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Executive Summary

For the past 150 years, Dime Savings Bank of Williamsburgh has become the community bank for the Brooklyn area, garnering loyal, lifelong customers and a wellestablished reputation. In an effort to aid Dime Bank in better serving both their loyal customers as well as prospective ones, three evaluators from Pratt Institute's School of Information and Library Science conducted usability tests on Dime Bank's website (www.dime.com). We recruited a convenience sample of six (6) participants for inperson usability testing. To ensure consistency across all tests, we used a scripted testing process, largely facilitated by an online software called UserZoom. The data collection included the following steps:

- A brief introduction to the study
- · Consent for audio-visual recording
- A pre-test demographic questionnaire
- Four specific tasks
- Four post-task questions
- A post-test questionnaire, using the System Usability Scale

Then, we analyzed the data by compiling a list of all the issues surfaced by each user and consolidating this into a smaller list. It was prioritized into high- and low-priority recommendations based on the severity of the problem, post-task question and openended comments. We also analyzed the System Usability Scale data by calculating a raw SUS Score and determining the confidence interval for this score. We then converted this SUS score to percentile rank in order to assess usability compared to a grading tool, developed by Sauro (see Appendix B).

Thus, the usability tests resulted in three actionable recommendations:

- 1. Create a table that adds account comparisons
- 2. Make linking to pages consistent
- 3. Add a global search bar

The usability tests also resulted in three additional recommendations:

- 1. Replace confusing banking terms
- 2. Content at bottom of homepage should be moved into image slider as well as made clickable and clean up design of interior pages
- 3. When opening an account, users should be given highlights of information instead of links to lengthy documents

These recommendations are intended to enhance the overall customer's experience of Dime Bank's website as a way to further Dime's already well-established name and banking services.

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Introduction

Dime Savings Bank of Williamsburgh is the largest community bank in the Brooklyn area for the past 150 years. Dime Bank offers modern services linked with traditional values that attract lifelong, loyal customers.

Dime Bank's website reflects their forward and innovative options to attract more lifelong and loyal customers. To maintain modern trends, the bank participated in a user study conducted by three evaluators. Each of the three evaluators conducted a user test with a total of six participants. During the user testing, the six participants were asked to go through a series of tasks to evaluate the interface of the website by using the platform UserZoom, while the evaluators guided them along with a script. Once the tests were completed, the results were gathered and analyzed. Then, three actionable recommendations were formed with the intention of enhancing the usability of Dime Bank's website so that both their lifelong as well as prospective customers enjoy their experience.

Methodology

We conducted in-person usability tests to assess users' experience interacting with www.dime.com. According to the International Organization for Standardization, usability testing aims to identify 'the extent to which a product can be used by specified users to achieve specific goals with effectiveness, efficiency satisfaction in a specified context of use. Put more simply, we wanted to answer the following questions for Dime Savings Bank:

- · Can users easily and efficiently use www.dime.com to do what they want to do?
- Are they satisfied when doing so?

User testing has long been used as an effective method identifying key usability issues for product development (Barnum, 2011). Moreover, user testing is effective on a small scale - testing with up to five users tends can reveal 80 to 85% of issues (Nielson, 2000).

Participants

We recruited a convenience sample of six (6) participants in this study. The majority of participants (4) were between the ages of 26 and 30, 1 was between 31 and 35, and 1 was between 36 and 45. Half of the participants were men; the other 50% were women. Professions varied and included: operations coordinator; project manager; attorney; nurse practitioner and small business owner; brand manager and music industry employee.

Participants used their banks frequently. All (100%) of participants had a bank account and used their bank's website. The majority (83%) used their bank's website at least weekly; and two-thirds (66%) used their bank's mobile app weekly or daily.

Data Collection

All tests were conducted in-person in a home environment. To ensure consistency across all sites, we used a scripted testing process, largely facilitated by an online software called User Zoom. This software tracks an amalgam of important indicators including: task completion and efficiency; clickstreams; screen, facial and audio recording; and surveys and comment results. The process included the following steps:

- A brief introduction to the study
- Consent for audio-visual recording
- A pre-test demographic questionnaire
- Four specific tasks
- Four post-task questions
- A post-test questionnaire, using the System Usability Scale

The post-task question asked participants to rate the difficulty of the task on a 5-point Likert scale.

For the post-test questionnaire, we used the System Usability Scale - a scale first developed by John Brooke in 1986 that has since been referenced in thousands of articles (see John Brooke's original chapter titled, "SUS: a 'quick and dirty' usability scale," which has been cited by 2,282 on Google Scholar as of December 13, 2014). We elected to use this validated scale in order to assess Dime website's usability against standardized benchmarks. In addition, the post-test questionnaire included one general question to gauge participants' overall satisfaction with their experience and one open-ended comment field.

