
Test No.	Control Area	Tests	Comments
Section: Audience Details			
11.1	Data Source(s) Selection of Offline Sources: Requires completion of "On-boarder Details" section	Cross-check content in following fields: A. ID Type B. Segmentation Criteria If "Offline Survey", "Public Record", or "Offline Transaction" is stated, the "On-boarder Details" section must be completed and properly formatted.	Supported
12.1	Data Inclusion Methodology Selection of "Modeling": Requires selection of "Yes" within "Audience Expansion" field.	Cross-check content in the Segmentation Criteria Ensure that "Audience Expansion" is completed and accurately formatted	Supported
13.1	Audience Expansion Selection of "Modeling": Requires selection of "Yes" within "Audience Expansion" field.	Cross-check content in following fields: A. Data Inclusion Methodology B. Segmentation Criteria	Supported
14.1	Cross-device Expansion	Cross-check content in Segmentation Criteria	Not Applicable
15.1	Audience Refresh Cadence Selection of Offline Sources: Requires completion of "On-boarder Details" section	Cross-check against content in following fields: A. Segmentation Criteria B. Data Sources - if any "Offline" source is selected, "Continuous" or "Daily" are not acceptable options	Supported with the approval from the IAB Tech Lab. <i>Where labels contained both offline and online data sources, "daily" was selected.</i>
16.1	Source Lookback Window	Cross-check against content in following fields: A. Segmentation Criteria B. Audience Refresh Cadence	Supported
Section: Onboarder Details			
17.1	Input ID/Match Key	If "Offline Survey", "Public Record", or "Offline Transaction" is stated, the "On-boarder Details" section must be completed and properly formatted.	Supported
18.1	Audience Precision Level		Supported
19.1	Audience Expansion		Supported
20.1	Cross Device Expansion		Supported

II. People and Process Control Objectives			
Test No.	Control Area	Tests	Comments
Section: General			
	General	Examine documentation to support the online and offline data partner's acquisition, data transfer and quality control processes.	Supported
		Walk through workflow of data logging process.	Supported
		Review system control documentation within the data loading process to prevent loss or corruption of data.	Supported
		Review data aggregation job process	Supported
		Review controls and test documentation to ensure successful and complete collection and aggregation of log file data.	Supported
Section: Data Summary			
2.2	Provider Contact Info	Email is delivered to designated FTE	Supported
6.2	Audience Precision Level	Provide documentation re how identity is resolved: via in house tech, via a partner, or some combination of both in house and partner.	Supported
		If in house: methodology description (DOM) - documentation to be provided outlining systems for data flow, and for resolving identity.	Supported
		If via partner: provide a description of partner, SOW with partner, examples of log files / data ingestion points	Not Applicable
		If both in house + provider: see requirements above for both	Not Applicable
8.2	ID Type(s)	Confirm on segment files that unique ID types are represented	Supported
9.2	Geography Standard Country list is used.	Provide documentation for the process used to assign geographic attribute to the ID level record	Supported
11.2	Data Source(s)	Documentation made available of: Org Chart of team directly involved in collecting, analyzing, onboarding, or otherwise preparing the data for sale to buyers. Job descriptions of product, engineering, and business development stakeholders within org chart. Process by which relevant stakeholders interact to collect and process data. Process by which relevant stakeholders interact to populate the IAB Tech Lab data transparency standard,	Supported

II. People and Process Control Objectives

Test No.	Control Area	Tests	Comments
		and description of responsible, accountable, consulted, informed parties (RACI) for each label field	
11.3		Review the interaction between people and processes within the organization.	Supported
Section: Audience Details			
12.2	Data Inclusion Methodology	<p>Documentation made available of:</p> <p>Org Chart of team directly involved in collecting, analyzing, onboarding, or otherwise preparing the data for sale to buyers.</p> <p>Job descriptions of product, engineering, and business development stakeholders within org chart.</p> <p>Process by which relevant stakeholders interact to collect and process data.</p> <p>Process by which relevant stakeholders interact to populate the IAB Tech Lab data transparency standard,</p> <p>and description of responsible, accountable, consulted, informed parties (RACI) for each label field</p>	Supported
12.3		Review the interaction between people and processes within the organization.	Supported
12.4		<p>Conditional checks:</p> <p>If "Modeled" is selected - documentation shall be provided for model input, output, and scores associated with behavior.</p>	Supported
13.2	Audience Expansion	Provide documentation with suitable number of attributes to enable modeling / scoring, which outlines the types of attributes being used as an input into the model	Supported
13.3		Provide Output file documentation to ensure that resulting ID count is larger than ID count input file (see Input ID / Match Key log file)	Supported
13.4		Provide documentation of match report / data portrait analysis (i.e., demographic profile)	Supported
14.2	Cross Device Expansion	Provide documentation of consumer (device) footprint with suitable number of attributes to enable modeling and scoring that are tied to the same Input ID	Not Applicable
14.3		Provide Output file documentation to ensure that resulting ID count is larger than ID count input file (see Input ID / Match Key log file)	Not Applicable
15.2	Audience Refresh Cadence	Documentation made available of:	Supported

