

# Facebook Paper Usability Test

**Submitted by: Sam Kahle  
Brandon Frye  
Gary Barber  
Maria Tran**

**COM 560 Xu**

## Executive Summary

Paper is a free, content management app built by Facebook for mobile devices that helps users view, organize, and format the content of their personal Facebook accounts. Paper's functionality provides tools for organizing, tagging, scrolling, searching, and viewing their content on a new mobile interface. This format is a "new and improved" version of Facebook's traditional mobile format. We designed and conducted a task-oriented usability test that utilized the AB testing method of Paper's interface versus Facebook's regular mobile interface. Our end goal was to determine which interface was more preferable and for what reasons.

Paper's most notable difference is their addition of the "sections" feature. This feature is their way of trying to incorporate a newspaper-like feel into this new interface. The "sections" feature enables users to edit categories of several industries including technology, entertainment, sports, headlines, etc. This allows for more relevant news articles to generate onto a user's news feed that pertains to their interests.

User testing occurred on Tuesday, November 11 and Thursday, November 13 of 2014. Ten participants were randomly selected who had never used Paper before but had at least some familiarity with Facebook. During our testing sessions, each participant was given a set of eight realistic tasks that would mimic real world scenarios of functionality, along with a guided tutorial of Paper that stepped them through the basic functions. Each session was video recorded, a consent form was signed by each participant, and each test session was approximately 15 minutes long, including one minute for a pre-test background survey and a two minute post-test debriefing questionnaire.

We gave each participant a list of tasks, structured in a usual order using the key features of the app. We recorded task completion (and task failure), survey data, and made observations of user reactions to the Paper interface. Using the data and observations, we derived several common obstacles that participants encountered and we give an in-depth analysis for why those came to be.

The tests were conducted on campus with Elon University students. We decided to use the Elon student lounge located in the Moseley Student Center and the Elon Belk library. Each participant logged into their own Facebook account and the login information was deleted after the session was completed to ensure privacy. The usability tests were conducted using an Apple iPhone 5. We believe that having them use a phone that already had Paper installed on it, rather than using their own phone, would provide convenience for the participants not having to download it themselves. Additionally, using the same device for every participant would provide consistency in results as well as minimal behavior change.

Some participants skipped through the tutorial quickly without paying attention to the differences in actions in Paper versus Facebook. Those that did not complete the tutorial ended up struggling with each individual task more than the ones who completed the tutorials. It can be assumed that because people were already somewhat familiar with Facebook and its navigational features, that they already felt confident enough to inherently pick up the functionalities right off the bat.

Overall, participants were confused by the navigational differences that Paper offered. The swiping action of Paper is a learned new behavior. The tutorial proved to be helpful to most

participants, if they chose to fully complete it. If the tutorial were built so that the participant had to complete it, the success rate of the usability test would likely increase.

Minor issues that were identified during testing includes:

- Many participants showed confusion on how to navigate and edit the “Sections” category.
- Not understanding or knowing about the swiping up and down function to navigate to user’s main page, settings, and sections.
- Lack of knowledge about the swiping up and down function which is roughly 50% of how the application is navigated.
- When certain tasks needed users to swipe up and down to navigate, users tend to want to swipe left, right, and clicking the screen instead.
- Some users chose to not follow the tutorial provided and chose to try to navigate and figure out the layout on their own, which gave them issues due to lack of clear instructions on how to use the page.
- Some participants chose to follow through with tasks even if they came across issues and it took a long time, while others gave up the tasks completely.

## **Introduction**

Our team conducted an onsite usability test on students that currently attend Elon University. *Paper* is Facebook’s redesigned mobile application layout that serves as an alternative way to explore and use the widely popular social networking platform, Facebook. The purpose of the test was to assess the design of Facebook’s Paper and determine whether it is

more understandable than Facebook's traditional mobile design by measuring the navigability, efficiency, and user satisfaction of the Facebook Paper browsing experience.

