

# DIGITAL LAB TESTING REPORT

KENT PILOT REGION REPORT 2023 T4.2.3



# INTRODUCTION

The Kent Regional Best Practice Guide presents findings on the effectiveness of the delivery for off-season experiential tourism, marketing and distribution (T4.1.3) for the Interreg EXPERIENCE project.

EXPERIENCE is a €24.5m project co-funded by the Interreg France (Channel) England Programme, which committed €17m from the European Regional Development Fund. It is led by Norfolk County Council (NCC) and ran from September 2019 to June 2023. EXPERIENCE is a major project to boost visitor numbers in the off-peak season through an innovative tourism strategy. New autumn and winter experiences will attract 11,309,368 new visitors to the six project pilot areas across England and France: Norfolk, Kent, Cornwall, Pas-de-Calais, Compiègne and Brittany (Baie de Morlaix and Côtes d'Armor).

Marketing and distribution within the Kent Pilot region was delivered in the following priority areas

1. Market testing with trade and distribution channels (T4.2.1)
2. Consumer testing campaigns (T4.2.2)
3. Consumer perception study (T4.2.2)
4. Digital Lab testing (T4.2.3)
5. Targeted consumer campaigns (T4.3.1)
6. Destination and business photography (T4.3.1)
7. Online pre-visit inspirational and trip-planning platforms (T4.3.2)
8. Travel trade and B2B distribution (T4.3.3)





# MARKET TESTING

## DIGITAL LAB TESTING

Visit Kent submitted 8 pieces of material to The University of Surrey (PP9) to put through their Digital Lab process to test consumers rational and emotional triggers of consumption, and ultimately measure 1. Advertising perception, 2. Purchase intention, 3. Links between rationality and emotion in decision-making. This was conducted through eye-tracking, galvanic skin response and facial electromyography.

The 8 materials Visit Kent (PP3) tested were:

- Facebook imagery
- Instagram imagery
- Instagram video influencers
- Instagram video narrative
- Website content – outdoor cooking
- Website content – Oyster Farm
- Website content – Think you know Kent
- Website content - Your Kent Experience

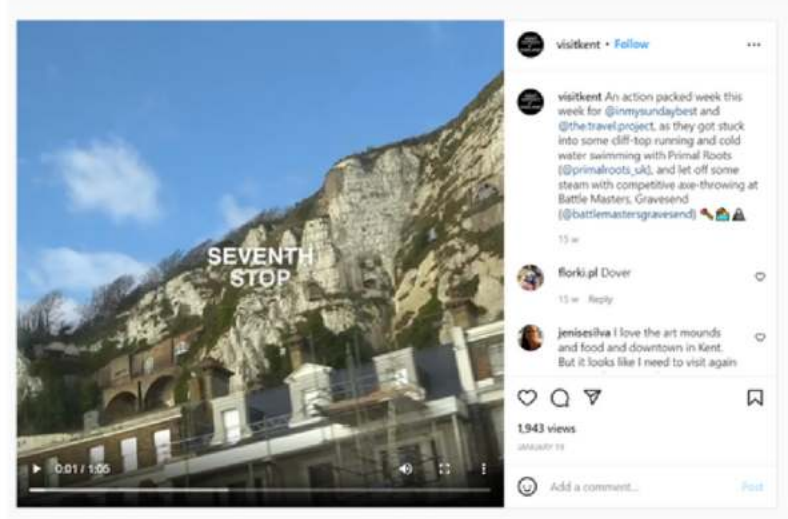
The following pages provide examples of the materials and corresponding reports.





