Refinance calculator

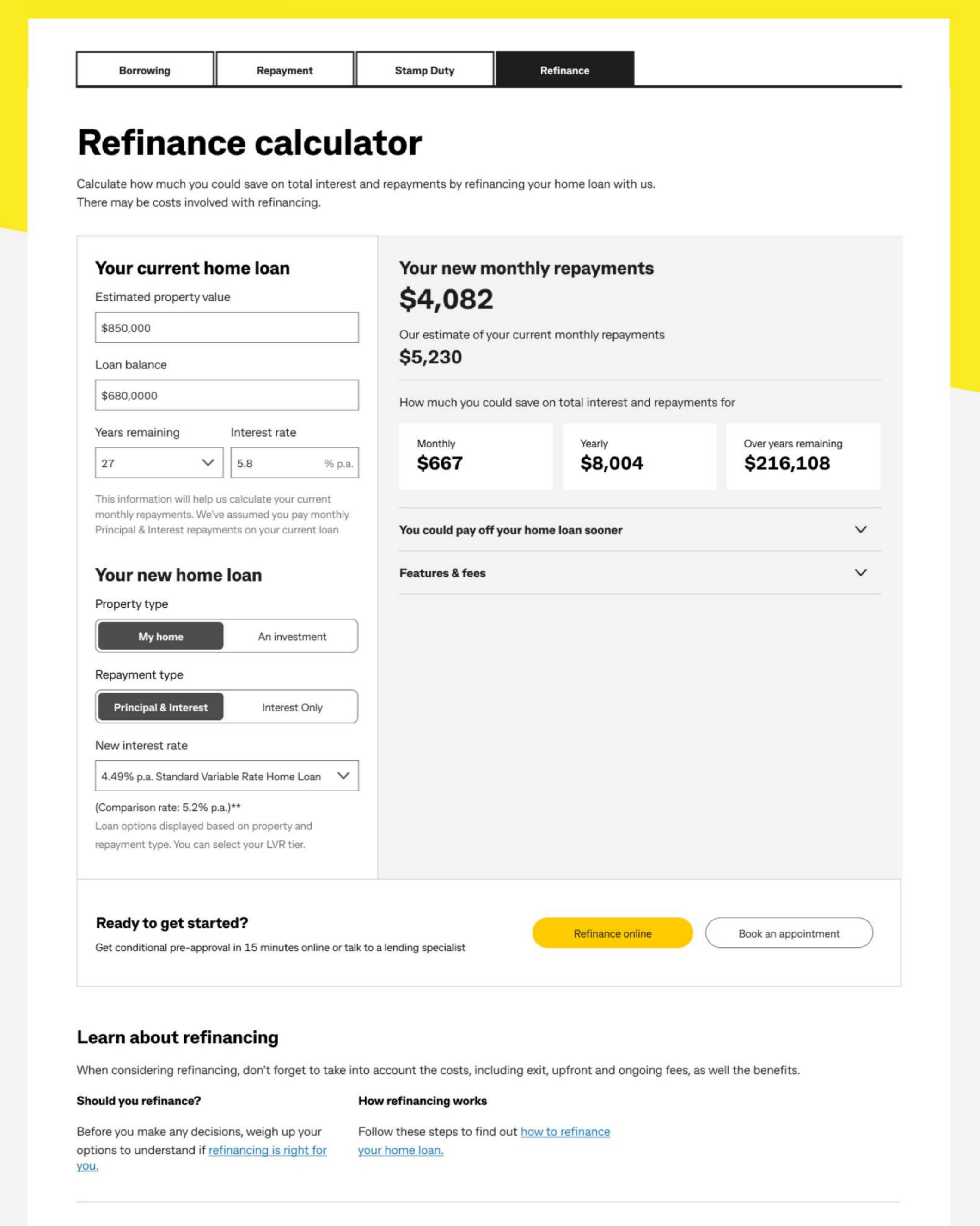
A loan comparison tool

Role: Product designer

2022-23



Home loans / Tools & calculators / Refinance calculator



Design brief

Background

The refinance calculator is a tool which allows customers with existing home loans to understand their current repayments and how much they could save when comparing different Interest rates. The Refinance Calculator has several problems such as a low traffic rate, lack of error preventions and accessibility and usability issues.

Customer Opportunities

Have an easy to use tool which demonstrates the savings between two loans. Further arm the customer with confidence to help them have peace of mind during the refinance process.

Business Opportunities

Uplift the calculator in order to provide a customer-centric approach, which can generate more refinance leads.

Design brief

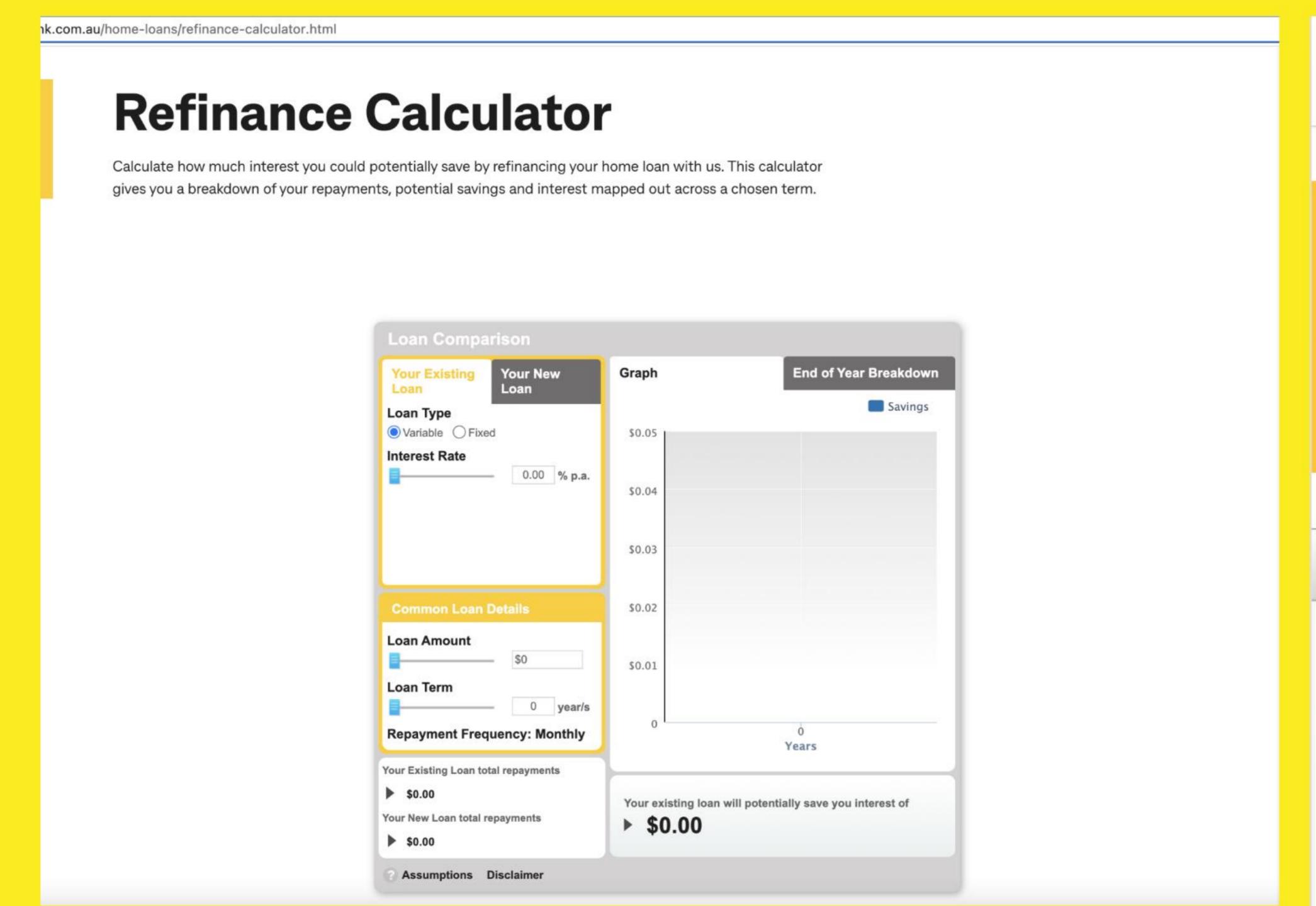
Hypothesis

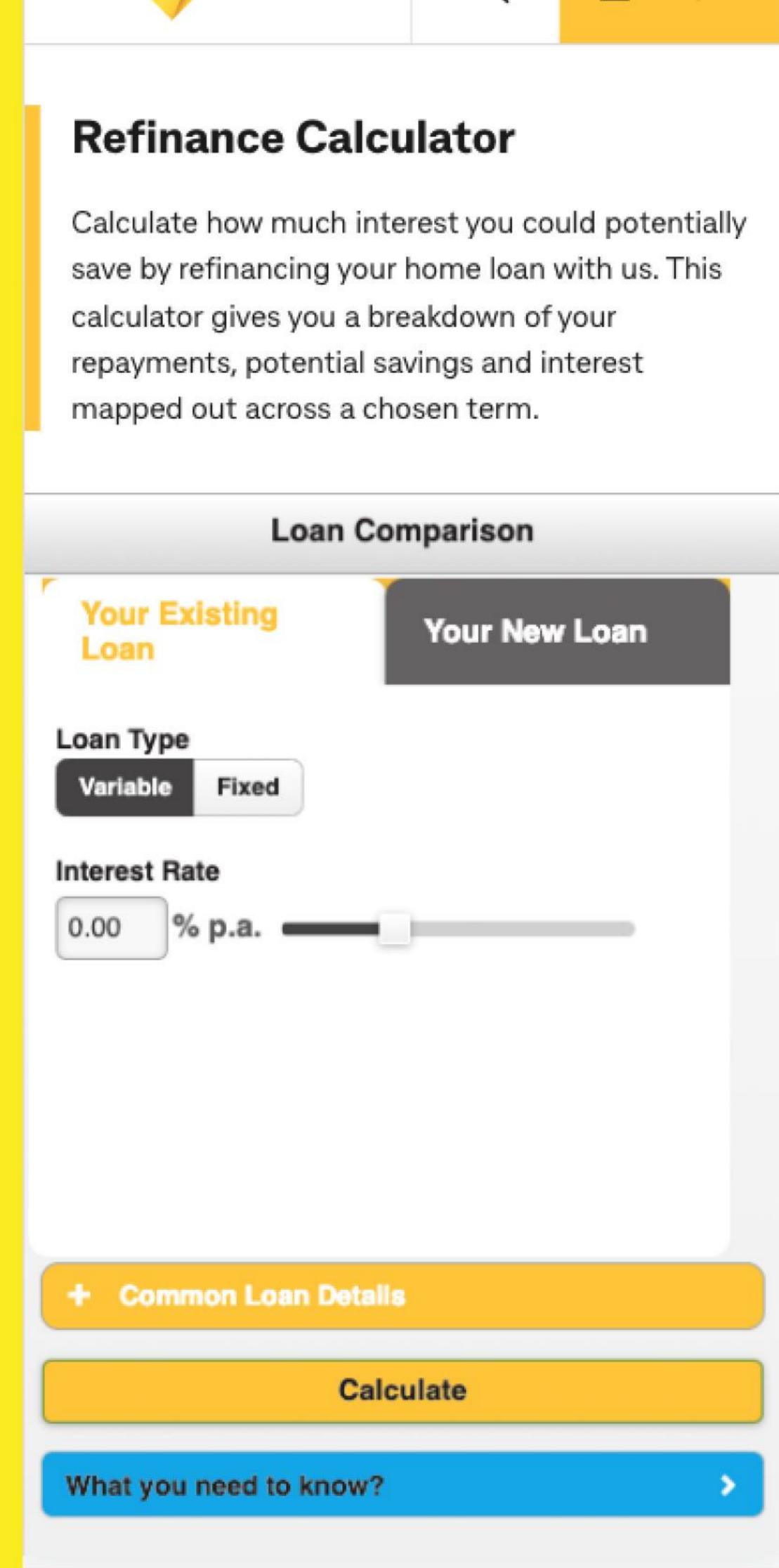
Many refinancers do not know what a refinance calculator is. They would use a repayment calculator or go to a broker when searching for a better loan.

We believe that by improving the usability and findability of the refinance calculator, users looking to refinance will use the calculator with ease, and will want to make an appointment with CBA.

Approach

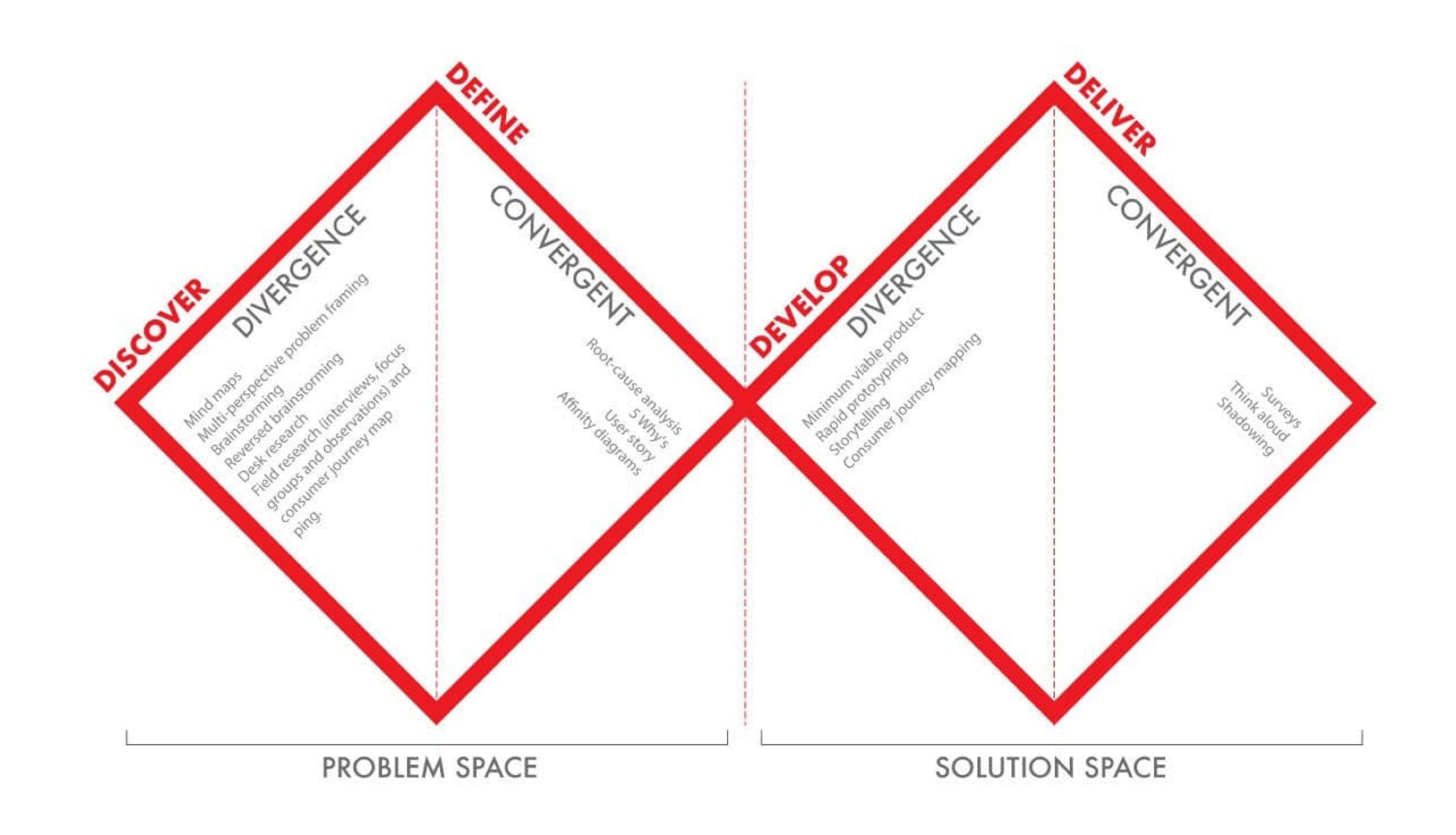
Double diamond method (Discover, Define, Develop & Deliver)





☐ Log on

Design approach

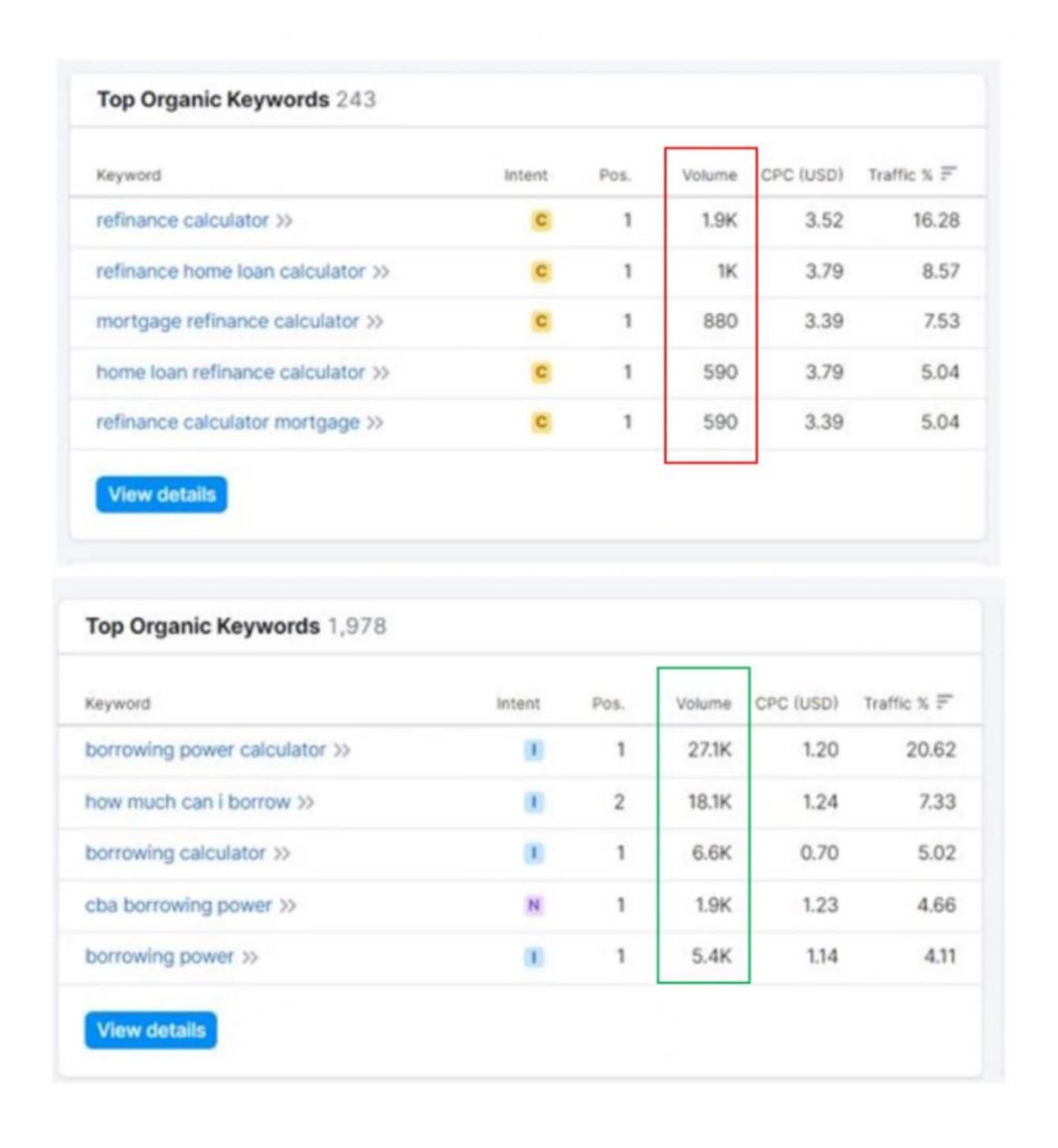


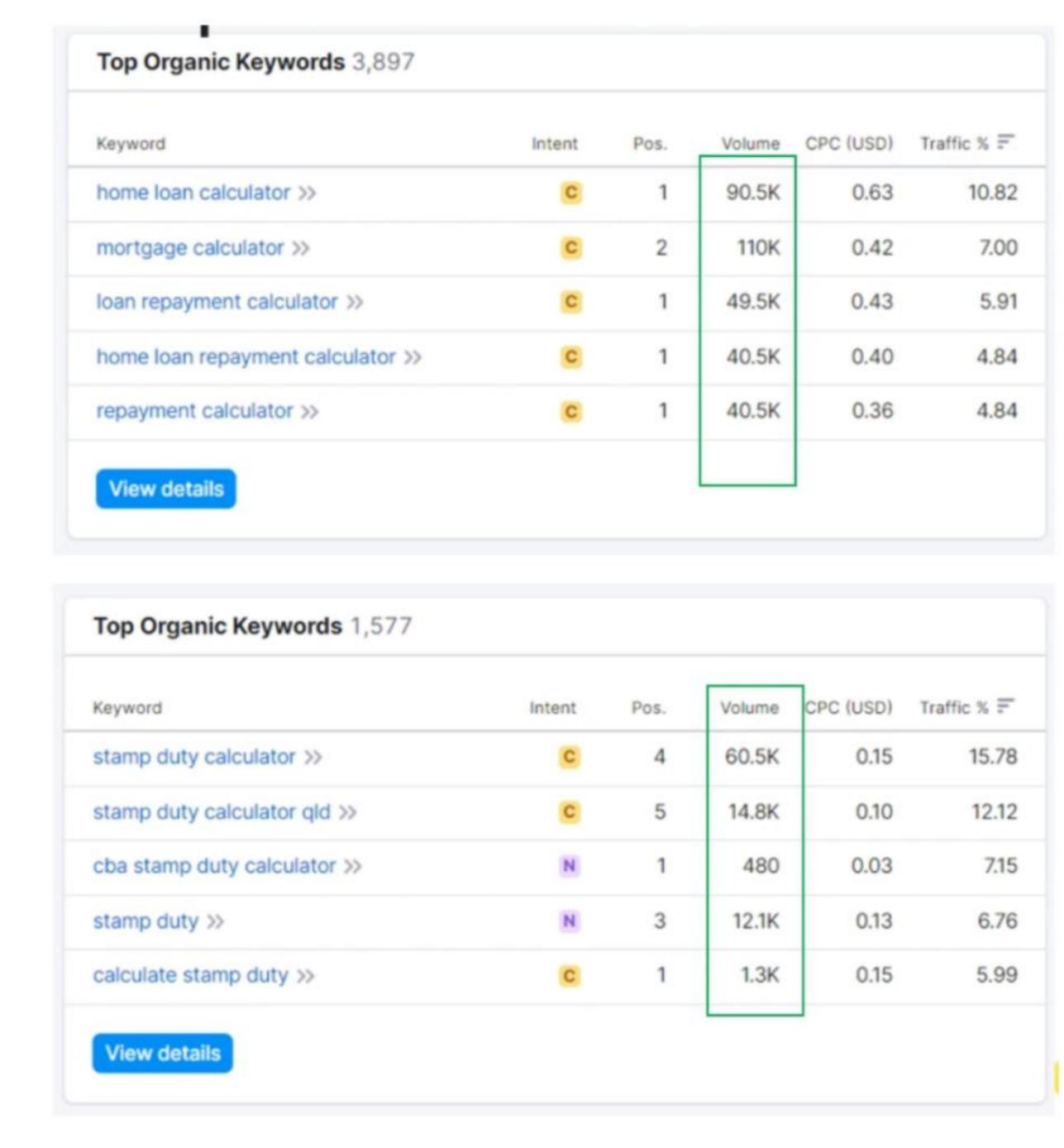
Statistics

Views on CommBank Home Ioan calculators June-July 2022

| Calculator | UV June | UV July | OM June | OM July | CR June | CR July | % change | CR 6MA | R/A/G |
|------------|----------|----------|---------|---------|---------|---------|----------|--------|-------|
| Repayments | 303, 712 | 338, 918 | 1, 318 | 1, 437 | 0.44% | 0.44% | | 0.59% | |
| Borrowing | 161, 148 | 190, 804 | 1, 952 | 2, 134 | 1.21% | 1.12% | -0.09pp | 1.4% | |
| Stamp Duty | 64, 427 | 68, 793 | 708 | 758 | 1.1% | 1.1 | | 1.2% | |
| Refinance | 3579 | 3122 | 76 | 87 | | | | | |

Google analytics: Most users search for 'repayment calculator' more than 'refinance calculator'





- How might we inform users about the refinance calculator?
- How might we bring prominence to the refinance calculator?

