Issue-Based Metrics & Self-Reported Metrics
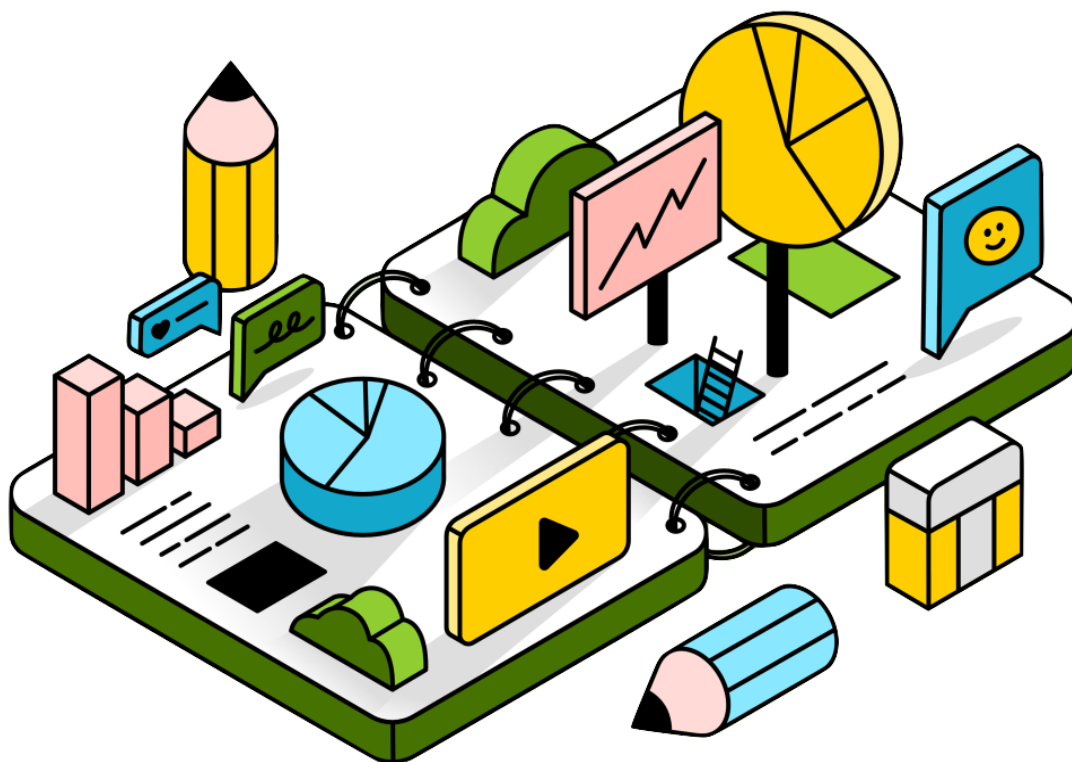
UX-271 -Research in User Experience Design

INSTAGRAM & VSCO (Assignment Two)

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## Experiment Design:

Experiment Systems:

Instagram:

Instagram is a popular social media tool used to share photos or videos. It launched on October 6th in 2010 and was recently bought by Facebook Inc, another social media platform. Users can direct message, post 24-hour story highlights, shop online, and save media. Other main features include following friends, liking posts, editing photos, and tagging friends.
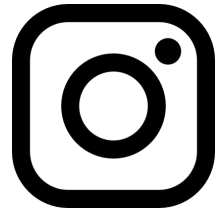
VSCO:

VSCO is another social media platform that lets users take images, edit them using presets or filters, and share them online. The mobile app used to be called VSCO Cam which was initially released in 2011. People can send direct messages, apply filters, edit multiple photos at once, re-publish or favorite media. However, these features only work on mobile devices, the desktop version only allows users to see their existing published feed.
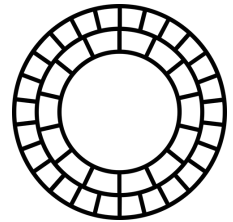
Hypotheses:

Instagram will have fewer error frequencies for task completion in comparison to VSCO.

Instagram will have a higher user satisfaction for task completion in comparison to VSCO.

Instagram will have fewer usability issues as the system is more commonly used by the selected participants. The majority of the participants use VSCO less often and have less experience. Instagram is also one of the biggest social media apps, which means its features and interfaces are designed and tested thoroughly. VSCO is a much smaller platform and app that would not have the same resources/designers that Instagram has. Instagram will also have a higher

satisfaction rate due to the frequency of use. The selected participants have completed a wide variety of tasks on Instagram, whereas some users have never used VSCO for personal reasons. In addition, VSCO has fewer features, options, and capabilities, limiting users. Instagram however, offers multiple ways, methods, or paths to complete tasks. Instagram also has a simpler menu and navigation structure, making it less consuming for participants. Therefore, Instagram will have fewer errors and higher satisfaction compared to VSCO.

Features Being Tested:

   The first feature being tested is the ability to use the help and support centers to find information. The specific feature is using a search bar to find answers about liking other posts. This feature allows the user to get instant results and articles about any issues or concerns they have. On both Instagram and VSCO, users can search using keywords and questions to get faster and more accurate results.

   The second feature that I aim to test is the ability to use preset filters made by the two systems. This feature applies custom editing adjustments to images. In addition, the caption feature will also be used after editing the photo. This allows users to add a location and hashtags to the edited image.

Tasks & Subtasks:

Search for help or support about "How to like a post?"

Instagram:

- Go to profile settings
  - Tap the "Avatar" image at the bottom right of the screen
  - Select the "Three Bars" menu icon at the top right of the screen
  - Tap the first option in the pop-up, "Settings"
- Go to the "Help" setting section
  - Scroll and find the heading "Help"
  - Select the text "Help"
- Open the "Help Center"
  - Tap on the heading "Help Center" and wait to be redirected

- Use the "Search Bar"

  - Select the "Search Bar" icon and wait for the keyboard to appear

- Type in "How to like a post?"

  - Using the keyboard, type "how to like a post?"

- Find results

  - Hit the "Return" key on the keyboard and view results

VSCO:

- Go to profile settings.

  - Tap the "Smile" icon at the bottom right of the screen in the navigation bar

  - Select the "Gears" icon at the top left of the screen

- Go to the "Help" setting section

  - Scroll and find the heading "Need Help?"

- Open the "Help Center"

  - Tap on the heading "Need help?" and wait to be redirected

- Use the "Search Bar"

  - Select the "Search Bar" icon at the bottom of the screen and wait for the keyboard to appear

- Type in "How to like a post?"

  - Using the keyboard, type "how to like a post?"

- Find results

  - Hit the "Airplane" icon on the search bar

  - Wait for the support robot to send a reply and view the results

Apply a preset filter to an existing photo with hashtags and location

Instagram:

- Create a new post.

  - Tap the "Plus Button" icon at the top right of the screen

  - Select the "Post" option

  - Select the desired photo from the camera roll

- Click the "Next" option in the top right corner
- View filter adjustment options
  - Select the "Filter" option in the bottom left corner
  - Use the fourth preset filter
  - Scroll to the fourth preset filter on the image slider
  - Tap the fourth option, "Moon"
- Adjust the filter to 50% opacity level
  - Select the fourth image or text, "Moon"
  - Drag the slider to the left, down to "50"
  - Select the "Done" option
- Insert hashtags in the caption section
  - Select the text "Next" in the top right corner
  - Tap the area or box labeled "Write a caption"
  - Type using the keyboard, "#research"
  - Hit the "Space" button/key
  - Type using the keyboard, "#userexperincedesign"
  - Hit the "Space" button/key
- Add a location to the photo
  - Select the text "Add Location"
  - Tap the first option that appears in text
  - Wait for the location to be added and view in under "Tag People"

VSCO:
- Create a new post
  - Tap the "Plus" sign/icon at the bottom in the middle of the screen
  - Tap on the desired photo from the camera roll
  - Click the "Edit" icon in the bottom left corner
- View filter adjustment options

- Select the "Frame" icon in the bottom left corner
- Use the fourth preset filter
    - Scroll to the fourth preset filter on the bottom image slider
    - Tap the fourth option, "B5"
- Adjust the filter to 50% opacity level
    - Select the fourth image or "Slider" icon
    - Drag the slider to the left, down to "+6.0"
    - Select the "Check Mark" icon
- Insert hashtags in the caption section
    - Select the text "Next" in the top right corner
    - Tap the area or box labeled "Write a caption"
    - Type using the keyboard, "#research"
    - Hit the "Space" button/key
    - Type using the keyboard, "#userexperincedesign"
    - Hit the "Space" button/key
- Add a location to the photo
    - Select the text "Add Location"
    - Tap the first option that appears in text
    - Wait for the location to be added and view in under "Tag People"

Scenario:

The first and second scenarios that are being tested will involve the user to have an account on Instagram and VSCO with the mobile app on their devices. The first scenario that is being tested is using the help and support services on the app as if a user was having a troubleshooting problem.

The second scenario that will be tested is editing an existing photo using a present filter created by each system/app as if the user wanted to share the image on their feed. This also involves adding a caption that includes hashtags and the location, both common features used by users. Both scenarios are typical behavior and tasks that a photo-sharing social media user would do. Overall, the general scenario is finding help and using preset filters with captions.

Subject Design:

The experiment is **between** two systems. Participants will be measured on error frequency and satisfaction between Instagram and VSCO. Since the participants are testing both systems, the experimental subject design is **within**.

Independent and Dependent Variables:

Instagram will have fewer error frequencies for task completion in comparison to VSCO.

-The independent variables are the operating system/app being used to complete the task, Instagram and VSCO, location of experiment, and the user/selected participants

-The dependent variable is usability issues

Instagram will have a higher user satisfaction for task completion in comparison to VSCO.

-The independent variables are the operating system/app being used to complete the task, Instagram and VSCO, location of experiment, and the user/selected participants

-The dependent variable is satisfaction level

Data Types:

The data type of the dependent variable "usability" is **nominal.** The data type of the dependent variable "satisfaction" is **ordinal.**

Type of Research:

The type of research for this experiment will be conducted remotely and in person. The remote research will be conducted using Facetime and Zoom. Facetime is a mobile and laptop app created by Apple, that allows users to video chat with other Apple users. Zoom is a cloud-based teleconferencing software program that allows users to communicate through video and audio. In-person research will be conducted using a think-aloud approach and face-to-face communication within a household. The data collection will be done using a computer. All the notes will be recorded using Google Docs and Sheets. The in-person interviews will have the participant sitting in front of the researcher, so the mobile device screen can be seen as well as the participant's actions and behaviors.

Frequency Levels: Frequent, Moderate, Occasional, Rare

Experience Levels: Advanced, Intermediate, Beginner

Levels are determined based on the use of Instagram and/or VSCO

Participant	Age	Gender	Experience	Frequency of Use	Location
One	18	Male	Intermediate	Moderate	In-Person
Two	18	Female	Advanced	Frequent	Remote
Three	18	Female	Intermediate	Occasional	Remote
Four	20	Male	Intermediate	Rare	In-Person

PARTICIPANT ONE

-Uses Instagram to connect with friends, however, does not use the post/editing feature often

-Not a user of VSCO but has been on the app

-Very skilled and knowledgeable with technology and computers

PARTICIPANT TWO

-Uses Instagram to connect with friends, send messages and edit photos

-A frequent VSCO user and edits images often on app

-Very skilled and knowledgeable with technology

PARTICIPANT THREE

-Uses Instagram to connect with friends and posts photos often

-A rare VSCO user but has an old profile

-Uses the messaging feature on Instagram often

PARTICIPANT FOUR

-Uses Instagram to connect with friends but rarely posts images

-Not a VSCO user and never used the app

-Does not use social media or image editing apps often

Experiment #1 -Identifying Usability Issues:

Experiment one is measuring how frequently users experience errors. The task is to use the help or support sections on the mobile app of the two systems. To complete the task, participants have to find results pertaining to their search.

Think-aloud Protocol:

The think-aloud protocol that was mainly used to collect data was a concurrent approach. This involved asking participants to think out loud while they completed the tasks and subtasks. This helped to gain important insight as some of the experiments were conducted virtually. To reduce a lengthy interaction between the participant and moderator, the time on task data was collected and the participants held longer comments in between the tasks. During the subtasks, small comments and follow-up questions were asked; however, any form of long response required from the participant was held off until the subtask was complete. These follow-up questions included subjects such as explaining emotional reactions, the reasoning for clicking or selecting buttons, and thought processes.