# Digital Lab Testing - Visit Kent - Instagram video influencer reports

## Digital Lab Testing - VK - Instagram vid influencers

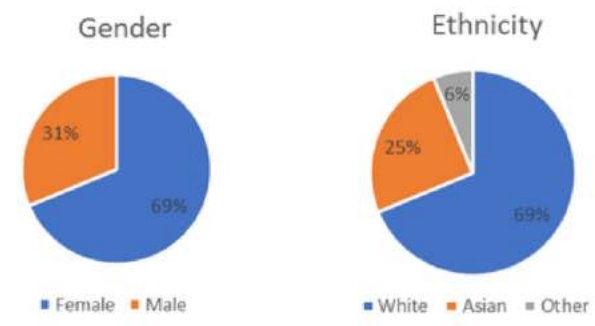


<https://www.instagram.com/tv/CY7MIBIBZGx/>

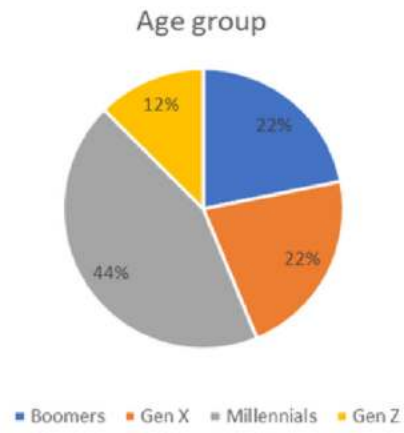
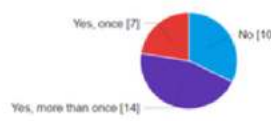


## Participant demographics

Marketing tests were conducted with 32 participants. All the participants tested the English content and 14 tested the French content. Participants ranged from 18 to 78 years old and the majority were female with a white ethnic background.



Have you ever visited Kent county in England?



	Born	Ages
Gen Z	1997 – 2012	10 – 25
Millennials	1981 – 1996	26 – 41
Gen X	1965 – 1980	42 – 57
Boomers II	1955 – 1964	58 – 67
Boomers I	1946 – 1954	68 – 76
Post War	1928 – 1945	77 – 94

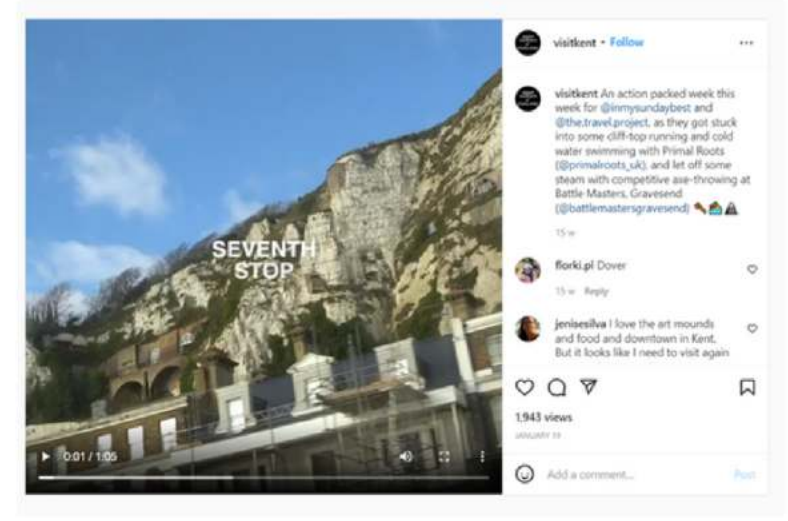
Source: www.beresfordresearch.com

## Experiment settings

Number of participants: 29 participants

### Instructions:

“Now, you will watch another instagram video.  
In this second video, Visit Kent hired **two influencers** to promote experiences.  
Make sure the **sound is activated**  
Please **DO NOT** display in **full screen**  
Let us know how you liked the content and whether or not you want to visit the destination.  
Enjoy!”



Exposure time: 01:20 min

### Surveys after exposure:

- Ad perception
- Trust in influencers
- Intention to visit



# Digital Lab Testing - Visit Kent - Instagram video influencer reports

## Eye-tracking - An explanation of visual attention

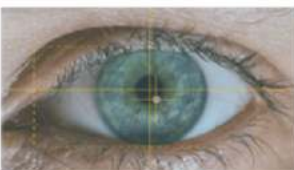
Eye tracking measures viewers' eye movements to understand the distribution of visual attention.

### Quantification:

The process involves the camera tracking the pupil center and where the light reflects from the cornea, informing the eye tracker about the movement and direction of the eye.

Eye tracking is quantified in various different ways:

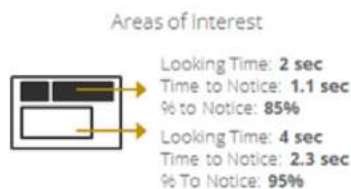
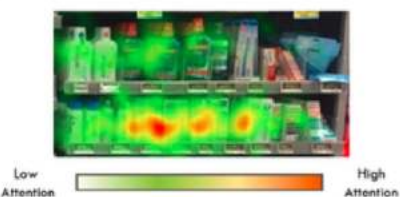
- **Gaze points** constitute the most basic unit of measure. One gaze point equals one raw sample captured by the eye tracker.
- Eye movements between fixations are known as **saccades**.
- A **fixation**, a period in which our eyes are locked toward a specific object. Typically, the fixation duration is 100-300 milliseconds.