Our team consisted of four group members, which were then split into two groups for testing in order to obtain diversity in test subjects, environments, and results. Ten participants were randomly selected for testing; six female subjects and four male subjects. Our team felt that choosing this gender ratio accurately represented the University's gender population as a whole. Elon's student demographic, based on ages 18-22, are most likely to be power users when it comes to the Facebook platform.

Each individual session lasted approximately 10-15 minutes. The overall test time for each team lasted roughly a little over an hour and a half to conduct testing on five test subjects. when accounting for gathering participants, giving instructions, the actual testing, and post test questions for the participants. Nearly all participants found the Paper mobile application to be clear, intuitive, and easy to use. There were at least one outlier from each group that struggled with certain tasks such as utilizing the swipe up and down navigational system, editing the sections category, and searching for friends.

## **Methods**

Our objective in this usability test was to measure the navigability, efficiency, and user satisfaction with the Facebook Paper mobile app. The test was completed with ten participants consisting of six females, and four males between the ages of 18 and 22. Although the study was limited through a convenience sample of university-educated individuals, we feel like the

participants accurately represent Elon University's gender and age ratio and furthermore Facebook's student demographic.

Before our team could administer the usability test, a set of required materials were developed to ensure consistency in our results. A participant consent form was generated (Appendix A). A pre-questionnaire (Appendix C) and post-questionnaire (Appendix D) was also created for participants to take before and after taking the test. After the pre-survey questionnaire, the ten participants were asked to sign into Paper using their own Facebook accounts. We were able to capture each participant's actions with a Canon 7D EOS. The usability test was composed of three stages. After the participants signed a consent form, a script was read to them that detailed the procedure and instructions. Before the test itself, participants were first asked to take the pre-survey questionnaire. Once they finished that, participants worked through the set of tasks provided. Finally, participants took the post-survey questionnaire regarding their experience and usage issues.

During the usability test, a set procedure for each of the ten participants was followed. One group member acted as the moderator and read an instructional script to ensure that each participant had the same understanding of the rules and requirements of the usability test. The script outlined how our group was focused on studying the interface and not the users, and asked the participants to honestly answer any questions about their experience and to give it their best effort when given the testing tasks (Appendix B). To best capture the typical browsing experience of users, participants were encouraged to complete the entire test without help, just as they would in a non-test-taking scenario.

The usability test began with a pre-survey of three questions that gauged our participants experience with their traditional Facebook account as well as their time consumption on both desktop and mobile versions of Facebook. Out of the ten participants, half of the participants reported they spend upwards of 20 hours a week on the social media site.

Once they completed the pre-survey, participants were given a set of verbal instructions before beginning the first task. The tasks were designed to test the effectiveness and navigability of Paper's browsing experience as well as representing scenarios that imitate real-world context and situations that consumers of this app would actually use it for. The scenarios represented included signing into your account, posting a status, searching for a friend, and browsing your news feed.

After the completing the tasks, participants were asked to answer a post survey that gauged their ease of use with the app and overall opinions to include future use and suggested design changes. Once all of the data was collected the video recordings of our participants were recorded that noted the tasks completed, errors made, and time of each task. The researchers measured this information and cross referenced it with the post-survey data in order to determine the effectiveness and user satisfaction with the Facebook paper interface.

## **Results**

The results of the usability test was obtained from video capturing the participant's interactions and the post- survey questionnaire results (Appendix D & F). The results were assembled based on averages amongst all test takers, however additional insights were gained

from individual experiences. While reviewing the videos, the results were categorized into three separate sections: rate of errors, time spent on each task, and their ability to complete the task or not. All results can be viewed in Appendix H.

The data collected from video observations were all highly similar in terms of error rate. The time it took the average participant to find out how to navigate to their own profile page was about 10 seconds and the participant with the fastest completion time was about 4 seconds. Due to the lack of familiarity with the new interface, most participants grew confused and frustrated with their inability to complete the tasks. The videos showed participants continuing to press the wrong buttons repeatedly in hopes that the button would take them somewhere different than the last time they pressed it.

