



From weeks to days: Building a faster home loan journey in Australia

July 2021

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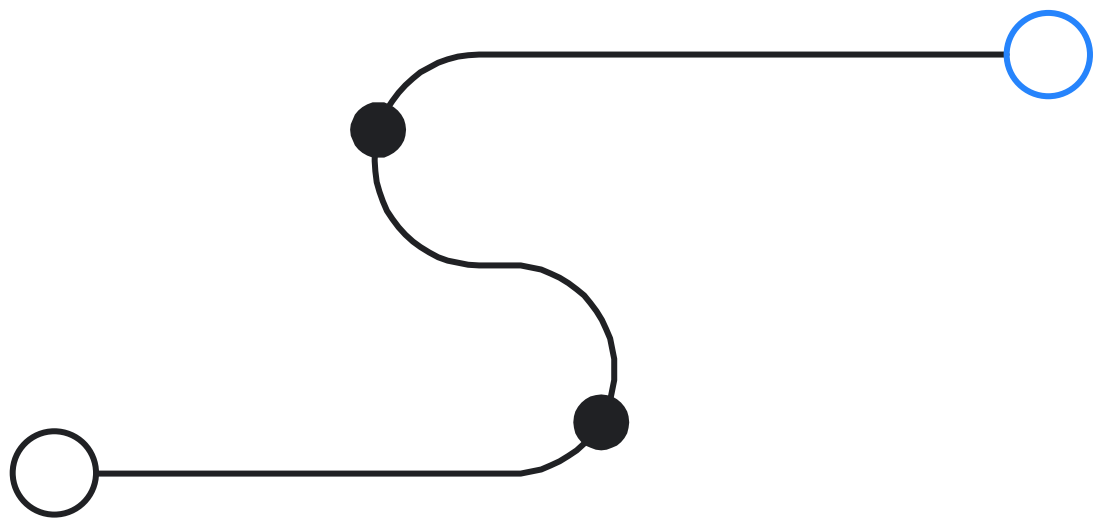


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Executive summary





Embracing the **future of digital mortgages**

Australia's home loan market is a high-value one. Currently, 25 million people live in 10.3 million homes worth a collective \$6.6 trillion. Of these, 6 million have mortgages against them, worth a collective \$2.1 trillion. And with the COVID-19 real estate boom, the value of this market is rapidly growing in value. But banks are struggling to keep up with this overwhelming demand while impeded by a largely analogue home loan process that stretches over several weeks.

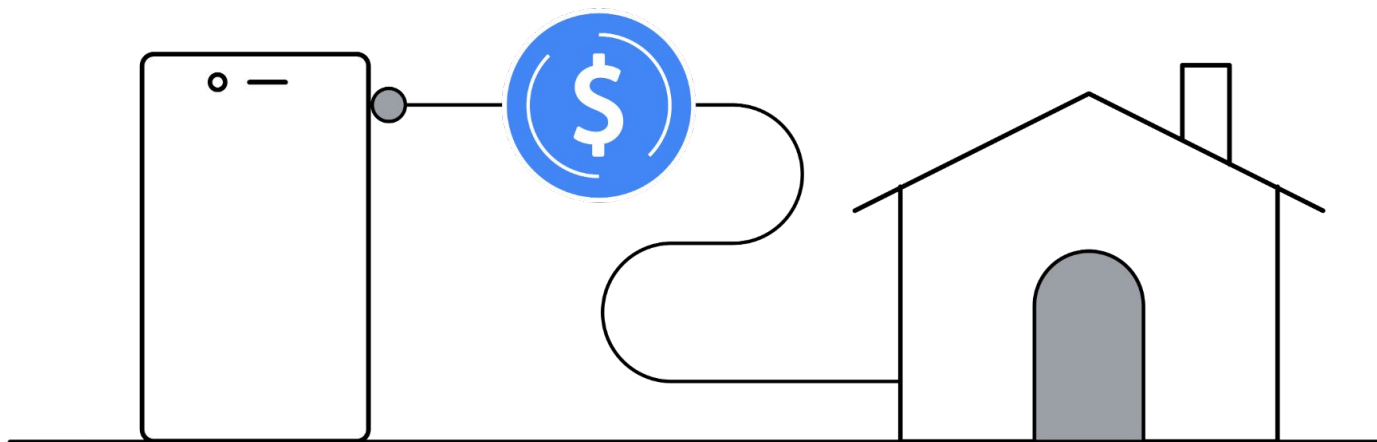
So, what if the home loan application in Australia could be completed in just a few days instead of a few weeks? If this is the future of home loans in Australia, it could not come any sooner. The current real estate boom is a prime opportunity for banks, brokers, and nonbanking financial institutions (NBFIs) to grow their business.