### Data Visualizations:

- **Heatmaps** are static or dynamic aggregations of gaze points or fixations revealing the distribution of visual attention.
- **Visual attention** is aggregated across the entire audience, and displayed as "heat" overlaid on a stimulus. This heat can help identify what areas of the content draw the most visual attention, and what areas or elements may go missed entirely.

While **red areas** suggest a high number of gaze points, and therefore an increased level of interest, **yellow and green areas** show fewer gaze points, indicating a less engaged visual system.

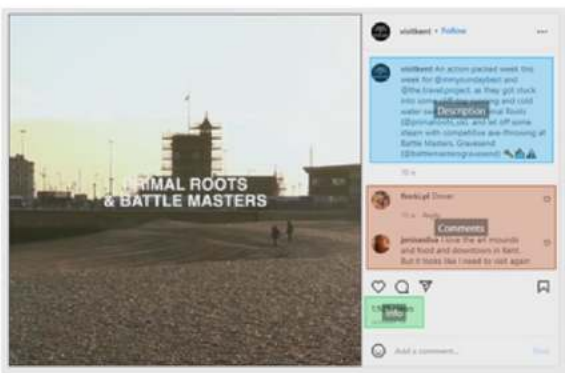


- **Areas of Interest (AOIs)** are user-defined subregions of a displayed stimulus. AOIs are an essential tool to incorporate into analysis for quantification and a more objective approach to interpreting eye tracking data. These metrics can reveal how many respondents fixated in that area of interest, how long it took them to fixate in that area, and how long they spent looking. These metrics can indicate if a stimulus is capturing visual attention in the intended way, or if the stimulus can be optimized to better appeal to natural visual patterns.

While eye tracking provides a wealth of information on where and when an individual looked, lengths of fixations, and the order in which elements are fixated upon, eye tracking does **not** reveal why an individual looked at a certain element, or how they felt while navigating a certain visual scene.

## Eye-tracking - Results

### Areas of Interest



# AOI metrics	Comments	Description	Info
<b>Information</b>			
Respondent base	29	29	29
<b>Gaze based metrics</b>			
Respondent count	25	25	4
Respondent ratio (%)	86.2	86.2	13.8
Dwell count	2.6	5.8	1.3
Revisit count	1.6	4.8	0.3
Hit time AOI (ms)	99795.6	14510.2	57818.5
Dwell time (ms)	1725.4	4670.1	250
Dwell time (%)	2.2	5.9	0.3
First dwell duration (ms)	750.3	583.7	270.8
<b>Fixation based metrics</b>			
Respondent count	25	25	4
Respondent ratio (%)	86.2	86.2	13.8
Revisit count	1.4	3.9	0.3
Fixation count	6.6	10.5	1.8
TTF AOI (ms)	42429.5	14527.1	57818.5
Dwell time (ms)	1667	4526.1	302.1
Dwell time (%)	2.1	5.8	0.4
First fixation duration (ms)	227	195.9	179.2

### Gaze based metrics analyse searching behaviour

Dwell count = how often participants looked at this AOI in average / revisit = how often they revisit this AOI

Hit time AOI (ms) = how long before people look at this AOI in average

Dwell time (ms) = how long people spent on this AOI in average / how long in (%)

### Fixation based metrics analyse information processing

Fixation count = how often participants process information in this AOI in average

TTF AOI (ms) = time to first fixation – how long before people process information in this AOI in average

## Facial Expression Analysis - An explanation of expressed emotions

Facial expression analysis (FEA) measures movements of facial muscles to capture expressed emotions like joy, sadness, disgust, and overall valence in response to stimuli.

iMotions generates the following 7 emotions, created using Friesen & Ekman's EMFACS mappings. (Friesen, W. V., & Ekman, P. (1984). EMFACS7. Unpublished manuscript. Human Interaction Laboratory)



In addition to the expressions and emotions above, Affectiva AFFDEX computes Valence, Engagement, and Attention.

- **Valence** (-100 - 100): A measure of how positive or negative the expression is.