Heuristic evaluation

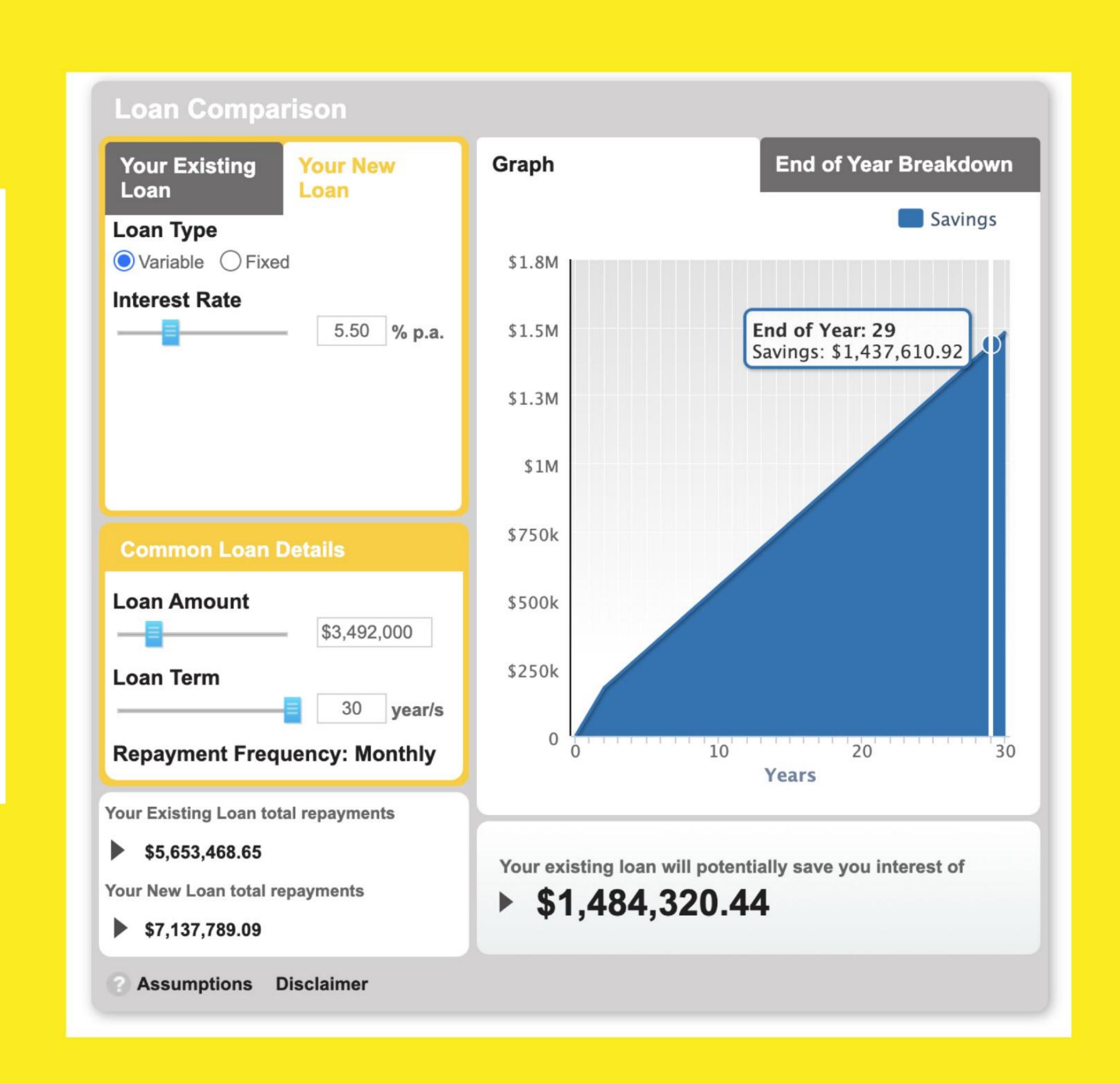
Task

I want to refinance my mortgage

| Tari | | | |
|---|--|---|--|
| Visibility of system status | 8 | Demonstrates to the user which inputs have been completed. Could be improved with clearer UI and better design principles, however it does the job well. | |
| Match between system and the real world | 8 | For users refreshing their lending knowledge could there be an opportunity to explain terminology? Info hover icons or a glossary link? The calculator assumes that the user knows terms, however it could be a child using the calculator on. Behalf of their parents who might not have English as their main language. | |
| User control and freedom | 8 | Users can easily change inputs. | |
| Consistency and standards | 2 | Is a third party software with the commbank yellow place upon it. It is not constant with the other calculators. | |
| Error prevention | 3 | Sliders are not user friendly. Someone slightly dragging the loan amount can increase the amount to 10 million easily. | |
| Recognition rather than recall | 7 | Good context for the user could be improved. | |
| Flexibility and efficiency of use | 5 | There is no clear way to get to the other 3 calculators. | |
| Aesthetic and minimalist design | 2 | Design is outdated, inconsistent and I am unsure if it is full accessible with the small sliders and inputs. | |
| Help users recognise, diagnose and revere from errors | 4 | Fixed term slider does not save the input amount until the user inputs their loan term amount. Should have a message that says "Please input the loan term before this input." | |
| Help and documentation | elp and documentation 5 There is documentation for assumptions. Documentation is seperate from the calculator and the user has to information if refinancing is good for them. | | |
| | | | |

Findings

- Not accessible
- Hard to find
- No error prevention



Understanding the problem

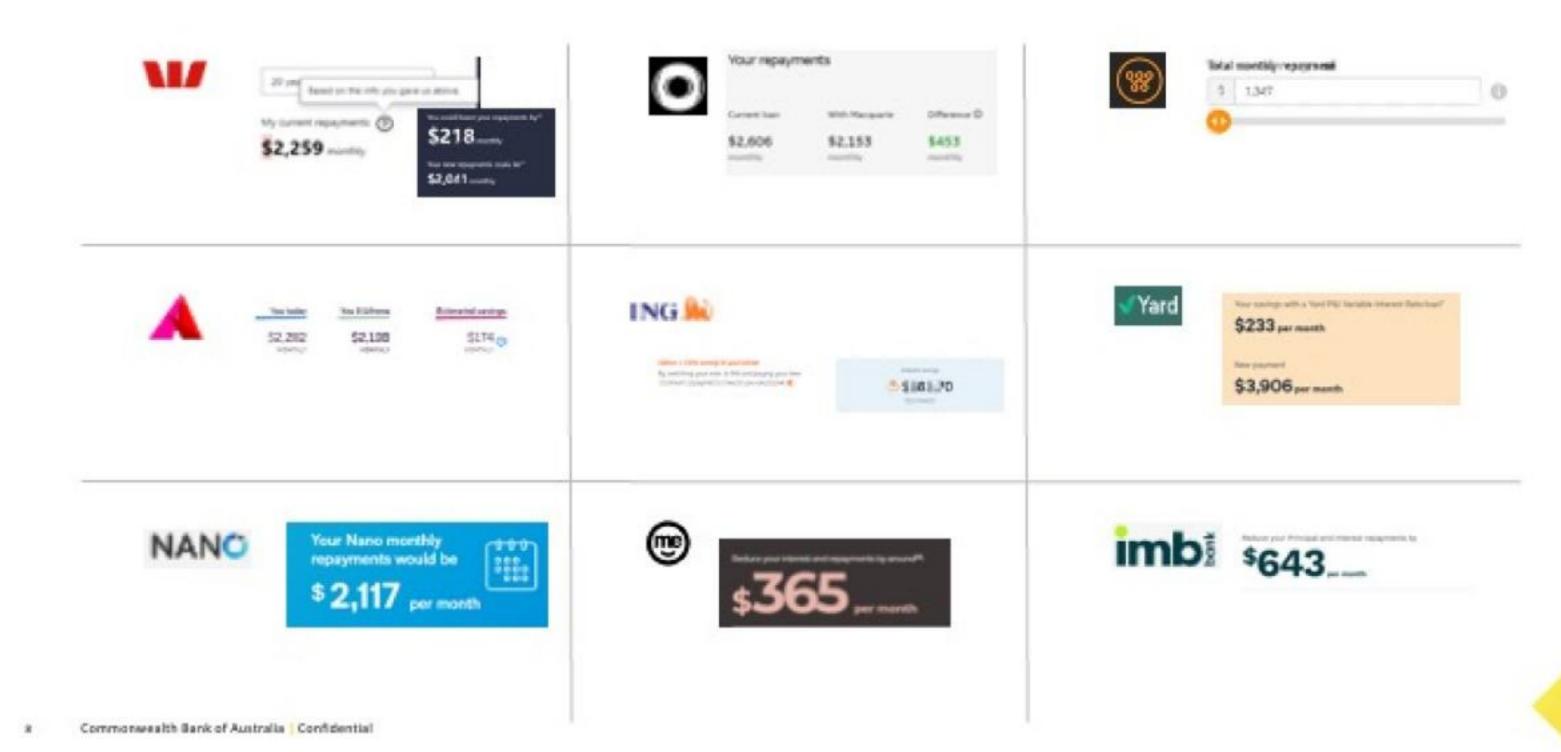
Questions

- Besides UI and accessibility, what is wrong with the current calculator?
- What are the current complaints in our limited complaints report?
- Are there any areas of this experience the user is actively struggling? Can we start tagging input fields to inform us?
- Google analytics/Adobe analytics: Where are users coming from? When are they clicking off? How do they use this page?
- Do we have personas built we can re use?
- What are the statistics of all calculators, how are they used?

Market research

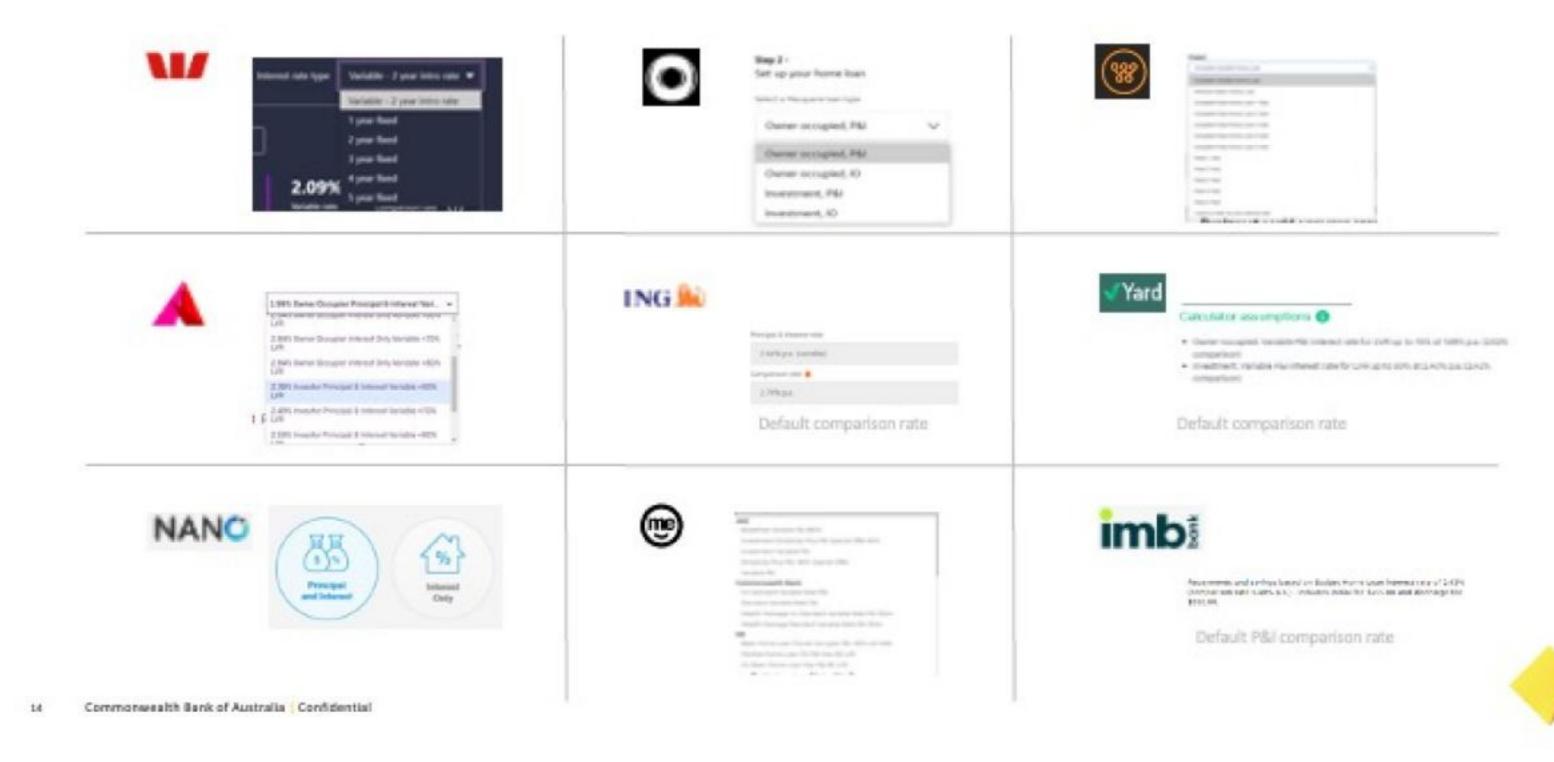
Comparison between current repayments and estimated new repayments

Clear breakdown of the current repayments, new repayments and the saving made once refinanced



Option to choose the loan type

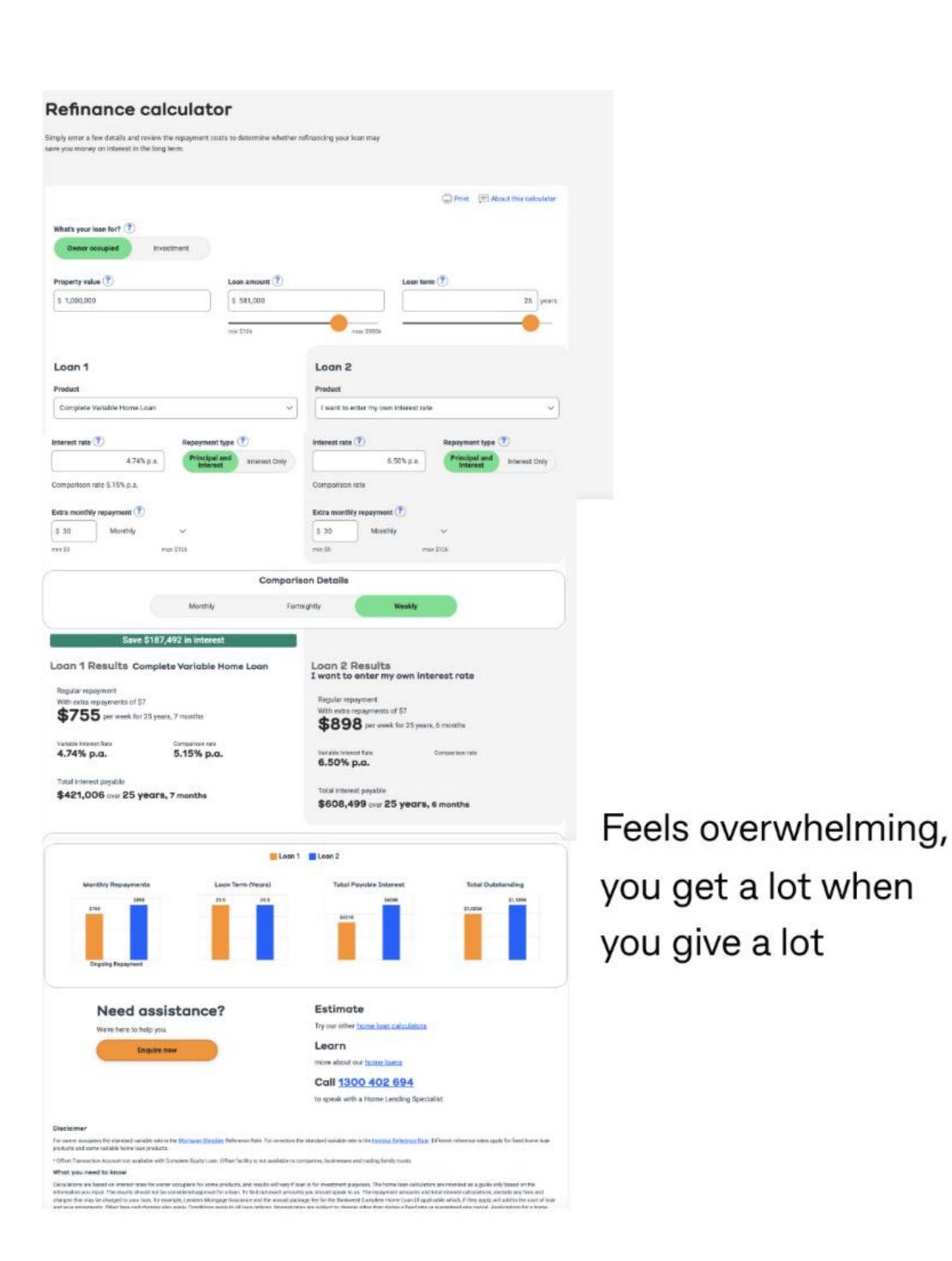
Opportunity to choose between principle and Interest or interest only loans. Some competitors combine the loan type with the property type.



NanoBank \$5,051 over 29 years Second on year 60% CVR, extension recessorid repayments for your home foun. No ongoing fees for the life of the loan. and the second of the second second Steps are nice and Adjust death of your News lose WHENTER Your current home loan Calculate Estimated property value Current loan balance Simple layout, less 29 years \$ 100,000 \$ 609,967 \$ 4.077 Current interest rate inputs for an output. Down payment 3.75% p.a. 8 990,000 Your new home loan My learn type: Owner Occupied Years remaining My current rate (3) Which of these is more important to you? My our mis missyments. (*) \$662 months Interesting slider Clear flow