The hardest task that was given to the participants was arguably the first task which was to navigate to their own profile. The lack of icons to press and the simplistic design looks intuitive but Facebook seems to have missed the mark in assuming user would find the hidden navigation bar behind the main display. It wasn't until participants were given the last task, which was to search for a friend via the search bar, where participants almost immediately thought to use their finger to drag down the main display to reveal the hidden menu.

Change is often seen as a challenge and this test proved to be no different. Paper's design inherently picks up after a newspaper style format, but for first time users, it wasn't as easy for them to understand that initially. As you can see in the results (Appendix D & F) the challenges of each task became easier and easier, one after the other in almost a linear pattern.

Nonetheless, most participants still were not convinced about this interface. One participant is quoted by saying "I wasn't very familiar with this type of profile, most social



medias follow the same format and this one did not.” (Appendix F). Another participant said that since the horizontal news feed only generates new content as you scroll left, those who use their right hand thumb to scroll could have their view blocked do to their thumb being in the way.

When completing the post-survey questionnaire, roughly 60% of the participants said they were likely to download Paper and use it. Coincidentally, everyone who said that Paper felt more fluid rather than problematic were the same people who were likely to download the app.

The most notable data we collected came from the “sections” portion; both from video observations and post-survey data. Seven out of the ten participants stated that the “sections” feature was important to them and 80% of participants said they would use this feature in the future. Furthermore, 90% of of our participants stated that this feature was highly beneficial and added to their Paper browsing experience. Initially, it was clear that our participants were optimistic about the addition of sections of news stories dividing up their news feed. However, functionally, they loved that they could easily drag and drop “sections” that most appealed to them into their feed.

## **Discussion**

Paper is on track to revolutionize social media content applications, but it still has a few flaws that will need to be modified before it can really make an impact. Participants struggled to complete certain tasks because of the new layout design. This new design is supposed to revolutionize the way users see and use Facebook, but the familiarity with the current mobile application will require a learning curve to become efficient at the new processes required to complete a task.

The introductory tutorial covers all of the necessary actions to become a power user with Paper, but the ability for the new user to ignore the tutorial hurts the potential of it become completely effective in teaching the user what to do. During testing, the participants which had sound with the tutorial were much more likely to complete the tutorial steps. This finding portrays a sense that auditory engagement helped the participants understand and engage in the tutorial instead of ignoring or only partially completing the tutorial. Possible modifications could involve having the new users to completely finish the tutorial before having full access to the Paper app. This should make sure that the new user is fully prepared to perform any tasks they wish to accomplish.

The difficulty of users finding their own profile, which requires a pull down modality, caused problems that the participants were not accustomed to experiencing on the regular Facebook mobile app. Participants were expecting to press the profile button on the home screen without having to go into another area of the app. For the participants that did not complete the tutorial, this task was almost impossible to complete. These participants typically found their profile by a trial and error method during the test. The pull down feature is typically linked to a search feature with the iPhone, and therefore the action did not typically come to mind when trying to achieve the task. The majority of participants that did not originally find this menu, found it when asked to search for a roommate. Participants immediately tried pulling down the screen because the keyword “search” made the user’s think of the required action. This new feature will continue to confuse new users unless the tutorial is completed, or this modality gains more uses in common applications.

Participants have positive reviews of the new “sections” feature within the app (Appendix F). This extra content provided the participants with extra content that they can customize to their liking and needs. Future testing will need to focus on the user interactions with the sections feature. These tests will include reading and sharing the articles, moving back and forth between the areas on the app, and time spent between the Facebook and “sections” features.

According to *TechCrunch*, Paper is a big part of Facebook's broader mobile strategy, intending to be similar to that of the fairly successful Facebook Messenger or the highly unsuccessful Facebook Poke. *Mashable* wrote that although Facebook Paper is content-focused, Facebook was still trying to stray away from being perceived as a media company and was focused on enabling people to create content rather than simply focusing on the reading experience. *The New Yorker* thinks that Facebook’s shift from the traditional horizontal news feed is part of what seems to be a shift toward flexibility and experimentation. Moreover, Paper is a sign that shows that Facebook finally thinks that it knows us well enough to show us everything one piece a time.

