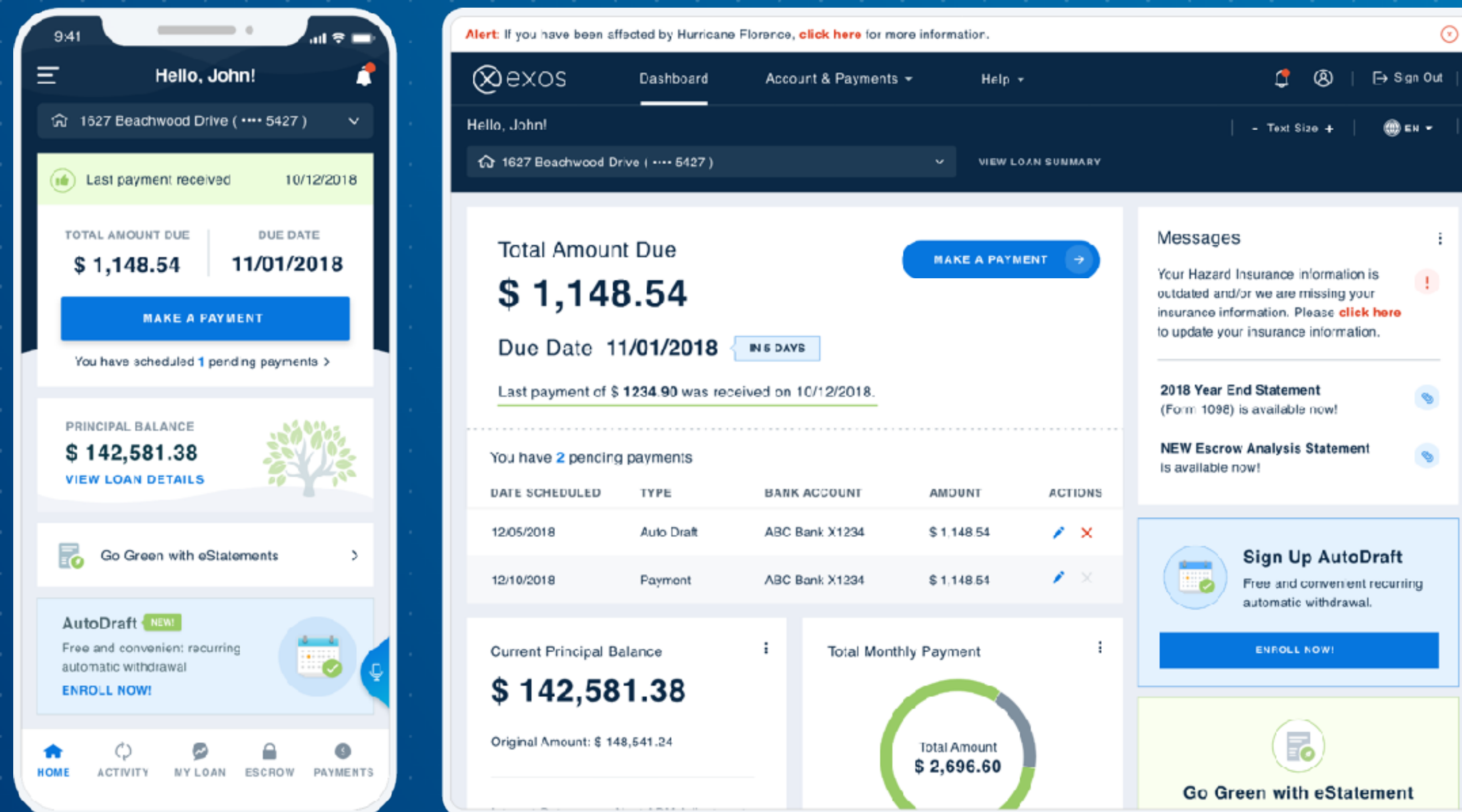


Loan Servicing Mobile App and Website

User Testing Results



Mobile App Test Link: <https://invis.io/XBT0ZGJPS32> | Website Test Link: <https://invis.io/V9QO5JZDQYR>

We conducted **11 User Testings** with **ServiceLink Colleagues**.

Each test lasts for **40 min**, which includes:

- 10 min - general conversation on how they manage their current mortgage and their exception on digital mortgage products
- 30 min - mobile app/website mockup testing and feedback collection

Step 1 - observe, ask questions, and take notes

Step 2 - document notes, and discover patterns and insights

Example:

Mobile Testing (25-30 MIN)

You will be asked to try out our new mobile app design prototype and complete several tasks. While you are using it, please describe what you see, what confused you, what you like, and what you are trying to do. The goal is to test whether a potential user will be able to understand the app design, define problems and the things that we can improve. It's not about testing your skill or your understanding of technologies. Please feel free to ask any questions and share your ideas/suggestions at any time.

Imagine you just downloaded this mobile app and you are a new user. Now you need to **register**. (5 MIN)

[illegible]

- *PART I* -

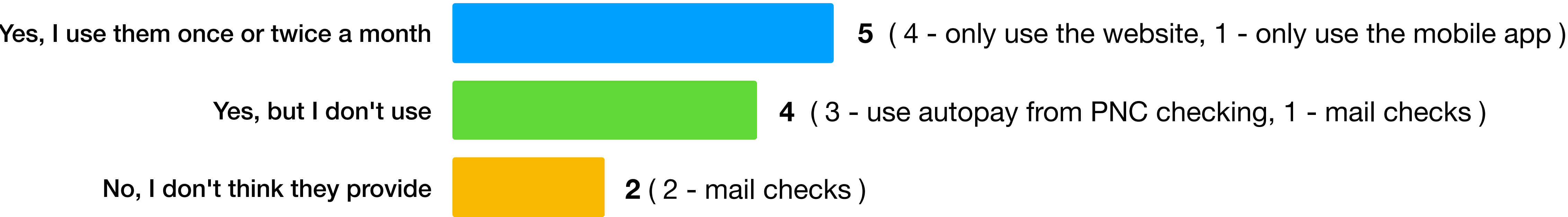
**How they manage their current
mortgage and their exception
on digital mortgage products.**

Who are they?