Task Success:

Task success was evaluated using three levels: complete success, partial success, and failure.

Complete Success: The participant completed all tasks & subtasks without any help

Partial Success: The participant completed all tasks & subtasks with minimal or moderate help

Failure: The participant failed to complete all or more than half of the tasks & subtasks

-Time: The participant failed to complete tasks & subtasks within given time (3 minutes) -Participant: The participant gives up on the tasks & subtasks

Performance Metrics -Task/Experiment #1:

Experiment #1: Search for help or support about "how to like a post?"

Participant	Instagram Time On Task (sec)	Instagram Task Success	VSCO Time On Task (sec)	VSCO Task Success
One	41	Complete Success	35	Partial Success
Two	36	Complete Success	33	Complete Success
Three	45	Partial Success	50	Partial Success
Four	50	Partial Success	55	Partial Success

Severity Ratings of Usability Issues. -Task/Experiment #1:

Usability Issues -Instagram:

Issue #1: The subtask is to "Type in (How to like a post?)." The cause of the issue is that the search bar is masked once a user enters in a search. The usability issue is that the participants cannot confirm if they entered in the intended question or content. In addition, participants cannot edit or return to their text field, they must re-enter all the information again.

Issue #2: The subtask is to "Open the Help Center." The cause of this issue is that in the menu list of options, another button exists labeled, "Support Requests." The usability issue is that users are confused about which menu option to select as the label misleads users to think they are the same. In addition, "Support Requests" is designed to be positioned in the lower portion of the top screen; this is the most common place or first option users will see.

Usability Issues -VSCO:

Issue #3: The subtask is to "Open the "Help Center." The cause of this issue is that the list of options in the menu includes, "Need help?" and "Support." The usability issue is that users cannot differentiate which menu will help them complete the subtask. Both options seem correct, however, only one button will direct users to a search bar field.

Issue #4: The subtask is to "Find results." The cause of this issue is that the number of results per question is one. The usability issue is that users can only see one answer per question. If the response doesn't provide the correct answer or what they were looking for then, users have to retype a new search or start the task over again. This increases time on task or efficiency for the user and can decrease user satisfaction.

Severity Rating Scale:

Low: the issue annoys or causes frustration with the user but doesn't affect task success

Medium: the issue causes significant, difficulty or inconvenience, but does not cause task failure

High: the issue leads directly to task failure or does not let the user complete the task

Summary of Usability Issues by Participant -Experiment #1

Participant	Instagram Issue #1 Disappearing Search Field	Instagram Issue #2 Confusing Labels	VSCO Issue #3 Confusing Menu	VSCO Issue #4 Limited Results
One	0	0	1	0
Two			0	
Three	1	0	1	0
Four	1	0	1	0
Total Score	**2**	**0**	**3**	**0**

0 = Low
1 = Medium
2 = High

Analyzation of Usability Issues:

The first issue that participants encountered using Instagram was the task "Type in (How to like a post?)." Three of the four participants in the experiment encountered this issue. The severity issue for this usability issue was medium for two participants and low for one of them. The majority of the participants were confused and concerned they had done the task wrong or didn't complete all steps of the task. This was due to the search field disappearing and participants thought this was an issue on their end. The participants verbalized that they couldn't confirm if they entered the correct text in the search bar and asked if they should redo the task. This problem causes a decrease in satisfaction and increases task on time. In addition, this issue causes future problems if the task is repeated. Since the text disappears, participants verbalized that if they were to adjust their search, they would have to retype the whole issue out. This can cause an increase in time on task again and a decrease in user satisfaction.

The second issue that participants encountered using Instagram was "Open the Help Center." During the task, three out of the four participants encountered this usability issue and classified it as a low severity rating. The participants were slightly confused and frustrated that they couldn't decipher which option to choose. One participant during the task stated, "Both of these options seem correct, how do I know which to pick?" This illustrates a clear confusion for participants who also have previous experience using the system. The two options, "Help Centre'' and "Support Requests" should be redesigned by Instagram, with clearer labels such as "Help Centre" and "Submitted Requests." This will increase user satisfaction and effectiveness.

The third issue that participants encountered using VSCO was "Open the (Help Center.)" Similar to Issue #3, participants were confused with the menu options provided by VSCO. All four participants encountered this usability issue and it was ranked with the highest severity with an overall score of three. The participants had medium severity ratings for this issue as the majority of
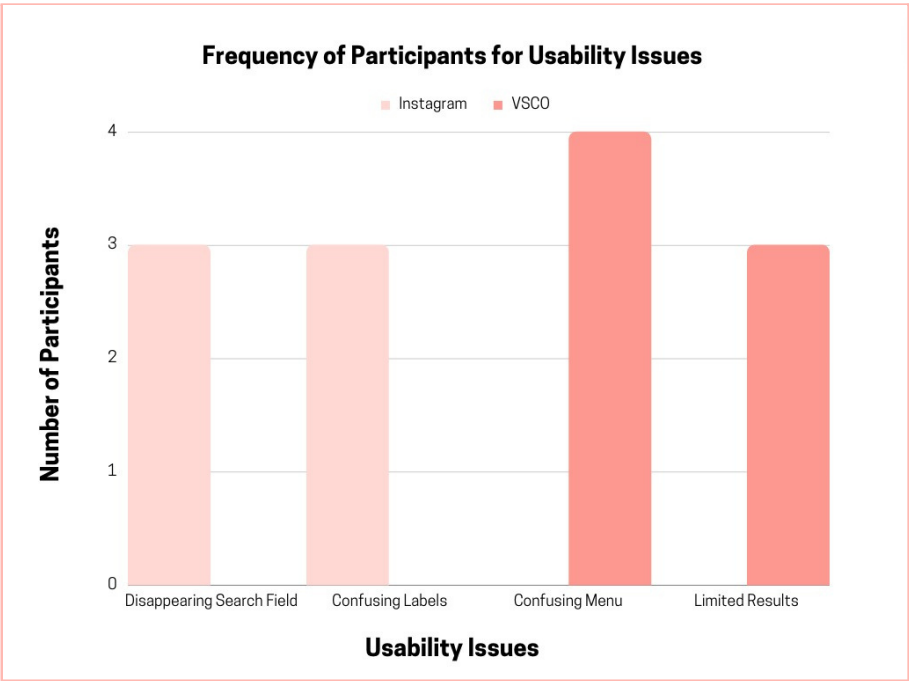
the participants chose the wrong option first. The two options on the menu that caused confusion are "Need Help?" and "Support." Participant four stated, "How am I supposed to know which one will take me to the correct screen?" This illustrates a clear usability issue that is decreasing user satisfaction. To fix this issue, VSCO should combine the menu options labeled "Support Center" and rename the "Need Help?" option to "Support Chat."

The fourth issue that participants encountered using VSCO was on the task "Find results." Three participants encountered this usability issue and were ranked as low severity by all three. This issue overall has a low impact on the user as it decreases satisfaction however, it did not cause much confusion for participants. When participants enter a search in the support field, the user is only given one result for their question. This causes an issue for users if the first suggested result does not provide the answer to their search. VSCO should adopt a similar interface to Instagram, where users are provided with a wide selection of options and articles to choose from. Participant three stated during the experiment, "Why is there only one answer provided. I don't think this answers the task question." To increase user satisfaction, VSCO should update its information architecture and content to show more than one result per search.

Number of Unique Issues Per System
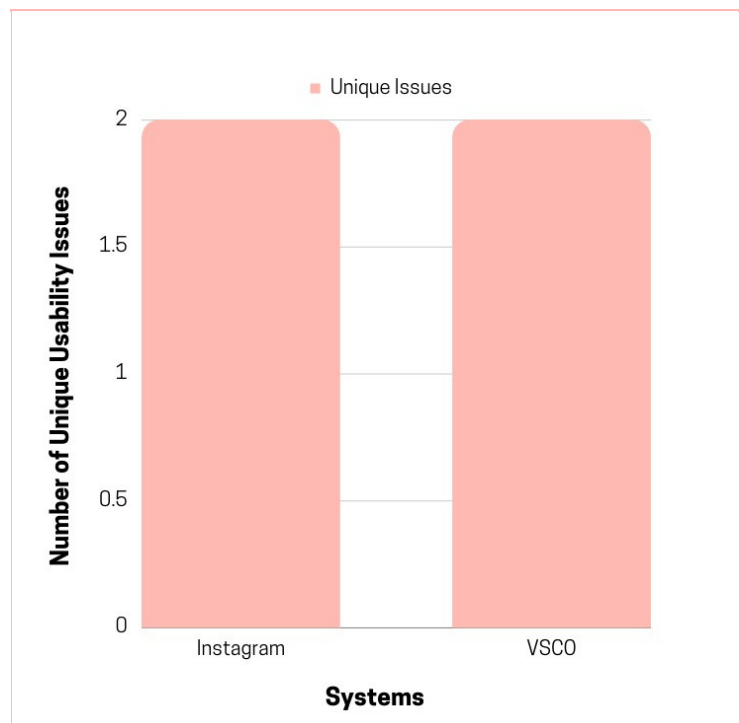
Frequency of Participants Who Experienced Specific Usability Issues

Frequency of Participants for Usability Issues
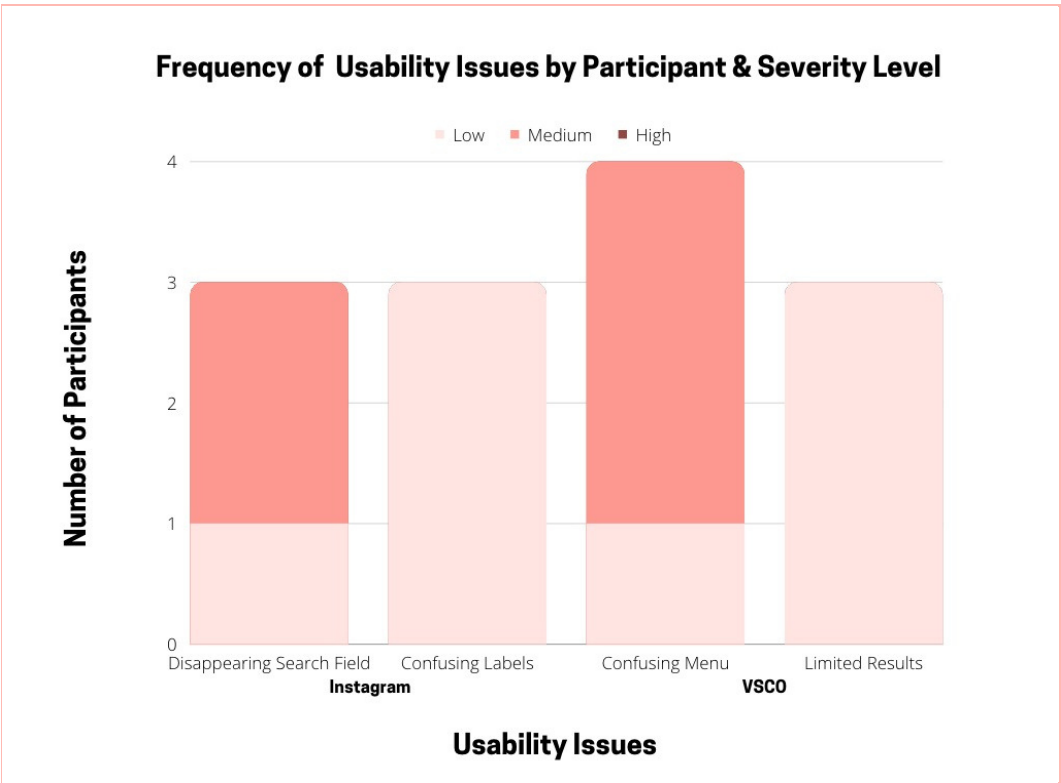
Legend: Instagram, VSCO

Number of Participants (y-axis: 0, 1, 2, 3, 4)

Usability Issues (x-axis): Disappearing Search Field, Confusing Labels, Confusing Menu, Limited Results

Frequency of Participants Who Experienced Specific Usability Issues

Frequency of Usability Issues by Participant & Severity Level

Legend: Low, Medium, High

Number of Participants (y-axis: 0, 1, 2, 3, 4)

Usability Issues (x-axis): Disappearing Search Field, Confusing Labels, Confusing Menu, Limited Results