## **Conclusion**

The experimental nature of the Paper app can potentially lead usability testing into a multitude of different evaluations of the application. Results show that working with a new interface can be challenging, but becomes easier after each task is completed. Our average participant represents the majority of Facebook users and future testing could also include the minority of users that would also access the information in a mobile format. Modifications of the tutorial could result in a higher efficiency in completed tasks by first time users. Overall, the

application received either positive or neutral results, which concludes that the new features and horizontal scrolling have a continued future with Facebook and possibly other apps.

## APPENDIX A

### INFORMED CONSENT FORM

Elon University

Title of Project: **COM560A Group Research Projects for Class**

Principal Investigator: Qian Xu  
 Assistant Professor  
 School of Communications, Elon University  
 2850 Campus Box  
 Office: (336) 278-6454|E-Mail: [qxu@elon.edu](mailto:qxu@elon.edu)

Co-Investigator:

- i. Purpose of the Study: The purpose of this study is to gather information about Elon students' and Elon community members' uses and evaluation on a number of various media interfaces in their daily life. The study has been designed as part of a graduate course project in interactive media strategies (COM560A) and will therefore reflect a number of different research questions being examined by multiple subgroups of students. This project is designed to give practical experience to students in usability test for communication media. This project will look into the uses and effects of communication media on users.
- i. Procedures to be followed: You will be asked to first interact with some media and then answer a few questions raised by the student researchers or fill out a questionnaire.
- i. Discomforts and Risks: There are no risks in participating in this research beyond those experienced in everyday life.
- i. Benefits: There are two potential benefits to participation: (a) You might learn more about yourself by participating in this study. You might have a better understanding of how important communication is to you; and (b) This research might provide a better understanding of how use of media affects college students. This information could help plan programs and make student services better.
- i. Duration: It will take about 10-15 minutes to complete the study.
- i. Statement of Confidentiality: Only the person in charge and the student researchers will know your identity. All data related to this study will only be accessible to the principal investigator and the student investigators for this study and will be kept in locked closets and/or secured computers of the investigator and student investigator desks, in Elon university offices.
- i. Right to Ask Questions: You can ask questions about this research. Contact Qian Xu at 336-278-6454 with questions. You can also call this number if you have concerns about this research, or if you feel that you have encountered any problem in the study.
- i. Compensation: There is no compensation involved in this study.
- i. Voluntary Participation: You do not have to participate in this research. You can end your participation at any time by telling the person in charge. You do not have to answer any questions you do not want to answer. Refusal to take part in or withdrawing from this study will involve no penalty or loss of benefits you would receive otherwise.
- i. By signing this document, I am giving consent to be filmed during this test.

You must be 18 years of age or older to consent to participate in this research study. If you consent to participate in this research study and to the terms above, please sign your name and indicate the date below.

You will be given a copy of this consent form to keep for your records.

Participant Signature

Date

Investigator Signature

Date

## APPENDIX B

### SCRIPT:

**Moderator:** Hello, my name is (blank) and these are my partners (blank), (blank), and (blank). We appreciate your time and willingness to be a part of this assessment. In the sake of formality and to ensure that every test participant receives the same general guidelines, I will dictate the test objectives word for word based off of this script.

Today my group and I will be conducting a usability test on Facebook's redesigned app layout called Paper. The reason why we have selected you is because you play a huge role in representing Elon University's gender ratio. The platform we will be using for testing is an Apple iPhone. To avoid any confusion of the unrecognizable content you may encounter, we ask that you please use your log-in information to sign into Facebook Paper. After the test, we will make sure that your log-in information has been permanently deleted off of the iPhone so that your personal credentials will remain safe and private.

----ENTERS IN LOGIN INFO----

You are now ready to begin the first part of this test assessment. As you begin testing, please remember that this is a usability test and there are no wrong answers. With that said however, please also try and do your best to make decisions independently and give it your best effort to complete the tasks efficiently and timely. If you do become lost or confused, my team and I will do our best in answering any questions you have during the testing period. Please also remember that there is no rush in completing this test and it is perfectly OK if you accidentally press a wrong button. Remember that our main goal of this test is to examine the functionalities of this redesigned layout and it's intentional that you as the participant is unfamiliar with this design layout.