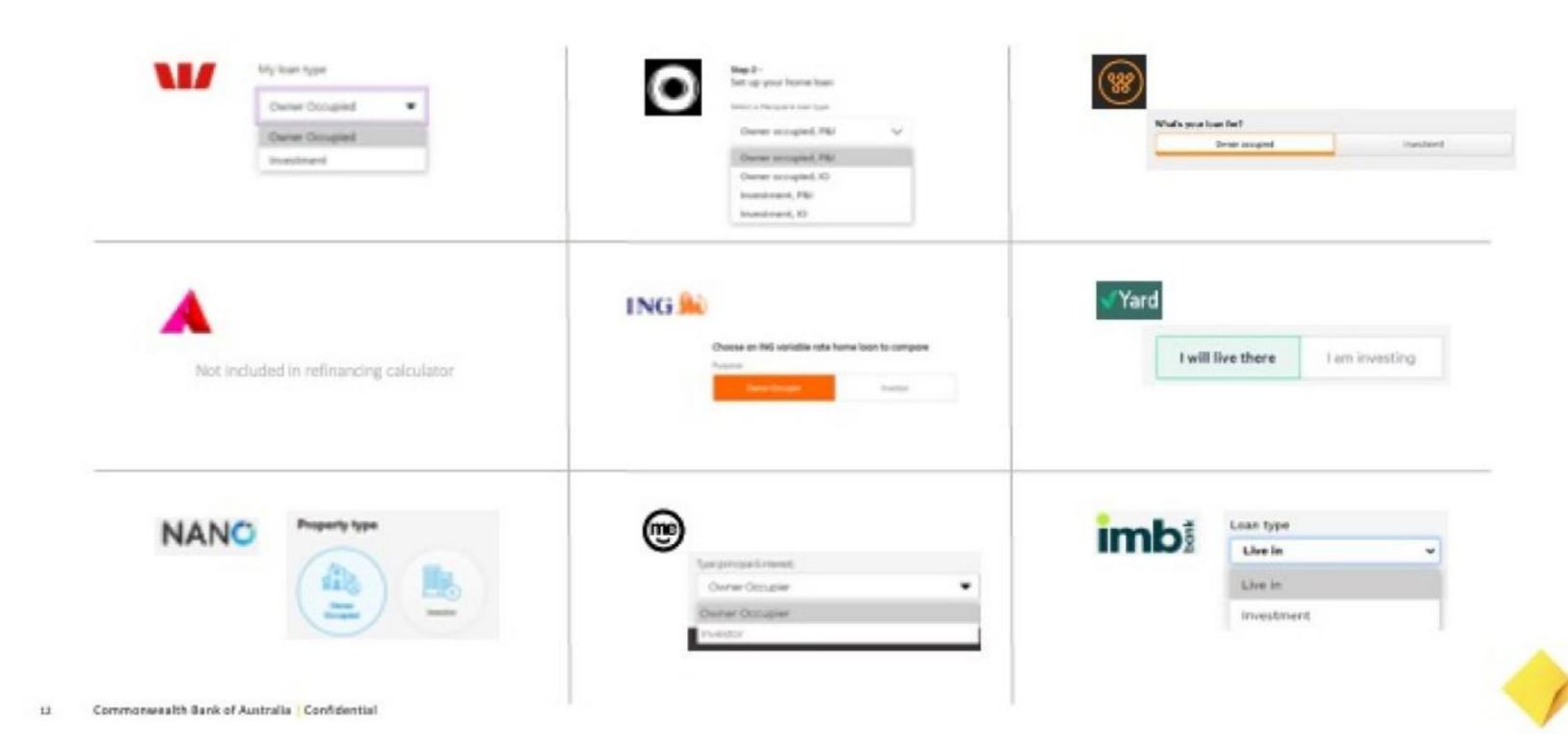
design

Spend & Save ♥ Home loans ♥ Our banking app Why us ♥ Get help ♥

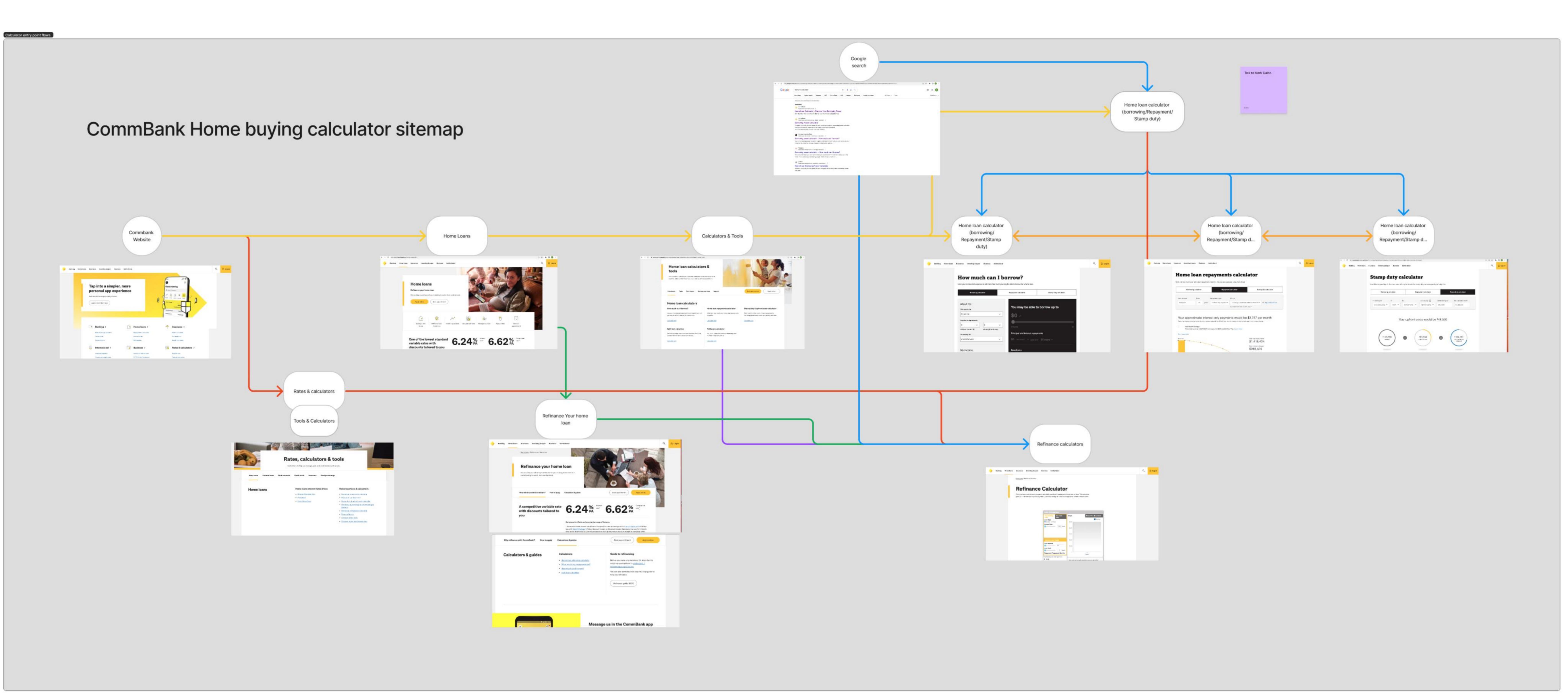


Option to choose the property type

Opportunity to filter between owner occupier and investment property



Discovery Sitemap

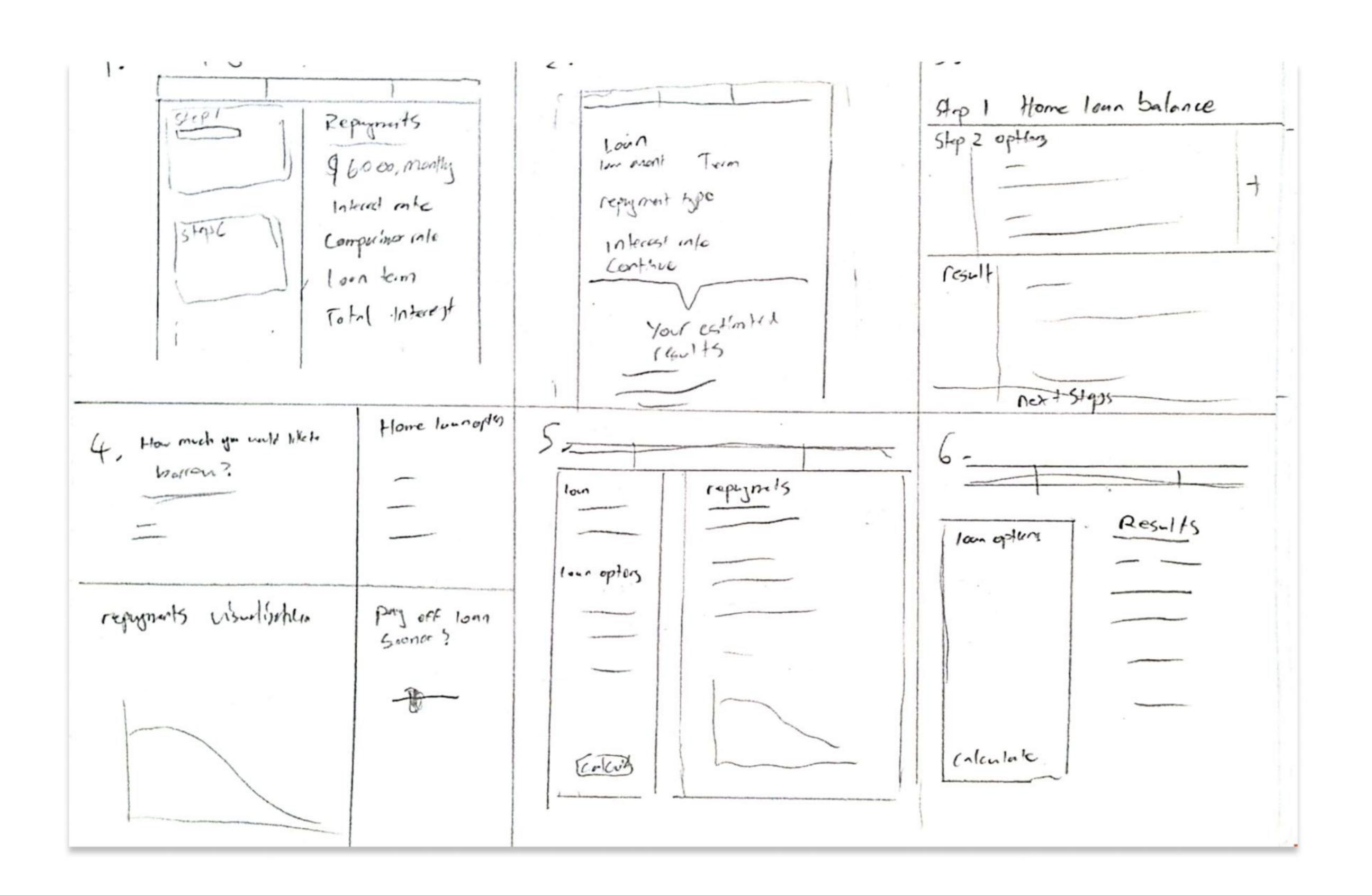


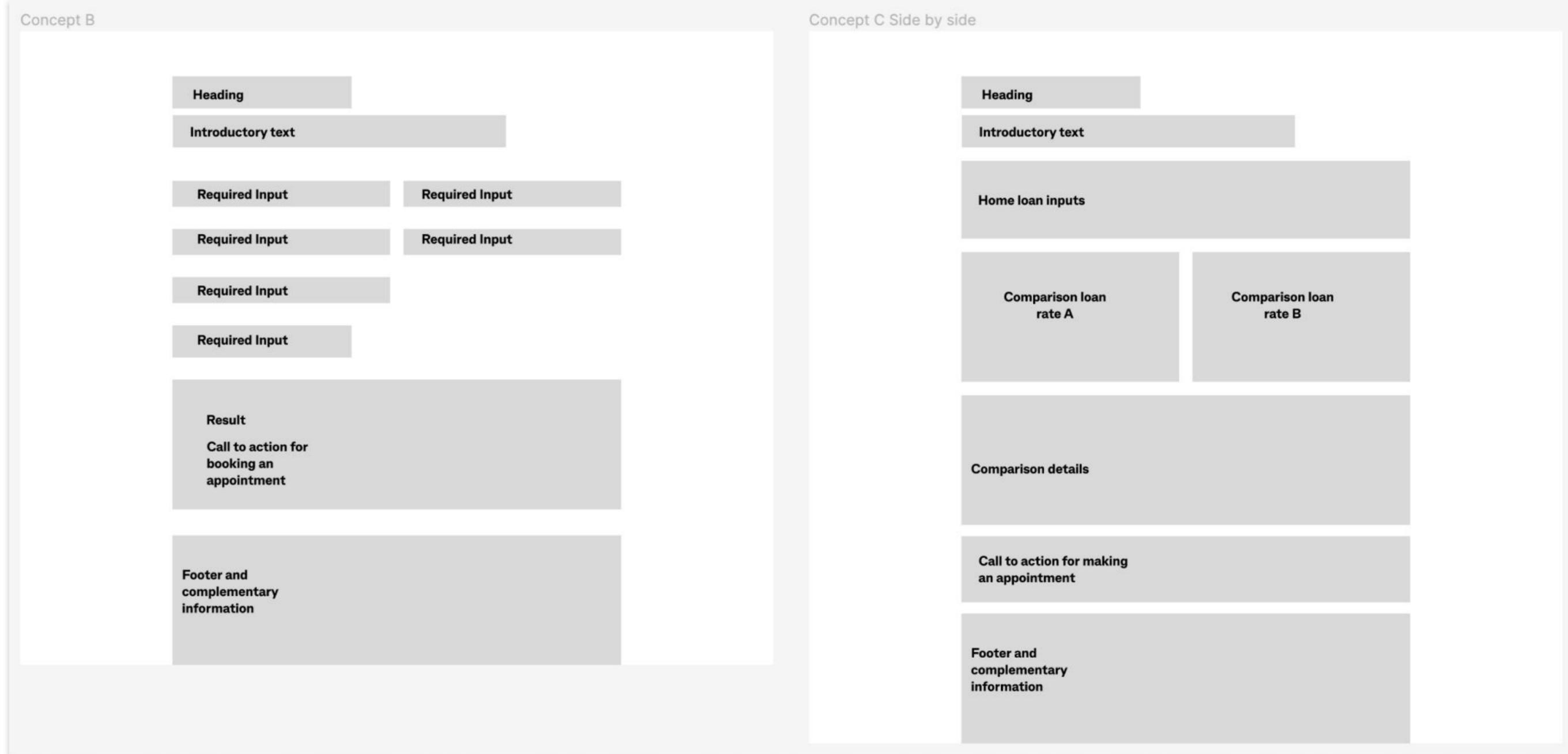
Define

Criteria of success

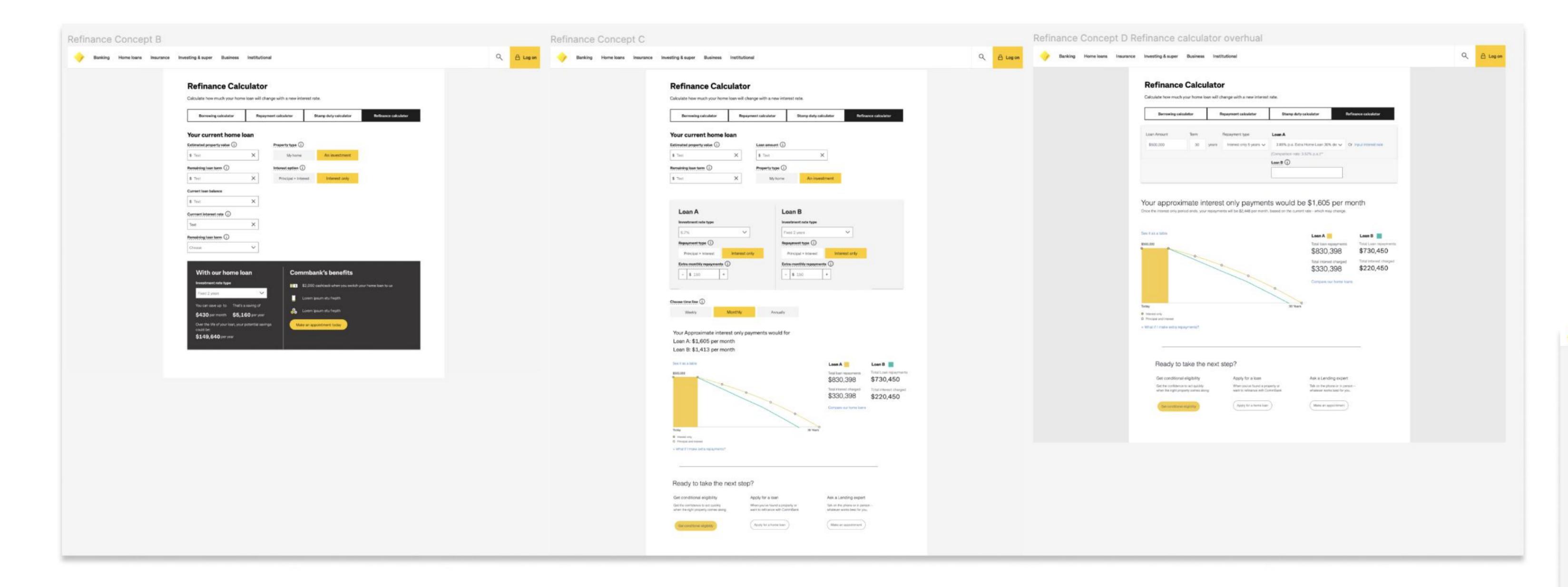
- Easy as possible to get results
- Users understand the purpose of the calculator
- Users are aware of other calculators available and they understand the difference
- Users know when to use each calculator in the home buying journey
- Users can learn about refinancing on the page
- Users can make an appointment easily

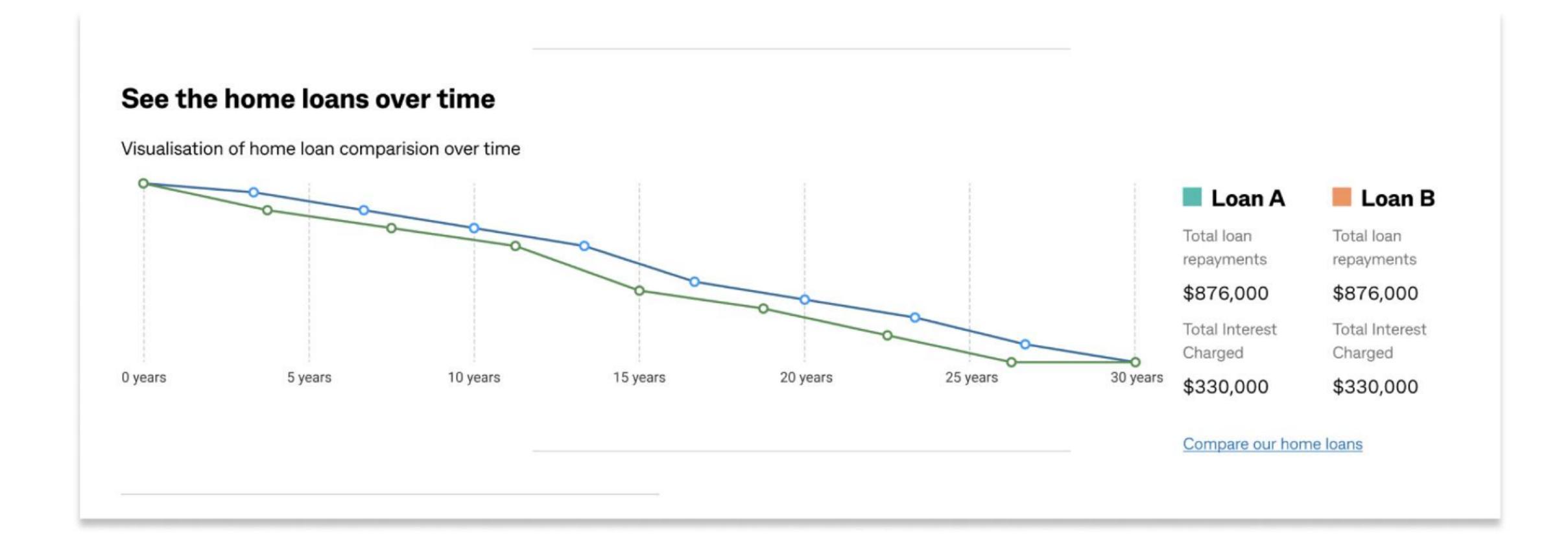
Develop Ideation

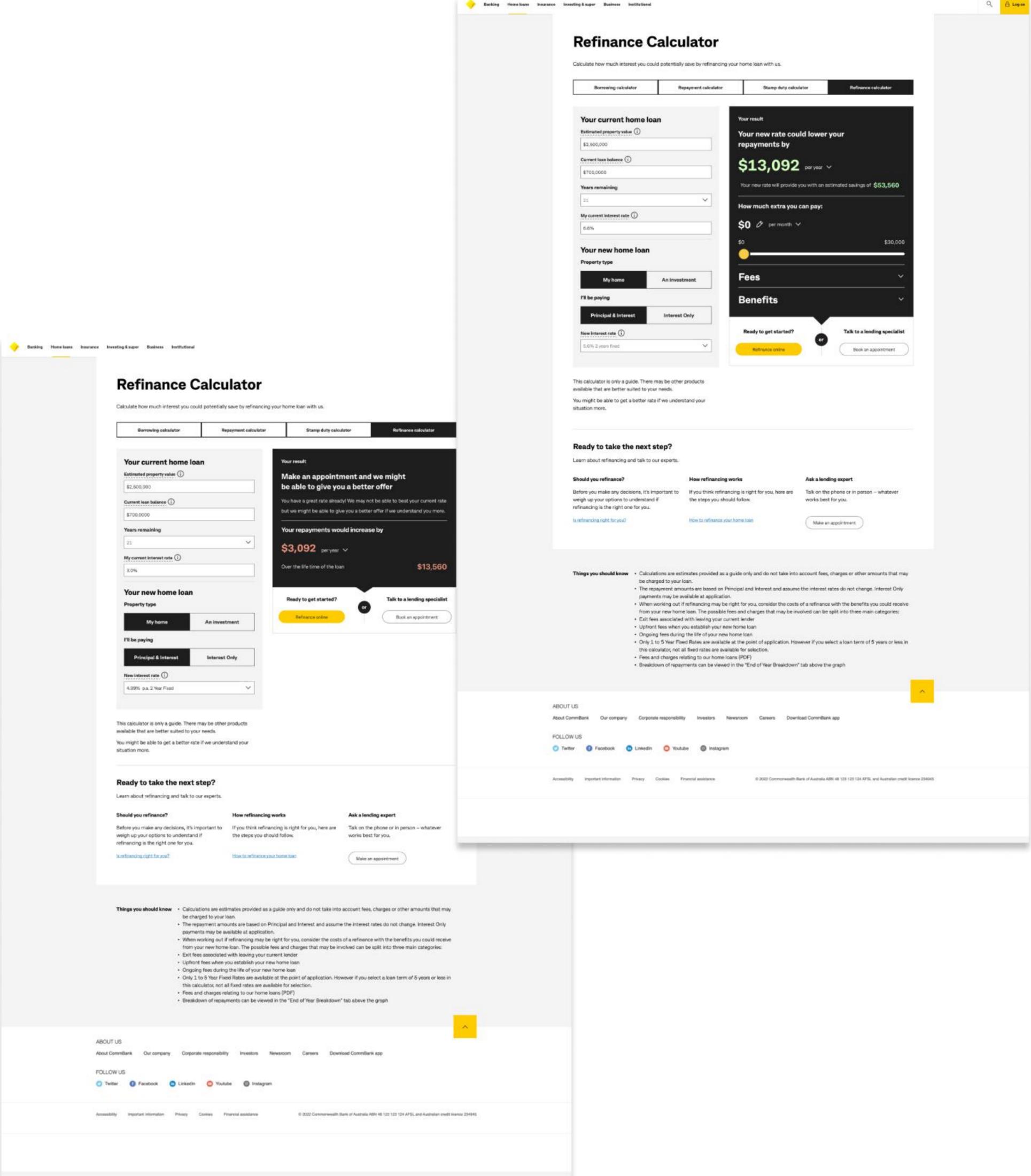




Develop Ideation







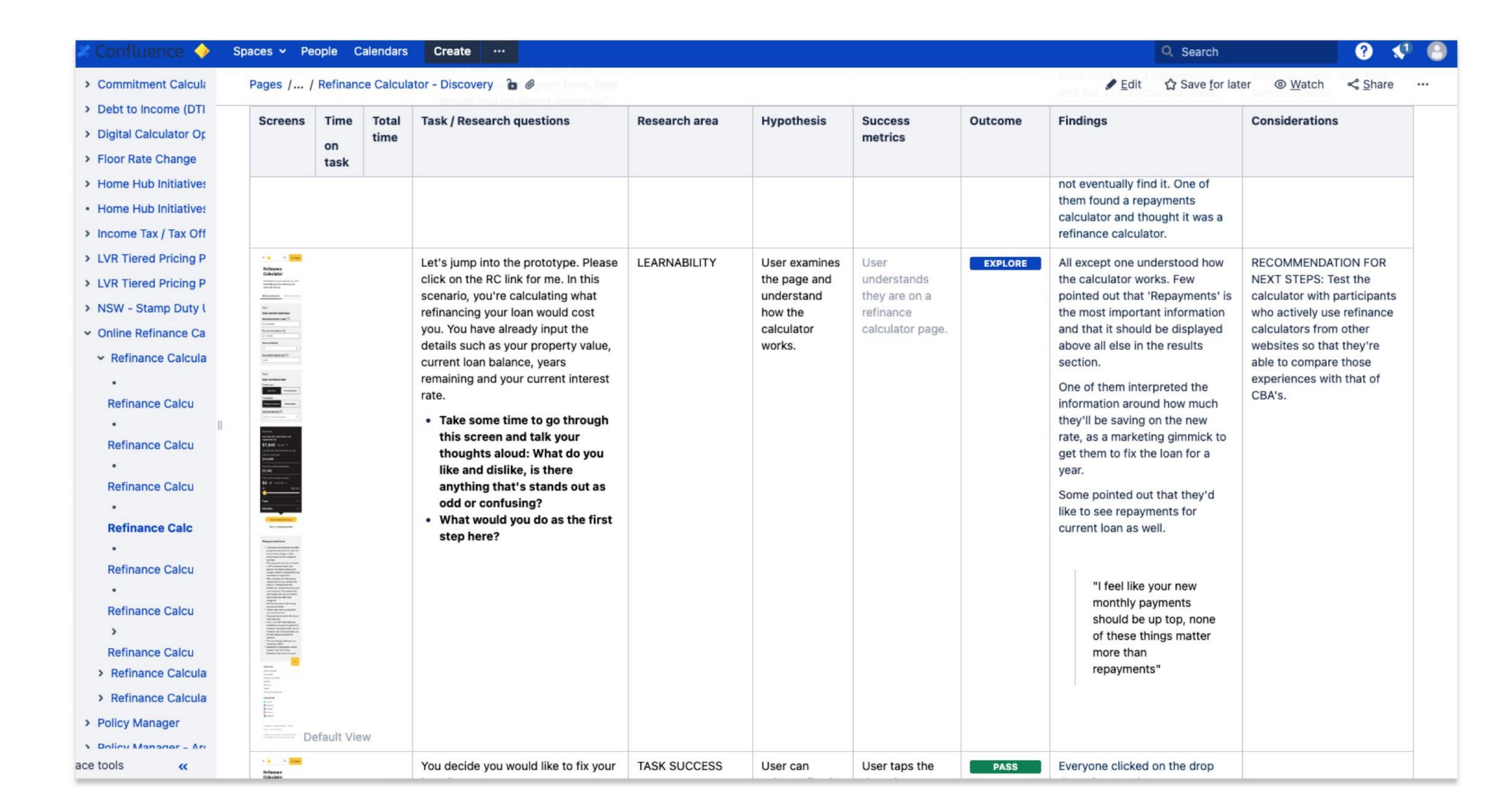
Usability testing

Session details

- 1:1 Usability testing sessions
- Exploratory & UT
- Participants had existing home loans
- 6 Participants
- Mobile view

Goals

- Ensure the experience is understandable, usable and desirable
- Identify opportunity areas
- Learn how customers refinance and how can we make it easier for them



Usability testing

Insights

- Participants were already looking to refinance or had refinanced due to interest rates. Some also did because of poor customer experience.
- Most of them had never used a refinance calculator and had gone through broker/lender for their refinancing needs. One participant did say they have used a refinance calculator in the past, however based on their response, it seemed like they have used only a repayments, and not a refinance calculator.
- Not everyone found the refinance calculator on the website easily. Some did try to navigate to the
 calculator but did not find it and one of them found a repayments calculator and thought it was a
 refinance calculator.
- Participants who were considering refinancing would typically reach out to their lender/broker rather than choose a product and calculate they repayments through a refinance calculator.

