

Title: **Billboard Top 5 Hit**

Publication date: 2019

Link: [Best Year in Music](#)

Author: **The Pudding**

It is a digital publication that explains ideas and cultural topics through visual essays.

Founded in 2017, it stands out for its use of data visualizations to make information more accessible and engaging. The topics covered range from music and sports to politics and society, aiming to inform and entertain without chasing current events or clickbait.

Aspects investigated:

This creative interactive data visualization displays a scrolling representation of the top five billboard hits throughout history from 1960 to 2019, while playing the music from the number one hit at any given time, as well as data on how long each held the top spot. You can simply click to jump directly to an era in musical history and listen to the tunes that shaped that generation.

Perceptual issues:

There are several perceptual issues:

- **Information overload:** the visualization is too complicated, the combination of scrolling visuals with music can overwhelm users, making it difficult to focus on either the data or the music. This can lead to cognitive overload, where the brain struggles to process too much information at once.
- **Data cluttered:** displaying too much data at once can make the visualization cluttered and hard to interpret.
- **Temporal perception:** the speed of scrolling can affect how users perceive the timeline. If it scrolls too quickly, users might miss important details. Conversely, if it scrolls too slowly, it can become tedious.

How to fix:

Sometimes, the simplest solutions are the most effective.

In this case, to show the trend of the songs, it would have been more appropriate to *divide the data by year or by semester*, analysing the most listened songs every 12/6 months. This division would provide a clearer and less fragmented view of musical trends over time.

Alternatively, to maintain the site's interactivity and appeal, *the most listened song could be shown and played month by month*. This approach would keep the engagement element without overwhelming the user with too much information.

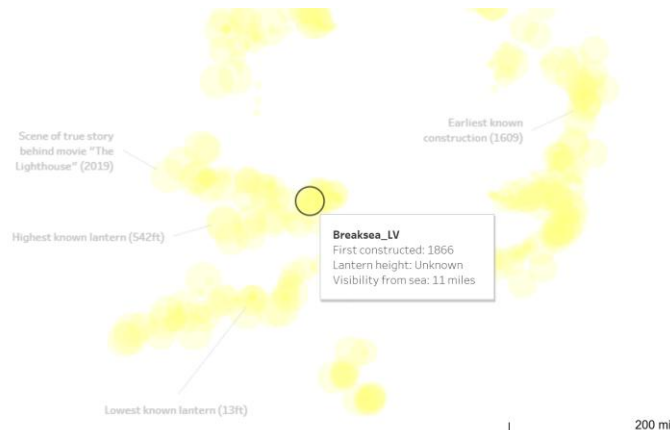
Showing the top five songs week by week makes the site too full of information.

Reducing the frequency of displayed data would help avoid information overload, improving the user experience.

USES

Turn on the lights...

- ☐ Medieval period
- ☐ 1693
- ☐ 1753
- ☐ 1851
- ☒ 1911
- ☐ All of them!



Title: **Lighthouses of England and Wales**

Publication date: 17 Oct 2020

Link: [Lighthouses of England & Wales | Tableau Public](#)

Author: **Richard Speigal**

He is the Head of Data Visualisation at N Brown Group plc, he lives in Chippenham, Wiltshire, United Kingdom.

Aspects investigated:

The dataset includes over 600 lighthouses, providing insights into the development of light-aided navigation and the evolution of British maritime activity. The bubbles on the map illustrate the night-time visibility range of each lighthouse from the sea. The data was collected using a combination of autonomous methods, such as Optical Character Recognition (OCR) tools, and manual data-entry methods, including archaeological surveys. The visualization employs a 3D terrain map generated with custom styles from Mapbox.

Perceptual issues:

There are several perceptual issues:

- **Lack of Information:** one major issue is that the map lacks visible geographical markers, making it difficult for users to understand their location.
- **Colour Contrast:** the colour contrast between certain bubbles and the background is insufficient, making it hard to distinguish the lights.
- **Cluttered Information:** the map can appear cluttered due to the high density of data points, which may overwhelm users.

How to fix:

To address the identified perceptual issues, several adjustments are necessary.

Firstly, *adding visible geographical markers to the map* is crucial to help users orient themselves and understand their location better.

Enhancing the colour contrast between the bubbles and the background is also important, as insufficient contrast makes it difficult to distinguish the lights.

Lastly, to tackle the issue of cluttered information, *reducing the density of data points by employing clustering techniques* would be beneficial. This approach would group nearby points and provide summary information, making the map more readable and less overwhelming for users.