Although the financial industry had been digitising its services before the pandemic, COVID-19 has sped things up. Invariably, it has also drawn attention to a home loan process in dire need of a revamp.

A recent home loan research report by The Lab and Nature Research uncovered three key pain points in the home loan journey — a lack of transparency, overwhelming paperwork, and delays in almost every phase of the application. It's a process that's both stressful and frustrating for banks, brokers, and home loan applicants.

“We provided every statement they asked for in the first round, and they just kept coming back asking for more and more documents.”

– Grace, Brisbane



Paving the way **for a digital journey**

There's an alternative digital mortgage origination process that provides a faster, more seamless experience for banks, customers, and brokers.

From a technology standpoint, a cloud- and data-driven solution will help lenders reduce the friction points across the stages of the home loan journey: data collection, verification, and lending approval.

This starts with identifying prospects most likely to be approved based on customer data segmentation. When lenders identify what stage of the home loan journey potential customers are at, they will understand their intents and needs.

In turn, they will be able to recommend suitable products or services.

Ultimately, this paves the way for a significantly improved experience for both lender and customer, from customer acquisition to final approval.

This new home loan journey could be one where customers would not be subject to tedious paperwork or filling out 15-page applications from scratch. These processes continue to exist simply because of the complexity of extracting data from their legacy systems. Instead, modern analytics and machine learning capabilities can deliver a pleasant customer experience, from discovery to fulfillment — while ensuring lenders meet responsible lending requirements.

The study presented this new home loan concept to respondents, who reacted to it with enthusiasm because it could save time and cut hassle and was seen as more flexible. They believed there would be less stress and waiting, less paperwork and searching for documentation, and more control of their time.

However, although respondents desire a smoother home loan journey, they are not willing to trade speed for favourable interest rates and fees, among other factors. Data security is also a key concern for them. But they are ready for a digitised home loan journey, and they see it as a natural next step bigger lenders should take to improve the current process.

“Doing it fast is just one of the benefits [of digitising the home loan journey] and that’s how it should be in this digital world.”

- Neil, Baulkham Hills, New South Wales

An abstract graphic featuring a large, thin black outline of the number '1' on the left side. To the right of the '1' is a yellow rectangular area with a stepped, blocky right edge. Inside this yellow area, the text 'Embracing the future of digital mortgages' is written in white, sans-serif font. Below the yellow area, a black line starts from the bottom of the '1', curves down and to the right, passing through two solid black dots, and ends at a yellow circle. Another black line starts from a yellow circle at the bottom left, moves horizontally to the right, passing through a solid black dot, and then curves up and to the right, ending at a yellow circle.

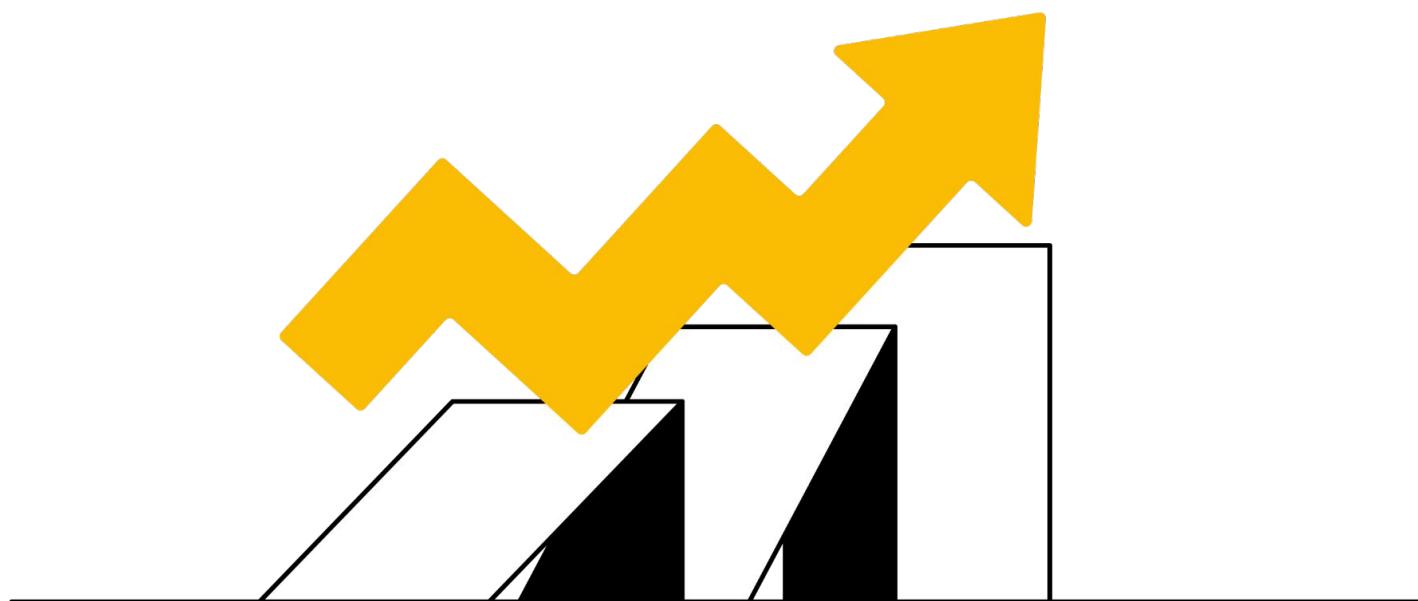
Embracing the future of digital mortgages