OPPORTUNITY: How might we help our customers who visit the CBA website understand the difference between refinance, repayments and borrowing calculator so that they make an informed decision on what calculator suits their current needs?

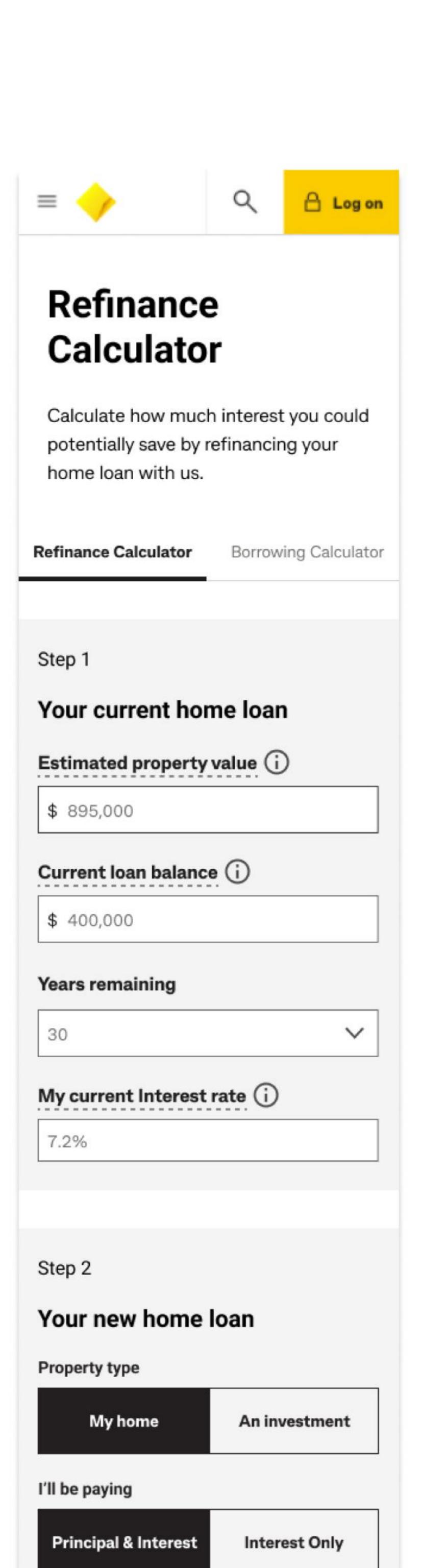
Usability testing

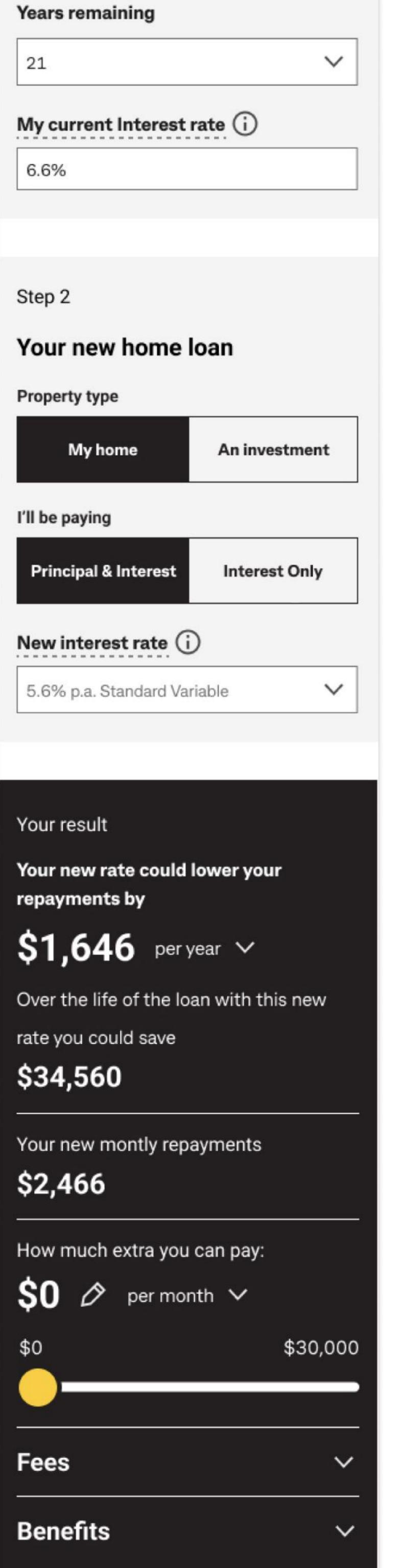
What worked well

The overall structure worked well. Participants knew that the first section was all about their current loan and the second section was about the new product. The result section was well appreciated, however the general feedback was that the information that's most important - repayments - should be above savings.

What needs improvement

Information in the 'Result' section could be structured in a way such that the most crucial information is right at the top followed by how much they will be saving. Perhaps also try rewording "lower your repayments" to "savings per month" because people don't immediately relate "lowering repayments" to savings.



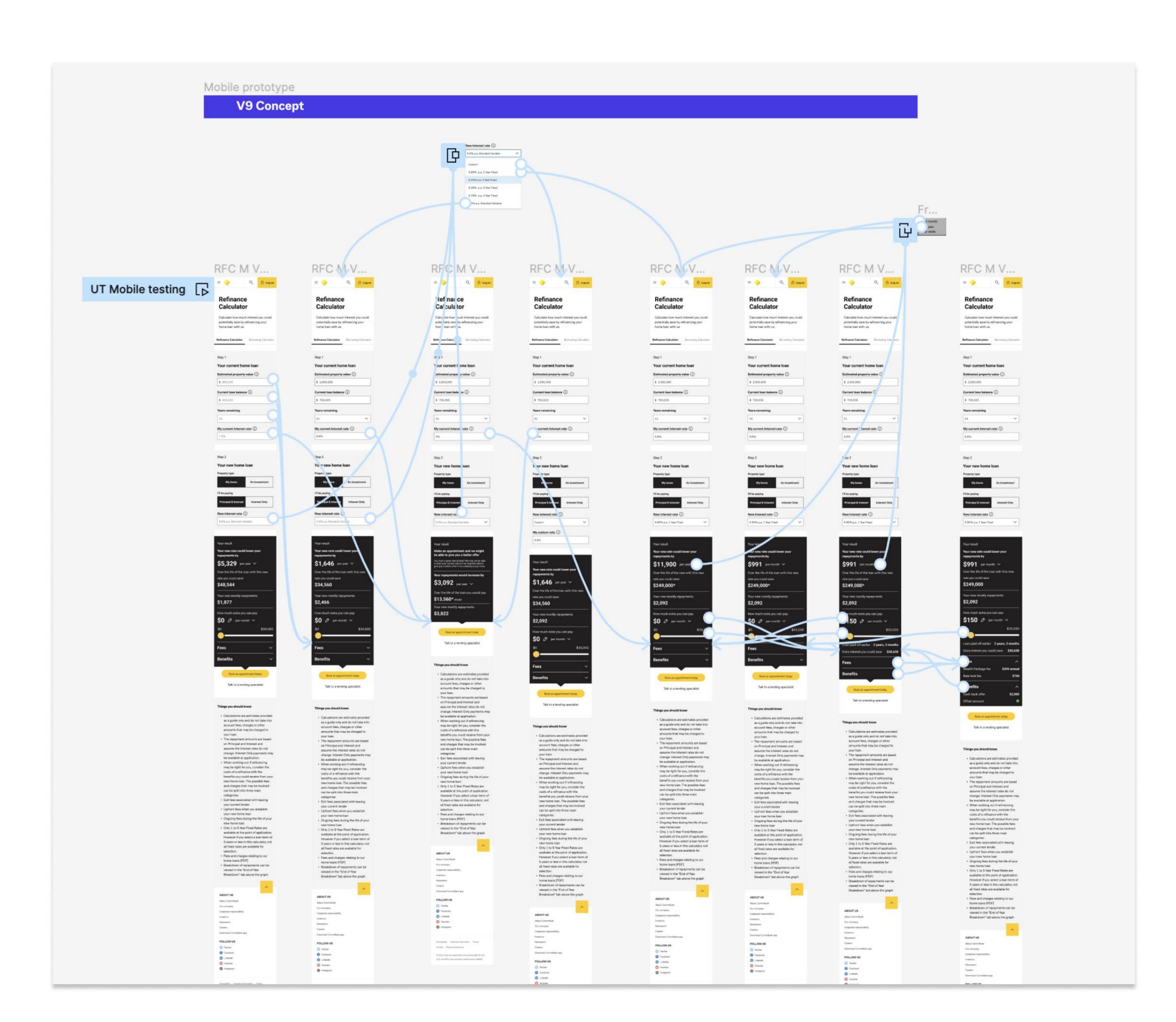


Usability testing

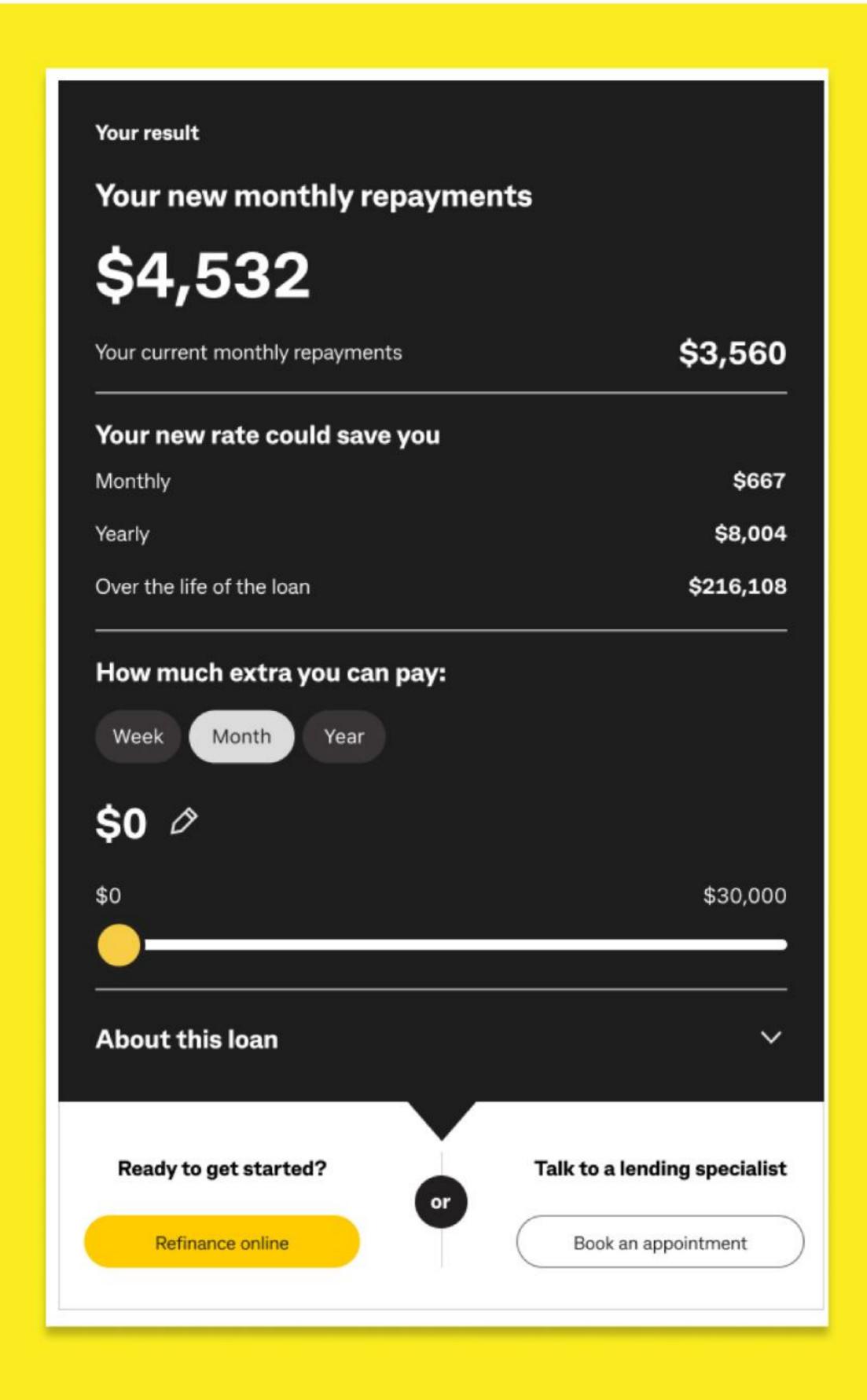
Overall

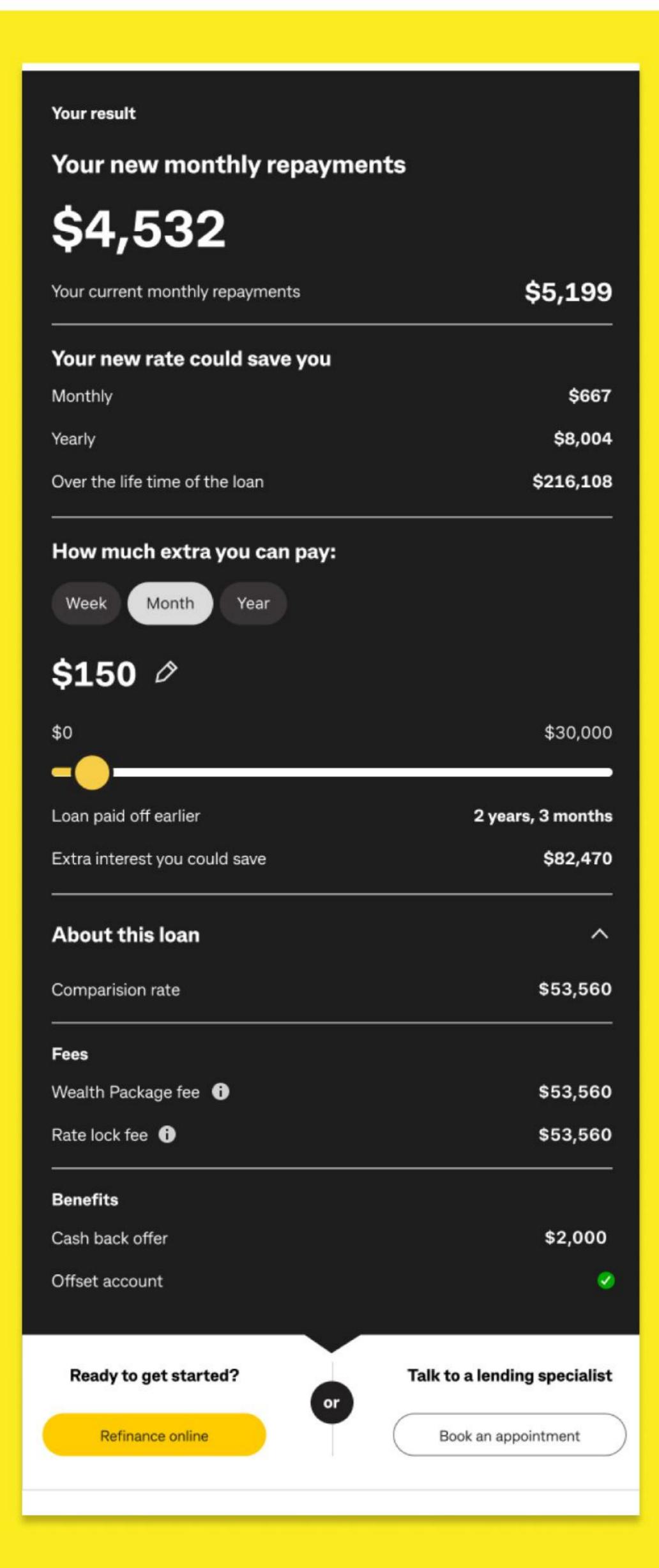
Participants understood how to use the refinance calculator, and the purpose of it. They appreciated the outputs the calculator gave them, however they would re-order the output section.

There seemed to be a general lack of knowledge around the difference between refinance and repayments calculator.



Develop Ideation





UX Changes

It can be difficult to read the page as there is a significant amount of content. How might we ensure the correct hierarchy of content?

UI Changes

Can we strip out elements to make it easy to read at a high level?

Challenges

Challenges on the project

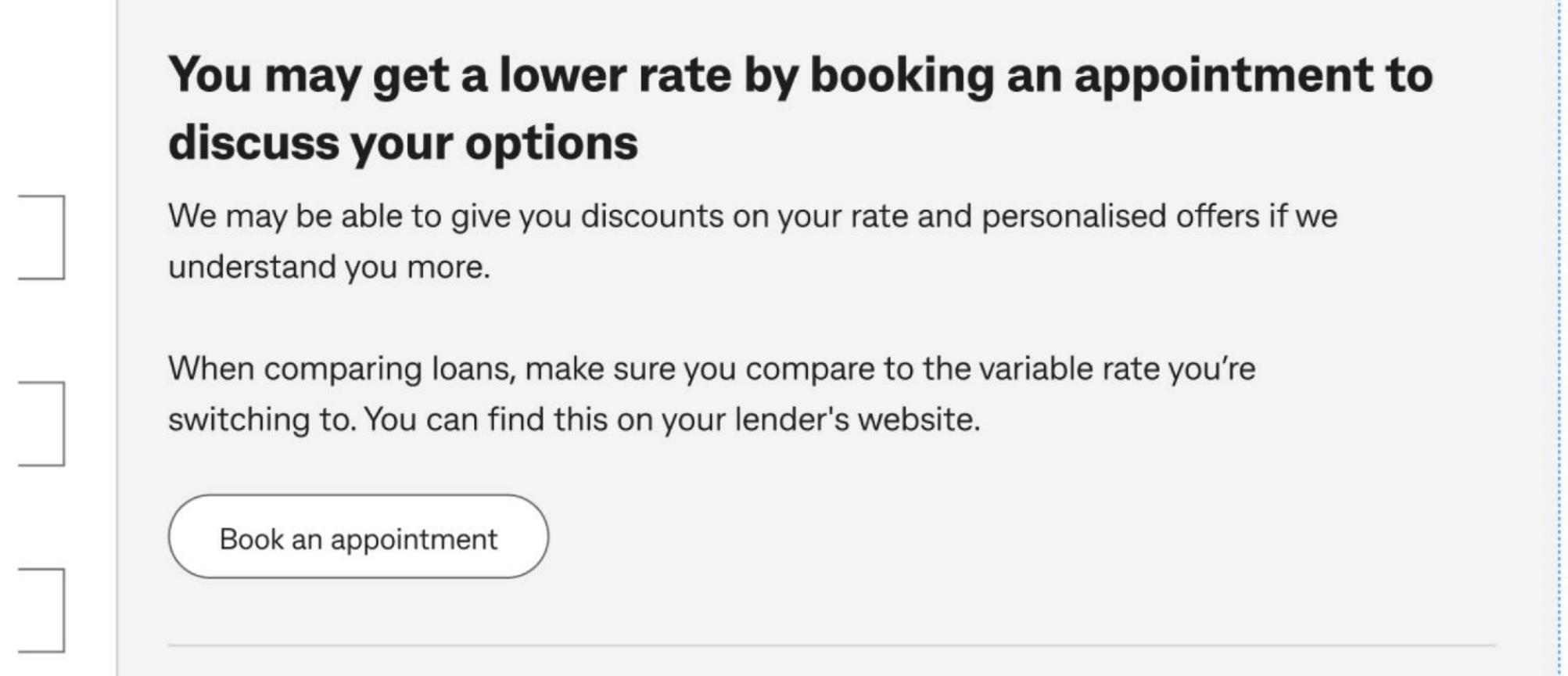
- Design system lacks components like a segmented control toggle.
- Financial institutions calculate weekly and fortnightly differently to each other. Thus we would have to ask the user for an exact repayment schedule which most users would not know exactly and would require more input fields.
- Information hierarchy for the Refinance calculator.
- Adding a fourth tab to the current suite of calculators. Is this the right way to promote the calculator or can it be integrated better elsewhere?
- Additional wording was required due to compliance and we were building in agile as they were making changes with legal. We had to prioritise what is the minimum viable product and a future iteration.
- Adapting to organisation and ensuring delay impacts were minimised.

Challenges

Compliance

Working together to give the right amount of information without being too overwhelming.