Instagram, VSCO

Issues on Average Per Participant

Issues on Average Per Participant
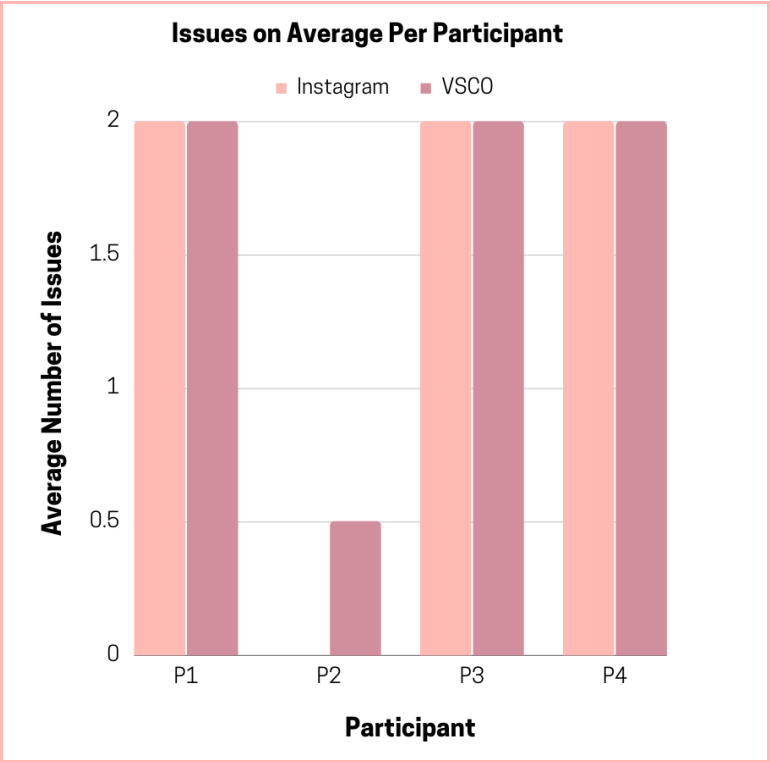
■ Instagram ■ VSCO

Performance Metrics -Task/Experiment #2:

Experiment #2: Apply a preset filter to an existing photo with hashtags and location"				
Participant	Instagram	Instagram	VSCO	VSCO
	Time On Task (sec)	Task Success	Time On Task (sec)	Task Success
One	46	Complete Success	57	Complete Success
Two	41	Complete Success	51	Partial Success
Three	50	Partial Success	54	Partial Success
Four	53	Complete Success	61	Partial Success

Task-Specific Tailored Rating Scale

Task Related Likert Scale Questions: Ease of Use

Task 1: Create a new post

Likert: This task was easy to complete.

Task 2: View filter adjustment options

Likert: This task was easy to complete.

Task 3: Use the fourth preset filter

Likert: This task was easy to complete.

Task 4: Adjust the filter to 50% opacity level

Likert: This task was easy to complete.

Task 5: Insert hashtags in the caption section

Likert: This task was easy to complete.

Task 6: Add a location to the photo **Likert:**

This task was easy to complete.

**Experiment #2: Apply a preset filter to an existing photo with hashtags and location"
(Instagram)**

Task 1: Create a new post

This task was easy to complete.

Strongly Disagree	Disagree	Niether Agree nor Disagree	Agree	Strongly Agree
1	2	3	4	5

Task 2: View filter adjustment options

This task was easy to complete.

Strongly Disagree	Disagree	Niether Agree nor Disagree	Agree	Strongly Agree
1	2	3	4	5

Task 3: Use the fourth preset filter

This task was easy to complete.

Strongly Disagree	Disagree	Niether Agree nor Disagree	Agree	Strongly Agree
1	2	3	4	5

Task 4: Adjust the filter to 50% opacity level

This task was easy to complete.

Strongly Disagree	Disagree	Niether Agree nor Disagree	Agree	Strongly Agree
1	2	3	4	5

Task 5: Insert hashtags in the caption section

This task was easy to complete.

Strongly Disagree	Disagree	Niether Agree nor Disagree	Agree	Strongly Agree
1	2	3	4	5

Task 6: Add a location to the photo

This task was easy to complete.

Strongly Disagree	Disagree	Niether Agree nor Disagree	Agree	Strongly Agree
1	2	3	4	5

Experiment #2: Apply a preset filter to an existing photo with hashtags and location"
(VSCO)

Task 1: Create a new post

This task was easy to complete.

Strongly Disagree	Disagree	Niether Agree nor Disagree	Agree	Strongly Agree
1	2	3	4	5

Task 2: View filter adjustment options

This task was easy to complete.

Strongly Disagree	Disagree	Niether Agree nor Disagree	Agree	Strongly Agree
1	2	3	4	5

Task 3: Use the fourth preset filter

This task was easy to complete.

Strongly Disagree	Disagree	Niether Agree nor Disagree	Agree	Strongly Agree
1	2	3	4	5

Task 4: Adjust the filter to 50% opacity level

This task was easy to complete.

Strongly Disagree	Disagree	Niether Agree nor Disagree	Agree	Strongly Agree
1	2	3	4	5

Task 5: Insert hashtags in the caption section

This task was easy to complete.

Strongly Disagree	Disagree	Niether Agree nor Disagree	Agree	Strongly Agree
1	2	3	4	5

Task 6: Add a location to the photo

This task was easy to complete.

Strongly Disagree	Disagree	Niether Agree nor Disagree	Agree	Strongly Agree
1	2	3	4	5

Participant One: Likert Scale Ratings

Task 1: Create a new post

This task was easy to complete.

Strongly Disagree	Disagree	Niether Agree nor Disagree	Agree	Strongly Agree
1	2	3	④	5

Task 2: View filter adjustment options

This task was easy to complete.

Strongly Disagree	Disagree	Niether Agree nor Disagree	Agree	Strongly Agree
1	2	3	④	5

Task 3: Use the fourth preset filter

This task was easy to complete.

Strongly Disagree	Disagree	Niether Agree nor Disagree	Agree	Strongly Agree
1	②	3	4	5

Task 4: Adjust the filter to 50% opacity level

This task was easy to complete.

Strongly Disagree	Disagree	Niether Agree nor Disagree	Agree	Strongly Agree
1	②	3	4	5

Task 5: Insert hashtags in the caption section

This task was easy to complete.

Strongly Disagree	Disagree	Niether Agree nor Disagree	Agree	Strongly Agree
1	2	3	4	⑤

Task 6: Add a location to the photo

This task was easy to complete.

Strongly Disagree	Disagree	Niether Agree nor Disagree	Agree	Strongly Agree
1	2	3	4	⑤

**Experiment #2: Apply a preset filter to an existing photo with hashtags and location"
(VSCO)**

Task 1: Create a new post

This task was easy to complete.

Strongly Disagree	Disagree	Niether Agree nor Disagree	Agree	Strongly Agree
1	2	3	4	⑤

Task 2: View filter adjustment options

This task was easy to complete.

Strongly Disagree	Disagree	Niether Agree nor Disagree	Agree	Strongly Agree
1	2	3	④	5

Task 3: Use the fourth preset filter

This task was easy to complete.

Strongly Disagree	Disagree	Niether Agree nor Disagree	Agree	Strongly Agree
1	②	3	4	5

Task 4: Adjust the filter to 50% opacity level

This task was easy to complete.

Strongly Disagree	Disagree	Niether Agree nor Disagree	Agree	Strongly Agree
1	2	③	4	5

Task 5: Insert hashtags in the caption section

This task was easy to complete.

Strongly Disagree	Disagree	Niether Agree nor Disagree	Agree	Strongly Agree
1	②	3	4	5

Task 6: Add a location to the photo

This task was easy to complete.

Strongly Disagree	Disagree	Niether Agree nor Disagree	Agree	Strongly Agree
1	②	3	4	5

Participant Two: Likert Scale Ratings

Task 1: Create a new post

This task was easy to complete.

Strongly Disagree	Disagree	Niether Agree nor Disagree	Agree	Strongly Agree
1	2	3	4	⑤

Task 2: View filter adjustment options

This task was easy to complete.

Strongly Disagree	Disagree	Niether Agree nor Disagree	Agree	Strongly Agree
1	2	3	4	⑤

Task 3: Use the fourth preset filter

This task was easy to complete.

Strongly Disagree	Disagree	Niether Agree nor Disagree	Agree	Strongly Agree
1	2	③	4	5

Task 4: Adjust the filter to 50% opacity level

This task was easy to complete.

Strongly Disagree	Disagree	Niether Agree nor Disagree	Agree	Strongly Agree
1	2	3	④	5

Task 5: Insert hashtags in the caption section

This task was easy to complete.

Strongly Disagree	Disagree	Niether Agree nor Disagree	Agree	Strongly Agree
1	2	3	4	⑤

Task 6: Add a location to the photo

This task was easy to complete.

Strongly Disagree	Disagree	Niether Agree nor Disagree	Agree	Strongly Agree
1	2	3	4	⑤

Experiment #2: Apply a preset filter to an existing photo with hashtags and location" (VSCO)

Task 1: Create a new post

This task was easy to complete.

Strongly Disagree	Disagree	Niether Agree nor Disagree	Agree	Strongly Agree
1	2	3	④	5

Task 2: View filter adjustment options

This task was easy to complete.

Strongly Disagree	Disagree	Niether Agree nor Disagree	Agree	Strongly Agree
1	2	3	④	5

Task 3: Use the fourth preset filter

This task was easy to complete.

Strongly Disagree	Disagree	Niether Agree nor Disagree	Agree	Strongly Agree
1	②	3	4	5

Task 4: Adjust the filter to 50% opacity level

This task was easy to complete.

Strongly Disagree	Disagree	Niether Agree nor Disagree	Agree	Strongly Agree
1	②	3	4	5

Task 5: Insert hashtags in the caption section

This task was easy to complete.

Strongly Disagree	Disagree	Niether Agree nor Disagree	Agree	Strongly Agree
1	2	③	4	5

Task 6: Add a location to the photo

This task was easy to complete.

Strongly Disagree	Disagree	Niether Agree nor Disagree	Agree	Strongly Agree
1	②	3	4	5

Participant Three: Likert Scale Ratings

Task 1: Create a new post

This task was easy to complete.

Strongly Disagree	Disagree	Niether Agree nor Disagree	Agree	Strongly Agree
1	2	3	4	⑤

Task 2: View filter adjustment options

This task was easy to complete.

Strongly Disagree	Disagree	Niether Agree nor Disagree	Agree	Strongly Agree
1	2	3	4	⑤

Task 3: Use the fourth preset filter

This task was easy to complete.

Strongly Disagree	Disagree	Niether Agree nor Disagree	Agree	Strongly Agree
1	2	③	4	5

Task 4: Adjust the filter to 50% opacity level

This task was easy to complete.

Strongly Disagree	Disagree	Niether Agree nor Disagree	Agree	Strongly Agree
1	2	3	④	5

Task 5: Insert hashtags in the caption section

This task was easy to complete.

Strongly Disagree	Disagree	Niether Agree nor Disagree	Agree	Strongly Agree
1	2	3	4	⑤

Task 6: Add a location to the photo

This task was easy to complete.

Strongly Disagree	Disagree	Niether Agree nor Disagree	Agree	Strongly Agree
1	2	3	4	⑤

**Experiment #2: Apply a preset filter to an existing photo with hashtags and location"
(VSCO)**

Task 1: Create a new post

This task was easy to complete.

Strongly Disagree	Disagree	Niether Agree nor Disagree	Agree	Strongly Agree
1	2	3	④	5

Task 2: View filter adjustment options

This task was easy to complete.

Strongly Disagree	Disagree	Niether Agree nor Disagree	Agree	Strongly Agree
1	2	3	④	5

Task 3: Use the fourth preset filter

This task was easy to complete.

Strongly Disagree	Disagree	Niether Agree nor Disagree	Agree	Strongly Agree
1	②	3	4	5

Task 4: Adjust the filter to 50% opacity level

This task was easy to complete.

Strongly Disagree	Disagree	Niether Agree nor Disagree	Agree	Strongly Agree
1	②	3	4	5

Task 5: Insert hashtags in the caption section

This task was easy to complete.

Strongly Disagree	Disagree	Niether Agree nor Disagree	Agree	Strongly Agree
1	2	③	4	5

Task 6: Add a location to the photo

This task was easy to complete.

Strongly Disagree	Disagree	Niether Agree nor Disagree	Agree	Strongly Agree
1	②	3	4	5

Participant Four: Likert Scale Ratings

Task 1: Create a new post

This task was easy to complete.