Putting things in perspective

For the past 20 years, home loans have powered the growth of Australian banks, making up 56-69% of their lending balances. In addition, home loans provide the elusive stickiness that banks and nonbank lenders look for to build customer lifetime value.



Australia's population of 25 million people live in 10.3 million homes worth a collective \$6.6 trillion. Of these, 6 million have mortgages against them, worth a collective \$2.1 trillion.



The need to keep up with demand

During the current global health crisis, demand for homeownership has spiked, as many Australians returned home from abroad. Also fuelling this demand have been low-interest rates and favourable government support programmes. Lenders have seen a deluge of home loan applications and have been hard-pressed to keep up with this surge in applications.

Making the move to digital

No doubt, the pandemic-driven demand has spurred traditional banks to speed up the digitisation process. In 2020, National Australian Bank announced compulsory measures for brokers to use Mortgage Settlement Australia National's remote verification of identity app (IDyou) to remotely verify borrower identity documents.


Demand for property has also increased the adoption of remote Verification of Identity (VOI) among lenders. These changes were in addition to digitisation efforts introduced before the pandemic, such as online applications and digital signing of mortgages, and even an artificial intelligence-powered digital home loan application.

But digitising parts of the process is not enough. Banks need to implement fully digitised mortgages to provide truly seamless service. As things stand, nonbank lenders share in the mortgage market has been growing. Undoubtedly, using technology to provide innovative offerings has given them a leg up over the bigger banks.

The pivot to digital is vital to the future of the bigger banks, even if they're expected to regain market share from nonbanks when the situation stabilises. Technology will boost the existing leverage they have because, historically, borrowers have sought home loans from Australia's Big Four, which write over 80% of the mortgages. Their reputation, experience, and vast customer databases also give them a huge advantage over nonbanks.

Adopting the fintech mindset and going digital will enable bigger banks to maximise their resources, positioning them to do more of the right business, at the right time, with the right customers.

As banks make their move to digital, the cloud, machine learning, and the open banking system will be central to this journey.

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What needs
fixing in the
current home
loan journey?

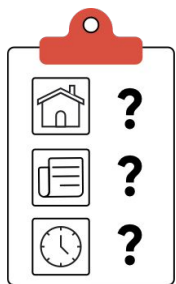


Cutting through the **complex home loan process**

Buying a house is one of the biggest decisions Australians will make in their life. But the path to purchase is one of the longest in any industry — taking nearly 20 months on average, in Australia. This journey is also complex, whether they're first-home buyers, second-timers, refinancers, or investors. And the largely analogue home loan application process exacerbates this complexity. Lenders and brokers alike are well aware of the flaws of the current home loan journey, and the need to speed up the digitisation process to resolve them.