	FACTS		OUR IMPRESSION		
	Tester ID	Department	Expertise in Mortgage	Expertise in Technology	Security v.s. Convenience
Mobile App	01 - Jo****	Finance	★★★	★★★	Convenience
	02 - Mi****	Finance	★★★★★	★★	Security
	03 -Be****	Finance	★★★	★★★	Convenience
	04 - Th****	Finance	★★★	★★★★	Convenience
	05 - Ji****	IT	★★★	★★★★★	Security
	06 - M***e	Finance	★★★	★★★★	Convenience
Website	07 - Wi****	Finance	★★★	★★★	Convenience
	08 - De****	Valuation	★★★	★★★	Convenience
	09 - Ba****	Title	★★★★	★★	Security
	10 - Ca****	Title	★★★	★	Convenience
	11 - Ma****	Valuation	★★★	★★	Convenience

Do their lenders provide loan servicing websites / mobile apps?

How often do they use these products?



The top reasons for not using Online Payment:

- Required to pay a **convenience fee**
- Worried about **data security**
- Cannot remember the **password**
- **Got used to** mailing a check

The top reasons for not using Auto-Draft:

- Need to feel **in control** since it's a lot of money
- **Plan to payoff earlier** so manually add additional payments
- Schedule payments based on **paycheck and budget**

What do the users expect from a mortgage application?

When you use the website/app provided by your lender, what feature do you use most often?

Check
Principal
Balance
(3)

Download Tax
Documents /
Annual Report
(3)

Check if the
payment is
posted
(3)

Make a
Payment
(2)

Basic Expectations:

- **easy to use**
- **easy to navigate**
- **get the things done fast**

Other Advanced Expectations:

- An extra layer of **data security**
- Distinct **visual style**

Not all users share the same goal.



A “Passive” User

I want to make sure I paid on-time.

AutoDraft saves me time.

I don’t make additional payments.

I don’t look at advertisements.

V.S.



A “Proactive” User

How can I pay off earlier?

How can I save interest?

Is it the right time to refinance?

I am interested in good deals.

- PART II -

EXOS Mobile App and Website Testing Results

REGISTER

1 Requirement

“What if I don’t remember my **loan number** and don’t know where to find it? Can you add some instructions about where to find the loan number?”

2 Requirement

“There are so many rules applied to the **password**. That’s exactly why I cannot remember them. Will the password expire? ”
(Password expires every 12 months on LC B2C)

3 UI / UX

All the test users (6/6) said they would **prefer to verify by Text Message instead of Phone Call**.

4 Requirement UI / UX

Half of the test users (3/6) asked **what an ”alternative phone number” mean and how they can skip** if they only have one mobile phone.

Find Your Loan

< CANCEL

Step 1: Find Your Loan

Welcome to EXOS Servicing. Please enter your credentials to get started.

Loan Number

123456789

HIDE

Social Security Number or Tax ID

123456789

HIDE

SAVE AND CONTINUE

1

Create Your Account

< BACK

Step 2: Create Your Account

We have verified your loan information. Now you can set up your EXOS Servicing online account.

Create Your User ID

johnd1958

Create Your Password

.....1

SHOW

Password Strength

At least 8 characters

Contains 1 uppercase letter

Contains 1 lowercase letter

Contains 1 number

Contains 1 special character

Confirm Password

Enter Password

SHOW

Email Address

example@example.com

Re-enter Email Address

example@example.com

Security Questions

You will be asked to answer these questions if you need to recover your password. You can update the following security questions in Settings.

Security Question 1

Select a Question

Enter the Answer

Security Question 2

Select a Question

Enter the Answer

2

2 Step Verification

< BACK

Step 3: Set Up 2-Step Verification

Two-step verification helps protect you by making it more difficult for someone else to sign in to your account.

How does it work?

Step 1

Enter User ID and Password to sign in.

Sign In

Step 2

You can choose to receive a verification code via text message. A mobile phone is required for this feature. Message and data rates may apply.

or

You can choose to receive a phone call; simply follow the call instructions to complete your verification.

Phone Number (Required)

(123) 456 -7890

Is this a mobile phone number?

Yes, it is

No, this is a land line

Alternate Phone Number (Recommended)

(800) 123 - 4567

Is this a mobile phone number?

Yes, it is

No, this is a land line

Verification Method

Receive code by text message (SMS)