II. People and Process Control Objectives

Test No.	Control Area	Tests	Comments
		<p>Org Chart of team directly involved in collecting, analyzing, onboarding, or otherwise preparing the data for sale to buyers.</p> <p>Job descriptions of product, engineering, and business development stakeholders within org chart.</p> <p>Process by which relevant stakeholders interact to collect and process data.</p> <p>Process by which relevant stakeholders interact to populate the IAB Tech Lab data transparency standard,</p> <p>and description of responsible, accountable, consulted, informed parties (RACI) for each label field</p>	
15.3		Review the interaction between people and processes within the organization.	Supported
15.4		<p>Syndication record documentation / analysis – evaluation of the delta between syndication records to ensure that IDs were added or removed from segment, and that syndication occurred within the declared cadence. Documentation needs to demonstrate:</p> <p>A. 3-5 syndication attempts (if continuous selected, multiple examples of intra-day refresh need to be provided) over the course of at least a year,</p> <p>B. and all syndication records need to be maintained for evaluation a minimum of one month</p>	Supported
16.2	Source Lookback Window	Documentation of: Source event record associated with IDs to ensure date stamp matches segment's declared refresh cadence.	Supported
Section: Onboarder Details			
17.3	Input ID/Match Key	Provide processing logs and match reports, ensure that inputs and outputs match	Supported
17.4		Show existing in-house database records that contain data on the same match key for indicated level of audience granularity	Supported
18.3	Audience Precision Level	Provide processing logs and match reports, ensure that inputs and outputs match.	Supported
18.4		Show existing in-house database records that contain data on the same match key for indicated level of audience granularity	Supported
19.2	Audience Expansion	Provide documentation of seed ID footprint with suitable number of attributes to enable modeling / scoring, which outlines the types of attributes being used as an input into the model	Supported

II. People and Process Control Objectives			
Test No.	Control Area	Tests	Comments
19.3		Provide Output file documentation to ensure that resulting ID count is larger than ID count input file (see Input ID / Match Key log file)	Supported
19.4		Provide documentation of match report / data portrait analysis (ie, demographic profile)	Supported
20.2	Cross Device Expansion	Provide documentation of consumer (device) footprint with suitable number of attributes to enable modeling and scoring that are tied to the same Input ID	Not Applicable
20.3		Provide Output file documentation to ensure that resulting ID count is larger than ID count input file (see Input ID / Match Key log file)	Not Applicable

III. Technology Control Objectives

Test No.	Control Area	Tests	Comments
Section: General			
	General	<p>Review architecture of the Data Solution Provider.</p> <p>Review the flow of data through the system: input, processing, at rest, output (in transit).</p> <p>Review log file and data retention protocols.</p> <p>Review system controls within the data loading process to prevent loss or corruption of data.</p> <p>Review data table structure.</p> <p>Analyze controls and tests in place to ensure successful and complete collection and aggregation of log file data.</p>	Supported
Section: Audience Details			
13.5	Audience Expansion	Analyze modeling code / script / routine that is used to process input, create and validate model, and select look-a-like data	Supported
13.6		Analyze Internal environment where script is run (cloud service / grid system)	Supported
14.4	Cross Device Expansion	<p>If in-house match table is used to expand segment the GitHub / product specs for match table are provided; methodology associated with ID resolution is described and documented, provide the modeling code / script / routine that is used to associate information over time.</p> <p>If match table used to expand segment is provided by third-party, provide MSA associated with business partner that does analysis.</p> <p>Provide process documentation of API calls to outside cross-device expansion partner (which would contain log files, reporting and billing information)</p>	Not Applicable
Section: Onboarder Details			
19.5	Audience Expansion	Analyze modeling code / script / routine that is used to process input, create and validate model, and select look-a-like data	Supported
19.6		Analyze Internal environment where script is run (cloud service / grid system)	Supported
20.4 and 20.5	Cross-device Expansion	If in-house match table is used to expand segment the Github / product specs for match table are provided; methodology associated with ID resolution is described and documented, provide the modeling code / script / routine that is used to associate information over time.	Not Applicable

III. Technology Control Objectives			
Test No.	Control Area	Tests	Comments
		<p>If match table used to expand segment is provided by 3rd party, provide MSA associated with business partner that does analysis.</p> <p>Provide process documentation of API calls to outside cross-device expansion partner (which would contain log files, reporting and billing information)</p>	