I am now going to give you your first task. Please listen to the instructions carefully. Do not look at the iPhone until the task has been stated. At the end of every task you complete, simply look up and say "Done".

The tasks are as follows.

### TASKS ARE FOUND IN APPENDIX E

Thank you for completing the testing part of this usability test. We now going to log your account out of the phone. We now have a few post-test questions we would like you to answer.

## APPENDIX C

### Pre-Test Questions:

Are you familiar with the Facebook Paper mobile app?

YES	NO
<b>0%</b>	<b>100%</b>

To the nearest estimation, how many hours a day do you spend on Facebook?

< 1 hour	1-2 hours	3-4 hours	5-10 hours
<b>0%</b>	<b>20%</b>	<b>20%</b>	<b>60%</b>

To your nearest estimation, how many hours a day do you spend on Facebook's mobile app?

< 1 hour	1-2 hours	3-4 hours	5-10 hours
<b>20%</b>	<b>10%</b>	<b>30%</b>	<b>40%</b>

## APPENDIX D

### Post-Test Questions:

Did you follow the on-screen tutorial?

I did not                      I followed it somewhat                      I followed the tutorials fully

How easy was it to navigate to your profile?

Hard    1            2            3            4            5            Easy

How easy was it to edit your sections?

Hard    1            2            3            4            5            Easy

How easy was it to browse news articles?

Hard    1            2            3            4            5            Easy

On a scale of 1-5, how easy was it to search for a friend?

Hard    1            2            3            4            5            Easy

After experiencing *Paper*, how did you feel about the horizontal news feed?

I didn't like it.                      Not sure if I liked it or not.                      I liked it.

Were there any problems/distractions with the way you navigated your Facebook account?

YES                                      NO

Did you find Paper's navigational methods problematic or more fluid than the traditional Facebook app?

YES                                      NO

Explain:

How useful did you find the sections?

Hard    1            2            3            4            5            Easy

Would you use the sections feature in the future?

YES                                      NO

Were the sections important to you?

YES                                      NO



Were the sections useful to you?

YES

NO

What is the likelihood you will use Paper in the future?

Not Likely

1

2

3

4

5

Very Likely

**Demographics:**

Age:

Gender:

Major:

Academic Standing:

FR

SO

JU

SR

## APPENDIX E

### Tasks:

- Go to the Facebook Paper app and open it. Please take a minute to follow the onscreen prompts.
- Navigate to your own profile and find where to post a status. Then write “good morning” but do not press the post button. Instead, simply say “Done”.
- Now exit out of the status bar. There are some new features in this app called sections. Navigate to where you can edit your sections.
- Add the enterprise, sports, cute, trending sections that interest you and rearrange them.
- Exit out of your sections and go back to your news feed. Browse your news feed and find a news story and open it as though you were going to read it. Scan through it and then go back to your news feed.
- In the search bar, search for one of your roommates and navigate to their profile.

## APPENDIX F

Post-Test Questions:

Did you follow the on-screen tutorial?

I did not	I followed it somewhat	I followed the tutorials fully
<b>10%</b>	<b>50%</b>	<b>40%</b>

How easy was it to navigate to your profile?

Hard	1	2	3	4	5	Easy	<b>2.9/5</b>
------	---	---	---	---	---	------	--------------

How easy was it to edit your sections?

Hard	1	2	3	4	5	Easy	<b>2.8/5</b>
------	---	---	---	---	---	------	--------------

How easy was it to browse news articles?

Hard	1	2	3	4	5	Easy	<b>3.5/5</b>
------	---	---	---	---	---	------	--------------

On a scale of 1-5, how easy was it to search for a friend?

Hard	1	2	3	4	5	Easy	<b>3.5/5</b>
------	---	---	---	---	---	------	--------------

After experiencing *Paper*, how did you feel about the horizontal news feed?