Strongly Disagree	Disagree	Niether Agree nor Disagree	Agree	Strongly Agree
1	2	3	4	⑤

Task 2: View filter adjustment options

This task was easy to complete.

Strongly Disagree	Disagree	Niether Agree nor Disagree	Agree	Strongly Agree
1	2	3	④	5

Task 3: Use the fourth preset filter

This task was easy to complete.

Strongly Disagree	Disagree	Niether Agree nor Disagree	Agree	Strongly Agree
1	2	3	④	5

Task 4: Adjust the filter to 50% opacity level

This task was easy to complete.

Strongly Disagree	Disagree	Niether Agree nor Disagree	Agree	Strongly Agree
1	②	3	4	5

Task 5: Insert hashtags in the caption section

This task was easy to complete.

Strongly Disagree	Disagree	Niether Agree nor Disagree	Agree	Strongly Agree
1	2	3	4	⑤

Task 6: Add a location to the photo

This task was easy to complete.

Strongly Disagree	Disagree	Niether Agree nor Disagree	Agree	Strongly Agree
1	2	3	④	5

Experiment #2: Apply a preset filter to an existing photo with hashtags and location"
(VSCO)

Task 1: Create a new post

This task was easy to complete.

Strongly Disagree	Disagree	Niether Agree nor Disagree	Agree	Strongly Agree
1	2	3	④	5

Task 2: View filter adjustment options

This task was easy to complete.

Strongly Disagree	Disagree	Niether Agree nor Disagree	Agree	Strongly Agree
1	2	3	④	5

Task 3: Use the fourth preset filter

This task was easy to complete.

Strongly Disagree	Disagree	Niether Agree nor Disagree	Agree	Strongly Agree
1	2	③	4	5

Task 4: Adjust the filter to 50% opacity level

This task was easy to complete.

Strongly Disagree	Disagree	Niether Agree nor Disagree	Agree	Strongly Agree
1	②	3	4	5

Task 5: Insert hashtags in the caption section

This task was easy to complete.

Strongly Disagree	Disagree	Niether Agree nor Disagree	Agree	Strongly Agree
1	2	3	④	5

Task 6: Add a location to the photo

This task was easy to complete.

Strongly Disagree	Disagree	Niether Agree nor Disagree	Agree	Strongly Agree
1	②	3	4	5

After Scenario Questionnaire -Questions

After-Scenario Questionnaire (ASQ)
Experiment #2: Apply a preset filter to an existing photo with hashtags and location"
(Instagram)

Effectiveness

I am satisfied with the ease of completing the tasks in this scenario.	Strongly Disagree	Disagree	Niether Agree nor Disagree	Agree	Strongly Agree
	1	2	3	4	5

Efficiency

I am satisfied with the amount of time it took to complete the tasks in this scenario.	Strongly Disagree	Disagree	Niether Agree nor Disagree	Agree	Strongly Agree
	1	2	3	4	5

Satisfaction

I am satisfied with the support information (online help, messages, documentation) when completing the tasks.	Strongly Disagree	Disagree	Niether Agree nor Disagree	Agree	Strongly Agree
	1	2	3	4	5

After-Scenario Questionnaire (ASQ)
Experiment #2: Apply a preset filter to an existing photo with hashtags and location"
(VSCO)

Effectiveness

I am satisfied with the ease of completing the tasks in this scenario.	Strongly Disagree	Disagree	Niether Agree nor Disagree	Agree	Strongly Agree
	1	2	3	4	5

Efficiency

I am satisfied with the amount of time it took to complete the tasks in this scenario.	Strongly Disagree	Disagree	Niether Agree nor Disagree	Agree	Strongly Agree
	1	2	3	4	5

Satisfaction

I am satisfied with the support information (online help, messages, documentation) when completing the tasks.	Strongly Disagree	Disagree	Niether Agree nor Disagree	Agree	Strongly Agree
	1	2	3	4	5

ASQ -Participant One Post-Task Evaluation

After-Scenario Questionnaire (ASQ)
Experiment #2: Apply a preset filter to an existing photo with hashtags and location"
(Instagram)

Effectiveness

I am satisfied with the ease of completing the tasks in this scenario.	Strongly Disagree	Disagree	Niether Agree nor Disagree	Agree	Strongly Agree
	1	2	3	(4)	5

Efficiency

I am satisfied with the amount of time it took to complete the tasks in this scenario.	Strongly Disagree	Disagree	Niether Agree nor Disagree	Agree	Strongly Agree
	1	2	3	4	(5)

Satisfaction

I am satisfied with the support information (online help, messages, documentation) when completing the tasks.	Strongly Disagree	Disagree	Niether Agree nor Disagree	Agree	Strongly Agree
	1	2	3	(4)	5

After-Scenario Questionnaire (ASQ)
Experiment #2: Apply a preset filter to an existing photo with hashtags and location"
(VSCO)

Effectiveness

I am satisfied with the ease of completing the tasks in this scenario.	Strongly Disagree	Disagree	Niether Agree nor Disagree	Agree	Strongly Agree
	1	2	3	(4)	5

Efficiency

I am satisfied with the amount of time it took to complete the tasks in this scenario.	Strongly Disagree	Disagree	Niether Agree nor Disagree	Agree	Strongly Agree
	1	2	3	(4)	5

Satisfaction

I am satisfied with the support information (online help, messages, documentation) when completing the tasks.	Strongly Disagree	Disagree	Niether Agree nor Disagree	Agree	Strongly Agree
	1	(2)	3	4	5

ASQ -Participant Two Post-Task Evaluation

After-Scenario Questionnaire (ASQ)
Experiment #2: Apply a preset filter to an existing photo with hashtags and location"
(Instagram)

Effectiveness

I am satisfied with the ease of completing the tasks in this scenario.	**Strongly Disagree**	**Disagree**	**Niether Agree nor Disagree**	**Agree**	**Strongly Agree**
	1	2	3	4	(5)

Efficiency

I am satisfied with the amount of time it took to complete the tasks in this scenario.	**Strongly Disagree**	**Disagree**	**Niether Agree nor Disagree**	**Agree**	**Strongly Agree**
	1	2	3	4	(5)

Satisfaction

I am satisfied with the support information (online help, messages, documentation) when completing the tasks.	**Strongly Disagree**	**Disagree**	**Niether Agree nor Disagree**	**Agree**	**Strongly Agree**
	1	2	(3)	4	5

After-Scenario Questionnaire (ASQ)
Experiment #2: Apply a preset filter to an existing photo with hashtags and location"
(VSCO)

Effectiveness

I am satisfied with the ease of completing the tasks in this scenario.	**Strongly Disagree**	**Disagree**	**Niether Agree nor Disagree**	**Agree**	**Strongly Agree**
	1	2	3	(4)	5

Efficiency

I am satisfied with the amount of time it took to complete the tasks in this scenario.	**Strongly Disagree**	**Disagree**	**Niether Agree nor Disagree**	**Agree**	**Strongly Agree**
	1	(2)	3	4	5

Satisfaction

I am satisfied with the support information (online help, messages, documentation) when completing the tasks.	**Strongly Disagree**	**Disagree**	**Niether Agree nor Disagree**	**Agree**	**Strongly Agree**
	1	2	(3)	4	5

ASQ -Participant Three Post-Task Evaluation

Effectiveness

I am satisfied with the ease of completing the tasks in this scenario.	Strongly Disagree	Disagree	Niether Agree nor Disagree	Agree	Strongly Agree
	1	2	(3)	4	5

Efficiency

I am satisfied with the amount of time it took to complete the tasks in this scenario.	Strongly Disagree	Disagree	Niether Agree nor Disagree	Agree	Strongly Agree
	1	(2)	3	4	5

Satisfaction

I am satisfied with the support information (online help, messages, documentation) when completing the tasks.	Strongly Disagree	Disagree	Niether Agree nor Disagree	Agree	Strongly Agree
	1	2	(3)	4	5

Effectiveness

I am satisfied with the ease of completing the tasks in this scenario.	Strongly Disagree	Disagree	Niether Agree nor Disagree	Agree	Strongly Agree
	1	(2)	3	4	5

Efficiency

I am satisfied with the amount of time it took to complete the tasks in this scenario.	Strongly Disagree	Disagree	Niether Agree nor Disagree	Agree	Strongly Agree
	1	2	(3)	4	5

Satisfaction

| I am satisfied with the support information (online help, messages, documentation) when completing the tasks.	Strongly Disagree	Disagree	Niether Agree nor Disagree	Agree	Strongly Agree
	1	(2)	3	4	5

ASQ -Participant Four Post-Task Evaluation

After-Scenario Questionnaire (ASQ)
Experiment #2: Apply a preset filter to an existing photo with hashtags and location"
(Instagram)

Effectiveness

I am satisfied with the ease of completing the tasks in this scenario.	Strongly Disagree	Disagree	Niether Agree nor Disagree	Agree	Strongly Agree
	1	2	3	(4)	5

Efficiency

I am satisfied with the amount of time it took to complete the tasks in this scenario.	Strongly Disagree	Disagree	Niether Agree nor Disagree	Agree	Strongly Agree
	1	(2)	3	4	5

Satisfaction

I am satisfied with the support information (online help, messages, documentation) when completing the tasks.	Strongly Disagree	Disagree	Niether Agree nor Disagree	Agree	Strongly Agree
	1	2	3	(4)	5

After-Scenario Questionnaire (ASQ)
Experiment #2: Apply a preset filter to an existing photo with hashtags and location"
(VSCO)

Effectiveness

I am satisfied with the ease of completing the tasks in this scenario.	Strongly Disagree	Disagree	Niether Agree nor Disagree	Agree	Strongly Agree
	1	(2)	3	4	5

Efficiency

I am satisfied with the amount of time it took to complete the tasks in this scenario.	Strongly Disagree	Disagree	Niether Agree nor Disagree	Agree	Strongly Agree
	1	(2)	3	4	5

Satisfaction

I am satisfied with the support information (online help, messages, documentation) when completing the tasks.	Strongly Disagree	Disagree	Niether Agree nor Disagree	Agree	Strongly Agree
	1	2	(3)	4	5

Top Box & Top 2 Box Scores + Data

Task One: Instagram				Task One: VSCO			
Participant	**Rating (1-5)**	**Top Box**	**Top 2 Box**	**Participant**	**Rating (1-5)**	**Top Box**	**Top 2 Box**
P1	4	0	1	P1	5	1	1
P2	5	1	1	P2	4	0	1
P3	5	1	1	P3	3	0	0
P4	5	1	1	P4	4	0	1
Average	4.75	75%	100%	**Average**	4	25%	75%

Task Two: Instagram				Task Two: VSCO			
Participant	**Rating (1-5)**	**Top Box**	**Top 2 Box**	**Participant**	**Rating (1-5)**	**Top Box**	**Top 2 Box**
P1	4	0	1	P1	4	0	1
P2	5	1	1	P2	4	0	1
P3	3	0	0	P3	4	0	1
P4	4	0	1	P4	4	0	1
Average	4	25%	75%	**Average**	4	0%	100%

Task Three: Instagram				Task Three: VSCO			
Participant	**Task Six: VSCO**	**Top Box**	**Top 2 Box**	**Participant**	**Rating (1-5)**	**Top Box**	**Top 2 Box**
P1	2	0	0	P1	2	0	0
P2	3	0	0	P2	2	0	0
P3	2	0	0	P3	3	0	0
P4	4	0	1	P4	3	0	0
Average	2.75	0%	25%	**Average**	2.5	0%	0%

Task Four: Instagram				Task Four: VSCO			
Participant	**Rating (1-5)**	**Top Box**	**Top 2 Box**	**Participant**	**Rating (1-5)**	**Top Box**	**Top 2 Box**
P1	2	0	0	P1	3	0	0
P2	4	0	1	P2	2	0	0
P3	3	0	0	P3	2	0	0
P4	2	0	0	P4	2	0	0
Average	2.75	0%	25%	**Average**	2.25	0%	0%

Task Five: Instagram				Task Five: VSCO			
Participant	**Rating (1-5)**	**Top Box**	**Top 2 Box**	**Participant**	**Rating (1-5)**	**Top Box**	**Top 2 Box**
P1	5	1	1	P1	2	0	0
P2	5	1	1	P2	3	0	0
P3	4	0	1	P3	2	0	0
P4	5	1	1	P4	4	0	1
Average	4.75	75%	100%	**Average**	2.75	0%	25%