SAVE AND COMPLETE

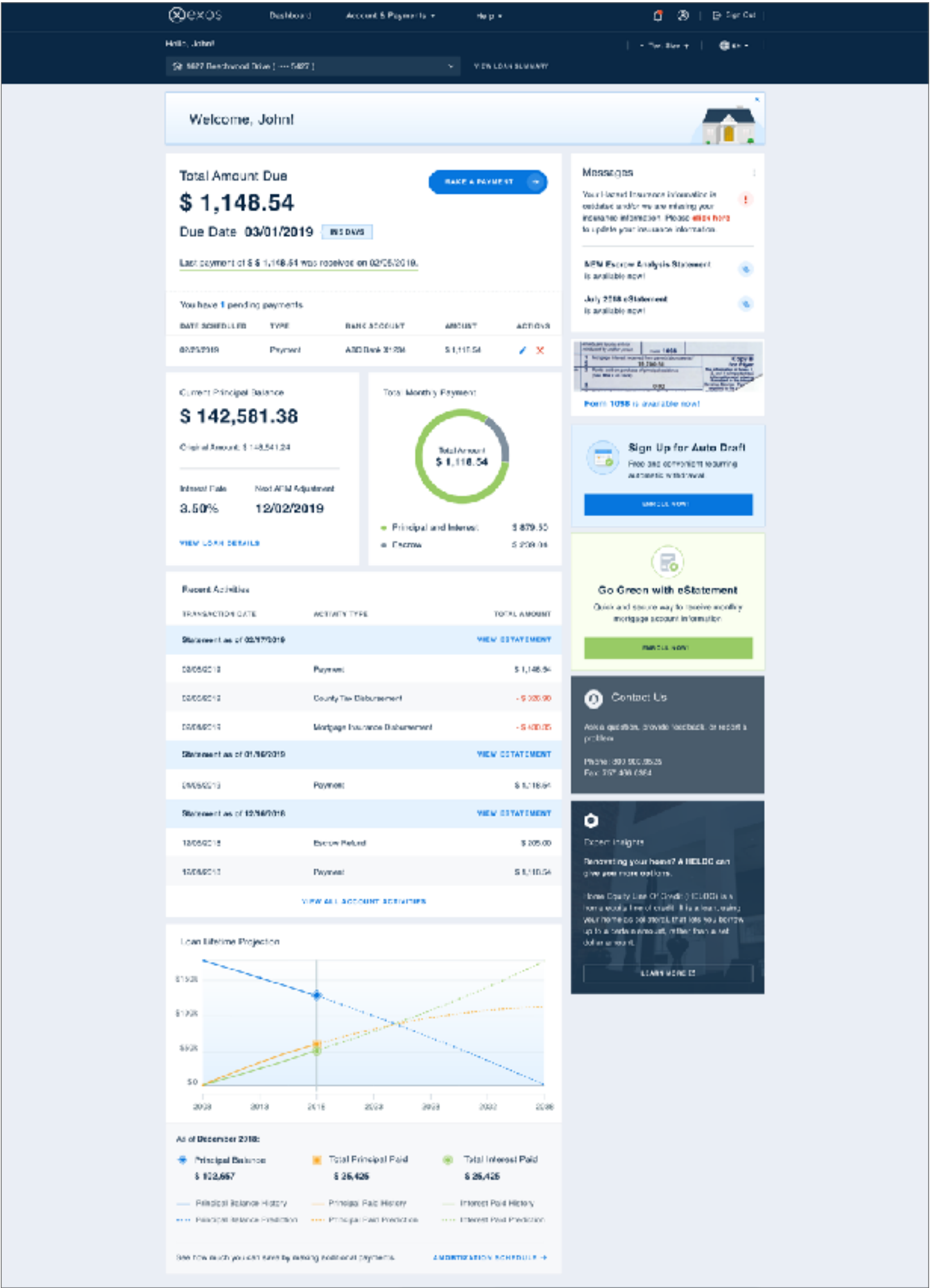
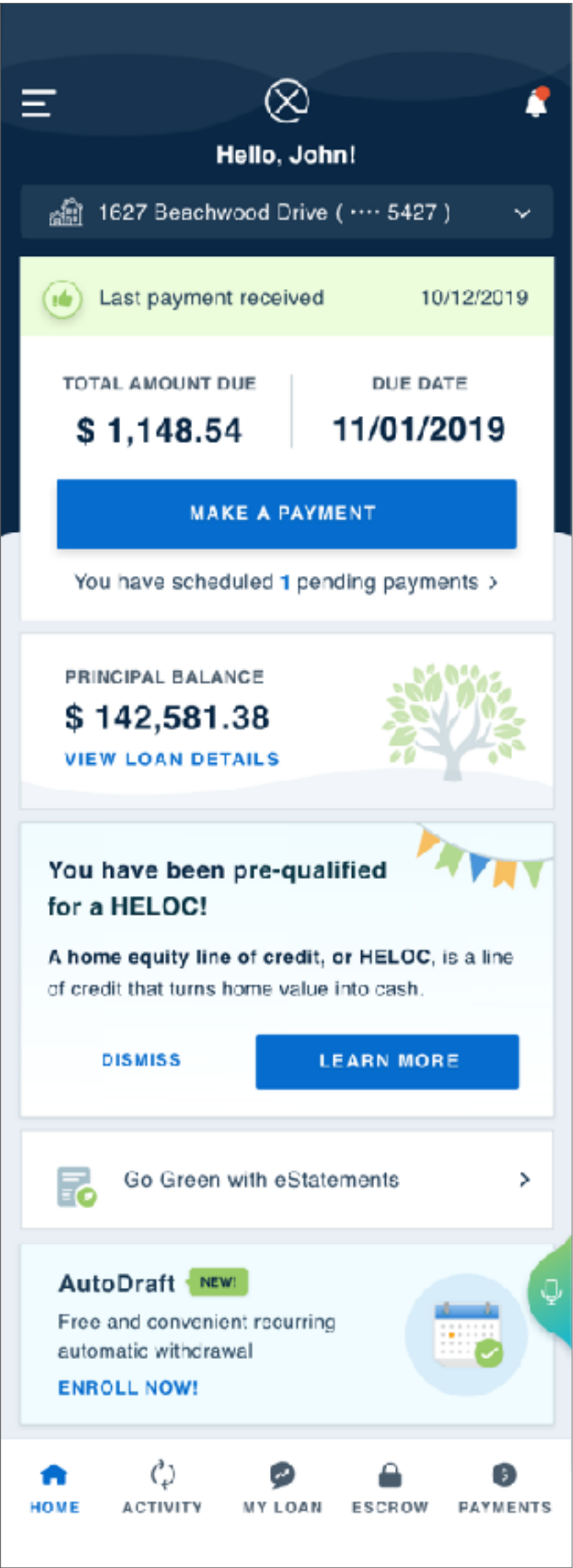
3

4

HOME / DASHBOARD

what would you expect to see from the landing screen?

 Due Date	<div></div>	8
 Due Amount	<div></div>	8
 Principal Balance	<div></div>	8
 Escrow Balance	<div></div>	4
 Interest Rate	<div></div>	2
 Payment History	<div></div>	2
 Payment Break Down	<div></div>	1
 Loan Details	<div></div>	1



WEBSITE DASHBOARD

Roadmap

To the test users, the term “dashboard” means the overview with the links to everything. They expect to take actions by clicking different cards.