Factors that increase the likelihood of positive valence include: Smile, Cheek Raise.

Factors that increase the likelihood of negative valence include: Inner Brow Raise, Brow Furrow, Nose Wrinkle, Upper Lip Raise, Lip Corner Depressor, Chin Raise, Lip Press, Lip Suck.

- **Engagement** (0 - 100): A measure of emotional responsiveness triggered by the content, whether positive or negative.

Calculated as the mean of the highest evidence scores from the upper (Brow raise, Brow furrow, Nose wrinkle) and lower face region (Lip corner depressor, Chin raise, Lip pucker, Lip press, Mouth open, Lip suck, Smile), respectively.

- **Attention** (0-100): A measure of point of focus of the user based on the head position.

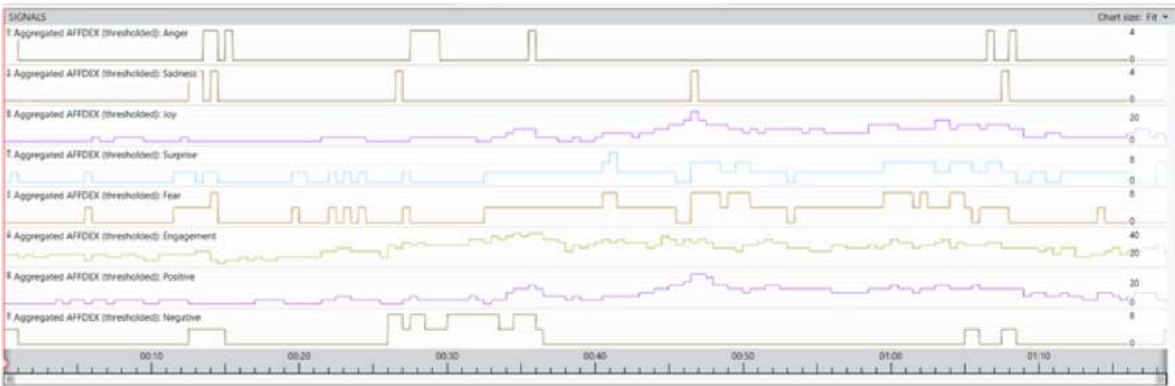


Facial expressions provide information on what is expressed. One of the core limitations of facial expression analysis is its inability to assess someone's emotional arousal, that is, the intensity of an emotion.



# Digital Lab Testing - Visit Kent - Instagram video influencer reports

## Facial Expression Analysis - Results



Threshold was set to 50% likelihood representing a moderately strong display of facial response

First half is considered as average and second half is considered as a good emotional response for a video  
**Joy:** At the highest 24% of participants felt joy  
**Anger, sadness:** Peaks of anger for 3% of participants  
**Surprise and fear:** Peaks for 7-10% participants  
**Engagement** was up to 41% of participants.  
**Positive emotions** felt by 27% of participants at the peak  
**Negative emotions** felt by 7% of participants

## Galvanic Skin Response - An explanation of emotional arousal

Galvanic Skin Response (GSR) measures emotional arousal via levels of perspiration on the surface of the skin, indicating the intensity of emotional response to stimuli.

### Quantification:

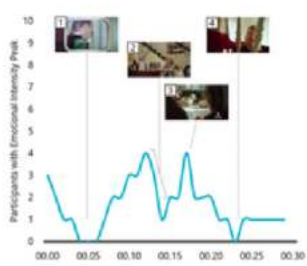
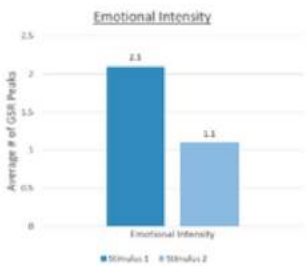
When sweat glands are triggered, they secrete moisture through pores towards the skin surface. By changing the balance of positive and negative ions in the secreted fluid, electrical current flows more readily, resulting in measurable changes in skin conductance. Skin conductivity is controlled on an entirely **subconscious level**.

- A **GSR peak** is a biological indicator that something relevant happened at that moment – an emotional connection was made. GSR peaks per minute indicates, on average, how many emotional events occurred every 60 seconds. The higher the number, the more of an emotional response the viewers were having during the content or experience.