Task Six: Instagram				Task Six: Instagram			
Participant	**Rating (1-5)**	**Top Box**	**Top 2 Box**	**Participant**	**Rating (1-5)**	**Top Box**	**Top 2 Box**
P1	5	1	1	P1	2	0	0
P2	5	1	1	P2	2	0	0
P3	5	1	1	P3	1	0	0
P4	4	0	1	P4	2	0	0
Average	4.75	75%	100%	**Average**	1.75	0%	0%

Top Box Scores

95% Confidence Level/Error Bars
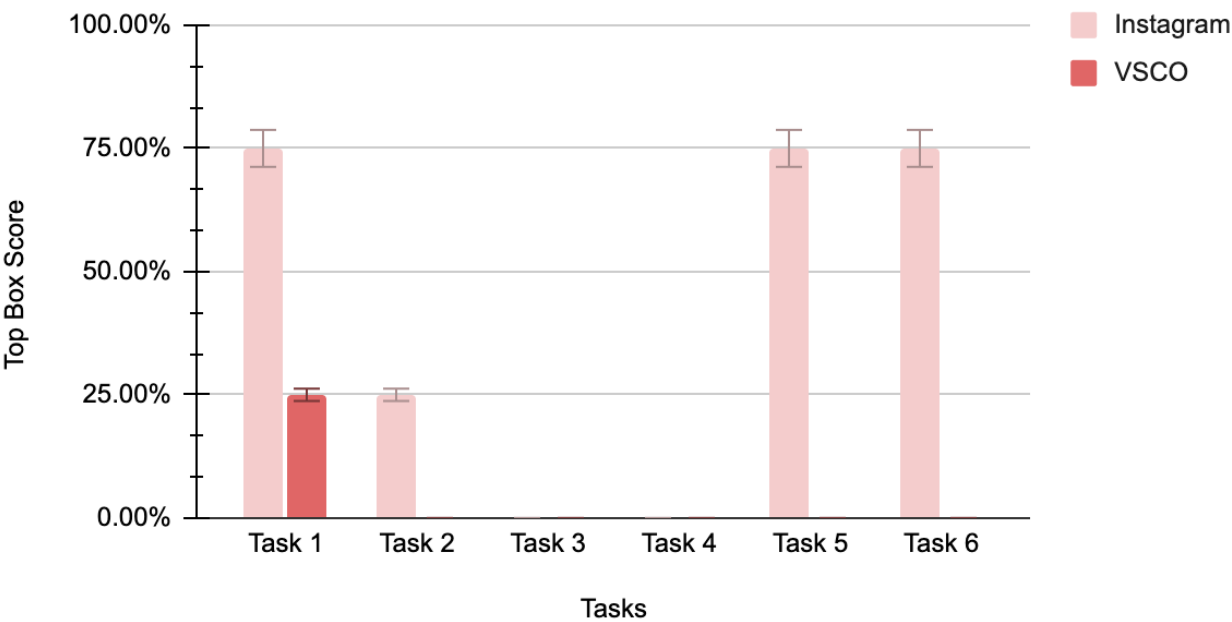
Top 2 Box Scores
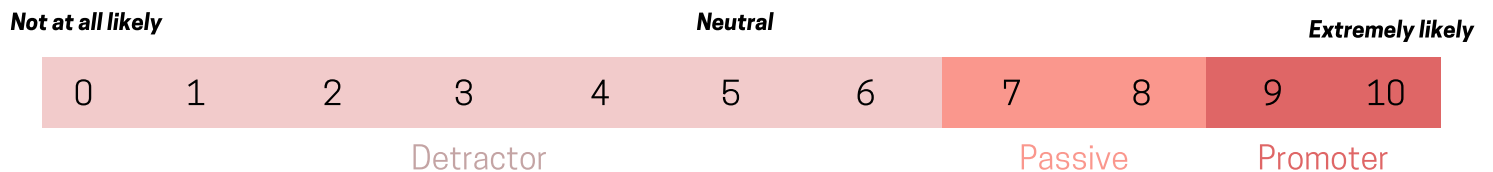
95% Confidence Level/Error Bars
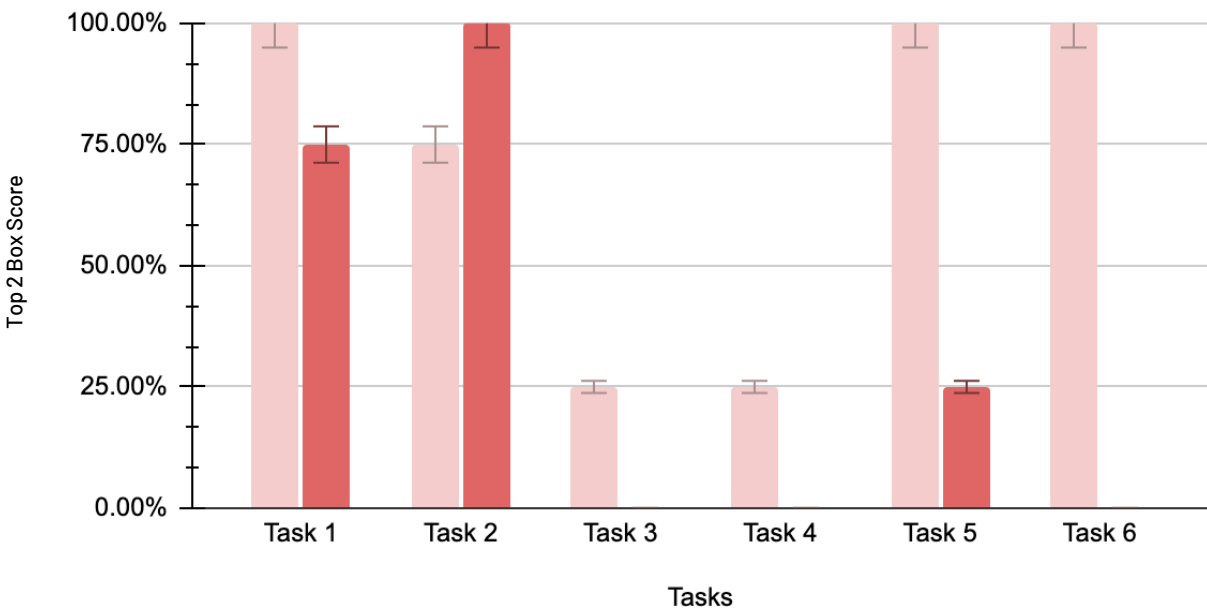
Net Promoter Score Template

How likely are you to recommend Instagram to a friend or colleague?
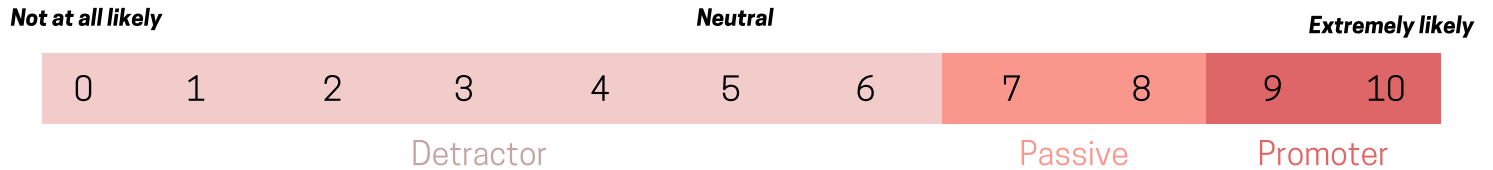
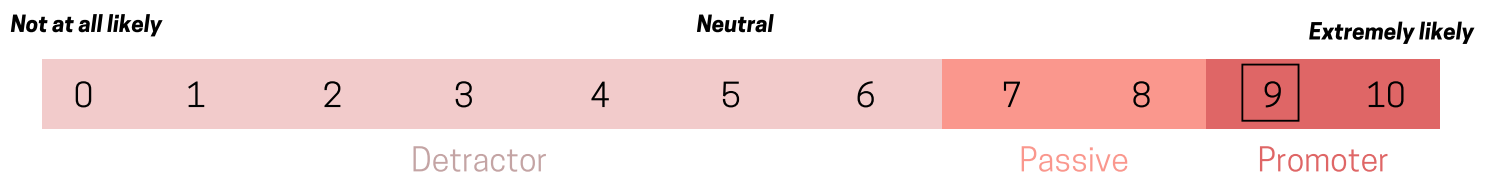*Not at all likely*   *Neutral*   *Extremely likely*

0	1	2	3	4	5	6	7	8	9	10

Detractor   Passive   Promoter

How likely are you to recommend VSCO to a friend or colleague?

Not at all likely   *Neutral*   *Extremely likely*

0	1	2	3	4	5	6	7	8	9	10

Detractor   Passive   Promoter

Net Promoter Score -Participant One

How likely are you to recommend Instagram to a friend or colleague?

Not at all likely   *Neutral*   *Extremely likely*

0	1	2	3	4	5	6	7	8	[9]	10

Detractor   Passive   Promoter

How likely are you to recommend VSCO to a friend or colleague?

Not at all likely   *Neutral*   *Extremely likely*

0	1	2	3	4	5	6	7	[8]	9	10

Detractor   Passive   Promoter
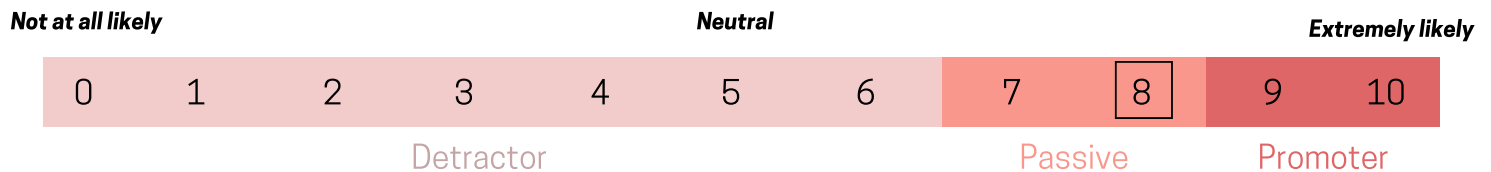
Net Promoter Score -Participant Two

How likely are you to recommend Instagram to a friend or colleague?
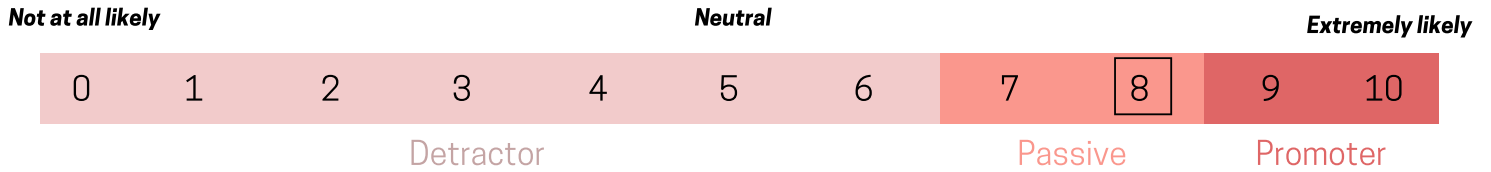
Not at all likely   **Neutral**   **Extremely likely**

0	1	2	3	4	5	6	7	8	9	10

Detractor   Passive   Promoter

How likely are you to recommend VSCO to a friend or colleague?