Research conducted by The Lab and Nature Research in April 2021 validates the frustration brokers and buyers face in the home loan journey: that it's fraught with paperwork, there's a lack of transparency, and there are delays in nearly every stage of the application. The research findings spotlight three key pain points among respondents in the pre-approval and final approval stages:

Pre-approval challenges

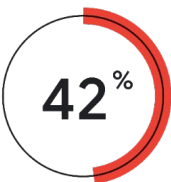


40% are unclear how long each stage of the process should take

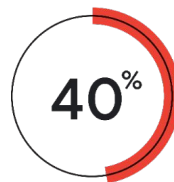
39% find the volume of paperwork overwhelming

39% think the waiting time to get the application approved is too long

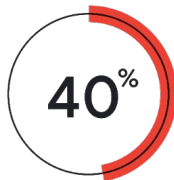
Final approval challenges



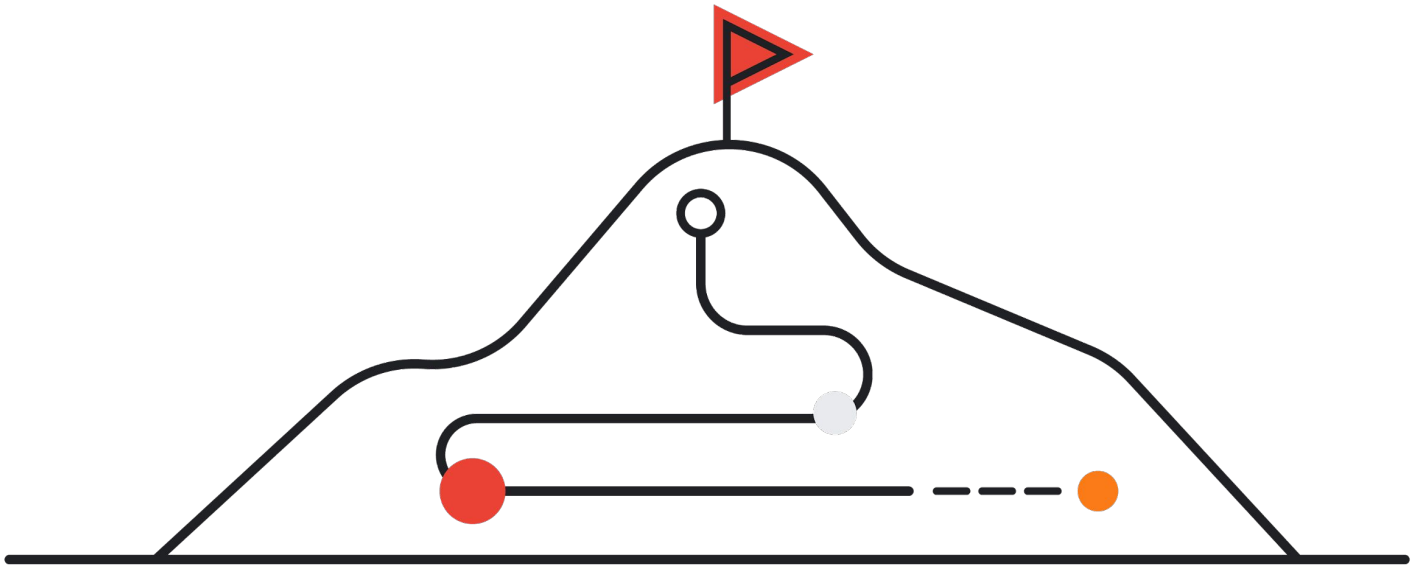
are unclear how long each stage of the process should take



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think the waiting time to get the application approved is too long



Borrowers and brokers complain about the mountain of paperwork entailed: from locating documents and filling out long application forms, to repeatedly submitting documents. Some applicants have also felt there is a lack of help from lenders and a sense of over-scrutiny in the data collection.

The lack of transparency, as well as having to chase the broker or lender for progress on the application, has annoyed and frustrated people too. In addition, because the home loan application process is not clear-cut for all applicants, it has posed hurdles for those requiring additional steps such as a guarantor or lender's mortgage insurance. Not knowing when their loan would be approved has left applicants fearful of losing their dream property or forfeiting their deposit.

The problems the applicants have faced, underscore the need for a modernized process.

“I guess banks need to move a little bit more into the 21st century because there’s an app for everything ... just get on with it.”

