NationalMi.com & TCS Usability Testing Report

NationalMi.com is a web tool providing users with an array of services around the mortgage industry. Services include but are not limited to, easily finding rate quotes, resources for calculating mortgage affordability and providing training and helpful information about mortgage related topics. 05-28-2021

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Executive Summary

The purpose of this test was to evaluate the usability of the National MI's website from the perspective of the Loan officer and Servicers (Servicing specialist and C-Level Executive). The specific goals include, but are not limited to:

- Testing the ability and limitations of the solution to inform new customers of the Underwriting and Servicing policies that set National MI apart from the competition.
- Assessing the ability of the tool to drive customers to file Rate Quotes to get the best rates in the industry.
- Examining the website's ability to provide useful, engaging, and relevant tools to encourage continued industry learning.
- Measuring both time and effort it takes customers to get help and information from National MI's Award Winning Solution Center support team.

The usability test will evaluate the website using 8 scenarios to be completed by 6 participants. The tests will be conducted virtually and require a computer with internet access. The software partner of choice for this test is WebEx. The test evaluation does not include a post-test questionnaire. Each session is thirty minutes. The test includes:

- 1. Welcome and instructions: 10 minutes
- 2. Task scenarios: 40 minutes
- 3. Q&A 10 minutes

91.5%

of participants were able to successfully complete all tasks.

100%

of participants enjoyed the testing experience.

100%

of participants consider the second test an improvement

8.5%

of participants were unable to complete all tasks.

100%

of participants were able to complete their test within allocated time.

Goals

We sought to understand how navigable the new nationalmi.com website is and how the site will be used within the tasks found in the test.

Reveal friction points and confusing experiences

We aim to understand if our current assumptions about the new design are true. We are testing to uncover experience gaps that we may have also missed .

Test navigation of NationalMI.com website with core users

Loan officers and servicers make up the majority of nationalmi.com users. Testing with them would provide us actionable insight we can extrapolate.

Methodology

What are we evaluating?

The test plan is designed to evaluate the Nationalmi.com website from the Loan officers and Servicers perspective:

Time-on-Task (ToT) Completion Rates Website intuitiveness

Consider the below:

How users are evaluating Nationalmi.com

Effective – Can I complete my goal? Efficient – Can I do it quickly? Error Tolerant – Can I do it correctly or can I easily get the help I need? Engaging – Do I like it? Easy to Learn – Can I do it correctly the first time?

User Profiles

The participants' responsibilities will be to attempt to complete a set of representative task scenarios presented to them in as efficient and timely a manner as possible, and to provide feedback regarding the usability and acceptability of the user interface. The participants will be directed to provide honest opinions regarding the usability of the application, and to participate in post-session subjective questionnaires and debriefing.

Note: Test subjects have been defined and determined by National MI

USER PERSONA : THE LOAN OFFICER



BYRON JOHNSON JR.

Age	47
Job Title	Residential Real Estate Loan Officer
Location	Louisville, KY
Married	Yes
Have Kids	2
Lives with	Wife, 2 children and Jedi, his pet Chihuahua

Byron Johnson Jr. is a residential real estate loan officer working for Happy Mortgage LLC, a small licensed mortgage lender in the Louisville, KY. Happy Mortgage LLC does not have centralized mortgage origination software to assist in the loan process. Thus, Byron relies on a patch work of software to generate leads, determine mortgage pricing, and close loans for his customers.

Because of his constant focus on providing the best deals to his customers, Byron routinely receives mortgage leads from past clientele which, in turn help him generate new customers. No wonder that he clocks ~25 loans a month, one of the highest loan volumes possible in his community.

Byron spends a considerable amount of time educating first-time homebuyers on the mortgage process. When working with a borrower with limited down payment capacity, PMI is a must. Byron needs a go-to partner for PMI who could make him more productive and help him meet his personal and company goals. Sales representatives of various mortgage insurance providers meet him regularly and He has a relationship with his National MI sales rep, who regularly reaches out to him and helps navigate bumps

PERSONALITY TAGS

Observant Creative Achiever Perfectionist Patient Tech-savvy Entrepreneurial

BEHAVIOR:

When mortgage insurance is required, Byron must go directly to the mortgage insurance company websites and get mortgage insurance pricing quotes, based on the borrower's finances. He prefers those mortgage insurance companies that he has a personal relationship with and have kept their promises as well as providing competitive rates. His lending organization already has a Master policy with NMI.

GOALS:

- After receiving the quotes from the mortgage insurance companies, Byron generally goes with the lowest price unless Radian is within two bps.
- His objective remains closing as quickly and accurately as possible.

