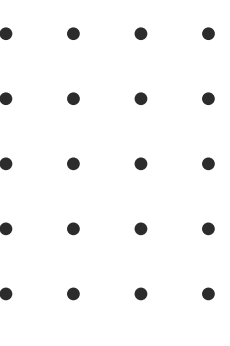
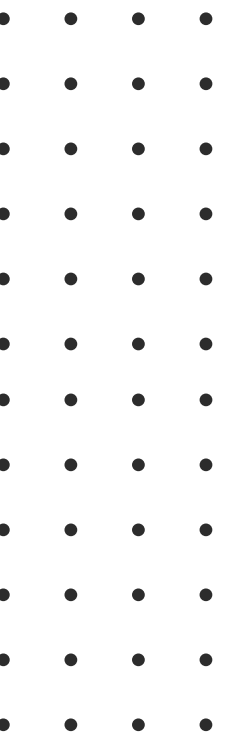




# The task-positive and task-negative network

According to the findings of fMRI that sense human blood flow in different tasks, there are two fundamental patterns of activity in the cortex. The first one is the task-positive network, and the other one is the task-negative network. The task-positive network is the mode of attention, meaning people focus on high-level tasks which require problem-solving ability. As for the task-negative network, it is the nonlinear and fluid mode of thinking and takes place under unconsciousness. People switch between these two modes in their lives according to different circumstances.

Therefore, inventors or creators need to ensure the purpose of the design from users' perspectives to meet human brains' way of thinking, and further make users feel that their attention is comfortably attracted.



2  
THE  
EXAMPLE  
(1)

\* SECRET  
SEATTLE

**We value your privacy**

We and our **partners** store and/or access information on a device, such as cookies and process personal data, such as unique identifiers and standard information sent by a device for personalised ads and content, ad and content measurement, and audience insights, as well as to develop and improve products. With your permission we and our partners may use precise geolocation data and identification through device scanning. You may click to consent to our and our partners' processing as described above. Alternatively you may access more detailed information and change your preferences before consenting or to refuse consenting. Please note that some processing of your personal data may not require your consent, but you have a right to object to such processing. Your preferences will apply to this website only. You can change your preferences at any time by returning to this site or visit our privacy policy.

AGREE

MORE OPTIONS

The screenshot on the left side is the page that pops up when users click on the website called "Secret Seattle." This website provides some traveling information and knowledge about Seattle.

When I searched for the recommended places for seeing fall foliage in Seattle online and clicked on this website, a window saying: "We value your privacy" abruptly jumped out into my vision. There were long lines of words without using highlights or fonts to emphasize the main points on the screen, which made me feel frustrated to understand the meanings of those descriptions. Even though the two buttons on the screen were clear with shape and color, the text "Agree" also made me confused. The question of "What should I agree to?" may float up in many users' minds. For me, I just wanted to browse those pictures of foliage with ease instead of reading a bunch of words needing to process a lot of information.

# 2 THE EXAMPLE (2)

**\* SECRET SEATTLE**  
**We value your privacy**

We and our partners store or access information on devices, such as cookies and process personal data, such as unique identifiers and standard information sent by a device for the purposes described below. You may click to consent to our and our partners' processing for such purposes. Alternatively, you may click to refuse to consent, or access more detailed information and change your preferences before consenting. Your preferences will apply to this website only. Please note that some processing of your personal

**REJECT ALL**   **ACCEPT ALL**

Precise geolocation data, and identification through device scanning	OFF >
Personalised ads and content, ad and content measurement, audience insights and product development	OFF >
Store and/or access information on a device	OFF >
Special Purposes and Features	>

**SAVE & EXIT**

PARTNERS   LEGITIMATE INTEREST



**\* SECRET SEATTLE**  
**We value your privacy**

We and our partners store or access information on devices, such as cookies and process personal data, such as unique identifiers and standard information sent by a device for the purposes described below. You may click to consent to our and our partners' processing for such purposes. Alternatively, you may click to refuse to consent, or access more detailed information and change your preferences before consenting. Your preferences will apply to this website only. Please note that some processing of your personal

**REJECT ALL**   **ACCEPT ALL**

Precise geolocation data, and identification through device scanning **ON** ▾

Precise geolocation and information about device characteristics can be used.