UI / UX

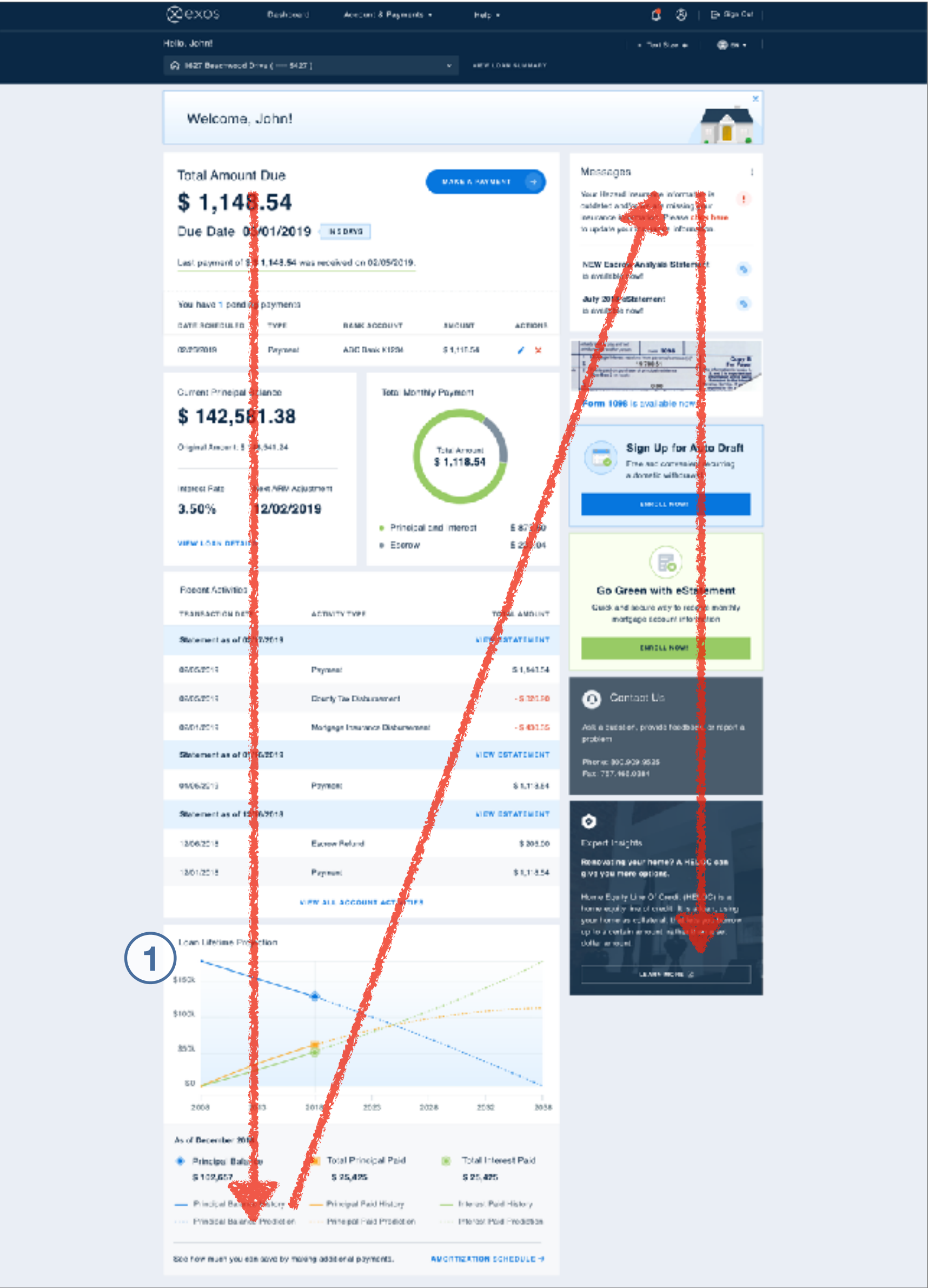
Most of the test users flowed the same **reading order**: they first read from the left side from the top to the bottom, then move to the right side and go from the top to the bottom.

Roadmap

Most of the test users (4/5) **don’t see the need to customize the dashboard** since they think the layout provides all the information they need.

UI / UX 1

Some test users, especially the ones who plan to pay off faster, think the “**Loan Lifetime Projection**” graph is really helpful. One test user thinks this graph is a bit hard to understand, therefore she prefers to have the text explanation above the graph.



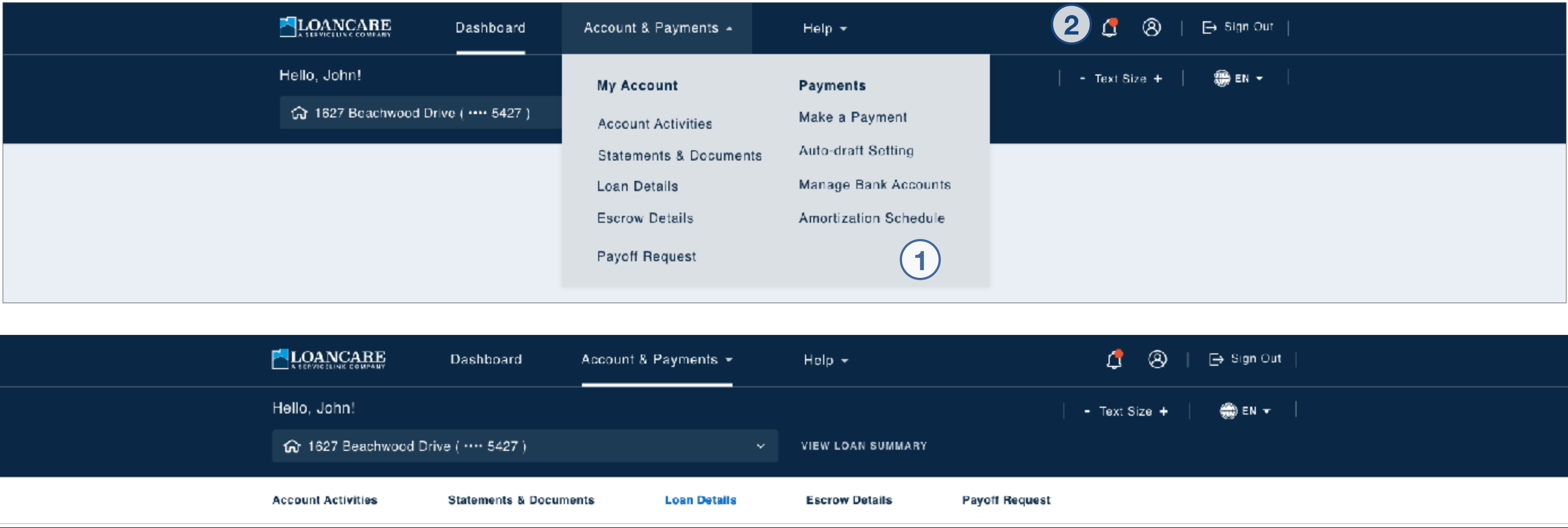
NAVIGATION STRUCTURE - WEBSITE

1 UI / UX

Most of the test users **didn't actively use the top navigation**, they look for links from the screen instead.

