

Data Sonification Canvas

1 Use Case: Who are your users, what are the goals and the context of your sonification?

Users Who are the users of your sonification? What rold do they have in relation to the phenomenon? Do they have a specific opinion about it? Do they have any specific competence or knowledge of the phenome-non? How much are they affected by the phenomenon?	Goals What are the specific goals you want to achieve with the sonification? Which specific needs does it address? Is it for analysis, explanation, communication, advocacy...	Context In which context will the sonification be experienced? Is it a web application? Is it used in a security operations center or in a public venue? Is it played through headphones or speakers? Is it a global or a local project? Does it have any specific cultural connotations?	Type of Sounds Synthesised: are the sounds generated with a synthesizer? Is it intended to mimic an existing sound? Concrete: is the sound from nature or from human activities? Is it sourced from analogue musical instruments?	Behaviour What are the rules that link changes in the dataset to changes in the sounds?
			Functions Indexical: is sound directly produced by the phenomenon you want to represent? Iconic: is sound similar to the phenomenon you want to represent? Symbolic: is sound arbitrarily related to the phenomenon you want to represent? e.g. Indexical: the intensity of rain is detected by listening to the sound it emits. Iconic: the intensity of rain is mimicked by the sound of rice grains falling on a surface. Symbolic: the intensity of rain is represented by the sound of different musical instruments.	Multi-modality Are you using only sound or is sound couplped with other sensory modalities?

Analytical Are you representing hard values from a dataset? <div></div>	Narrative Do you want to communicate a message or tell a story?	Causal Will they gather information on the phenomenon that produced the sounds? e.g. when you tap a container and the sound it makes give you information on how full it is.	Semantic Will they apply a code to interpret the sounds? e.g. when you need to apply Morse code to decipher the message contained in a sound	Reduced Will they focus on the sound itself and its inner characteristics? e.g. when we distinguish the interval between two notes or the pitch of a birdsong.
--	---	---	---	---

3 Sonification Approach: How would you position your approach to the sonification?

4 Listening Experience: How do you imagine your users will listen to the sonification?

Designed by Sara Lenzi and Paolo Ciuccarelli