**Use precise geolocation data**   
Your precise geolocation data can be used in support of one or more purposes. This means your location can be accurate to within several meters.

[Legal Description](#)

[Show Partners](#)

**SAVE & EXIT**

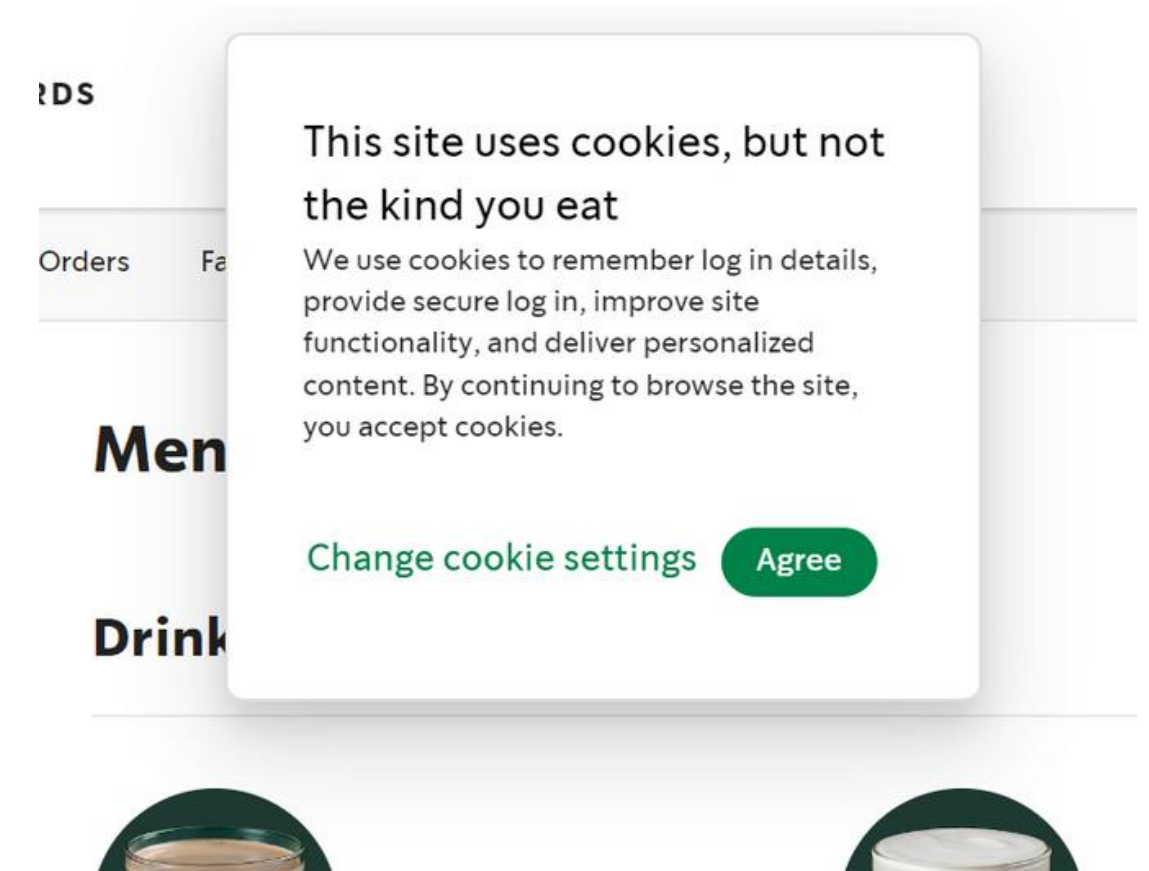
PARTNERS   LEGITIMATE INTEREST

Moreover, if I clicked the button called “More option,” another more overwhelming page then jumped out. By taking a closer look, I found that the paragraph on this page repeated the same words on the previous page, which made me think it was a waste of time reading it. What’s worse, as I understood the function of changing privacy settings and hit the switching buttons in order to decline the cookies, those red switching buttons did not turn white. (The word changed from “on” to “off” but the color of the button remains the same.) In sum, users in this situation use the task-negative network but the design of the website forces users to turn to the task-positive mode.