- Karen, Sydney



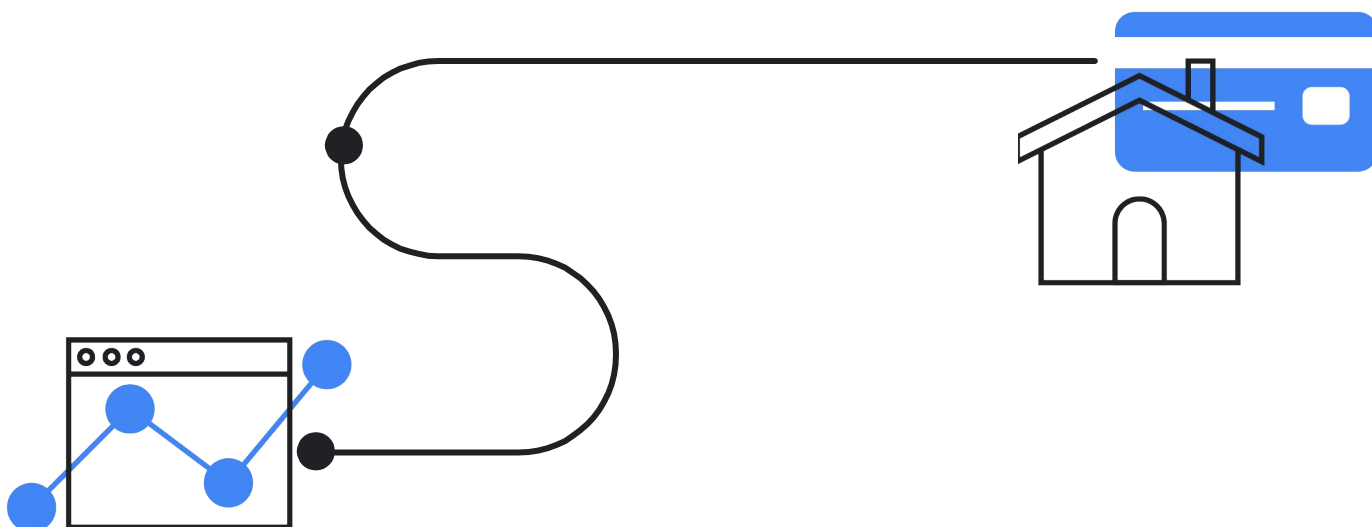
A smoother
customer
experience

A new home loan concept powered by Google

So, how would borrowers and brokers feel about a speedier, smoother, and more seamless home loan application journey? Respondents in the study were presented with this concept of a digital home loan journey:

Imagine if you could have your home loan application processed by a lender in less time than it takes today. The new loan application and approval process would help you own a home in a faster, frictionless way – minus the stress and uncertainty.

With this technology-driven process, the lender undertakes much of the preliminary work. The lender preprocesses data you consent to provide via Open Banking, and analyses your earning and spending profile to ensure that they're lending responsibly.



The new process automates the task of assembling personal financial information and completing a loan application. With the borrower's consent, the loan application form is prepopulated and auto-completed in near real time, saving hours of time and effort.

Such a process would relieve customers from the burden of providing information repeatedly. This seamless application process would also apply to new customers. Your financial history would be ingested and understood — as if you had been a customer of the lender for many years.

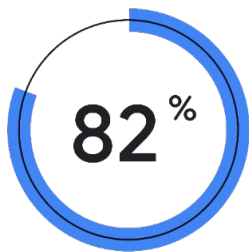
Borrowers would also be offered a safe, secure, and convenient facility to meet the lender virtually. The use of a secure virtual platform would allow lenders to conduct personalised interactions, and provide a convenient way of collecting additional data from the prospective borrower

For instance, the lender can get the borrower to hold up their identification to the camera, so the information can be automatically captured and processed. Through a personalised customer portal, documentation can be shared, and offers accepted digitally, with the borrower being kept up to date on their application progress.

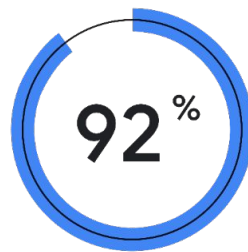
Most of the respondents were enthusiastic about the concept because it would save time, cut hassle, and provide flexibility in scheduling their time.

With less time spent chasing for the status of their application, respondents felt there would be less stress — and banks could focus more on customer service. They would also feel less resentment if banks removed the need for burdensome paperwork, especially when data can be sourced electronically.