FRUSTRATIONS:

 Byron is a multi-tasker and one-man band. He often becomes distracted while bouncing arounds between customers, calls, and systems. This leads to a fair amount of rework and mistakes that take up more of his precious time.

HIS THOUGHTS

The target of hitting loan volume keeps me going but helping people get into their dream homes remains the best part of my job and my main motivation.

DEVICE USED: CHANNELS :

Smartphone
 NMI Site

TEAM STRENGTH ONE MAN TEAM!

Laptop

EXPECTED FEATURES:

- A system that should be easy and quick to get him a PMI quote
- Easy access to MI insurer for himself and his underwriter to make sure they can put together the best package fast.

HOW DID HE KNOW ABOUT NMI?

Last month Byron attended a real estate fair in Lexington, KY where various Mortgage Insurance providers were offering attractive rates. He distinctly remembers that one sales representative from National MI talking about the training and support that National MI offers.

DIGITAL USAGE





USER PERSONA : THE C-SUITE EXECUTIVE FROM BANK





LINDA RYAN McCARTHY

Age	51
Job Title	EVP, Mortgage Lending
Location	Manhattan NY
Married	Yes
Have Kids	1
Lives with	Husband and Newton, her pet cat

Linda serves as the Executive Vice President of Mortgage Lending in one of the leading regional banks headquartered in New York. She is primarily responsible for driving efficiency improvements and profitability in the bank's mortgage process and reducing the bank's operational risks. She expects that everyone reporting to her would support her decisions and work under her directions.

As Linda works in a highly regulated industry, issues like compliance and risk management are paramount to her. She constantly monitors all vendor partners, Fannie Mae and Freddie Mac compliance, and profitability. Linda signed the master policy and and her National MI sales team ongoing contact keeps her updated on important issues related to PMI.

While looking for a mortgage insurance partner, Linda expects the partner organization to have the necessary financial strength to effectively manage the risk they insure and pay claims on her loans in the future. She also expects the partner organization's policies and practices would perfectly align with her bank, so that, the operations of both organizations could mesh well.

PERSONALITY TAGS

Observant Assertive Strategic Perfectionist Patient Leader Oceanoriented Visionary Visionary Visionary Visionary Determined

BEHAVIOR:

- Routinely meets her 18 direct reports to understand challenges and opportunities in the bank operations
- Regularly meets with the bank's vendors to discuss ways to improve the value
- Sometime does her own research on MI insurers to monitor their health

GOALS:

- Improving value proposition of her bank
- Ensuring that the partnering Mortgage insurance company has the required financial strength to effectively manage the risk they insure and pay claims
- Ensuring that the MI company's policies and practices are aligned with the same of her bank's so that the operations of both organizations will mesh well.

FRUSTRATIONS:

Too busy; always! Does not have the time to comb through websites and read elaborate articles/reports to understand company policies, e-practices, and financial info.

HER THOUGHTS

Opportunity and risk come in pairs. Risk management is mostly sensing and dealing with problems in their smallest state and repeating solutions controllably.

DEVICE USED: CHANNELS:

NMI Site

TEAM STRENGTH

Smartphone

iPad

18 Regional Managers directly report to Linda who manage their own regional teams. She also has a secretory who plans her meetings and appointments.

EXPECTED FEATURES:

- Value proposition is summarized well so that she wouldn't have to spend substantial time reading and decoding it.
- Clearly displayed info of how the MI partner organization is built to pay claims, financial strength and the lack of legacy risk would his help her bank.
- Information about how MI partner organization's operations can streamline with her own bank's operations.

HOW DID SHE KNOW ABOUT N MI?

Knew National MI as one of the existing PMI partners who made it to Fortune's List of "30 Best Small and Medium Workplaces in Financial Services & Insurance."

DIGITAL USAGE	
Mobile Internet Usage	
Internet & Software Usage	
Smart phone Usage	
Social Network Usage	
	30 🔇 📎

USER PERSONA : THE SERVICING SPECIALIST

JANICE CHEN

41

No

No

Servicing Specialist

Mom, and aquarium full of fishes

Minneapolis, MN

Age

Job Title

Location

Married

Have Kids

Lives with



Janice is Servicing Specialist for a large servicer headquartered in Minneapolis, MN. She works on a large team that handle a wide variety tasks some of which occur directly with the borrowers and some occur with other institutions like the mortgage insurance company,

Janice spends most of her day working in her company's loan servicing system, and performing tasks assigned to her through it or resolving issues brought up by borrowers.

investors, and other departments within

her own company.