### 3 THE IMPROVEMENT (1)

- Give a concise title and change the “More options” to “Change cookies setting.”

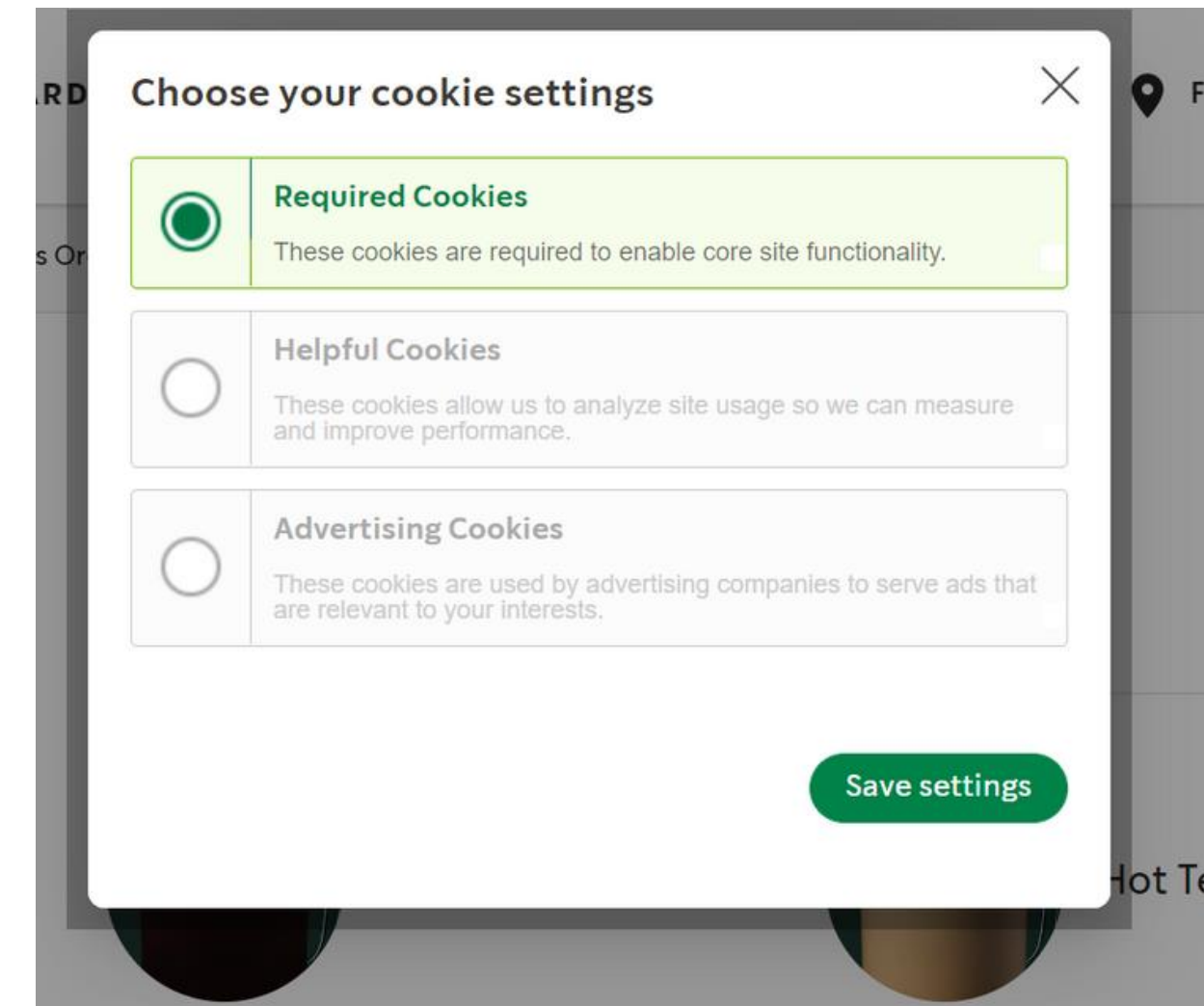
This idea of improvement comes from the website of Starbucks. They use an attractive title “This site uses cookies, but not the kind you eat,” making users feel relaxed when being interrupted by this kind of annoying announcement during their experience of browsing their website for browsing information about food and drinks. Moreover, their description is composed of only a few sentences that clearly conclude the explanation and primary purpose of asking users to accept cookies. In addition, the guiding words “Change cookies setting” make users understand that there is a section for them to manage their privacy settings.