Can't beat their current rate scenario text change

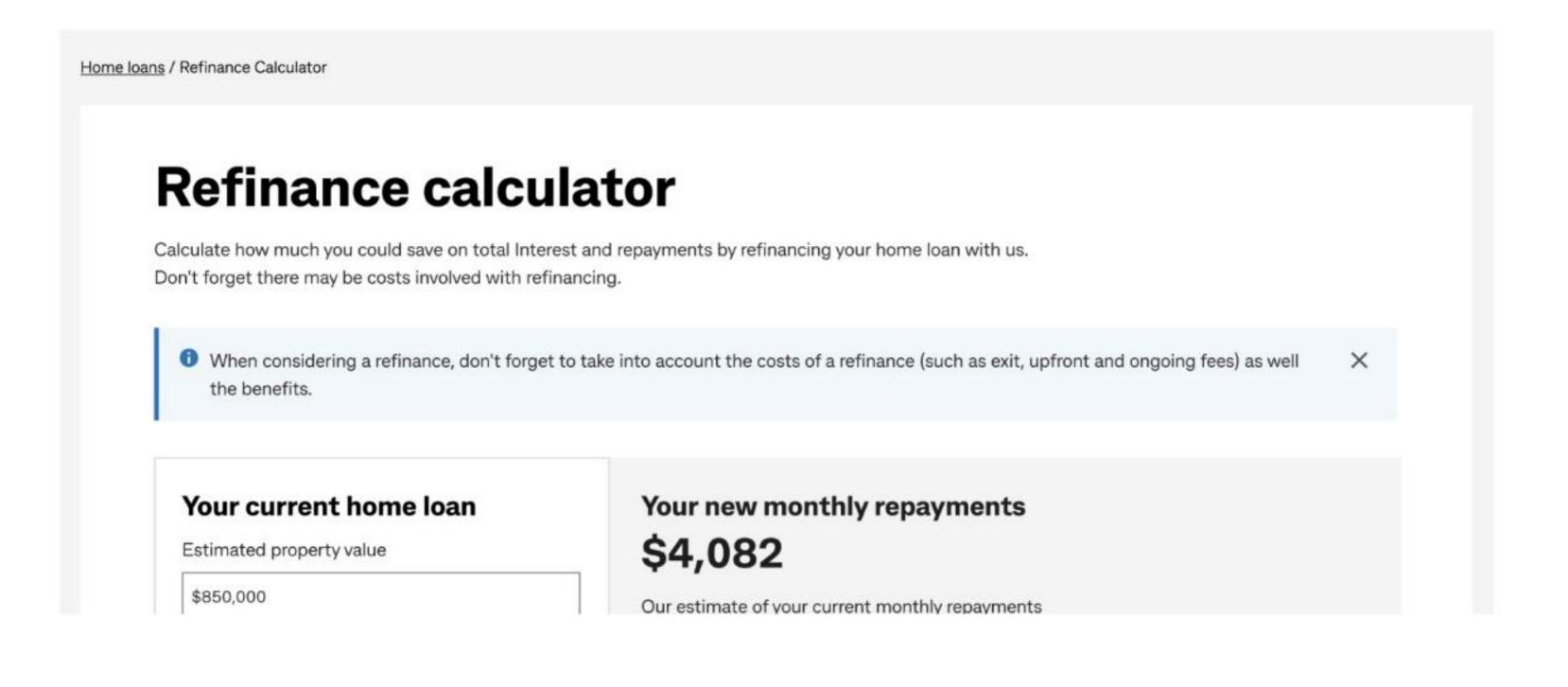


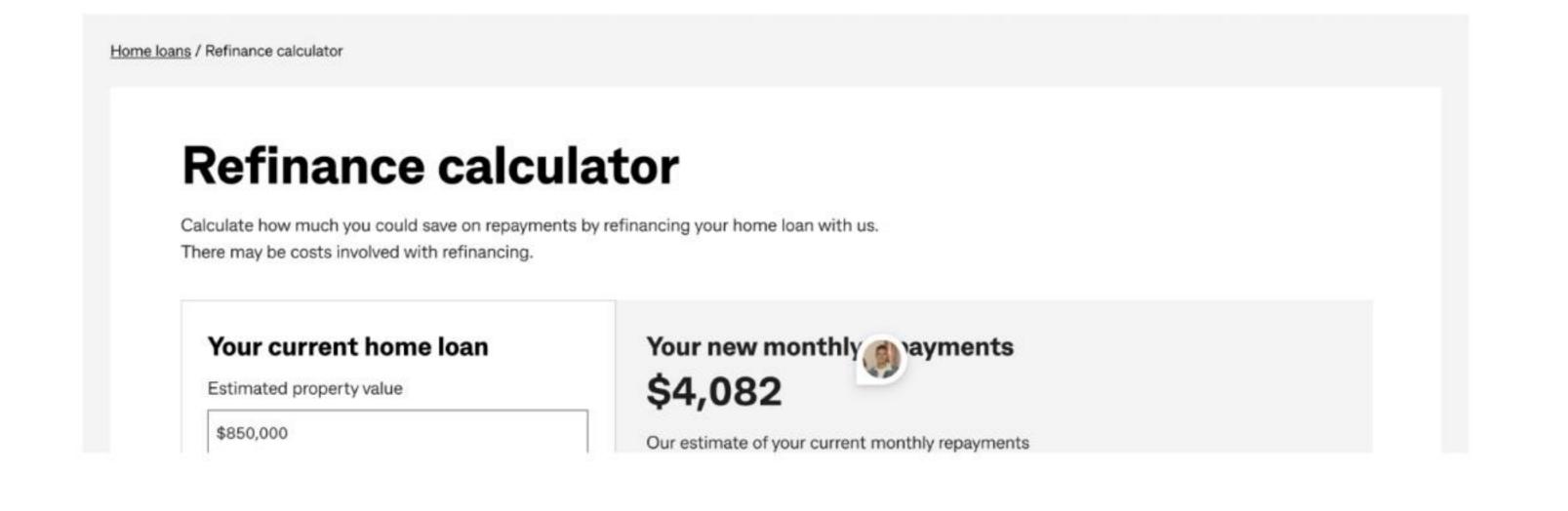
You can find out more by booking an appointment

From our calculations you'll be paying more for your new home loan. We may be able to give you discounts on your rate and personalised offers if we understand you more.

Book an appointment

When considering refinancing



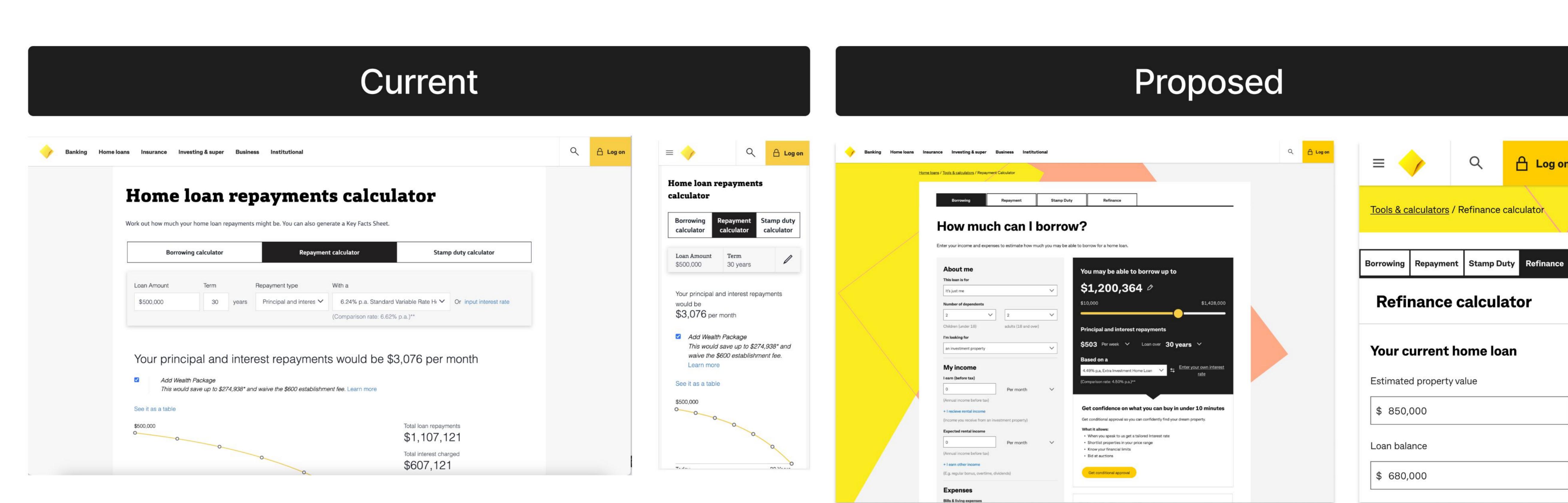


Challenges

Adding a fourth tab

Would bring more prominence to the refinance calculator.

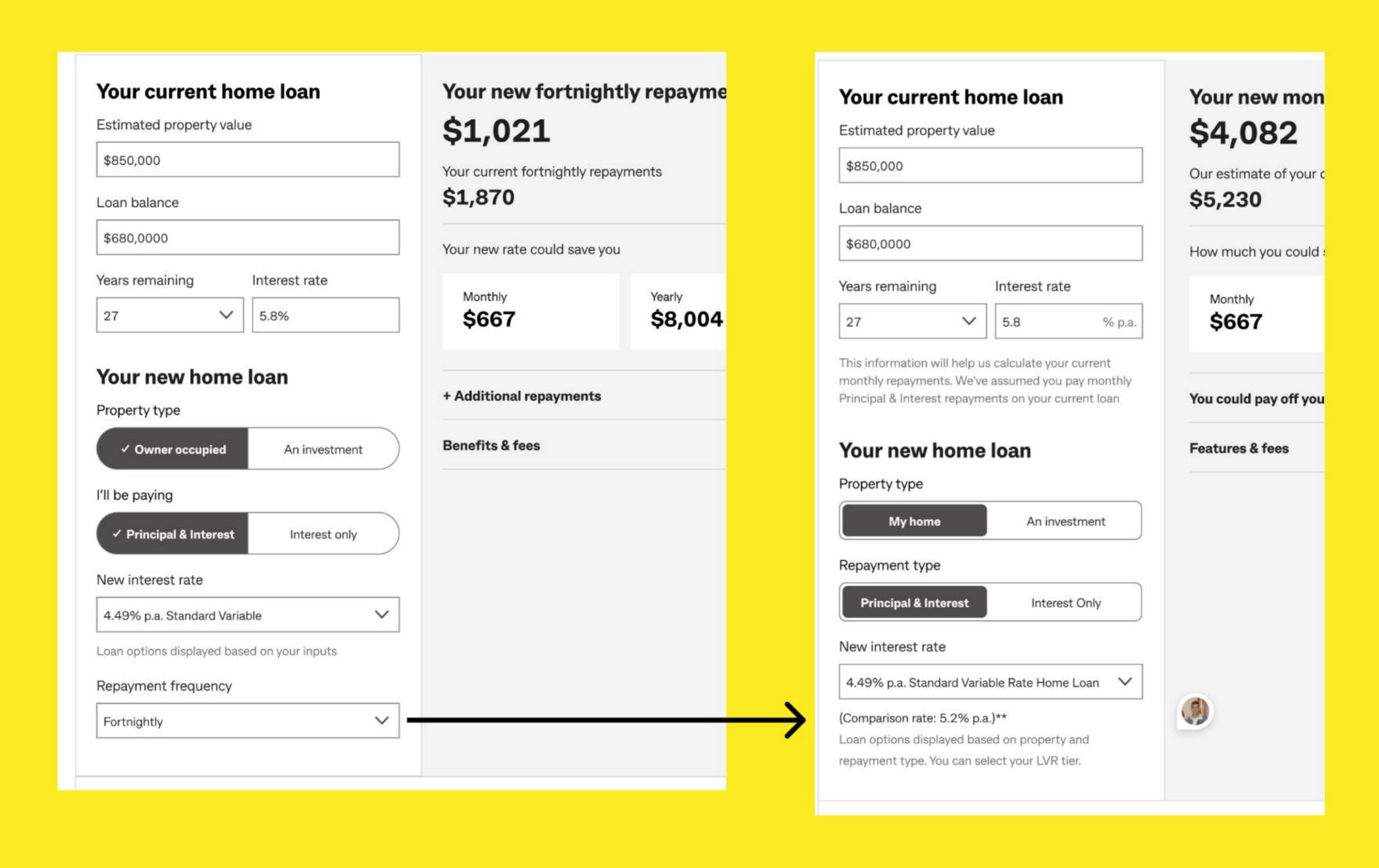
- First three calculators are for the first home buyer in mind.
- Not as scalable if we added another calculator to feature.
- Will Implement an A/B test to understand the effects.



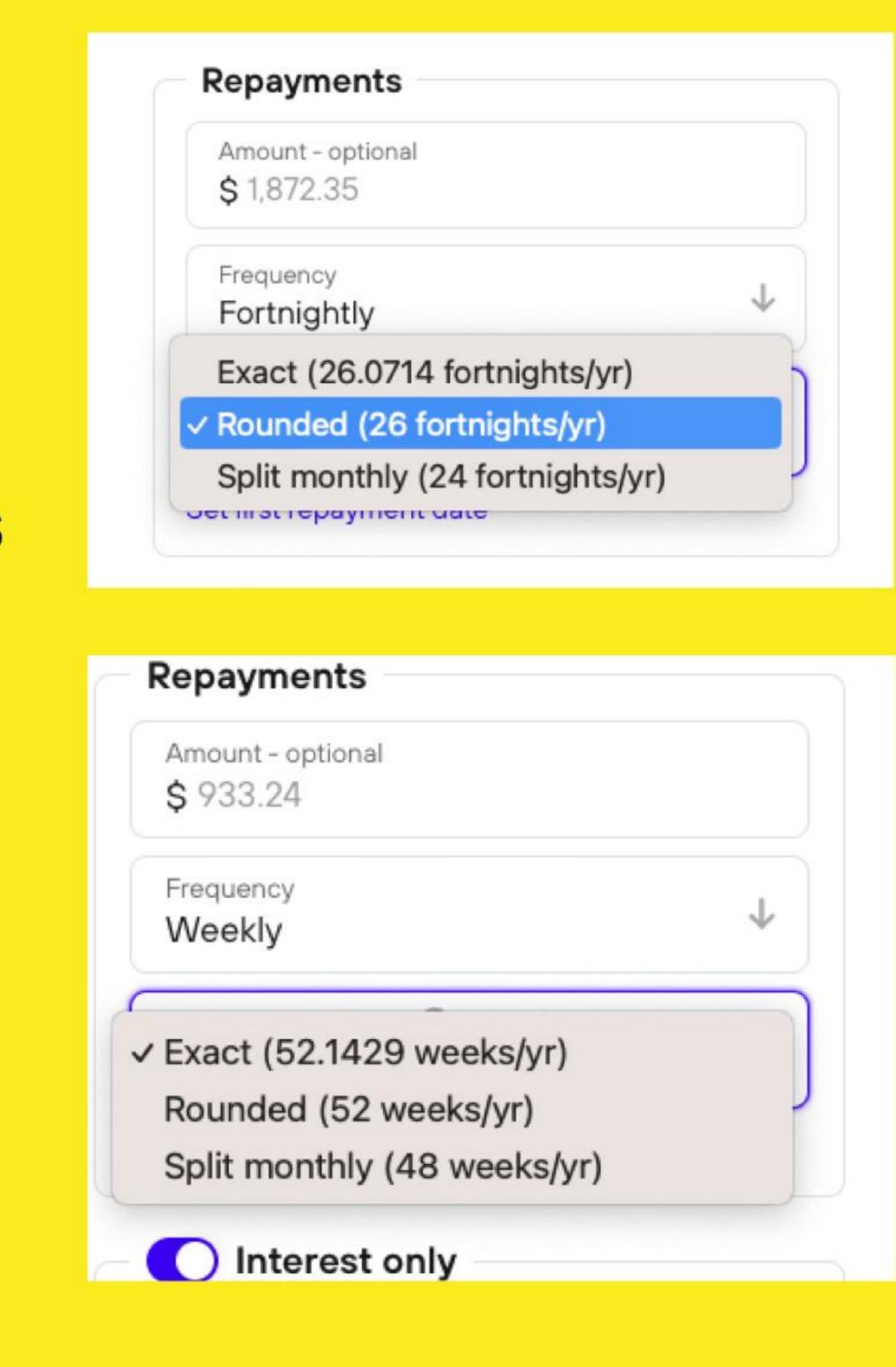
Challenges

Weekly, Fortnight or Monthly Repayments

Financial institutions calculate weekly and fortnightly repayments differently to each other. Thus we would have to ask the user for an exact repayment schedule which means an extra input field and would require them to know more about different repayment schedules. The solution due to time was removing the option.



An example of a repayment calculator with these options source: figura.finance

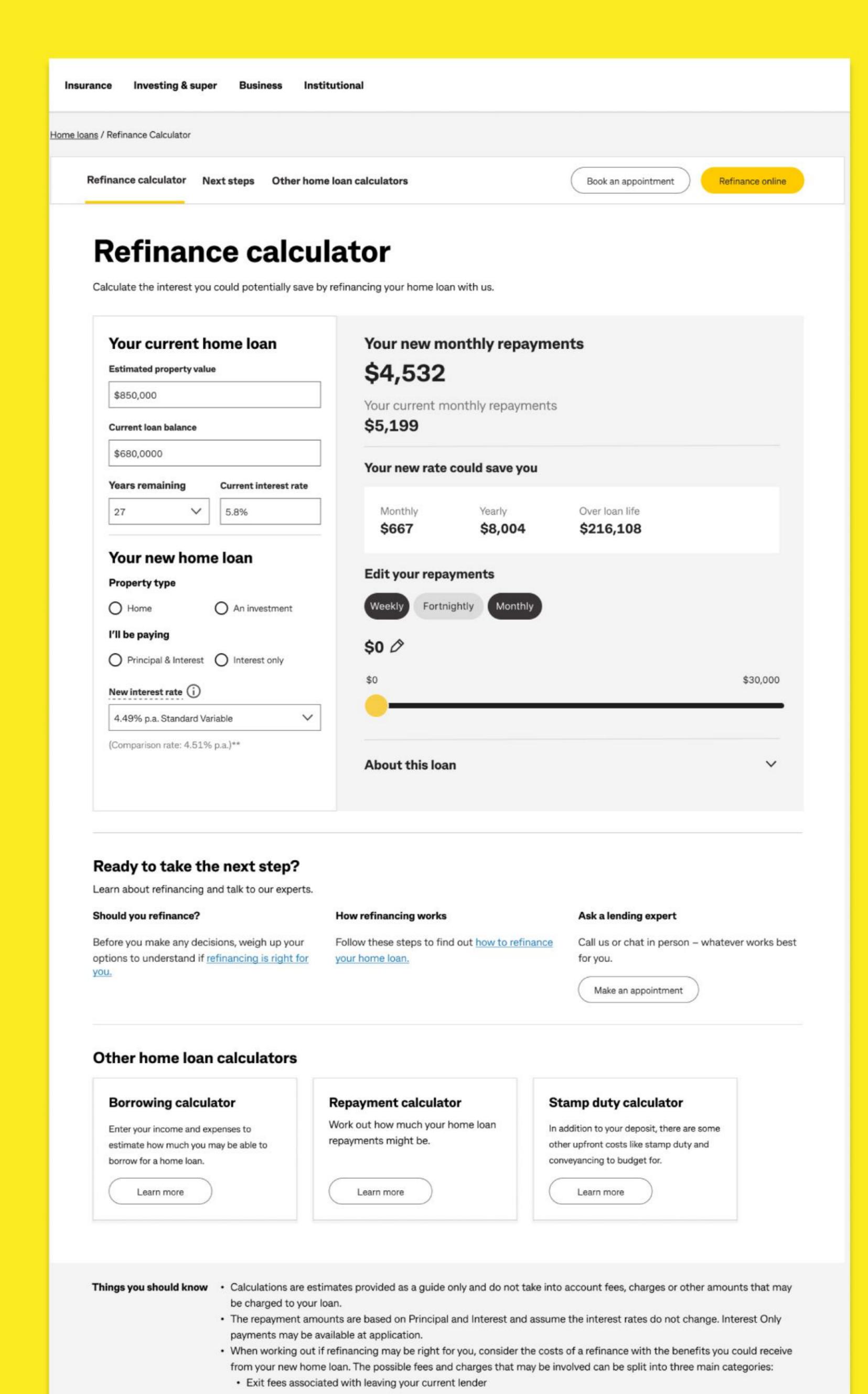


High fidelity

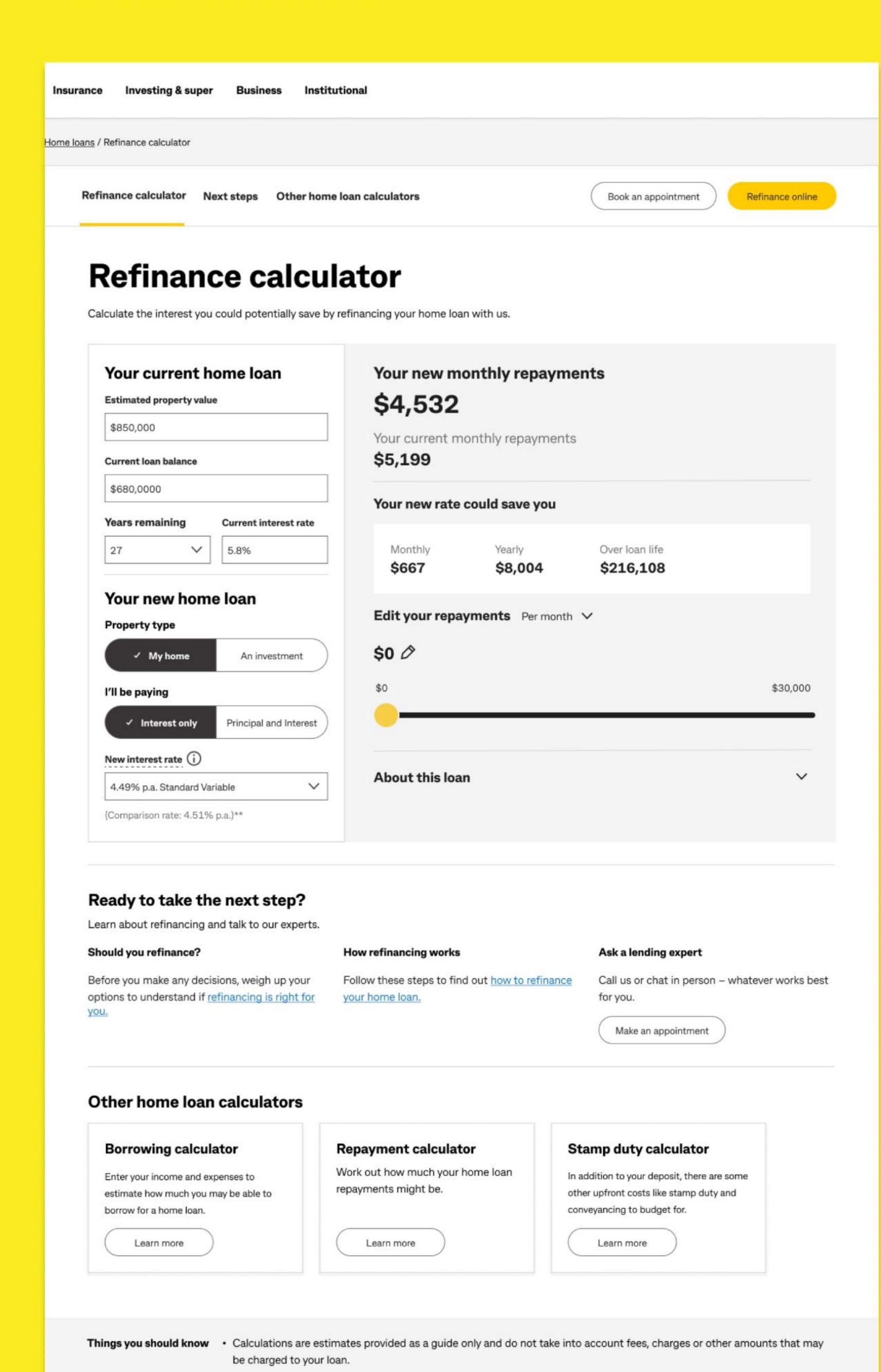
Concepts post UT

- Placement of appointment CTA
- Refining information hierarchy
- Education placement
- Colour adjustments.
- Spacing adjustments allowing more room for results