### Data Visualizations:

- **Overall scores** can be compared between two stimuli
- **Emotional intensity** can be measured on a moment to moment basis to better understand the participants' emotional journey while being exposed to video media content

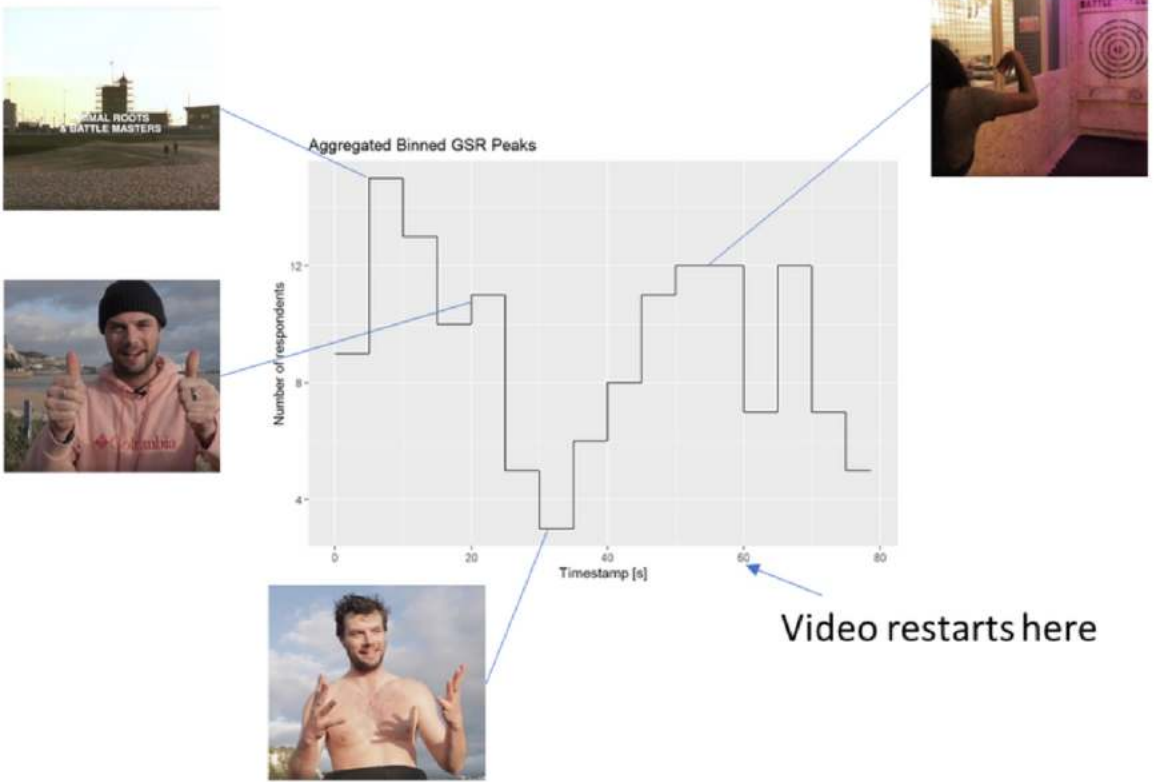


It is important to note that while GSR can measure if there is an emotional response and the intensity of an emotional response, it does **not** measure the valence, i.e. whether that emotional response is positive or negative.

## Galvanic Skin Response - Results

### Methods

GSR aggregation is accomplished based on binarization of the signal. iMotions can count the number of respondents that had "a response" (at least one GSR peak) in a time window: 5000 [ms]. The aggregated result therefore relates directly to the audience and the time window, e.g., 10 out of 29 respondents had a response in the time interval 02:00 - 02:09.



The segment contains 31 respondents. Of these, 29 have GSR data. During this stimulus, 18 respondents had at least one peak.