### 3 THE IMPROVEMENT (2)

- Delete the repeated description and reorganize the cookies selections

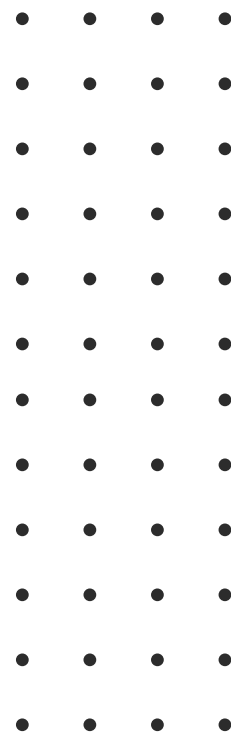
After people click the “Change cookies setting,” the redundant description on the original page can be deleted. Also, those confusing red switching buttons should be fixed so that the red button turns red as people click “on” and turn white for clicking “off”. What’s more, I think the original checklist of each privacy description can be organized into only three to four selections such as “required cookies” or “advertising cookies” like Starbucks does. By doing so, users don’t have to take much effort to read through each sentence and make a choice by processing enormous information in their brains.



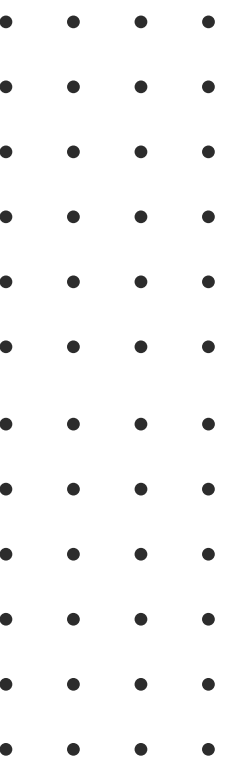
In my opinion, the task-positive network surpasses the task-negative network in this case. The original design of the website page squeezes so much unorganized information in a small window, which suspends users' fluid mode of surfing this website. Users usually don't expect to receive unrelated and overwhelming information to solve a complex task in the task-negative mode. Therefore, the abrupt appearance of the bunches of words may first stress people and indirectly imply users to press "agree" since users want to get into the website as soon as possible. This can lead to the ethical problem that the website takes advantage of users' inner conflict between task-positive network and task-negative network, and further leads users to make the action it wants. This means that the website can invade users' privacy by confusing them, which is not ethical. In addition, this can also just be a non-well-designed web page, not taking users' psychological journey into consideration. Consequently, these clues all show that the website does not value users' experience.



# 4 THE ETHICS



5  
THE  
RESULT



In this example, the usage and brand perception should be taken into measurement.

First, the rate of usage can increase after the optimization of the cookies announcement web page. This is because users can feel more comfortable when encountering a more effortful task under an unconscious and feeling-directed context. Users will be willing to stay on the page and visit this page again. Furthermore, I consider the bounce rate of this website will reduce after the improvement because users won't jump out due to the overloaded words and misleading design of buttons on the original page.

Second, the brand perception of this website can be enhanced to a better level. This is because users will understand that the design of the page is closely caring about their feelings and really value their right to decide the privacy settings, and thus leave a positive impression of this brand.