Ideation



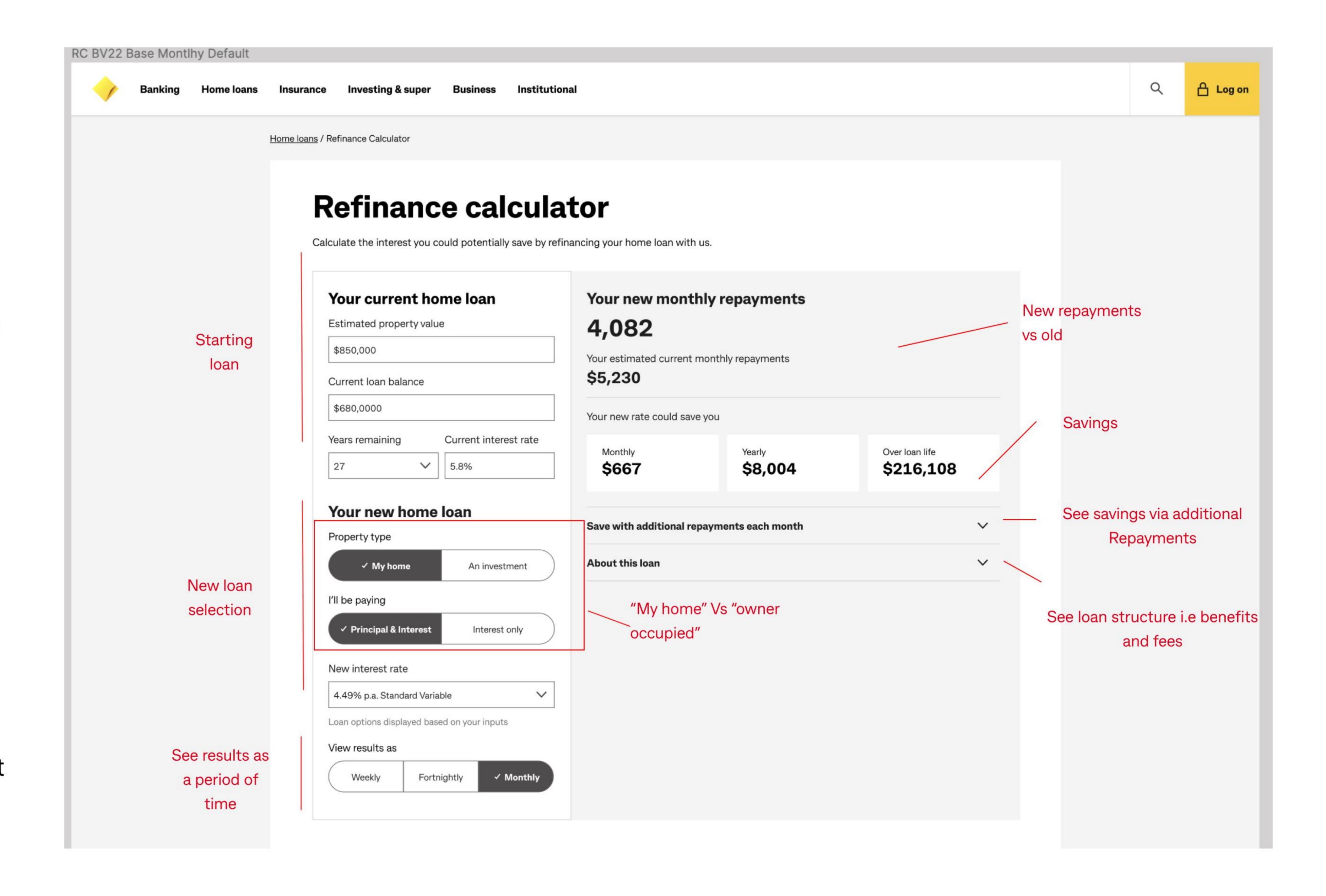
Further ideation



High fidelity

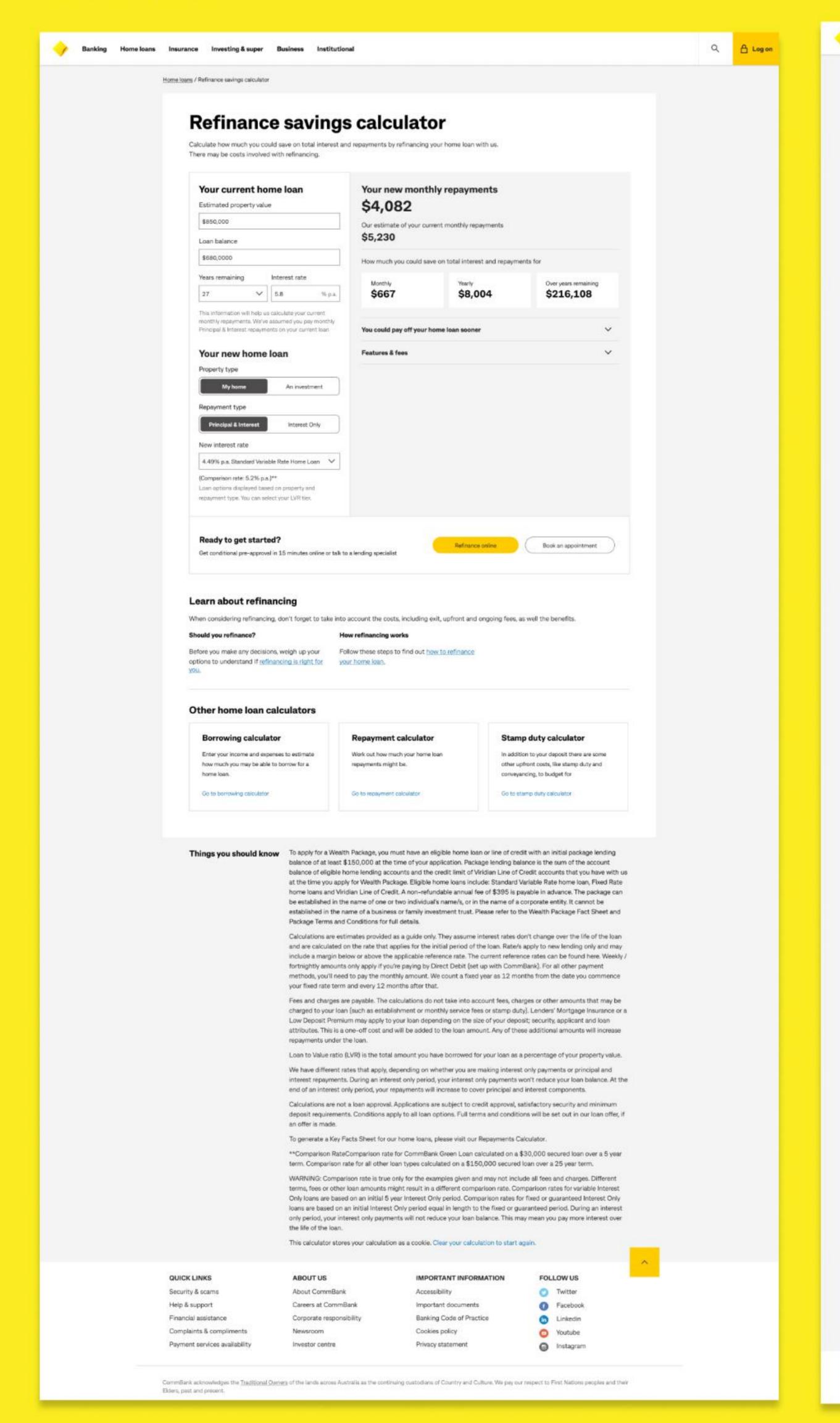
Features

- Displays current loan repayments & new loan repayments
- Displays savings between loans
- Users can use a slider to increase their repayments and see how much they can save
- Users can enter their own custom
 Interest rate
- 'About this loan' informs the user about features and fees involved with the selected loan.
- Education about refinancing
- Interest only view
- Option to talk to a lender if we can't beat a rate
- Link out to other relevant calculators.



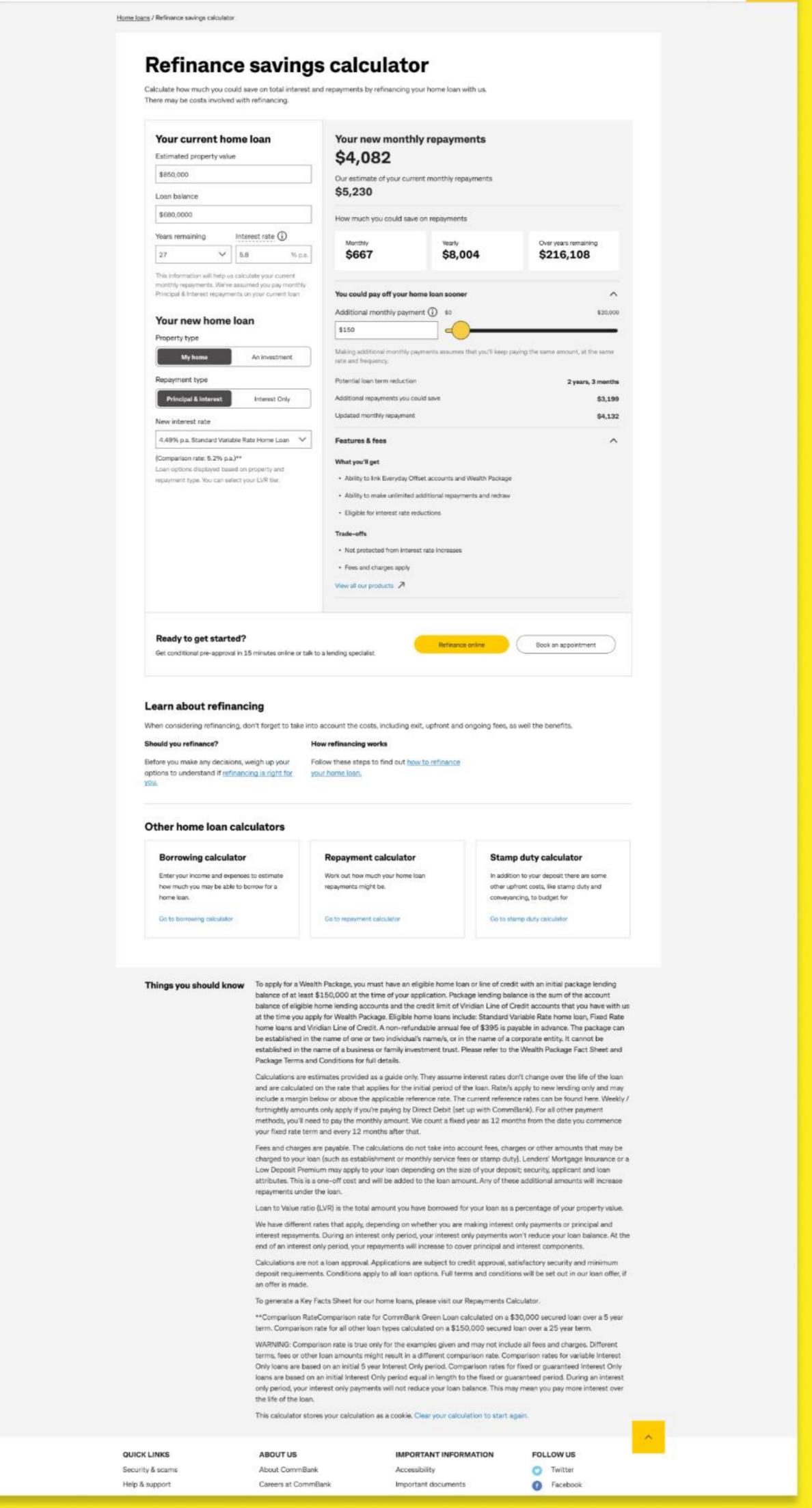
Develop High fidelity

Default

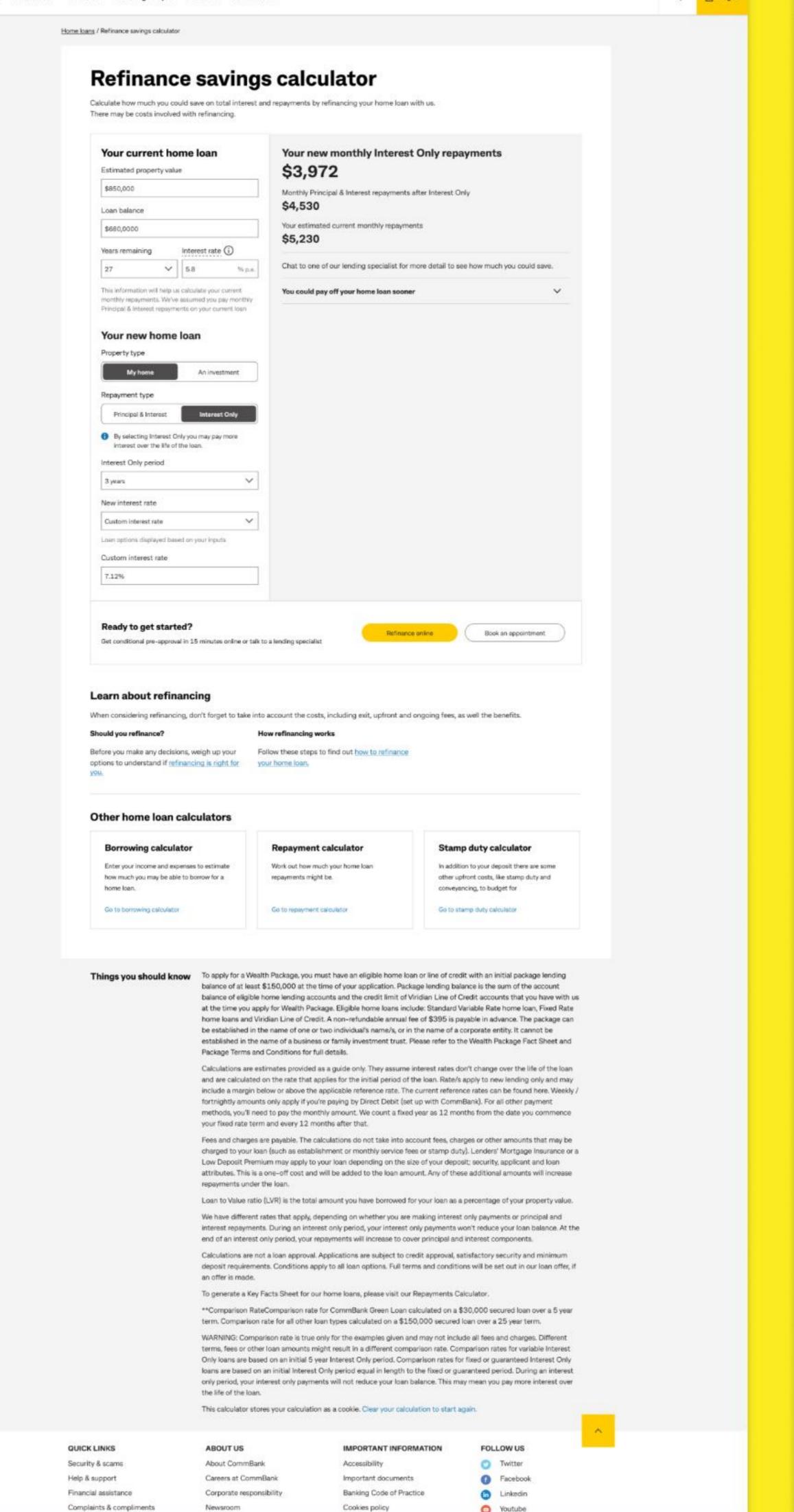


Expanded interacted view

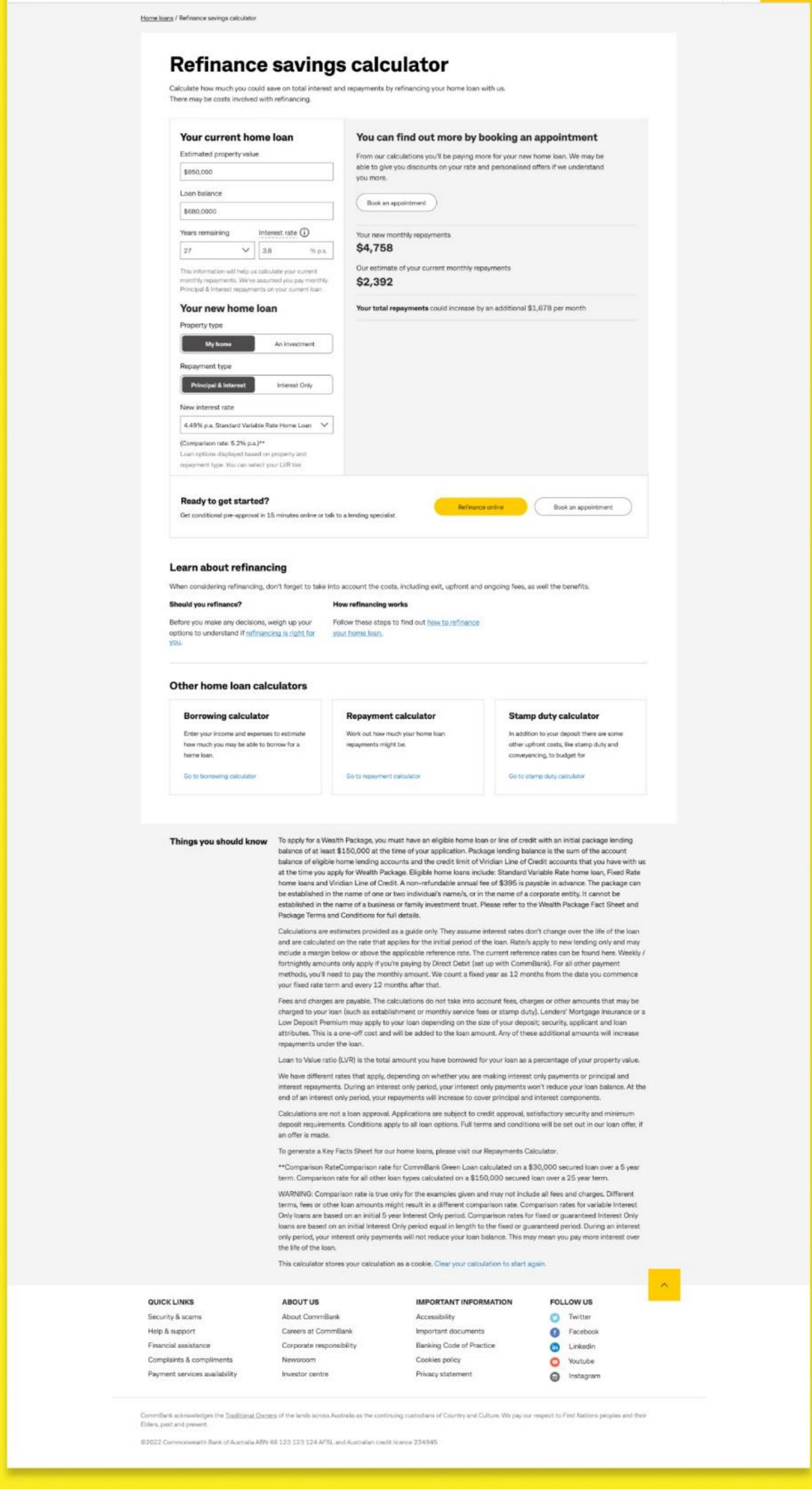
Banking Home loans Insurance Investing & super Business Institutiona