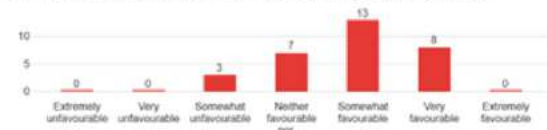
# Digital Lab Testing - Visit Kent - Instagram video influencer reports

## Survey - Results

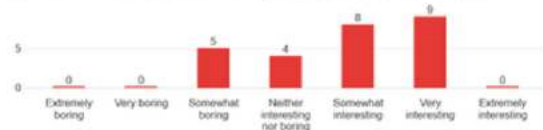
## Recommendations

### Ad perception = 4.73/7

Q1 - Aad - Please rate from 1 to 7 your overall reaction to the ad

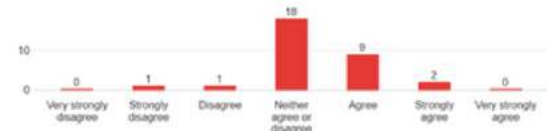


Q2 - Aad - Please rate from 1 to 7 your overall reaction to the ad

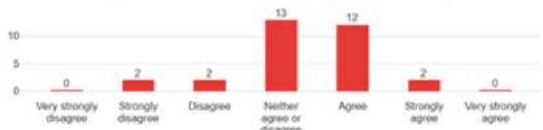


### Trust = 4.31/7

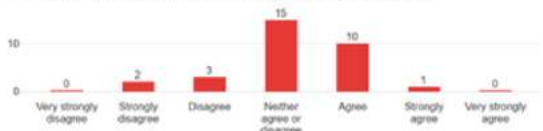
Q7 - trust - The influencers are trustworthy



Q8 - trust - The influencers are credible (likely to be believed)

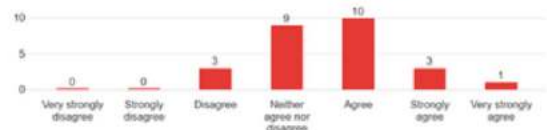


Q9 - trust - The influencers are reliable (able to be trusted)

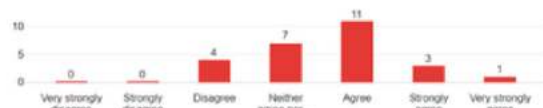


### Intention to visit = 4.59/7

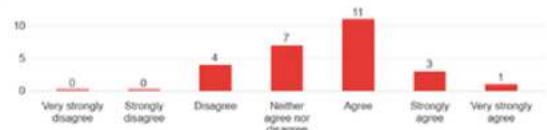
Q3 - intention to v - I plan to travel to Kent in the near future



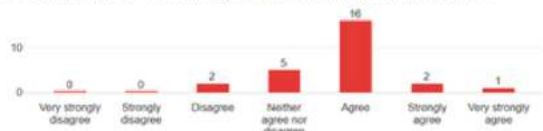
Q4 - intention to v - I will make an effort to travel to Kent in the near future



Q5 - intention to v - I have an intention to travel to Kent in the near future



Q6 - intention to v - I am willing to travel to Kent in the near future



This video works pretty good to promote the destination.

We can clearly see that participants preferred by far the second half (woman) of the video maybe because they don't want to swim in the Autumn-Winter maybe because they felt interesting the axe throwing.

Besides, some participants told us that the second half felt better filmed compared to the first half (man) which felt more amateur-ish. For example, in the first half we can see a photographer (00:27) while in the second half there are more close-up shots, moving scenes and diversity in editing.

Because the overall reaction to the video was not strong, the willingness to visit Kent was lower than the previous "narrative" video.

One of recommendation would be to exclude swimming that is more reserved for a niche. Avoid situation where the influencers talk directly to the camera but favour genuine engagement in activities.



# MARKET TESTING

## DIGITAL LAB TESTING

### Outputs

A Digital Lab Report was produced for each of the 8 tested materials. All reports for non-video materials also included a heat map showing where testers sight was focused. Results within the reports were used to inform upcoming marketing campaigns and content creation.



### Learnings

#### Timings:

The Digital Testing lab reports were not received until June 2022, by which time most of the products has been developed already, This meant it was not possible to see the true benefit of the reports in developing the product. The timings also meant that much of the content was developed and main campaigns designed/part delivered when the reports where ready, although on this occasion the reports could be acted upon, it was not possible to make best use of them.

The style of imagery and the nature of the influencer activity which had a positive response from the participants was useful in developing marketing materials.

#### Findings:

The knowledge gained through the digital labs was very interesting and not something Visit Kent has used before. Using the findings, we were able to adapt our messaging and adapt our approach across all our campaigns.

#### Scientific approach:

If we were to conduct digital lab testing again, we would approach it with a more scientific method, using a control and then a number of variables to measure how different approaches to the same content impacted consumers' perception and intention. This would enable us to better understand how variables such as page layout, use of images, tone of voice or call to actions had an impact on the consumer.



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