2 UI / UX

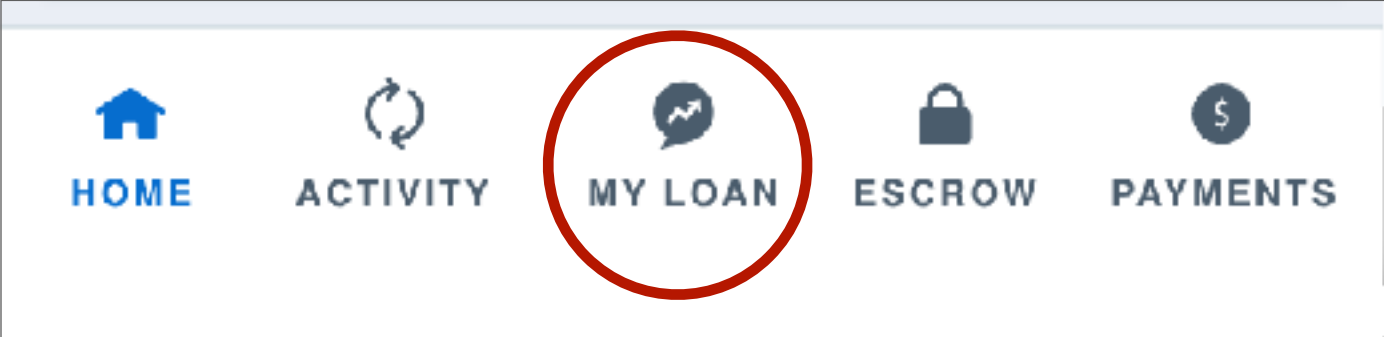
Most of the test users **didn't notice the "notification bell" and the "profile icon"**, some didn't understand what the icons mean.



NAVIGATION STRUCTURE - MOBILE

“My Loan” only exists in the MBA demo.

Q: What types of information or capabilities would you expect to find under each menu item?



Activity

Expected to find:

- Payment History
- Pending Payments

None of the test users mentioned “**eStatement**”. 2 of the test users got **confused** when they click on “Enroll in eStatement” from the Home screen and find they are **relocated** to the “Activity” tab.

My Loan

Expected to find:

- Loan Details
- Payment Details
- Loan Lifetime Overview
- Amortization
- Tax and Insurance

All the test user are **quite surprised** when they see **Home Value, Neighborhood Insights, and Advertisements**.

Escrow

Expected to find:

- Escrow Balance
- Escrow Payment Due
- Escrow Statements
- Mortgage Insurance

A few test users (2) think Escrow should be **a part of My Loan**.

Most of the test users (4/5) think they **won’t look at the Escrow Details very often**.

Payments

Expected to find:

- Payment Schedule
- AutoDraft Setup
- Payment History

1 test user thought “**payment history**” is **a part of the “payment”**.

MY LOAN: LOAN DETAILS / INSIGHTS / HOME RETENTION

1 UI / UX

Some users didn't notice they can click on the **“Insight”** and **“My Details”** tabs to switch the views.

2 Roadmap Data

Home Value

- “You should mention where the data comes from.”
- “I am afraid that my property tax will go up.”

3 Roadmap

Neighborhood info

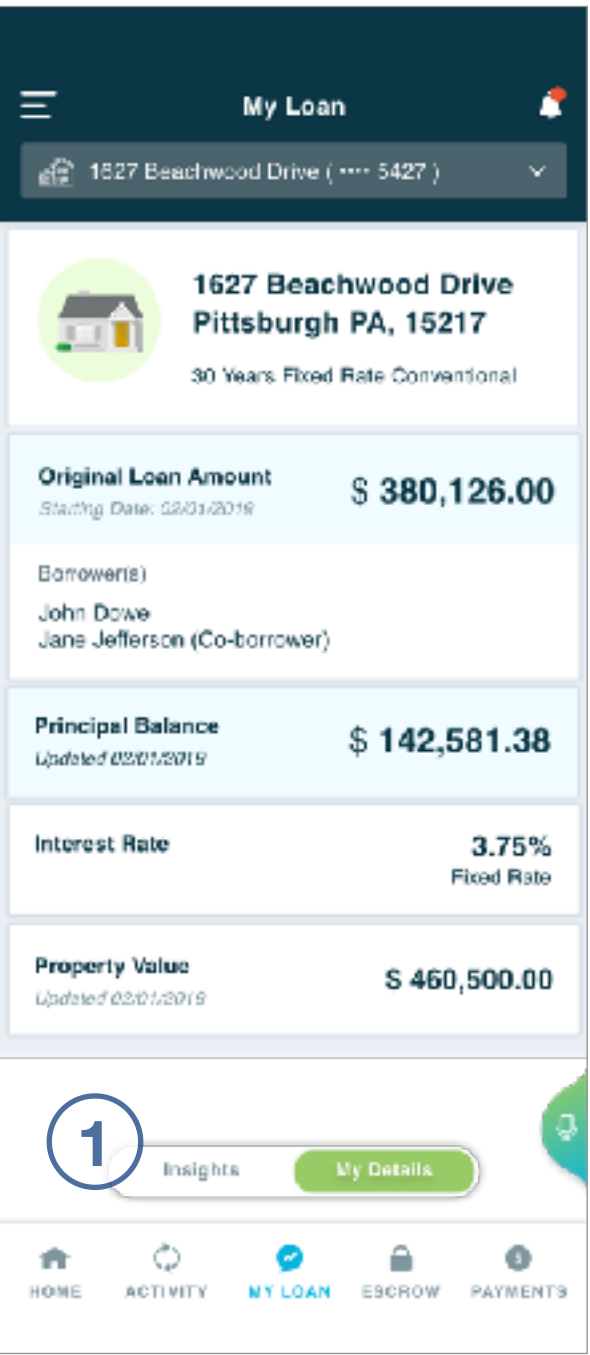
- “I would use google to find nearby places. I didn't expect to find this type of information in a mortgage app.”
- “Once I bought the house, I have already done enough research about my neighborhood.”