Janice spends a lot of time solving typical problems that she sees everyday. The variety of tasks are narrow, but the unique situations range from a borrower not paying, to payment to third parties being returned, etc., require Janice to research expedient methods to complete or resolve them.

Janice is usually under pressure to complete tasks so being able to quickly find a number and reach a live person, via a phone call, is extremely helpful.

PERSONALITY TAGS

Observant Task orig

Meticulous Task oriented Outgoing Friendly Perfectionist Empathetic Researcher Flexible

BEHAVIOR:

Janice is extremely task focused and almost everything she does is related to a task list she created or was assigned to her. She prefers those mortgage insurance companies which has Exhaustive FAQs for various acute and exception scenarios.

GOALS:

- Resolving various issues raised by borrowers and mortgage insurance company on time with minimum fuss
- Research and document ways to solve new and unique problems related to loan servicing

FRUSTRATIONS:

- Since she often finds out that while her problem appears to unique to her, it is often not unique to the industry
- Finding the answer to her problem can be as easy as a call to a MI company, but not being able to easily find a number to call can be frustrating

HER THOUGHTS

When making experiences, attention to detail matters. It is not about perfection. It's about excellence, about constant improvement.

DEVICE USED: CHANNELS :

- NMI Site
- loan servicing portal

TEAM STRENGTH

Desktop

Laptop

Janice is a part of a 35-member team, out of which a small 5-member team reports to her.

EXPECTED FEATURES:

- Overall Usable, useful and scalable user experience
- Exhaustive FAQs for various acute and exception scenarios related to mortgage insurance.
- Easy access to MI insurer for herself and her team members so that they could candidly discuss problem scenarios such as "accidental payoff of loans"

HOW DID HE KNOW ABOUT NMI?

Was familiar with National MI since many of the loans her company services, have mortgage insurance with National MI.

DIGITAL USAGE



Testing Setup, Moderation & Post-Test Questions

1. Introduction

Participants will take part in the usability test via remote screen-sharing technology (le. WebEx). The participant will be seated at their workstation in their work environment. Verbal communication will be supported via telephone or VOIP. Please note, Internet Explorer is unsupported. The facilitator will brief the participant and instruct that he or she is evaluating the Web site/Web application, rather than the facilitator evaluating the participant. Sessions will begin when all participant questions are answered by the facilitator. The facilitator will inform the participant that time-on-task will be measured and that exploratory behavior outside the task flow should not occur until after task completion. The facilitator will instruct the participants to read aloud the task description from the printed/digital copy and begin the task. Time-on-task measure will begin. The facilitator will encourage the participants to 'think aloud' and that a verbal record will exist of the task-system interaction. The facilitator will observe and enter user behavior and comments, and system interaction in a data logging application.

2. Tasks

1. Locate the Technology Integration page. Tell us the First listed technology vendor.

2. A new Bulletin was released. Show us where you would go to find the Bulletins.

3. You are a credit union customer and you are trying to find information about archived credit union Bulletins. Where would you go?

4. Locate the 2 places on the site where you can find information about MI Cancellation section.

5. Look for the webinar and podcast calendar and locate the upcoming webinars and podcasts. What are they?

6. Locate information about borrower's education (note: if they go back to where they found it last time, ask them to see if they can find it elsewhere on the site)

7. Locate a Sales Advisor in the State of Texas.

8. Locate the Lenders Overview page.

Results

The test was synthesized by performing an analysis on each task. The analysis was was broken in to 7 elements:

- Completion ratio,
- Task complexity,
- Average Time-on-Task,
- Ideal Time-on-Task,
- A combined analysis of what all users did when they performed the task,

• A breakdown consisting of the Accuracy, Happiness/ Enjoyability and Confusion of users when performing the tasks (note: These are subjective and based on the facilitator's observation),

Recommendation

Complexity score: The task Complexity score is measured on a scale from 1-3. Whereas a 1 is a simple task and a 3 is a more challenging task.

Breakdown Legend:

Accuracy- Observed if users were able to achieve tasks using only necessary steps. Happiness / Enjoyability- Observed user's negative and positive remarks about each task. Confusion- Observed if users understood the questions, specific terminology and how to perform the task.

Note: The Complexity score and the Breakdown are subjective.



1. Locate the Technology Integration page. Tell us the First listed technology vendor.

5 of 6

1m 59s

participants were **able to complete the task.**

was the $\ensuremath{\mathsf{average}}$ Time on Task.

2



Task Complexity score

was the ideal Time on Task

Analysis:

Locating the Technology Integration was an easy task for most users. Some users mentioned they believed Technology Integrations should live as a part of the Forms &Resources menu tab. However, This data is not significant enough to extrapolate.

