

Translating Food Waste Documentation into a Digital Format

Introduction

Food waste is an issue that affects both individuals and the environment. To better understand my personal food waste habits, I decided to document the food I discarded over seven days. This project involved taking photos of wasted food, recording their costs, and estimating the total monetary loss each day. The goal was to translate this data into an interactive digital format using HTML, CSS, and JavaScript. By visualizing the waste in a zoomable image with data overlays, I aimed to create an engaging way to reflect on food waste habits and their financial impact. This paper explores the process of transitioning from a physical record to a digital representation, the challenges encountered, and the effects of digital media on meaning and perception.

The Original Item

The original data collection process was entirely analog. Each day, after grocery shopping and meal preparation, I documented wasted food by taking photographs and recording details such as item names, estimated cost, and the reason for waste (e.g., spoilage, over-preparation). These records were kept in a notebook, allowing me to track trends over the week. I chose this approach because food waste is often overlooked, and seeing its financial impact in a structured way could encourage better habits. By capturing this data in physical form first, I could ensure accuracy before transitioning to a digital visualization.

The Digital Translation Process

To convert this information into a digital format, I used the following tools:

- **Camera & Notebook:** Captured images and recorded daily waste.
- **Spreadsheet:** Organized food waste costs and summaries.
- **HTML & CSS:** Built a webpage to display the waste visualization.
- **JavaScript:** Enabled interactive zooming and clickable hotspots for daily data.

The final digital visualization consists of a **large image of wasted food**, where each section corresponds to a different day. Users can zoom into the image, and clicking on specific areas reveals pop-ups containing a summary of that day's waste (cost and type of items discarded). Creating this required structuring the webpage, overlaying clickable regions on the image, and implementing interactive effects.

Challenges and Key Decisions

One challenge was ensuring that the interactive experience remained intuitive. Initially, I considered using a bar chart to represent the waste data, but this lacked the emotional impact of seeing actual food waste. Instead, I opted for an **image-based approach** where users could visually explore the waste. Another difficulty was optimizing the image for both

desktop and mobile screens, ensuring that zoom effects and pop-ups functioned seamlessly across devices. By using CSS transitions and JavaScript event listeners, I made the interface smooth and responsive.

The Impact of Digital Translation

Converting this project into a digital format significantly changed how the information was perceived. A physical notebook with text and numbers provides an objective record, but a **visual, interactive format** makes the problem more **tangible and engaging**. The digital version:

- **Amplifies awareness:** Users interact with the image, making them more engaged than if they were just reading statistics.
- **Improves accessibility:** The project can be shared online, allowing more people to reflect on their own food waste habits.
- **Creates a sense of scale:** Seeing the accumulated waste over a week provides a stronger emotional reaction than numbers alone.

However, there are limitations. Unlike a physical waste pile, a digital representation lacks **sensory details** such as smell, texture, and direct visibility in everyday life. This might make the issue feel less urgent compared to physically seeing wasted food in a trash bin.

Comparison: Analog vs. Digital Experience

What is Gained?

- **Interactivity:** Users can zoom in and explore specific data points.
- **Engagement:** A visual format encourages more reflection compared to static numbers.
- **Shareability:** The digital version can reach a wider audience online.

What is Lost?

- **Physical Impact:** Seeing waste in real life has a stronger emotional effect.
- **Sensory Experience:** Digital images cannot replicate the smell, texture, or immediate presence of food waste.

Despite these trade-offs, the digital translation successfully makes food waste more relatable and easier to analyze.

Conclusion

This project has deepened my understanding of both food waste and digital storytelling. Tracking my waste over seven days made me more aware of spending habits and meal planning inefficiencies. The process of creating an interactive digital representation showed me how visual and interactive elements can amplify the meaning of data. While digital tools enhance accessibility and engagement, they cannot completely replace the tangible impact of experiencing waste in real life. Moving forward, I could further develop this project by integrating dynamic analytics, allowing users to input their own data and compare results.

Ultimately, this translation from analog to digital serves as both a self-reflection and a tool to encourage more mindful consumption habits.