4 UI / UX

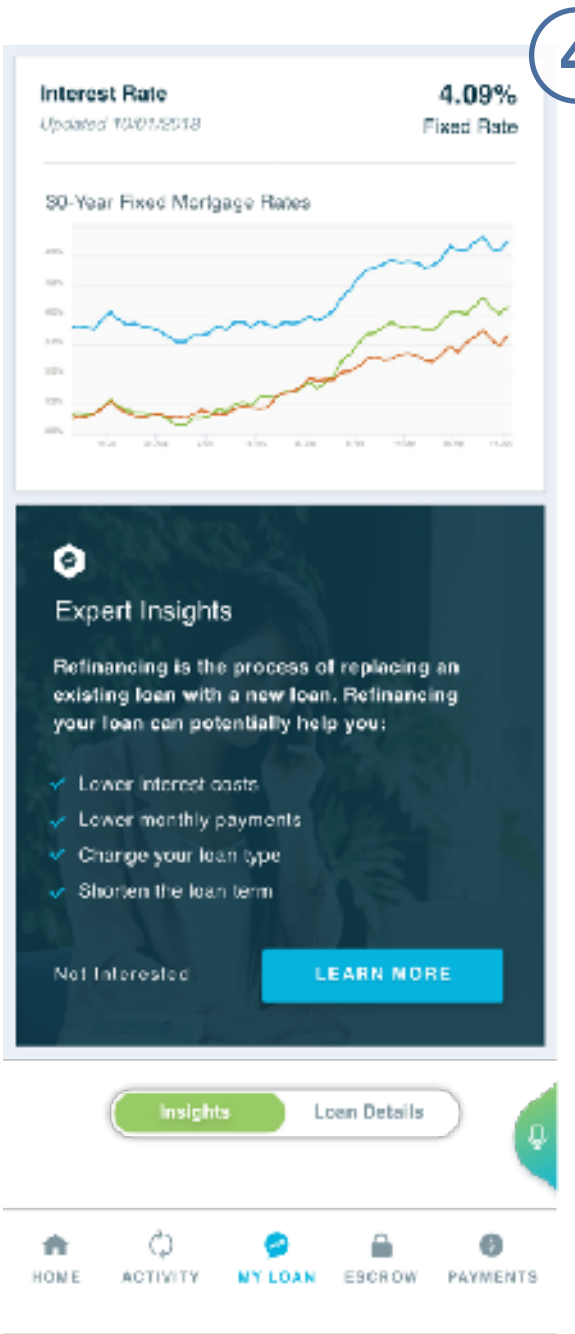
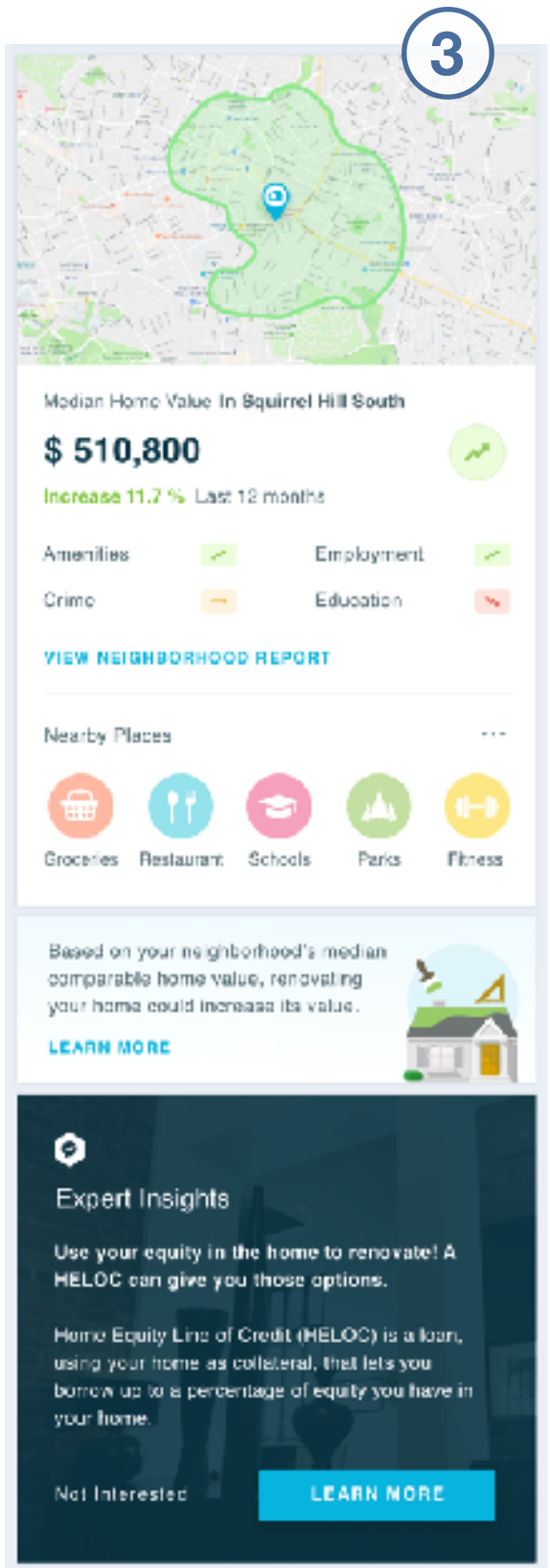
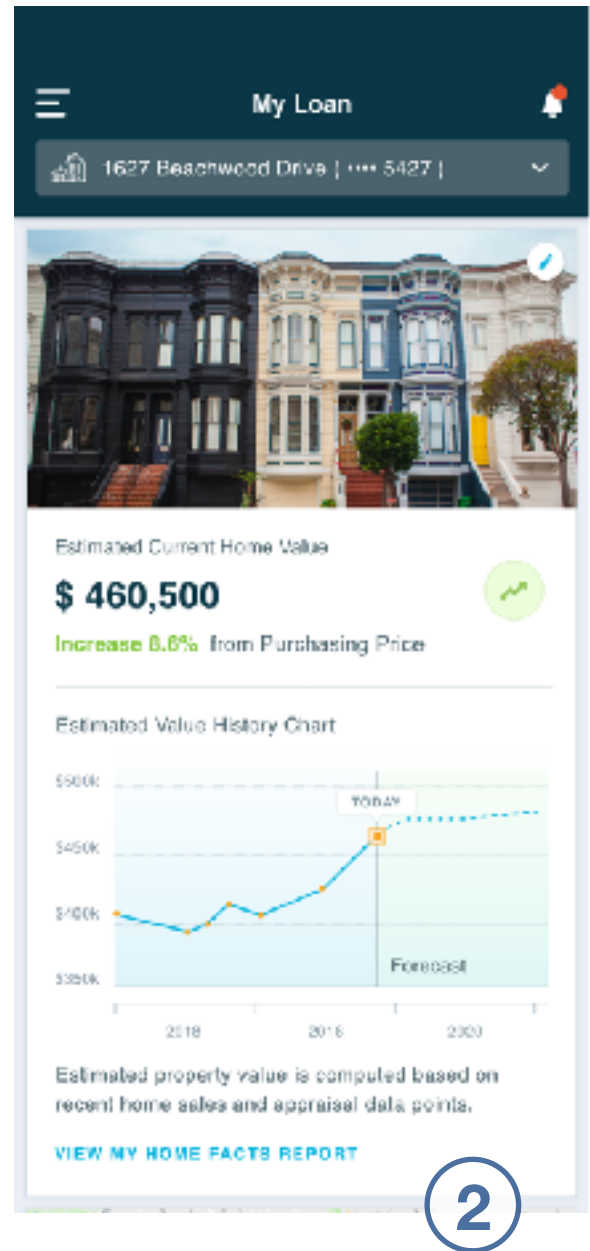
Interest Rate