Interest Only

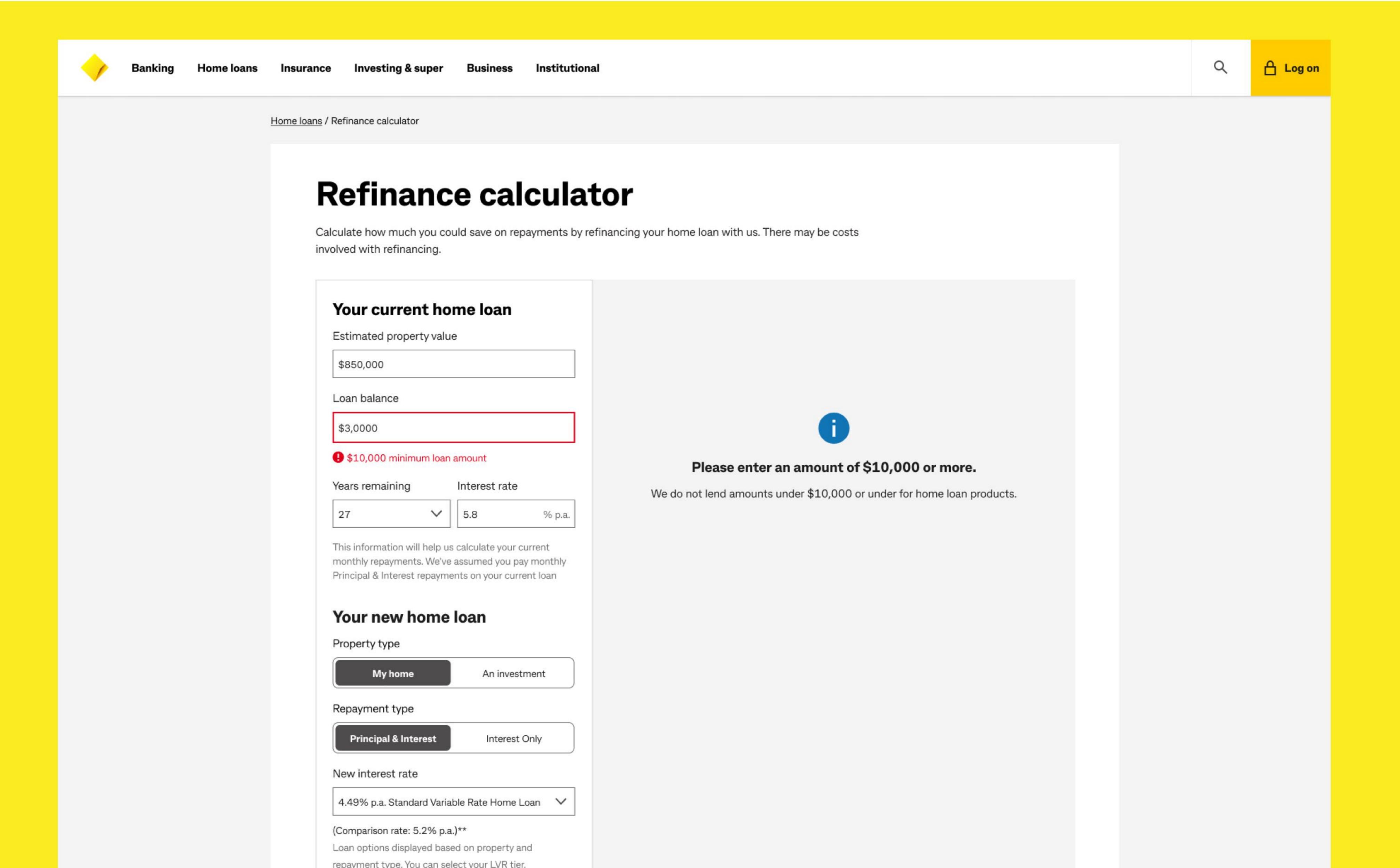


If we can't beat their rate



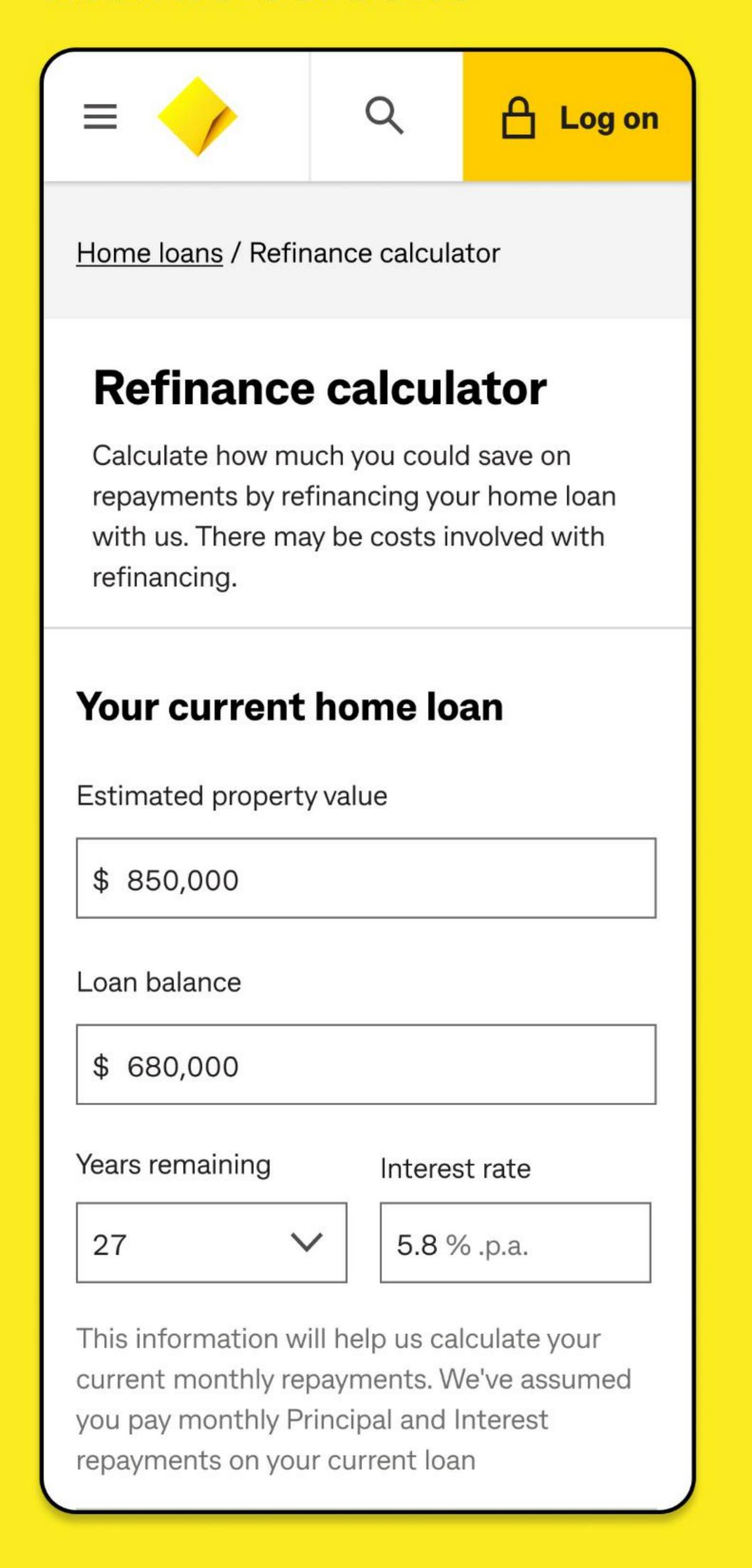
High fidelity

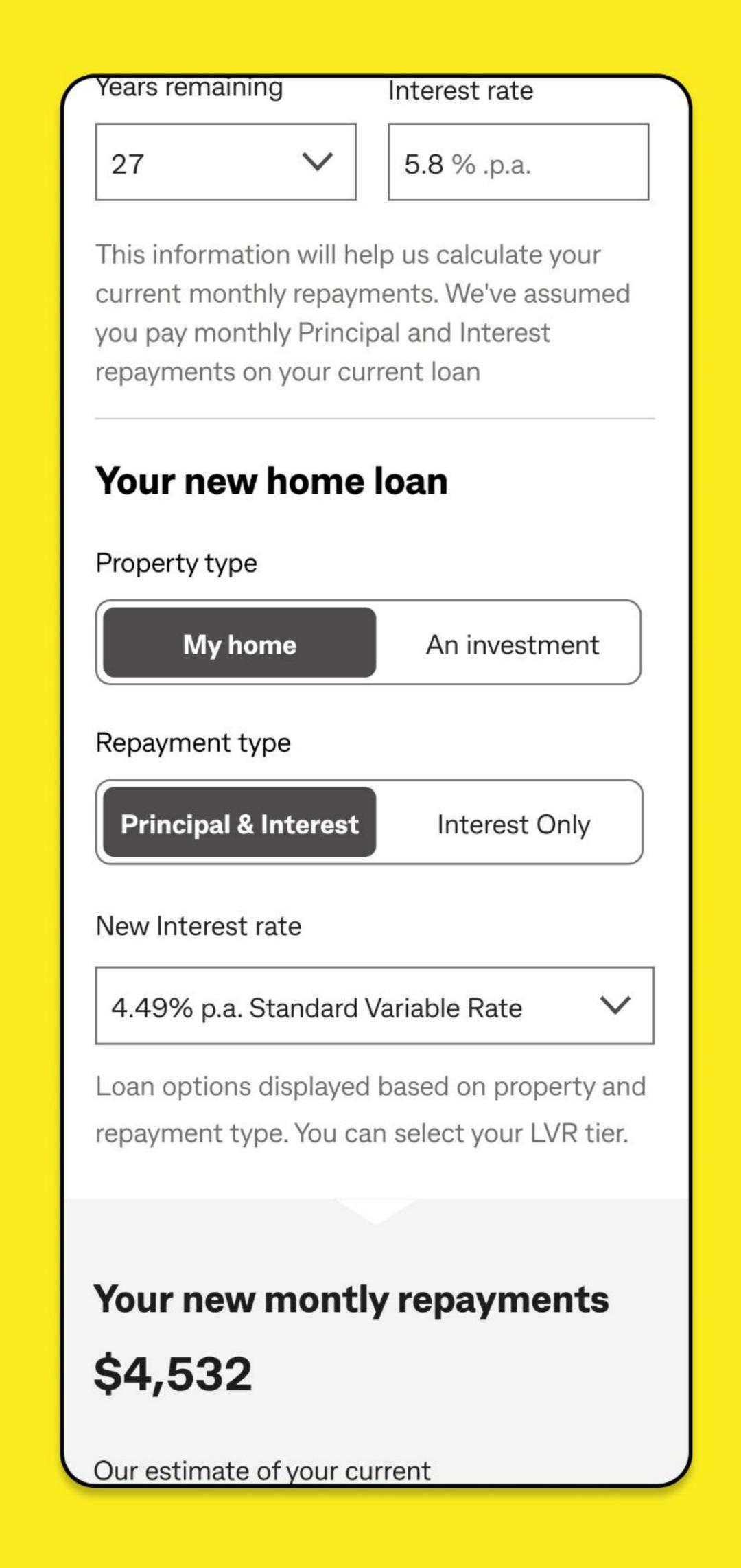
Accessibility enhancements

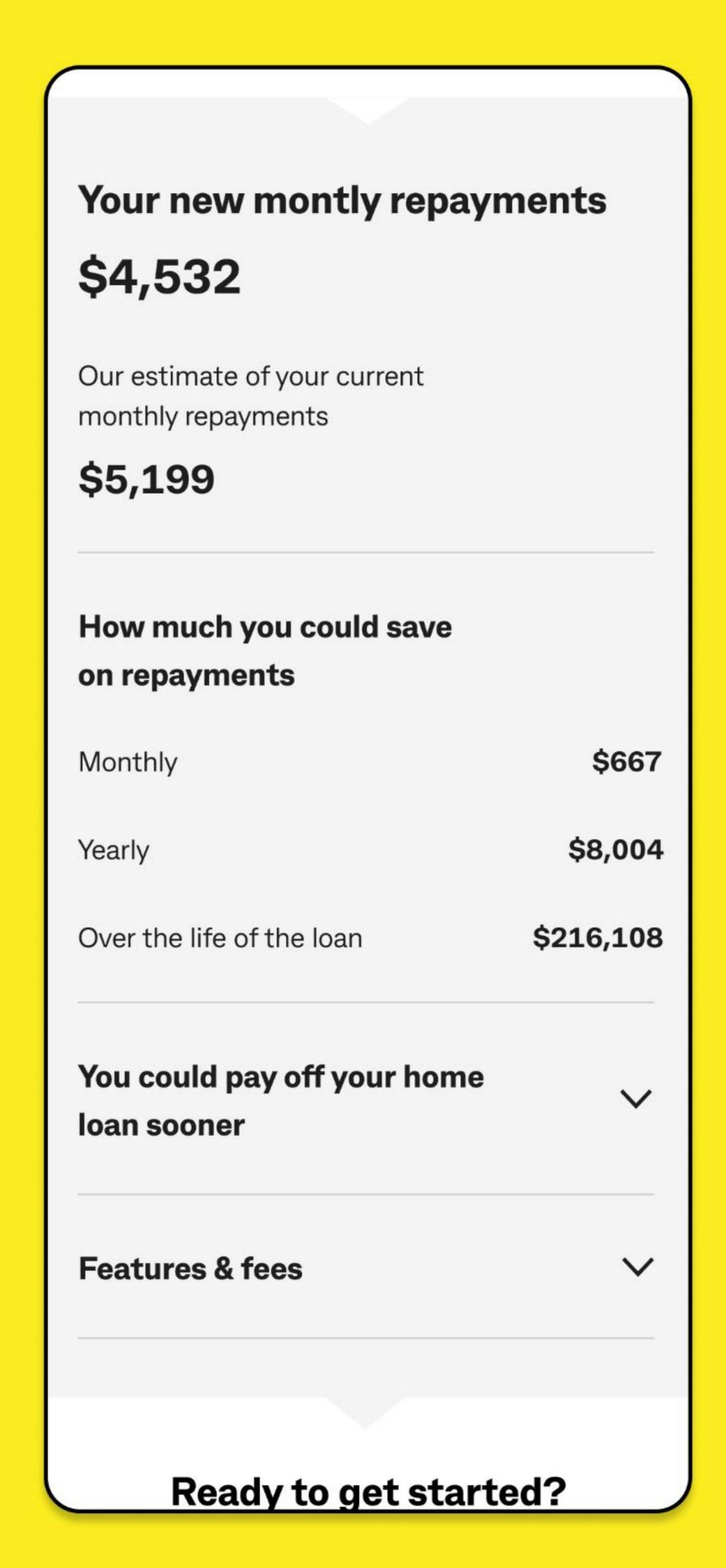


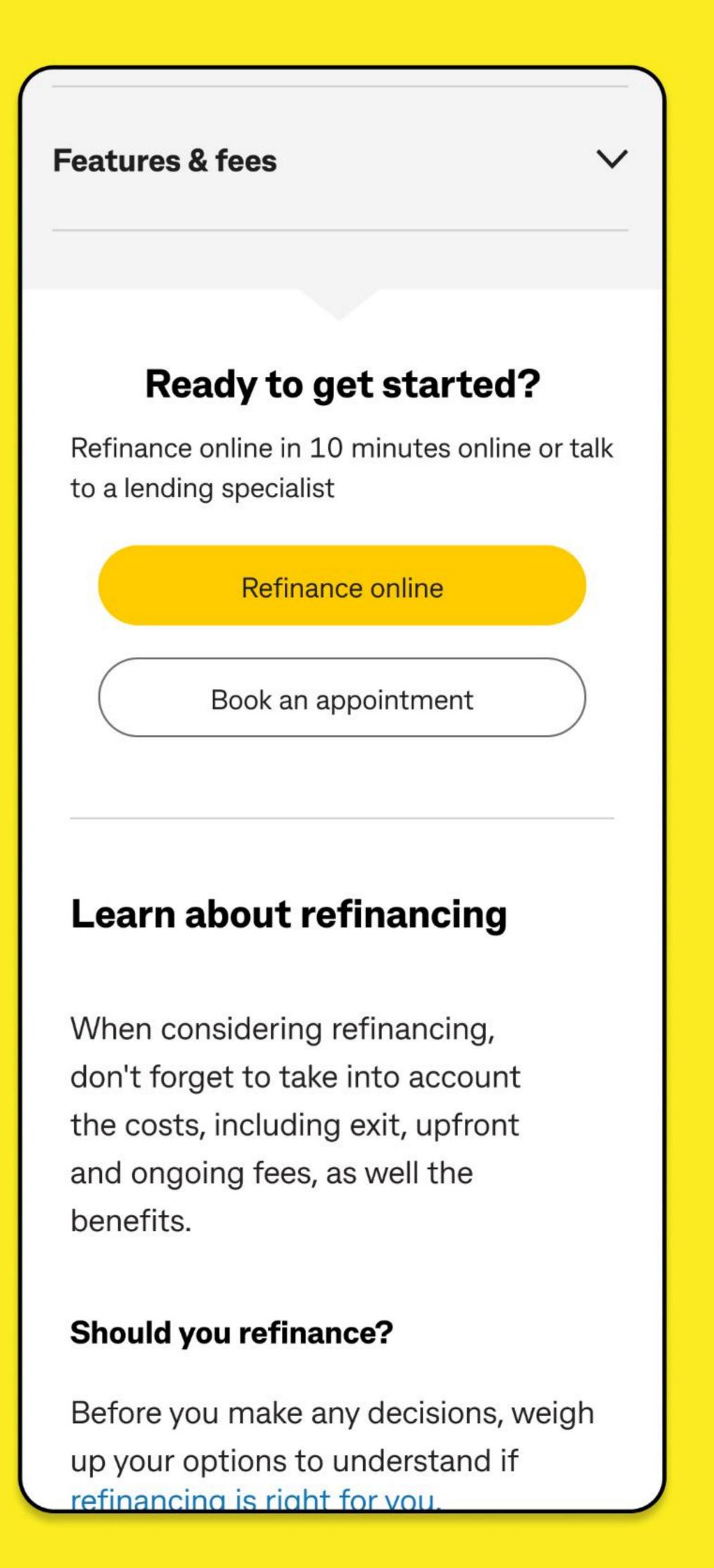
High fidelity

Mobile screens





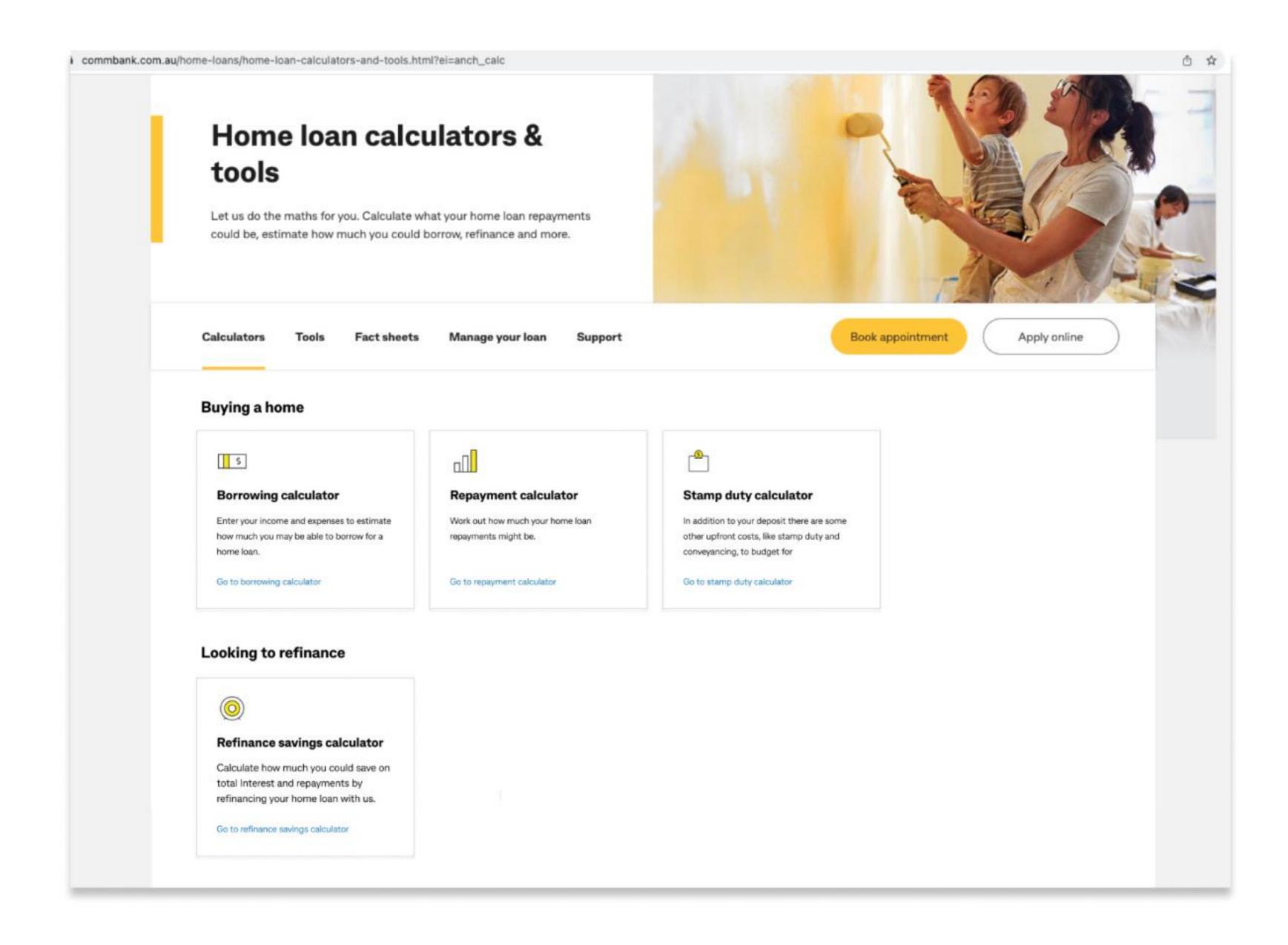




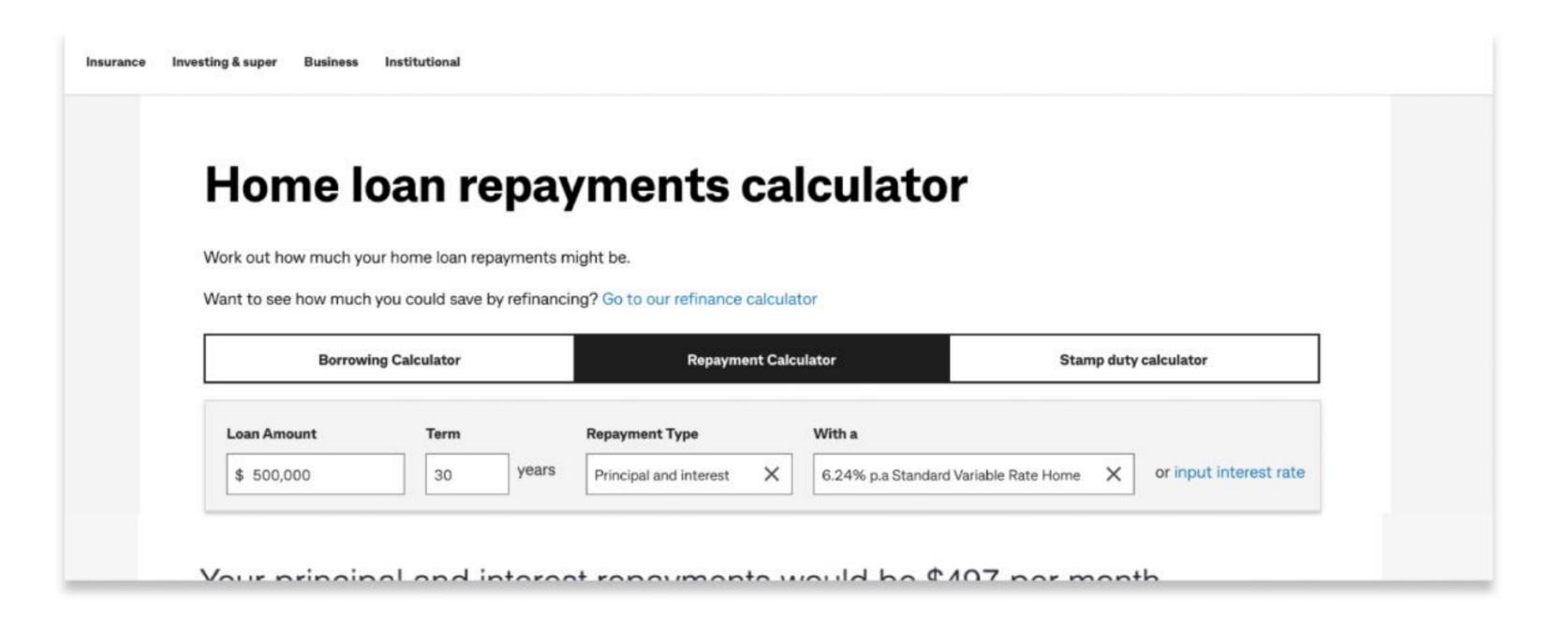
Information architecture overhaul

Calculator index overhaul

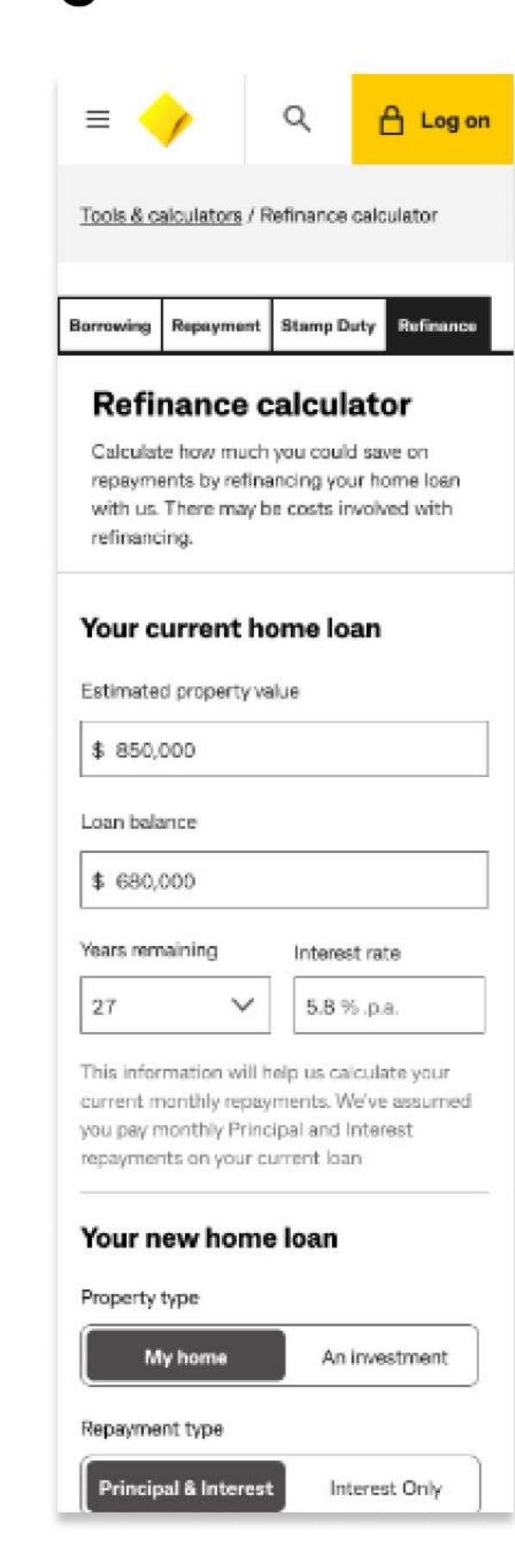
Assist with informing users the difference between a refinance and repayment calculator