Not at all likely   **Neutral**   **Extremely likely**

0	1	2	3	4	5	6	7	8	9	10

Detractor   Passive   Promoter
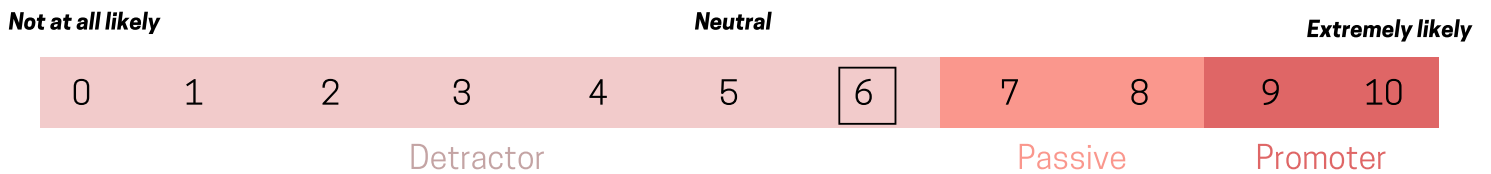
Net Promoter Score -Participant Three

How likely are you to recommend Instagram to a friend or colleague?
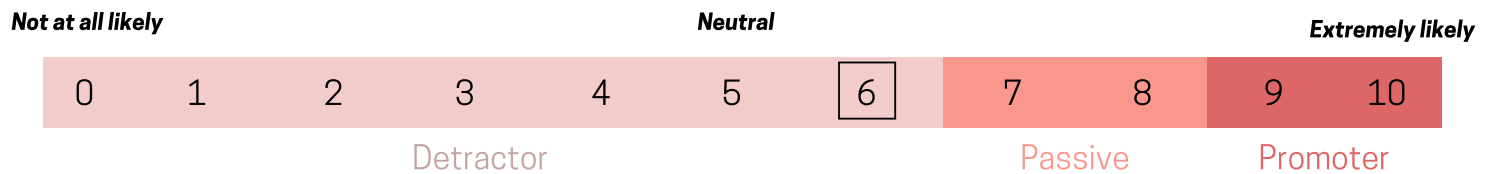
Not at all likely   **Neutral**   **Extremely likely**

0	1	2	3	4	5	6	7	8	9	10

Detractor   Passive   Promoter

How likely are you to recommend VSCO to a friend or colleague?

Not at all likely   **Neutral**   **Extremely likely**

0	1	2	3	4	5	6	7	8	9	10

Detractor   Passive   Promoter
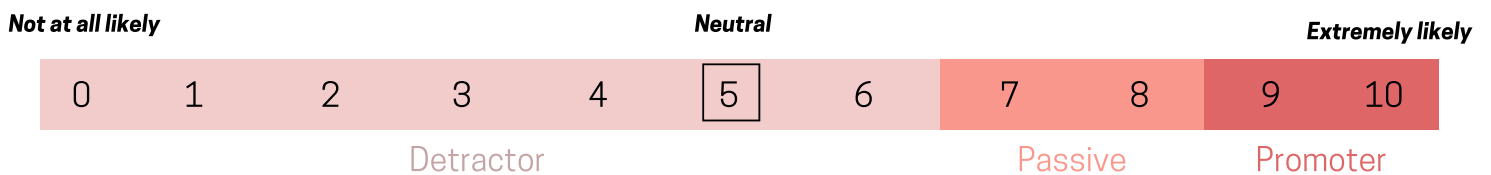
Net Promoter Score -Participant Four

How likely are you to recommend Instagram to a friend or colleague?

Not at all likely   *Neutral*   *Extremely likely*

| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |

Detractor   Passive   Promoter

How likely are you to recommend VSCO to a friend or colleague?

Not at all likely   *Neutral*   *Extremely likely*

| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
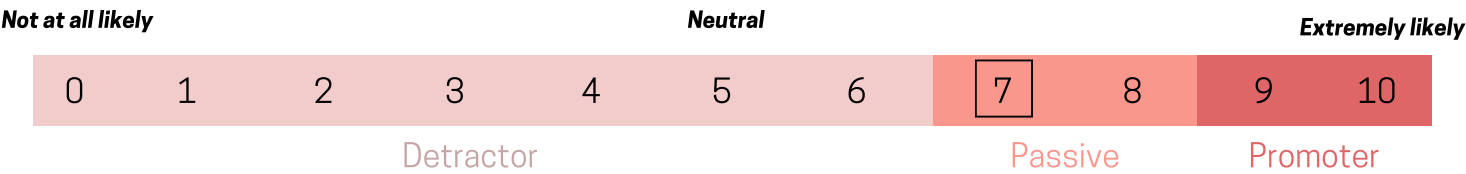
Detractor   Passive   Promoter
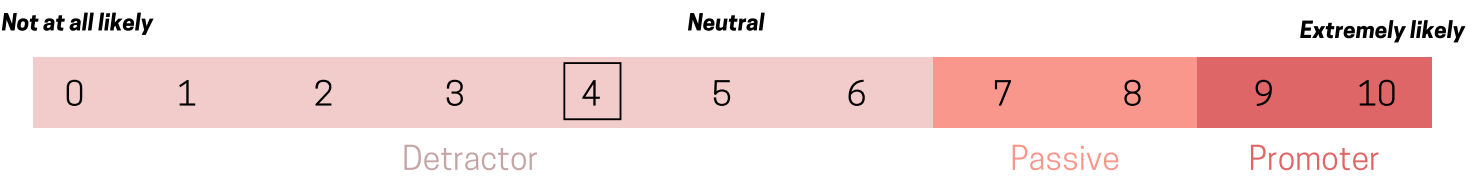
Net Promoter Score Calculations & Comparison

NPS (Instagram)	Detractors	Passive	Promoters
Amount	1	2	1
Percentage	25%	50%	25%
NPS Score	0		

NPS (VSCO)	Detractors	Passive	Promoters
Amount	3	1	0
Percentage	75%	25%	0%
NPS Score	-75		

Net Promoter Score Ratings Comparison (Overall Tasks)
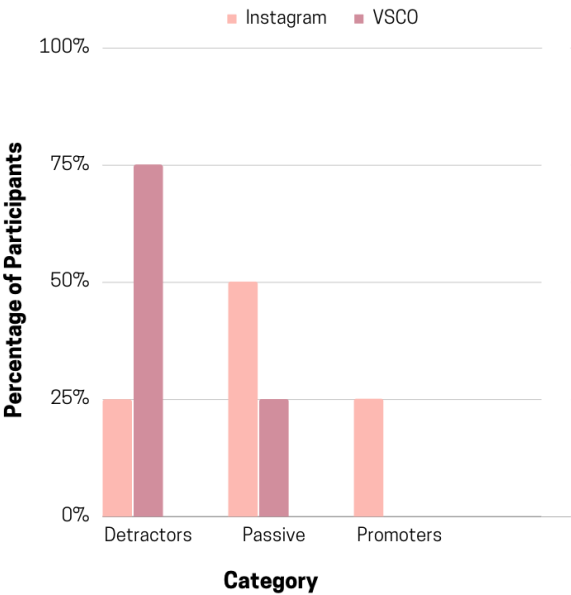
The Usability Metric for User Experience Lite (UMUX-Lite)

Template

Instagram is easy to use.
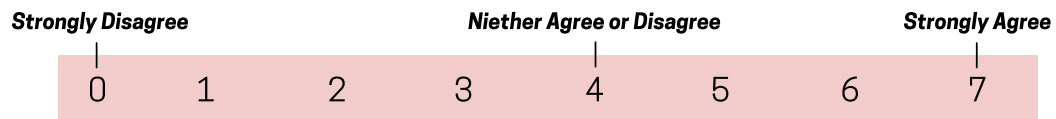
Strongly Disagree *Niether Agree or Disagree* *Strongly Agree*

0   1   2   3   4   5   6   7

Instagram's capabilities meet my requirements.

Strongly Disagree *Niether Agree or Disagree* *Strongly Agree*

0   1   2   3   4   5   6   7

VSCO is easy to use.

Strongly Disagree *Niether Agree or Disagree* *Strongly Agree*

0   1   2   3   4   5   6   7

VSCO's capabilities meet my requirements.

Strongly Disagree *Niether Agree or Disagree* *Strongly Agree*

0   1   2   3   4   5   6   7
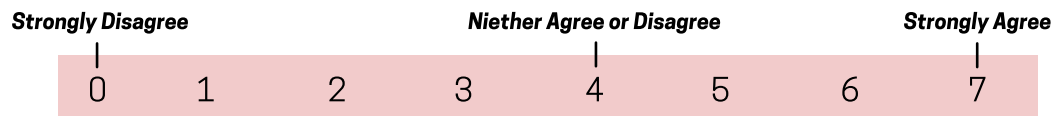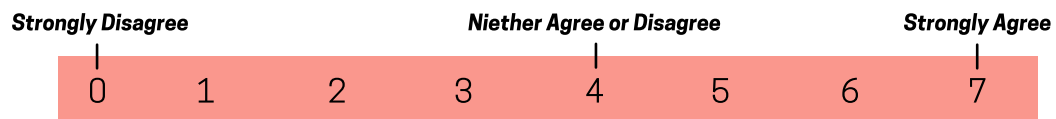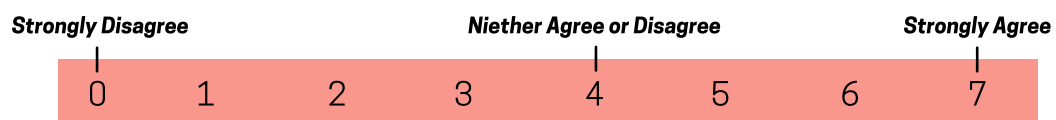
UMUX-Lite -Participant One

Instagram is easy to use.
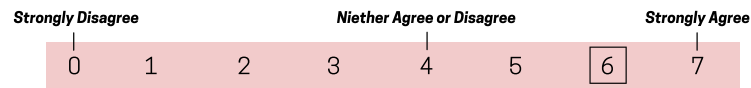
Strongly Disagree   *Niether Agree or Disagree*   *Strongly Agree*

0   1   2   3   4   5   [6]   7

Instagram's capabilities meet my requirements.

Strongly Disagree   *Niether Agree or Disagree*   *Strongly Agree*

0   1   2   3   4   5   6   [7]

VSCO is easy to use.

Strongly Disagree   *Niether Agree or Disagree*   *Strongly Agree*

0   1   2   3   4   5   [6]   7

VSCO's capabilities meet my requirements.

Strongly Disagree   *Niether Agree or Disagree*   *Strongly Agree*

0   1   2   3   4   5   [6]   7
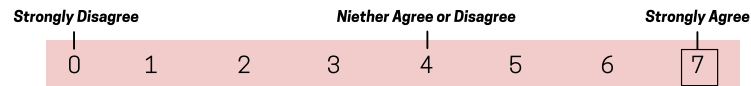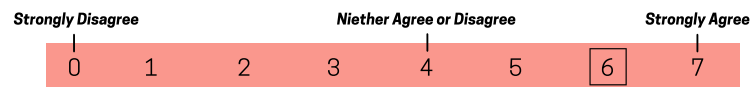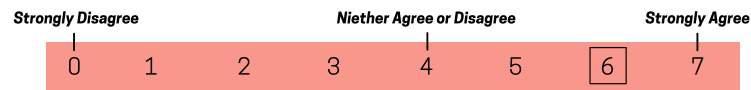
UMUX-Lite -Participant Two

Instagram is easy to use.
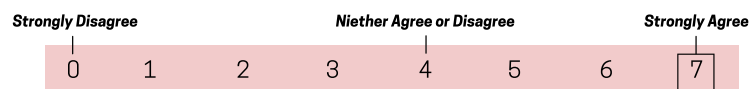
Strongly Disagree   *Niether Agree or Disagree*   *Strongly Agree*

0   1   2   3   4   5   6   [7]

Instagram's capabilities meet my requirements.

Strongly Disagree   *Niether Agree or Disagree*   *Strongly Agree*

0   1   2   3   4   5   [6]   7

VSCO is easy to use.

Strongly Disagree   *Niether Agree or Disagree*   *Strongly Agree*

0   1   2   3   4   [5]   6   7

VSCO's capabilities meet my requirements.

Strongly Disagree   *Niether Agree or Disagree*   *Strongly Agree*

0   1   2   3   4   5   [6]   7
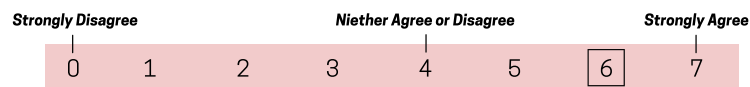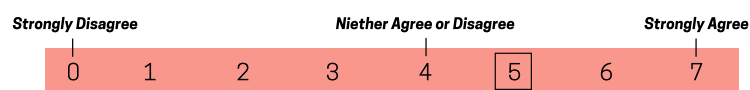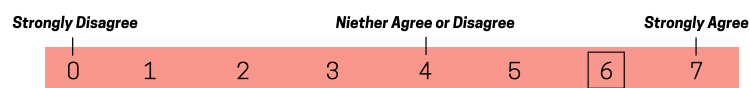
UMUX-Lite -Participant Three

Instagram is easy to use.
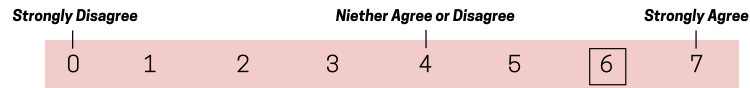
Strongly Disagree *Niether Agree or Disagree* *Strongly Agree*

0   1   2   3   4   5   [6]   7

Instagram's capabilities meet my requirements.