Analysis

Researchers analyzed user feedback by compiling a list of all the issues surfaced by each user and consolidating this into a smaller list. This list was prioritized into highand low-priority recommendations based on the severity of the problem, post-task question and open-ended comments.

Furthermore, we analyzed the System Usability Scale data by calculating a raw SUS Score and determining the confidence interval for this score. We then converted this SUS score to percentile rank in order to assess usability compared to a grading tool, developed by Sauro (see Appendix B).

Findings and Recommendations

In general, most participants noted that they did not expect a bank's website to be highly engaging, but they wanted it to be functional and user-friendly. As one participant noted, "Banking websites aren't necessarily 'enjoyable.' With sites like this, the focus should be on everything being easy..." In this regard, Dime.com scored very well. On the post-test questionnaire:

- Five (5) out of six (6) participants agreed or strongly agreed that "the website was easy to use."
- All participants agreed or gave a neutral response that they thought that "most people would learn to use the website very quickly."

However, when the analysis of the raw System Usability Scale was completed, the results reflected that on a scale of 1 to 100, the results from the six participants' mean are 64.6. From this mean, it can be concluded that the website has a 39.94% confidence interval for usability. Although this is a low percentile, the margin of error for the System Usability Scale ranges from 43.8 to 85.34. This concludes that for every 5 users that are evaluated on the website's usability, we can be 95% confident that the SUS population will score between 43.8 to 85.34. This score is not a reflection of the website's diagnosis, rather it only provides a quantitative analysis of area of improvement for the usability of the website.

On the System Usability Scale, a grading scale is also provided for the website's usability. The grades provided, a C- and a D, place the website's usability at a marginal level. As mentioned, the System Usability Scale is a quantitative analysis, it is not meant to diagnose the website's usability. This qualitative data only implies where there is ability to improve.

Actionable Recommendations

The usability tests resulted in three actionable recommendations:

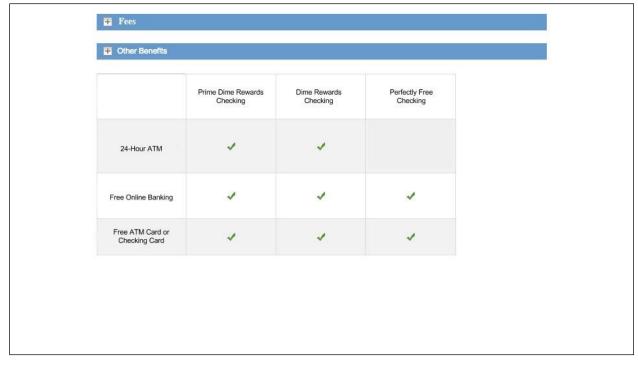
- 1. Create a table that adds account comparisons
- 2. Make linking to pages consistent
- 3. Add a global search bar

Actionable Recommendation 1: Create a Table That Adds Account Comparisons

The user test revealed that it is difficult to compare bank accounts with current options that are available and that there is too little of information about the details of the account options

Checking Account options and Saving Account options have information provided about different options, but there is not a visible comparison between each of the accounts. Users found that this caused frustration when it came to choosing the right account due to lack of immediate knowledge of the difference between accounts.

Actionable Recommendation



1. Create a table that adds account comparisons (Figure 1)

Figure 1: Proposed Redesign for Account Comparisons

The pages for the accounts can still be available, but on the left hand side bar, there should be an option available that compares the three Checking Account options as well as the three Savings Account options.

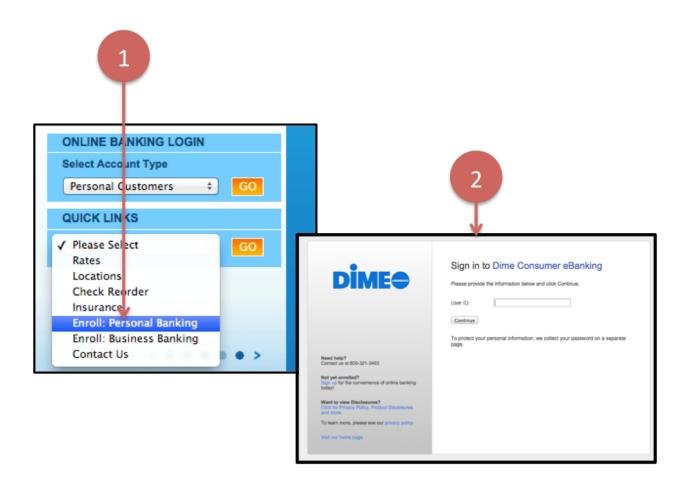
Another recommendation for the Checking Account and Savings Account information is to add more necessary information to the accounts. One user stated that they would not want to sign up for an account without any knowledge about what the minimum opening amount, withdrawal fees, as well as overdraft fees were if this information was not immediately available.