- “I like the idea of interest rate trend since I won't frequency check it. However, average users may not know how to interpret the graph by themselves.”

Loan Details



Loan Insights



MODIFY PAYMENT

1

Requirement

UI / UX

Make multiple payments at one time

Understand the Concept

4

Doesn't Understand

7

- “What is the difference between ‘multiple payments’ and ‘additional payments’?”
- “Does that mean make a payment from multiple bank accounts?”
- “Will these payments be withdrawn on different dates or all at once?”

2

Requirement

UI / UX

Principal, escrow and fee only payment

Understand the Concept

4

Doesn't Understand

5

- Expected to see explanation/clarification on the fees.

Modify Payment

1627 Beachwood Drive (••• 5427)

Total Withdrawal\$ 1,148.54

Mortgage Payment\$ 1,118.54

☐

Make multiple payments at one time 1

☐

Principal, escrow and fee only payment 2

Additional Payment ⓘ\$ 0.00

Additional Principal\$ 0.00

Additional Escrow\$ 0.00

Fee Payment ⓘ\$ 30.00

Other Fee (\$15.00 due)\$ 15.00

One-Time Payment Fee\$ 15.00

SUBMIT

EXOS

DashboardAccount & PaymentsHelp

Hello, John!

1627 Beachwood Drive (••• 5427)

VIEW LOAN SUMMARY

Make a PaymentAuto-draft SettingManage Bank AccountsAmortization Schedule

Make a Payment

The one-time payment online option is a quick and convenient option that allows a one-time withdrawal of your mortgage payment directly from your checking or savings account via an Electronic Funds Transfer (EFT).

Step 1 of 2: Payment Details

Total Withdrawal\$ 1,118.54

Mortgage Payment\$ 1,118.54

☒

Make one month minimum payment

☐

Make multiple payments at one time

☐

Make principal, escrow and fee only payment

Additional Principal\$ 0.00

Additional Escrow\$ 0.00

Other Fee (\$15 due)\$ 15.00

One Time Payment Fee\$ 15.00

Bank Account

ABC Bank x7119 - Checking

Payment Effective DateDue Date 03/01/2019

03/01/2019

Payment must be submitted prior to 10 p.m. EST to be posted the same day. Payments submitted on weekends, holidays, or after 10 p.m. EST will be posted on the next business day.

CANCELCONTINUE

AutoDraft Payment

Free and convenient recurring automatic withdrawal.

ENROLL NOW!

Payment Options

Explore all of the payment options and find the most convenient one for you.

Amortization Schedule

How much can I save by making additional principal payments?

Financial Assistance

Facing financial challenges? Look for resources and assistance here.

MODIFY PAYMENT - VERBIAGE

Version 1 - What we have today in B2C Website

Total Withdrawal	\$ 1,118.54
Mortgage Payment	\$ 1,118.54
<input checked="" type="radio"/> Make one month minimum payment	
<input type="radio"/> Make multiple payments at one time	
<input type="radio"/> Make principal, escrow and fee only payment	

Version 2 - New Verbiage

Total Withdrawal	\$ 1,118.54
Mortgage Payment	\$ 1,118.54
<input checked="" type="radio"/> Regular mortgage payment: \$ 1,118.54	
<input type="radio"/> Schedule multiple payments in advance	
<input type="radio"/> Additional or fee only payment	

Requirement

UI / UX

- “**Regular mortgage payment**” might be better than “**Make one month minimum payment**”.
- “**Make multiple payments at one time**” is confusing. However, “**Schedule multiple payments in advance**” is also misleading, because it sounds like the payments will be processed month by month.
- Neither “**Additional or fee only payment**” nor “**Make principal, escrow and fee only payment**” is clear. One tester suggested to say “**Make additional principal, escrow, and fee only payment**”.