Strongly Disagree *Niether Agree or Disagree* *Strongly Agree*

0   1   2   3   4   5   [6]   7

VSCO is easy to use.

Strongly Disagree *Niether Agree or Disagree* *Strongly Agree*

0   1   2   3   4   [5]   6   7

VSCO's capabilities meet my requirements.

Strongly Disagree *Niether Agree or Disagree* *Strongly Agree*

0   1   2   3   4   [5]   6   7
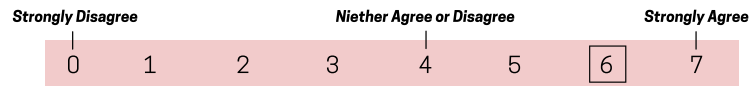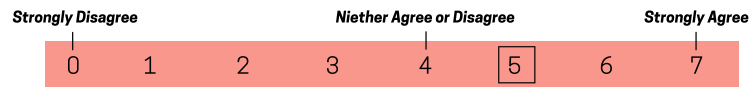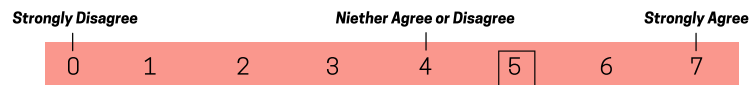
UMUX-Lite -Participant Four

Instagram is easy to use.
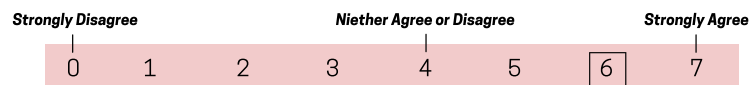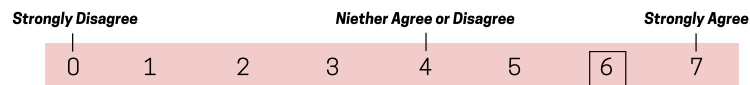
Strongly Disagree *Niether Agree or Disagree* *Strongly Agree*

0   1   2   3   4   5   [6]   7

Instagram's capabilities meet my requirements.

Strongly Disagree *Niether Agree or Disagree* *Strongly Agree*

0   1   2   3   4   5   [6]   7

VSCO is easy to use.

Strongly Disagree *Niether Agree or Disagree* *Strongly Agree*

0   1   2   3   [4]   5   6   7

VSCO's capabilities meet my requirements.

Strongly Disagree *Niether Agree or Disagree* *Strongly Agree*

0   1   2   [3]   4   5   6   7
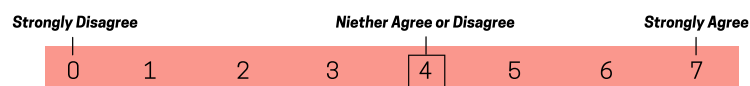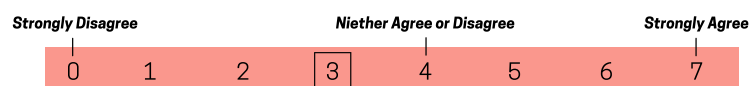
Usability Metric for User Experience Lite Scores & Calculations

|	Usability Metric for User Experience Lite					
	Instagram			VSCO		
Participant	Q1	Q2	UMUX Lite	Q1	Q2	UMUX Lite
P1	6	7	92%	6	6	83%
P2	7	6	92%	5	6	75%
P3	6	6	83%	5	5	67%
P4	6	6	83%	4	3	42%
Average			88%			67%

Usability Issues

Instagram: Task #1: Search for help or support about "how to like a post?"
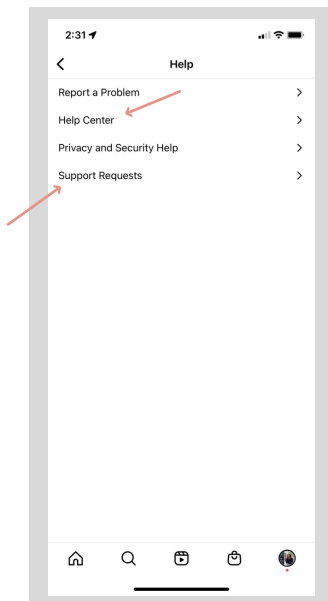
Issue #1: Confusing Labels
The subtask is to "Open the Help Center." The cause of this issue is that in the menu list of options, another button exists labeled, "Support Requests." The usability is that users are confused about which menu option to select as the label misleads users to think they are the same. To fix this issue, Instagram should rename the "Support Requests" to "Submitted Requests."

Participant One: "Both of these options seem correct, how do I know which to pick?"
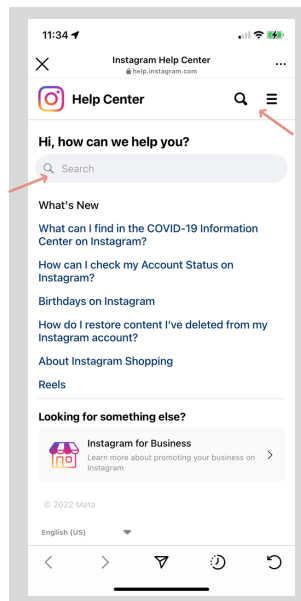
Issue #2: Navigation Options
The subtask is to "Use the search bar." The cause of this issue is that there are two search icons. The usability issue is that users are confused about which search icon will lead them to the correct screen. To fix this issue, Instagram should remove one of the search icons.

Participant Two: "I noticed there are two search icons, this might confuse others."
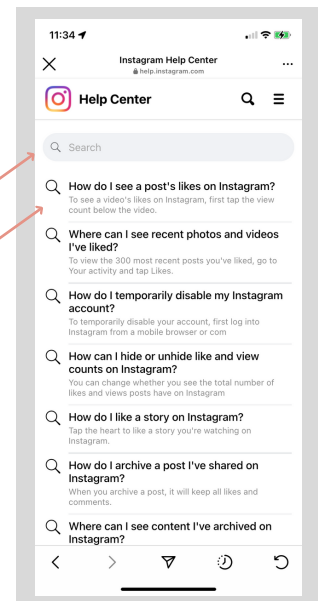
Issue #3: Disappearing Search Field
The subtask is to "Type in (How to like a post?)." The cause of the issue is that the search bar is masked once a user enters in a search. The usability issue is that the participants cannot confirm if they entered in the intended question or content. In addition, participants cannot edit or return to their text field, they must re-enter all the information again. To fix this issue, the text should always remain until deleted by the user.

Participant Three: "It's weird how the text disappears."

VSCO: Task #1: Search for help or support about "how to like a post?"
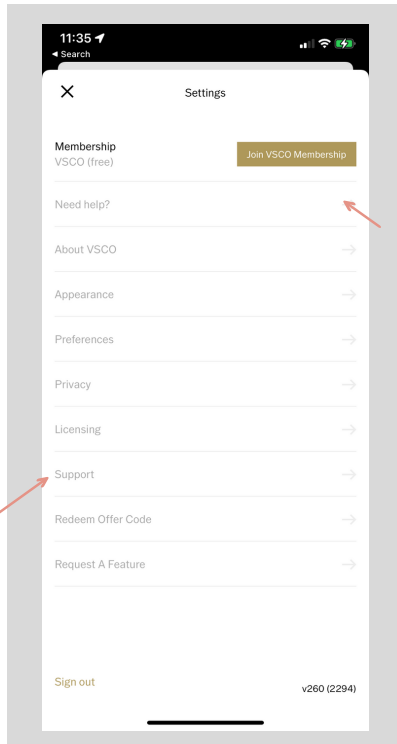
Issue #1: Confusing Menu
The subtask is to "Open the "Help Center." The cause of this issue is that the list of options in the menu includes, "Need help?" and "Support." The usability issue is that users cannot differentiate which menu will help them complete the subtask. To fix this issue, VSCO should combine the menu options labeled "Support Center" and rename the "Need Help?" option to "Support Chat."

Participant Four: "How am I supposed to know which one will take me to the correct screen?"
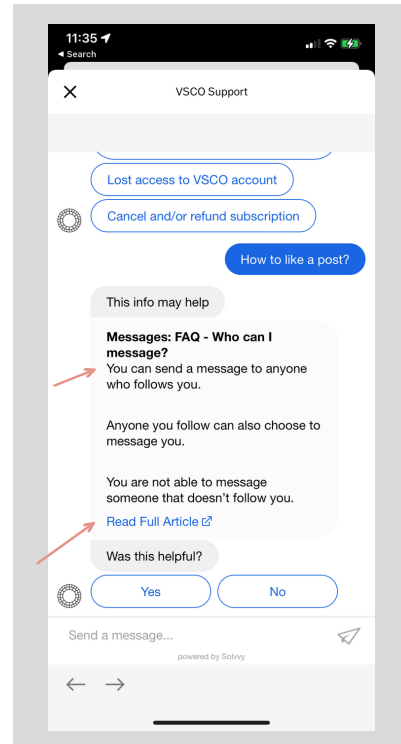
Issue #2: Limited Results
The subtask is to "Find results." The cause of this issue is that the number of results per question is one. The usability issue is that users can only see one answer per question. If the response doesn't provide the correct answer or what they were looking for then, users have to retype a new search or start the task over again. To fix this issue, VSCO should adopt a similar interface to Instagram, where users are provided with a wide selection of options and articles to choose from.

Participant Three: "Why is there only one answer provided. I don't think this answers the task question."

Usability Issues by Participant -Experiment/Task #1
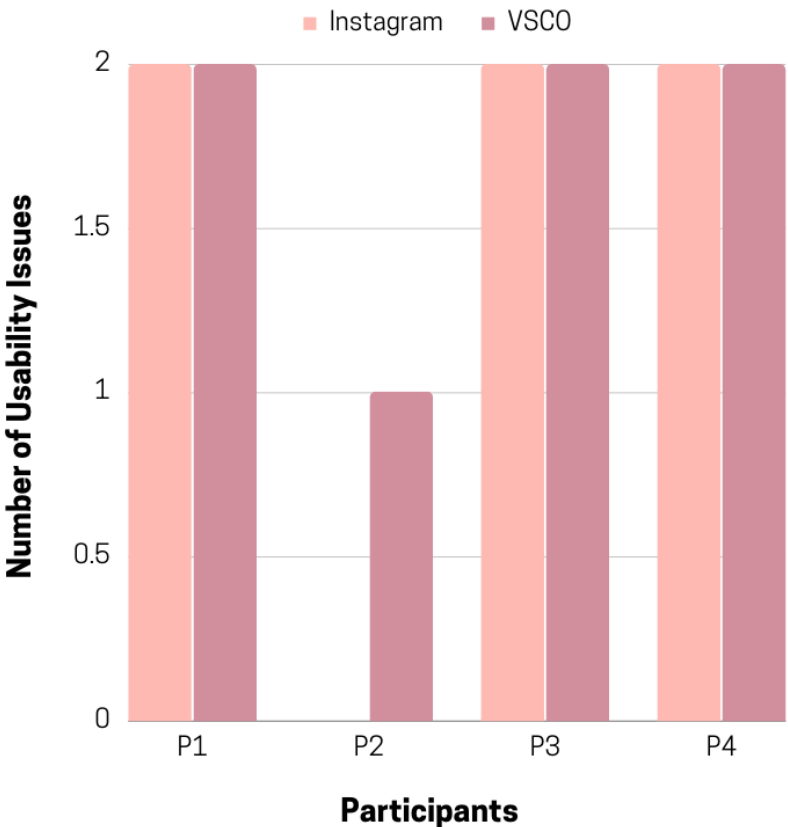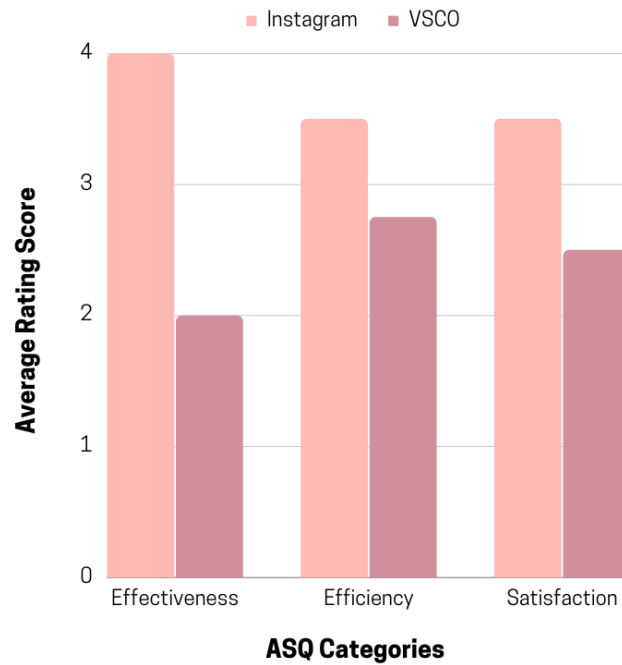
After-Scenario Questionnaire (ASQ) Scores						
	Instagram				VSCO		
	Effectiveness	Efficiency	Satisfaction		Effectiveness	Efficiency	Satisfaction
P1	4	5	4		4	4	2
P2	5	5	3		4	2	3
P3	3	2	3		2	3	2
P4	4	2	4		2	2	3
Average Score	4	3.5	3.5		3	2.75	2.5