Actionable Recommendation 2: Make Linking to Pages Consistent

Some links on Dime Bank's website do not open to the correct or expected window. For example, if a user hovers over "Business Banking" from the global navigation bar and selects "Savings Products," (1) the link opens to a "Banking Services" page (2), rather than "Savings Products." Note: This problem only occurs on the secondary pages. It does not occur if hovering over "Business Banking" and clicking on "Savings Products" from the homepage.



In another example, when a user clicks on "Enroll: Personal Banking" from the "Quick Links" (1), they expect that this will open a page with more information on personal banking options and how to enroll. Instead, this link opens a page to sign into Dime Consumer eBanking (2), which is not what the user expects. It also has a different feel than the bank's website (e.g., no headers), which is confusing. One user said after clicking around the website to find this information for two and a half minutes said, "I would stop here... I would get deterred and go to a different bank."



Actionable Recommendations

Fix the links in the above mentioned examples to go to the expected pages.

- 1. When hovering over "Business Banking" and then clicking on "Savings Products," it should link to "Business Savings Products."
- 2. On "Quick Links," "Enroll: Personal Banking" should link to a page about "Personal Banking Options."
- 3. Also, consider changing the "Quick Links" label to "Personal Banking" and then adding large, noticeable links on the "Personal Banking" page about comparing options (See Actionable Recommendation 1) and how to enroll.

Actionable Recommendation 3: Add a Global Search Bar

During our user tests, users noted that there is no search bar if they are unable to find the information they are looking for. While our tasks were relatively easy, a search bar would be helpful in the instance that users were presented with a more difficult task. Then, this function would provide more use for finding the information that a user is looking for.

Actionable Recommendation

1. This is easily fixed by simply just adding a global search bar, which means it should be throughout the whole website— on every page (Figure 2).



Figure 2: Proposed Redesign for Search Bar on Homepage

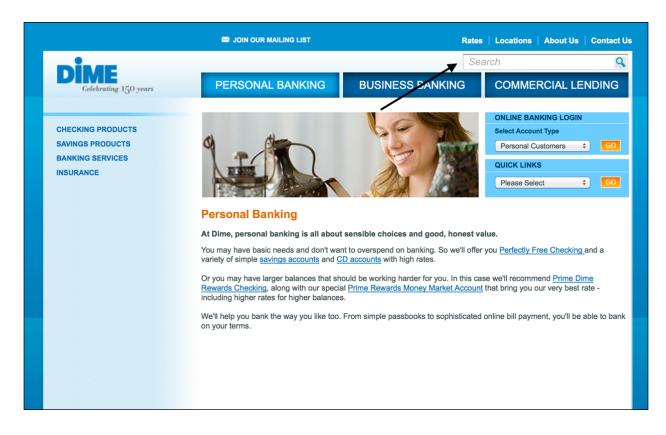


Figure 3: Proposed Redesign for Search Bar on an Internal Page

Additional Recommendations

The usability tests also resulted in three additional recommendations:

- 1. Replace confusing banking terms
- 2. Content at bottom of homepage should be moved into image slider as well as made clickable and clean up design of interior pages
- 3. When opening an account, users should be given highlights of information instead of links to lengthy documents

Additional Recommendation 1: Replace Confusing Banking Terms

Some of the banking terms were found to be confusing to users. For example, "Remote Deposit Capture" and "Remote Check Disbursement."

Additional Recommendations

- 1. "Remote Deposit Capture" and "Lockbox" can be condensed and should be given the title of "Easy Check Deposits"
- 2. "Remote Check Printing" should be replaced with "Remote Check Disbursement"

Additional Recommendation 2: Content at Bottom of Homepage Should be Moved into Image Slider as well as Made Clickable and Clean up Design of Interior Pages

Users felt that the content at the bottom of the homepage and interior pages look like advertisements. This comes across as inauthentic, causing confusion and distrust by users. One user said, "Is this a real bank?" in response to the images at the bottom of the homepage (1).





Certain interior pages look like advertisements. On the example below, the yellow background on this interior page is jarring, and the image looks like a stock photo. Also, the design of this page does not look the same as other pages on the website (2).



Additional Recommendations

- 1. Move the content from the bottom of the homepage into the image slider. Then, make the images clickable so that they hyperlink to content deeper in the website (e.g., "Our 150th Celebration" image would open to the interior page). This will help users to understand that this is primary content that the bank wants them to notice and take action on.
- 2. Clean up the design of interior pages in two main ways:
 - A. Keep the look and feel consistent across all pages
 - B. Downplay supporting text and images in order to draw attention to:
 - the actions that a user can take on the page (e.g., sign up)
 - the information a user expects to find (e.g. what can you do with Dime Mobile Banking?)

