



Measuring Visual Attention on Eco-Friendly Detergents

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Introduction

The objective of this study is to determine if eco-labels play an important role on consumer visual attention. The purpose of this research is to find out the main important factor related with eco-labels effect, which is driving the success of detergent brands. In order to create the right packaging for their products, companies must understand the consumer buying process and understand the role and impact of packaging such as image, claim or eco-labels that can influence the purchase decision. So, by understanding which factors influence the buying behavior and which packaging elements are most important to help companies make the right decisions on package design.

This research will identify the relationship between consumer visual attention as the main variable of the study and some independent variables like brand's logo, eco-labels, image, and claim that catch consumer visual attention. The primary research data will be collected by measuring the visual attention on different packaging elements with eye-tracking technique. In the end, the study tries to find out which packaging elements draws the most attention from the consumers.

Problem & Relevance

Low visibility of the eco-label on the product influences consumer attention negatively

Research Question

1. Does size of eco-labels affect consumers' visual attention?
2. Do different packaging elements affect consumers' visual attention towards eco-labels?
3. Which combination of packaging elements that infer to environmental-friendliness draws the highest attention?

Literature Review



Literature



Inspiration

Songa G., Slabbinck H., Vermeir I. and Russo V. → Measure: **time to first fixation, time spent**

Pancer E., Mcshane L. and Noseworthy T. J. → **Additional environmental cues** make a difference

Droulers O., Gallopel-Morvan K., Lacoste-Badie S. and Lajante M. → Stimuli to manipulate: **Image, size, claim**

Methodology

"Eye tracking is a sensor technology that enables a computer or any other machine to determine what the user is looking at– the gaze point."

For our experiment:

Sample Size: 30

Age: > 18 years old

Our stimuli:
Size of ecolabel
Image (positive & negative)
Claim (positive & negative)

Creation of 10 images showing a detergent packaging with different combinations of stimuli

Showing randomized order of each image for 6 seconds

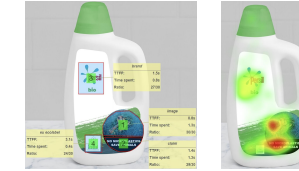
Analysis

Results

Eye Tacking metrics

- Areas of Interest
- Heatmaps

Metrics Interpretation



Outcome: Average of AOI

Order	Area of Interest	TTF	Time Spend	Ratio
1	Brand	1,5	0,98	26,7/30
2	Image	0,7225	1,275	28,875/30
3	Claim	1,76	1,63	29
4	Eco-label	3,93	0,34	17,2/30

Eco-labels are the 4th and last element to get noticed by the audience. Furthermore, once an image and/or claim has been displayed in the detergent packaging, the Eco-labels get a lower fixation than without those elements.

Hypothesis testing:

"Eco-labels get more attention from consumers when detergent packaging implement the use of images and/or claims with environmental cues than without them."

Hypothesis rejected given the results of the Eye-tracking study.

References

- Songa G., Slabbinck H., Vermeir I. and Russo V., 2018. How do implicit/explicit attitudes and emotional reactions to sustainable logo relate? A neurophysiological study. [pdf]
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- Droulers O., Gallopel-Morvan K., Lacoste-Badie S. and Lajante M., 2017. The influence of threatening visual warnings on tobacco packaging: Measuring the impact of threat level, image size, and type of pack through psychophysiological and self-report methods. [pdf]
- Kyriakos Riskos, Paraskevi (Evi) Dekoulou, Naoum Mylonas, George Tsourvakas., 2021. Ecolabels and the Attitude-Behavior Relationship towards Green Product Purchase: A Multiple Mediation Model. [pdf]