After-Scenario Questionnaire (ASQ) Average Rating System Comparison

Experiment Set Up

Zoom Room Set Up Instagram -Participant One
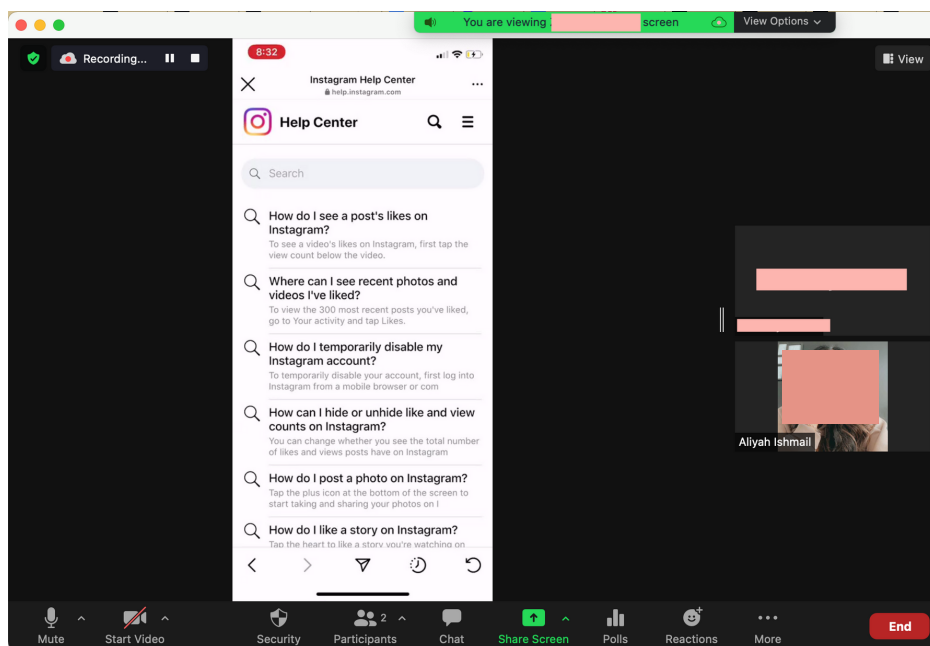
Word Clouds
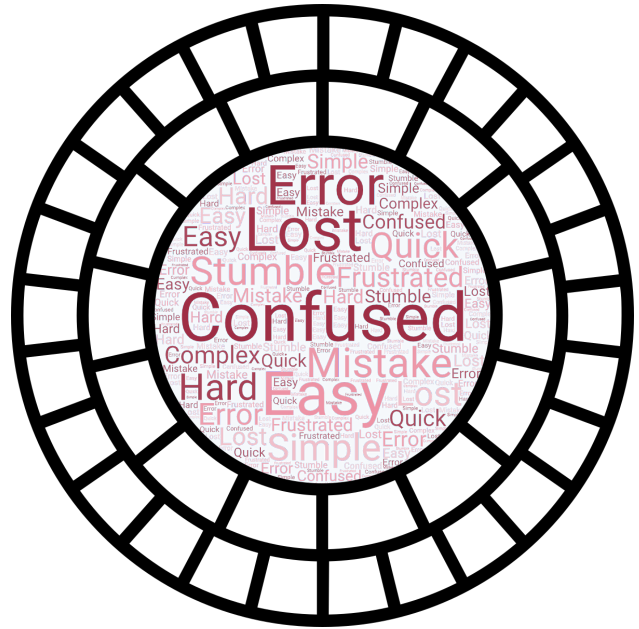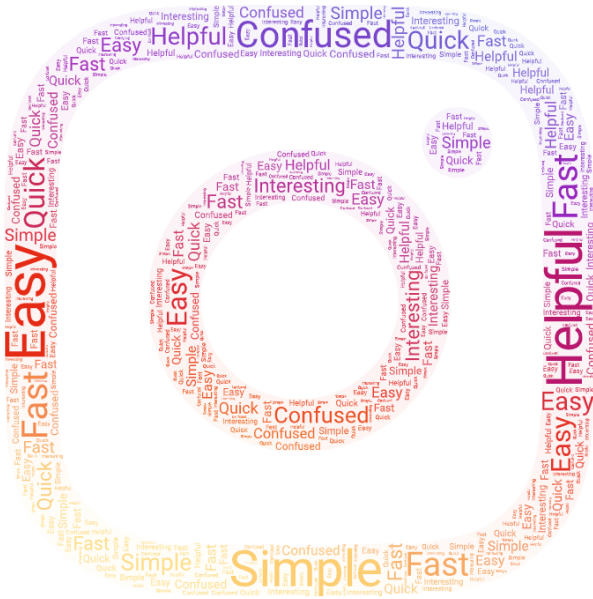
Post-Session Interview Insights

    After running a post-session interview with the participants, there were many insights into the two systems that were revealed. While both systems have issues, VSCO seemed to have an overall lower satisfaction and usability compared to Instagram. This is mainly due to the previous knowledge and experience of participants. The four participants were more familiar and frequent users of Instagram compared to VSCO before the experiments. However, the most prevalent issue with Instagram is the disappearing search field in their Help Center. In this design, the participants all noticed that the system deletes their previously imputed search requests. The most prevalent issue with VSCO is the label and headers in their menu section. The similarity and choice of words made it confusing and frustrating for participants to decipher which option to pick. These issues are illustrated in the Usability Issues section.

    A common error or mistake that participants made while completing tasks occurred with Instagram and VSCO. When participants were tasked with reducing a present filter to 50% opacity, many participants selected the wrong icon. This led them to edit individual filter adjustments such as brightness, contrast, etc. In both systems, to access the opacity, users need to reselect the filter to bring up the adjustment bar. To reduce future usability issues both systems should design the adjustment bar to appear immediately after a preset filter has been selected. Another mistake that participants made using VSCO was associated with the task of selecting the fourth preset filter. In Instagram, the filters are all evenly aligned and spaced out, including the "Normal" filter or none.

However, this error occurred in VSCO because this system separates the "Normal" or empty filters apart from their present filters (F.1). Participants were therefore selecting the fifth filter option, as they did not count the first one. To stop this usability issue, VSCO should adjust its filter spacing and size to make them all evenly aligned.

(F.1)
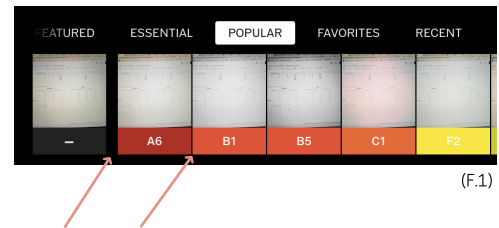
While both Instagram and VSCO function well for users, some aspects of Instagram function more optimally. Both systems have designed an interface and option where users can input hashtags into their captions, where the post will be located on a public feed. On Instagram, the hashtag feature will auto-suggest possible suggestions based on the text as the user inputs it. This increases effectiveness, making it faster for users to type out the word. It also increases user satisfaction as users are prompted with hashtags they may not have thought of. VSCO does not have this feature, forcing users to individually type and input every word and hashtag. This decreases satisfaction and effectiveness as users may misspell words. Another main aspect of both systems is the ability to add a location to a photo. Instagram's location functions more optimally as it allows users to easily add a location by suggesting ones based on the photos linked location and your current location. In addition, this system also allows users to type and enter any location in the world. VSCO does not provide the same functionality. The icon to add a location is small and hard to find. Furthermore, it does not let users customize the location, it provides it based on the location linked to the original photo.

A big area for improvement that Instagram and VSCO could both implement is with their help and support center accessibility. The help or support feature is a common task that many different types of users would need to use. However, to access this feature on both systems, users have to go through multiple steps to achieve the desired content or help. The user flows should be redesigned to make them more easily accessible from the home page or feed of both systems. Adding a help button or icon should always be displayed on-screen or in the profile without having to go into multiple menus to navigate to the correct section.

The other area for improvement for VSCO is their results page in their help section. Users are only prompted with one result to any inquiry or question they submit. The information is also reduced to a small summary, not a full article. To improve the help area, VSCO should provide users with multiple articles and links to ensure users are provided with enough details. In addition, creating a better help and support center will reduce the number of support requests that are made using the VSCO support platforms. This requires VSCO to pay and employ employees to respond and actively communicate with users, increasing their expenses.

Overall, Instagram and VSCO are very similar and offer almost alike features. However, Instagram seemed to perform better, provide better usability and satisfaction to participants. This may be due to the familiarity participants had with the system and its popularity. While both systems are social media and image-sharing apps or systems, Instagram gains and attracts a bigger audience. A big reason for this could be due to its vast majority of users. Despite both systems offering similar capabilities, users want to be able to share and view media with their friends and family. Participant one stated, "Why would I use VSCO when everyone has Instagram." This illustrates a clear indicator of why Instagram seems to be superior to VSCO. Instagram also compares better with its diverse target audience and market. VSCO is meant for personal accounts and images while Instagram offers functionality for businesses, companies/shopping, brands, and personal accounts.

Participant Quotes

"Everyone can view the things I repost on VSCO."

"Instagram allows me to save posts or images for later."

"I prefer Instagram over VSCO because my friends use it more."

"VSCO doesn't allow videos on my feed."

"VSCO won't allow comments or likes on images to be visible."

Possible Design Change

From a usability standpoint, both systems could be redefined and redesigned to decrease usability issues. A possible design change for Instagram is relocating where the help and support page is found. To increase visibility and accessibility, a "Question Mark'' icon should be located on the bottom navigation bar. The current bar features icons that direct users to the homepage, search, Reels, shopping, and profile. However, the Reels and shopping features can also be found and accessed on the homepage. These are also low-priority tasks for users as they tend to provide and include scams or ads. A direct button for the help center would be more useful and reduce time on task for users. Another design change to improve the usability on Instagram is the ability to turn off the suggested hashtag feature. While it may improve satisfaction and effectiveness, the feature can be distracting and hard to use if there are multiple hashtags. In addition, the suggested hashtags pop up on the screen, blocking the user from editing other parts of the text caption. To fix this issue, Instagram should design an "On" and "Off" feature, allowing users to enable or disable it.

A design change for VSCO to improve usability is redesigning the location feature. The current option to add a location is tiny and hard for users to find. This feature will also only appear if VSCO can access the original location of the photo. If a photo was downloaded or screenshotted, VSCO will not be able to identify where the location is. While Instagram lets users add any location regardless of the photo, VSCO users only have the option to choose the preselected location occasionally. To improve usability, VSCO should create a separate screen and section that allows users to input any location. This redesign should also include the option to enable or disable the feature at any time.

The overall study revealed through participant quotations and verbatim that their preference of system would be Instagram. This was due to the functionality that Instagram offers and VSCO lacks. To improve usability and satisfaction, VSCO should allow users to post videos and images without paying a fee. Users on VSCO can edit a video and upload it to their feed. However, VSCO only allows paid users to access this feature but this notification only appears after the user has spent time editing the image. VSCO restricts the access to posts but will allow the user to access the editing features, making users upset and frustrated. VSCO should also redesign the comment and likes feature on the homepage feed. Users on VSCO can favorite or repost images however, any comments made will make a direct message with the other user. From a usability standpoint, users are unsure where their comment went or how to view it. To fix this issue, comments should be made visible under each post or image.