Link out from repayment calculator



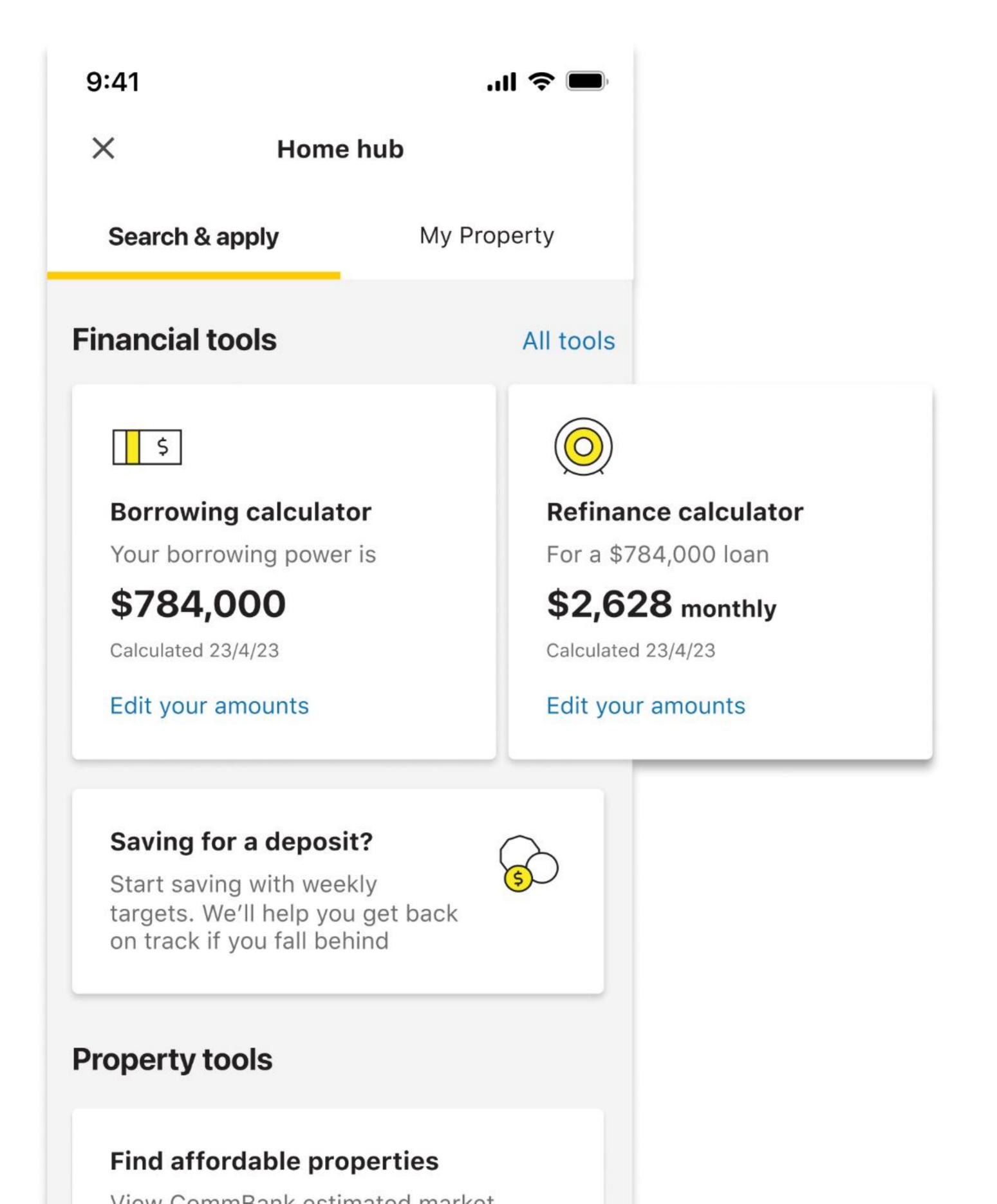
Breadcrumbs to help give context to the user



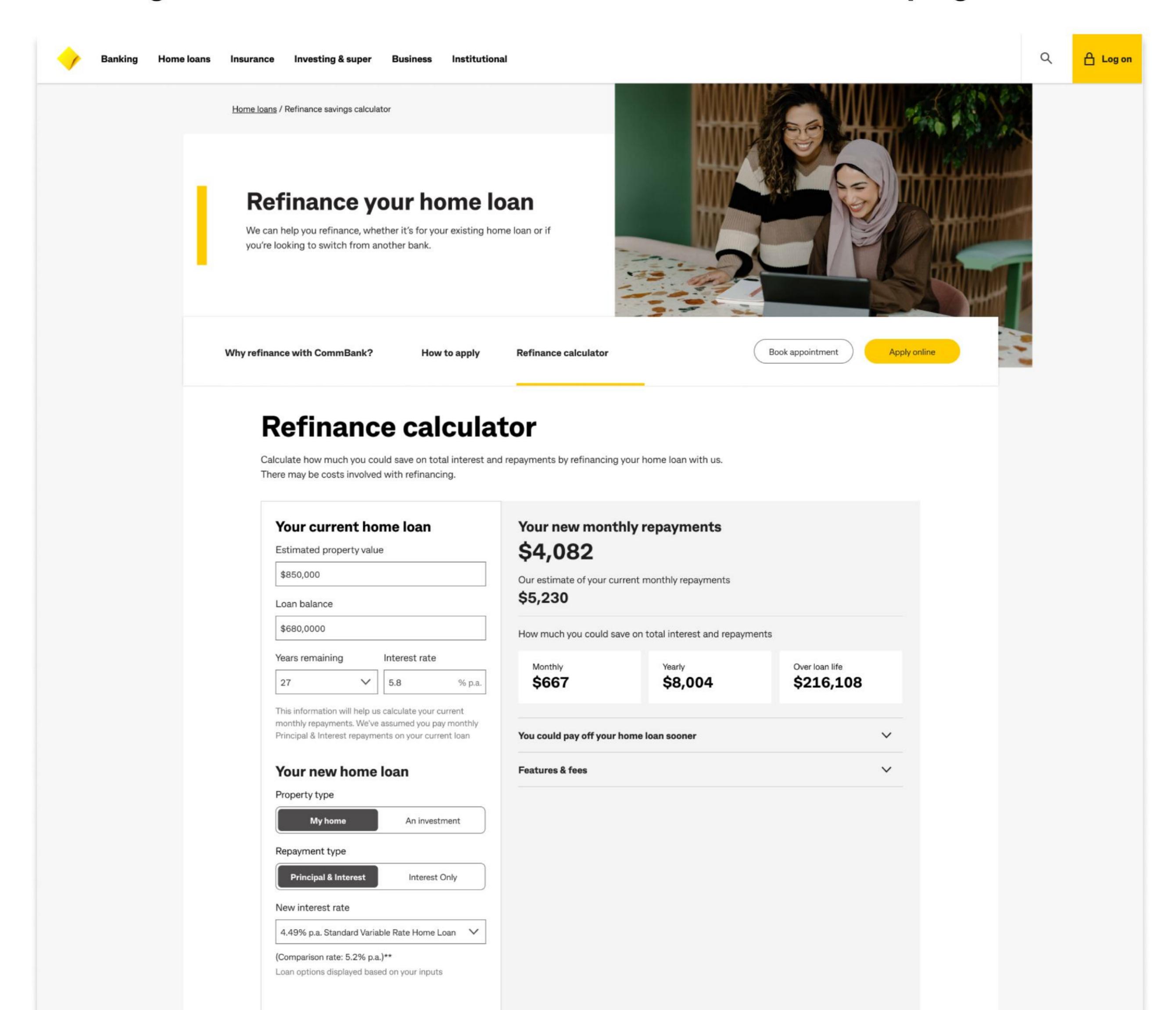
Information architecture overhaul

Adding calculators to Home Hub

A secondary initiative to improve the Home Hub experience by adding calculators to inform customers of their financial position.



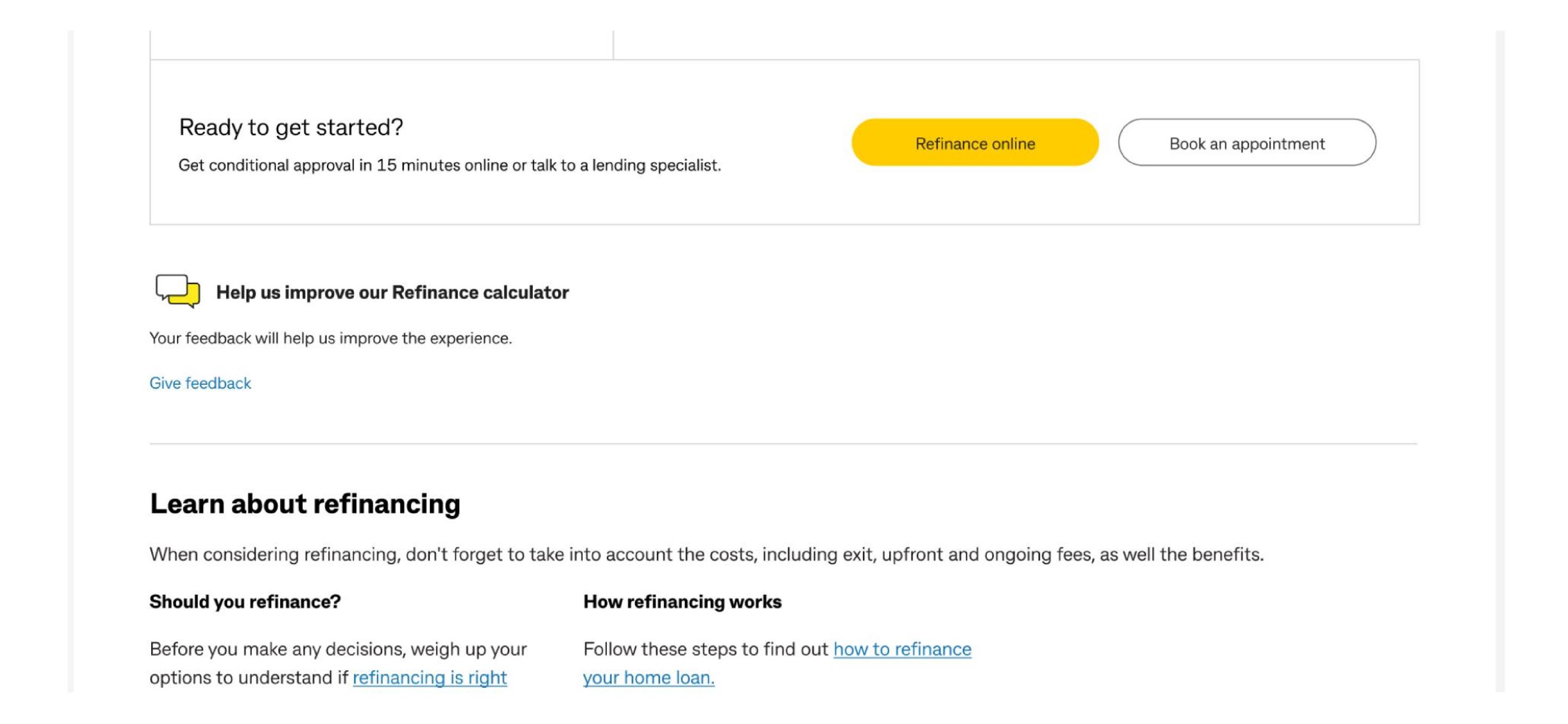
Placing the refinance calculator on the refinance page



Deliver

Measuring Success

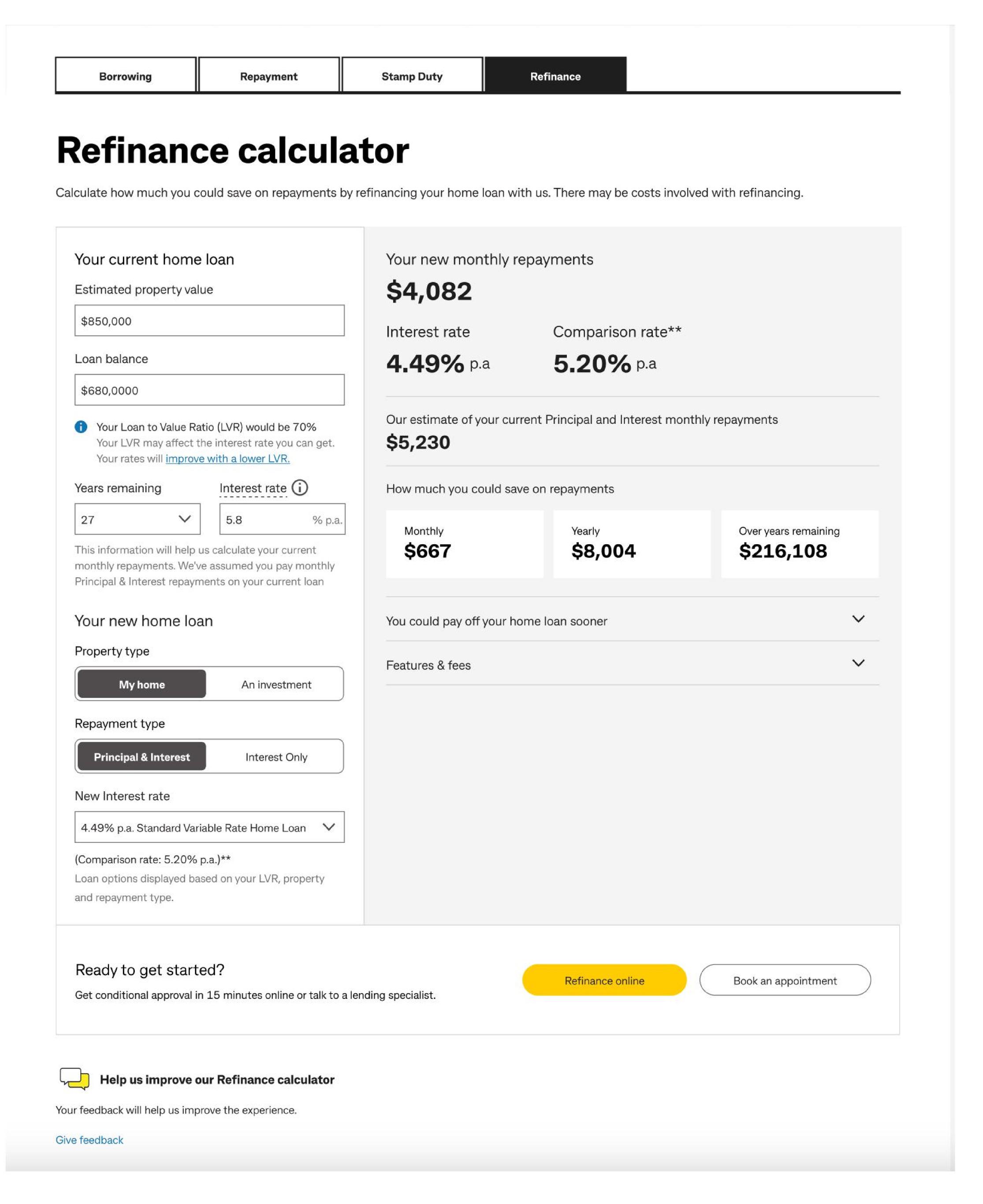
- Tagging input fields to understand how users interact with them
- Conversion rate of how many people click call to actions to book an appointment or refinance online
- Measure against the other calculators in terms of usage and booked appointments
- Conducting research on current usage with a survey on the calculator



Deliver

Measuring Success

- Current loan balance, years remaining and interest rate received the highest interactions
- The launch of the refinance calculator is creating a rich source of new leads with 2,172 leads since it launched at a 4.69% conversion rate.
- This a 500% increase in traffic since we launched the new refinance calculator. Unique visitors to the old calculators was ~5K per month. After 1 month the new refinance calculator has attracted 30K unique visitors.

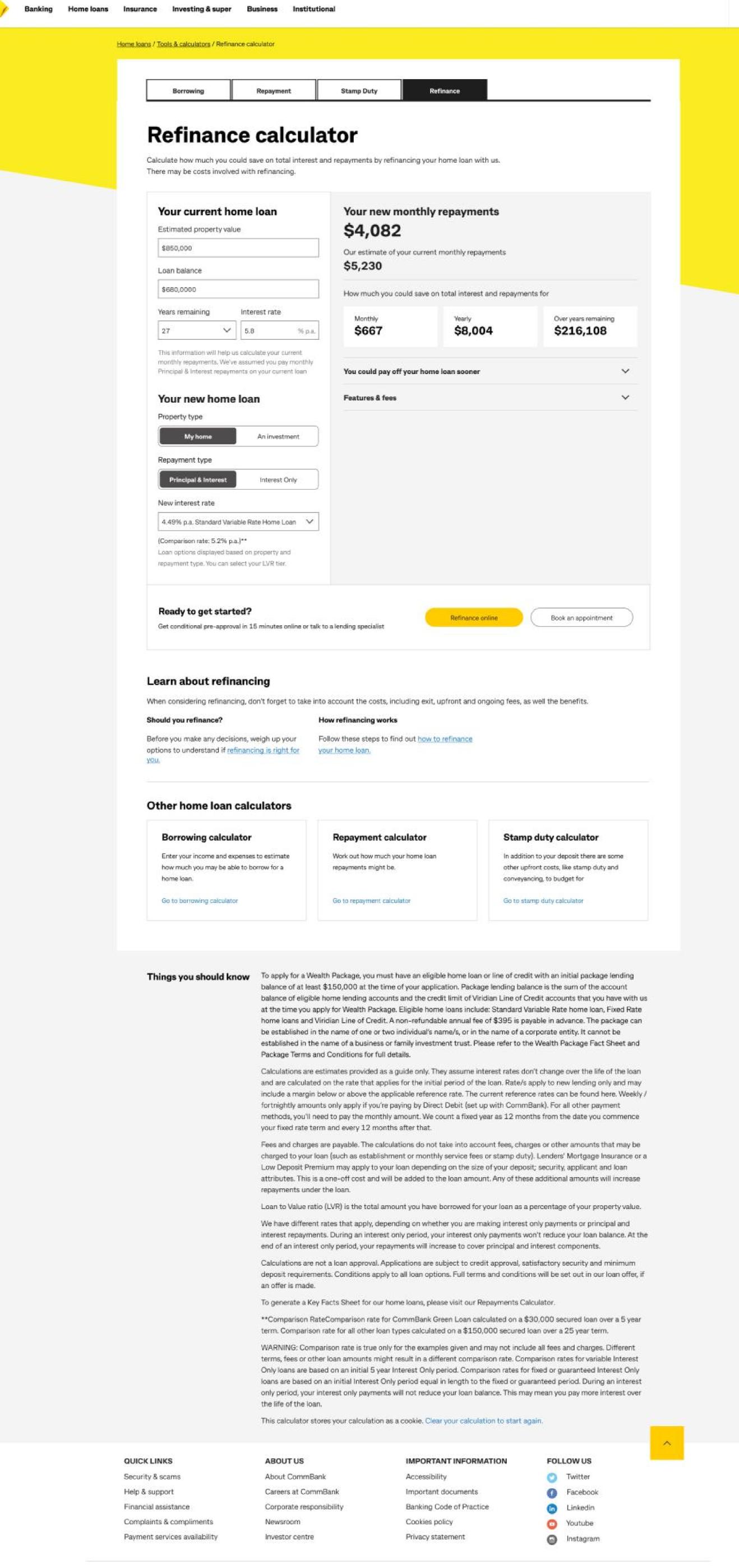


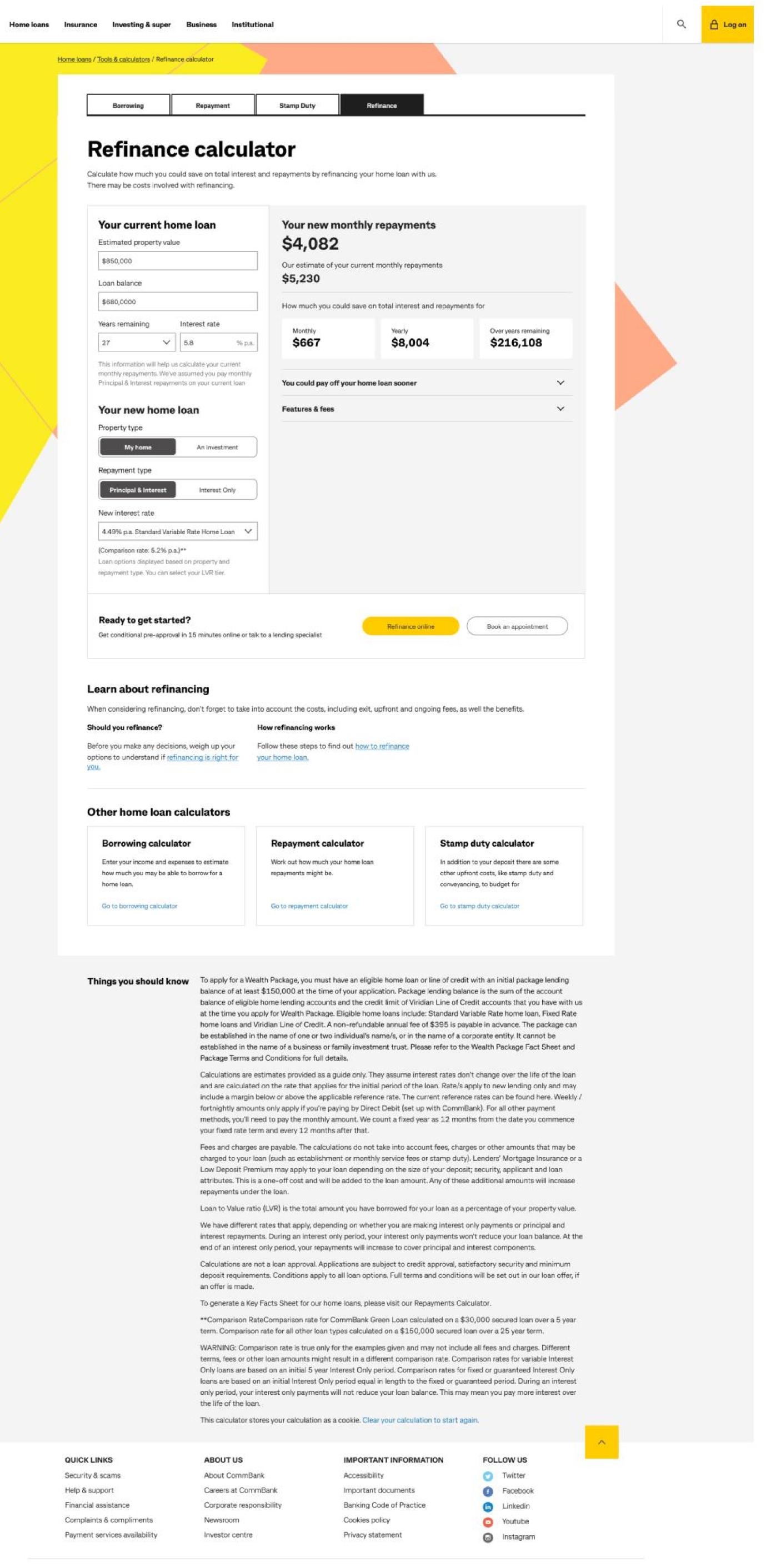
Deliver

Opportunities

Enhancements

- Creating a new colour palette to add a fun atmosphere to the calculators
- Further improvements based on metrics and research. How can we keep improving this calculator?
- Saving customer inputs and giving those inputs to the lender to streamline the process





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