Additional Recommendation 3: When Opening an Account, Users Should be Given Highlights of Information Instead of Links to Lengthy Documents

On the "New Account Disclosure Information" page, users are presented with five links to different documents (see Figure 4), in which they should be reading before they select "I Agree." However, the user test revealed that users don't read this important information that is hidden within these links. Instead, they just select "I Agree" at the bottom of the page.

	🖾 JOIN OUR MAILING LIST	Rates	s Locations About Us Contact Us		
Dince Celebrating 150 years	PERSONAL BANKING	BUSINESS BANKING	Search		
CHECKING PRODUCTS > Prime Dime Rewards Checking Dime Rewards Checking	1 Read about the Account	Apply for the Account 3 Fund Account			
Perfectly Free Checking Overdraft Direct Deposit SAVINGS PRODUCTS BANKING SERVICES INSURANCE	New Account Disclosure Information Please read and review all of the following documents. It is recommended that you print and retain this new account information. By clicking "I Agree", I am agreeing to all the terms and conditions provided in the new account disclosure information. By clicking "I Do Not Agree", I am terminating the application process. To continue applying for a new account and to proceed to step 2, you must click "I Agree".				
	 Schedule of Service Charges (click It Guide To Banking (click here to read Opt-Out Notice (click here to read or Privacy Notice (click here to read or New Account Disclosure (click here 	or print) print) print)			
	_	I AGREE I DO NOT AG	SREE		

Figure 4: "New Account Disclosure Information" Page with Actionable Recommendation 3 (Global Search Bar)

Additional Recommendation

1. Instead of links to documents that are hard for users to understand, there should be highlights of what is within those documents and a way to access them, if the user wants to.

Conclusion

The findings that were revealed from the analysis are meant to be improvements for Dime Bank to consider as a way to enhance the usability of their website. The actionable recommendations: (1) comparing bank accounts, (2) correcting inconsistent links, (3) and adding a search bar throughout the site, will improve the overall experience of Dime Bank's customers. Dime Bank has proven to be the best community bank in Brooklyn for 150 years. To continue its excellence in financial guidance for years to come, these recommendations will only further enhance their well-known quality.

References

Barnum, C. (2011). Usability Testing Essentials. Burlington, MA: Elsevier.

- Nielson, J. (March 19, 2000). Why you only need to test with 5 users. Nielsen Norman Group. Retrieved December 13, 2014 from http://www.nngroup.com/articles/whyyou-only-need-to-test-with-5-users/
- Sauro., J. (2011). A Practical Guide to the System Usability Scale: Background, Benchmarks, & Best Practices. Denver, Co: CreateSpace. Measuring Usability LLC.

Appendix

Appendix A

Post-Test Questionnaire

How enjoyable was your experience of Dime Bank's website?

Not Enjoyable	e			Neutral					Very Enjoyable	
1	2	3	4	5	6	7	8	9	10	
System	Usability	Scale								
1. I think that I would like to use this website frequently.										
Strongly	Disagree					1		Strongly	Agree	
1		2		3		2	1	Ę	5	
2. I found the website unnecessarily complex.										
Strongly	Disagree							Strongly	Agree	
1		2		3		2	1	Ę	5	
3. I thought the website was easy to use.										
Strongly	Disagree							Strongly	Agree	
1		2		3		2	1	Ę	5	
4. I think that I would need the support of a technical person to be able to use this website										

website.

Strongly Disagree			1	Strongly Agree
1	2	3	4	5

5. I found the various functions in this website were well integrated.

			-	
Strongly Disagree				Strongly Agree
1	2	3	4	5
E I thought thora	waa taa much in	annoistanav in thi	a wahaita	
 I thought there 		consistency in this	s websile.	
Strongly Disagree				Strongly Agree
1	2	3	4	5
7. I would imagin	e that most peop	le would learn to L	ise this wedsite v	ery quickly.
Strongly Disagree				Strongly Agree
1	2	3	4	5
8. I found the wel	osite very cumbe	rsome to use.		
Strongly Disagree				Strongly Agree
1	2	3	4	5
 I felt very confi 	dent using the wo	edsite.		
Strongly Disagree				Strongly Agree
1	2	3	4	5
10. I needed to lea	arn a lot of things	before I could get	going with this w	ebsite.
Strongly Disagree				Strongly Agree
1	2	3	4	5

Do you have any final thoughts or suggestions?

Appendix B