ESCROW

1 Requirement

None of the test users understood what “**Current Escrow Advance**” is.

2 UI / UX

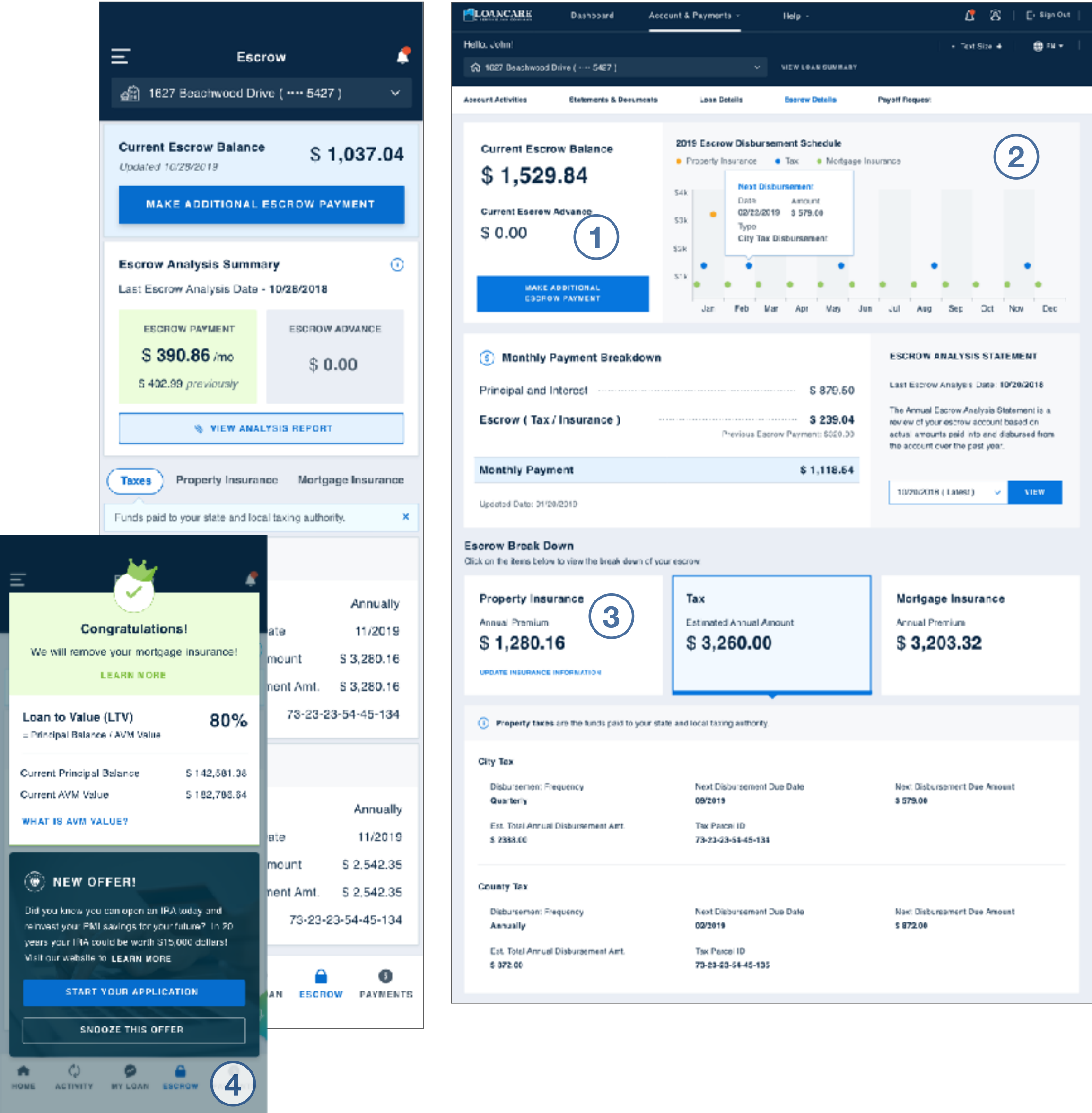
A few test users experienced difficulties to understand the **Escrow Disbursement Schedule Graph**. One test user scrolled up and down for multiple times to read the **Graph** together with the **Escrow Break Down** section.

3 UI / UX

Most of the test users didn’t realize that the **3 cards - Property Insurance, Tax, and Mortgage Insurance** - are clickable.

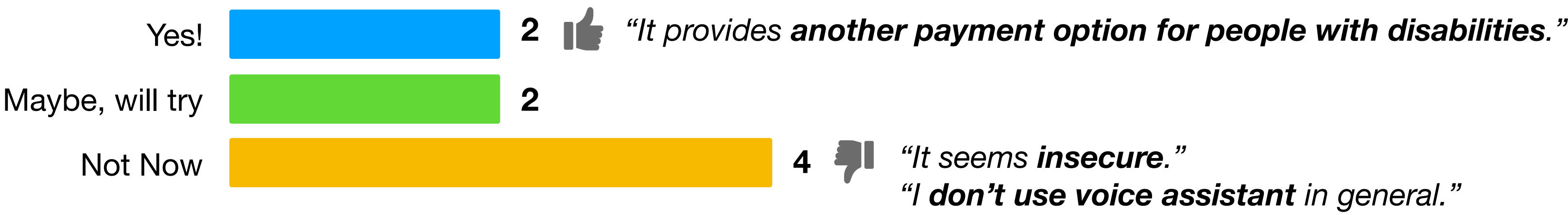
4 Roadmap

2 Test Users like the **Remove PMI** feature and think this is a great opportunity to **sell “refinance” as a product**.



EXOS VOICE

Will you use the voice assistant / conversational user interface to manage your mortgage?



If yes, what will you use the Voice User Interface for?

- Ask Payment Due Dates
- Call Customer Services

But for any information involves “**numbers**”, they prefer to **view it on the screen**.