The one user who had trouble finding Technology integrations was due to the WebEx chat box covering the option.

Accuracy Happiness / Enjoyability Confusion

Recommendation:

2. A new Bulletin was released. Show us where you would go to find the Bulletins.



Analysis:

2

Locating the new bulletin was an easy task for most users. Interestingly, 5 of 6 users accomplished this task by navigating to either the home screen or the Forms & Resources menu tab. Only one user navigated to the bulletins page from the Lenders tab.

Accuracy	
Happiness / Enjoyability	
Confusion	

Recommendation:

Future usage analytics will be needed to determine the next best course of action.

3. You are a credit union customer and you are trying to find information about archived credit union Bulletins. Where would you go?

5 of 6 48s participants were able to complete was the average Time on Task. 7s



Task Complexity score

was the ideal Time on Task

Analysis:

the task.

1

Finding the Credit Union Archived Bulletins was an easy task for most users. We observed an initial hesitation. It is very possible that the placement of the question caused some confusion with users. The preceding question asked about bulletins.

Recommendation:

User education

4. Locate the 2 places on the site where you can find information about MI Cancellation section.

5 of 6

1m 22s

participants were **able to complete the task.**

was the $\ensuremath{\mathsf{average}}$ Time on Task.

2

10s

Task Complexity score

was the ideal Time on Task

Analysis:

3 of 5 users who were successful first found the MI Cancellation in the Lenders tab first. This indicates that the Lenders was a favored route to MI Cancellation. The remaining 2 users found MI Cancellation in the Servicers tab. Having them in both locations accounts for 83% of users given the same. This is a successful percentage.

The one user who was unable complete the task found the initial location in the lenders tab but could not find the other location in the servicers tab.

Accuracy Happiness / Enjoyability Confusion

Recommendation:

User education

5. How many Live Webinars are available this month?



Analysis:

The Top four users completed the task within 28.75 seconds. The bottom two users looked at the home page in an effort to find live webinars.

Recommendation:

6. Locate information about borrower's education

5 of 5 10s Accuracy participants were able to complete the task. was the average Time on Task. Happiness / Enjoyability 1 7s Confusion task Complexity score was the ideal Time on Task. Fask Complexity score

Analysis:

Locating Borrower's Education was an easy task for all users. Each user looked for and found the Borrowers Education in the Training menu item.

Recommendation:

7. Locate a Sales Advisor in the State of Texas.

6 of 6 39s Accuracy participants were able to complete the task. was the average Time on Task. Enjoyability 2 10s Task Complexity score was the ideal Time on Task Analysis: Recommendation: Recommendation:

Locating the Sales Advisor(s) in Texas was an easy task for all users.

8. Locate the Lenders Overview page

5 of 6

10s

participants were able to complete the task.

was the $\ensuremath{\operatorname{average}}$ Time on Task.



7s

Task Complexity score

was the **ideal Time on Task**

Analysis:

Users found the Lenders Overview page

Accuracy Happiness / Enjoyability Confusion

Recommendation:

Bugs & Issues

Below are any bugs or known issues participants encountered during the usability test

KNOWN ISSUES

- Sales advisor link from the homepage
- The arrow on the homepage only shows in certain screen resolutions.

Recommendations & Action Items

Recommendations are provided above for each task. The below recommendation are additional recommendations not specifically related to a particular task but identified while users were performing tasks.

GENERAL

- The arrow on the home page needs to stay active if there is more screen available to scroll down. Once a user has reached the bottom of the screen the arrow can go away. However, the arrow must come back if a user scrolls upward.
- As a consideration, limit the envelopes found in the menu tabs to 4-5 links. We observed users would scan 3-4 links in an envelope and quickly navigate to another envelope. This type of "envelope-hopping" makes important items that are further than 5 links down harder for users to see.
- Technology integration should move to the left side of the Forms & Resources menu tab. Forms should be moved to the right side of Forms & Resources.
- Bulletins should be moved to the middle of the Lenders menu tab. MI Cancellations and Credit Union envelopes should be moved upward.

Disclaimer

Several factors may have affected the results of the usability test. It's important to remember that people bring their own experiences and biases into a test without realizing that they might color their impressions.

1. The sample size may not be representative of all people that may use the website.

2. While moderation began with a set agenda, questions and tasks administered varied from participant to participant.

3. Human error and misinterpretations of qualitative feedback affected the results to slight but varying degrees.

4. A series of common product bugs and errors occurred (listed in section above)

Thank you.

King Frost

TCS Research Design Build