I didn't like it.	Not sure if I liked it or not.	I liked it.
<b>0%</b>	<b>40%</b>	<b>60%</b>

Were there any problems/distractions with the way you navigated your Facebook account?

YES	NO
<b>50%</b>	<b>50%</b>

Did you find Paper's navigational methods problematic or more fluid than the traditional Facebook app?

PROBLEMATIC	FLUID
<b>60%</b>	<b>40%</b>

Explain:

**PROBLEMATIC**

- Very sensitive to how you move from page to page, Traditional Facebook is not that sophisticated.
- I wasn't very familiar with this type of profile, most social medias follow the same format and this one did not.
- I was a little confused as to where to go
- A new way of navigating made it harder due to the fact that I was unfamiliar with it.
- Didn't make sense initially. Horizontal news feed was blocked from view from thumb.
- Interesting change-up but I've always been just fine with regular Facebook.

**FLUID**

- Simple layout, Easy to follow, Good tutorial.
- I liked the swipe a lot. More interactive in my opinion.
- I thought it was more fluid and had a very natural and logical progression.
- Has a natural flow as you're scrolling through the app.

How useful did you find the sections?

Hard    1        2        3        4        5        Easy        **3.3/5**

Would you use the sections feature in the future?

YES	NO
<b>80%</b>	<b>20%</b>

Were the sections important to you?

YES	NO
<b>70%</b>	<b>30%</b>

Were the sections useful to you?

YES  
**90%**

NO  
**10%**

What is the likelihood you will use Paper in the future?

Not Likely

1

2

3

4

5

Very Likely

**3.4/ 5**

## APPENDIX G

### Demographics:

#### Student Lounge:

**Age:** 20

**Gender:** Male

**Major:** Communication Design

**Academic Standing:** Junior

**Age:** 22

**Gender:** Female

**Major:** Strategic Communications / Digital Art / Sport & Event Management

**Academic Standing:** Senior

**Age:** 20

**Gender:** Female

**Major:** Arts Administration

**Academic Standing:** Junior

**Age:** 19

**Gender:** Male

**Major:** Accounting

**Academic Standing:** Sophomore

**Age:** 20

**Gender:** Female

**Major:** Strategic Communications

**Academic Standing:** Junior

#### Library:

**Age:** 21

**Gender:** Female

**Major:** Sports Exercise Science

**Academic Standing:** Senior

**Age:** 19

**Gender:** Female

**Major:** Policy Studies / Public Health

**Academic Standing:** Sophomore

**Age:** 21

**Gender:** Male

**Major:** Finance

**Academic Standing:** Junior

**Age:** 18

**Gender:** Female

**Major:** Sociology

**Academic Standing:** Freshman

**Age:** 18

**Gender:** Male

**Major:** Sport Management / Broadcast Journalism

**Academic Standing:** Freshman

## APPENDIX H

How easy was it to navigate to your profile?	<b>2.9</b>		5
How easy was it to edit your sections?	<b>3.3</b>		5
How easy was it to browse news articles?	<b>3.7</b>		5
On a scale of 1-5, how easy was it to search for a friend?	<b>4</b>		5
After experiencing <i>Paper</i> , how did you feel about the horizontal news feed?	I didn't like it. <b>0%</b>	Not sure if I liked it or not. <b>40%</b>	I liked it. <b>60%</b>
Were there any problems/distractions with the way you navigated your Facebook account?	YES <b>50%</b>	NO <b>50%</b>	
Did you find Paper's navigational methods problematic or more fluid than the traditional Facebook app?	PROBLEMATIC <b>60%</b>	FLUID <b>40%</b>	
How useful did you find the sections?	<b>3.5</b>		5
Would you use the sections feature in the future?	YES <b>80%</b>	NO <b>20%</b>	
Were the sections important to you?	YES <b>70%</b>	NO <b>30%</b>	
Were the sections useful to you?	YES <b>90%</b>	NO <b>10%</b>	
What is the likelihood you will use Paper in the future?	<b>3.6</b>		5