They also liked that the new journey would give them more flexibility in their schedule with online video meetings. Notably, respondents in the study saw digitisation as a natural next step for financial institutions, that it was high time the financial institutions caught up with with other sectors on this front. Not least, there is an expectation among respondents that the bigger lenders would be able to offer this new digital home loan experience.




found the concept appealing



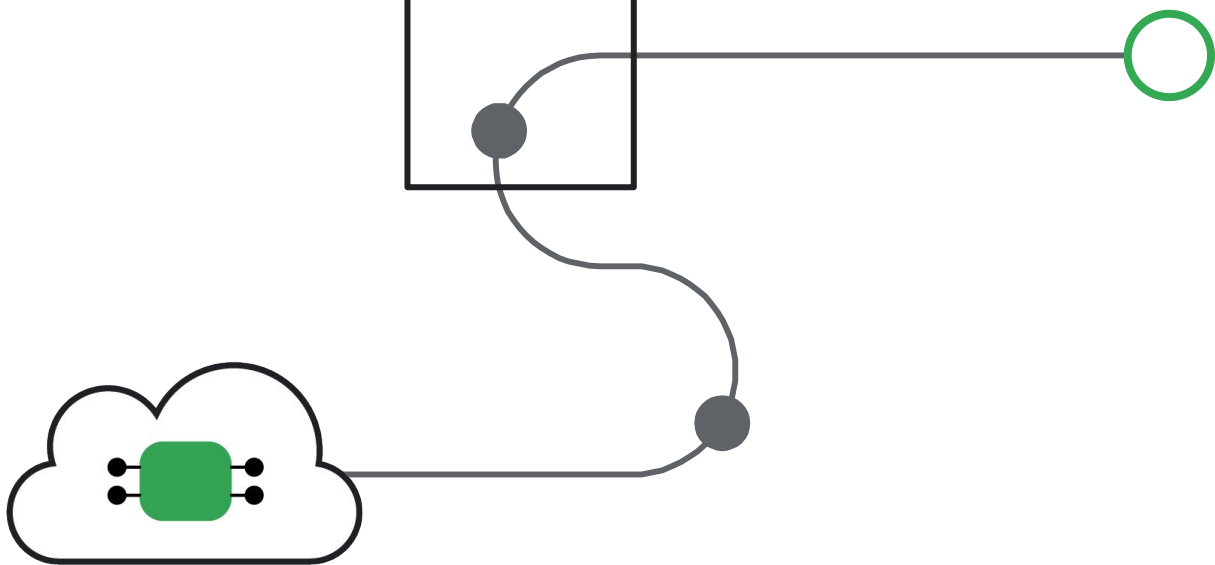
may prefer a lender over another if they offer the new concept

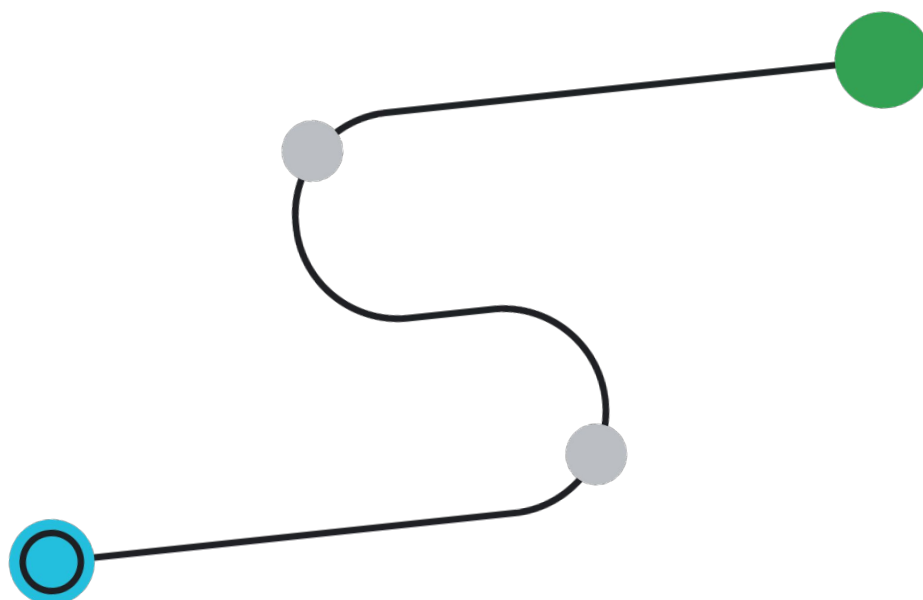
“We all know that we don’t live in a perfect world. But this is quite close to the perfect thing you’re talking about.”

– Percy, Melbourne



Powering the
new journey
with cloud
and data





A simpler, faster, more intuitive process

From a technology standpoint, a cloud- and data-driven solution should help lenders reduce the friction points across the stages of the home loan journey: data collection, verification, and lending approval. This is already happening in the U.S., where home loan servicer Mr. Cooper Group has partnered with Google Cloud in April 2021 to bring a digital home loan journey to its customers.

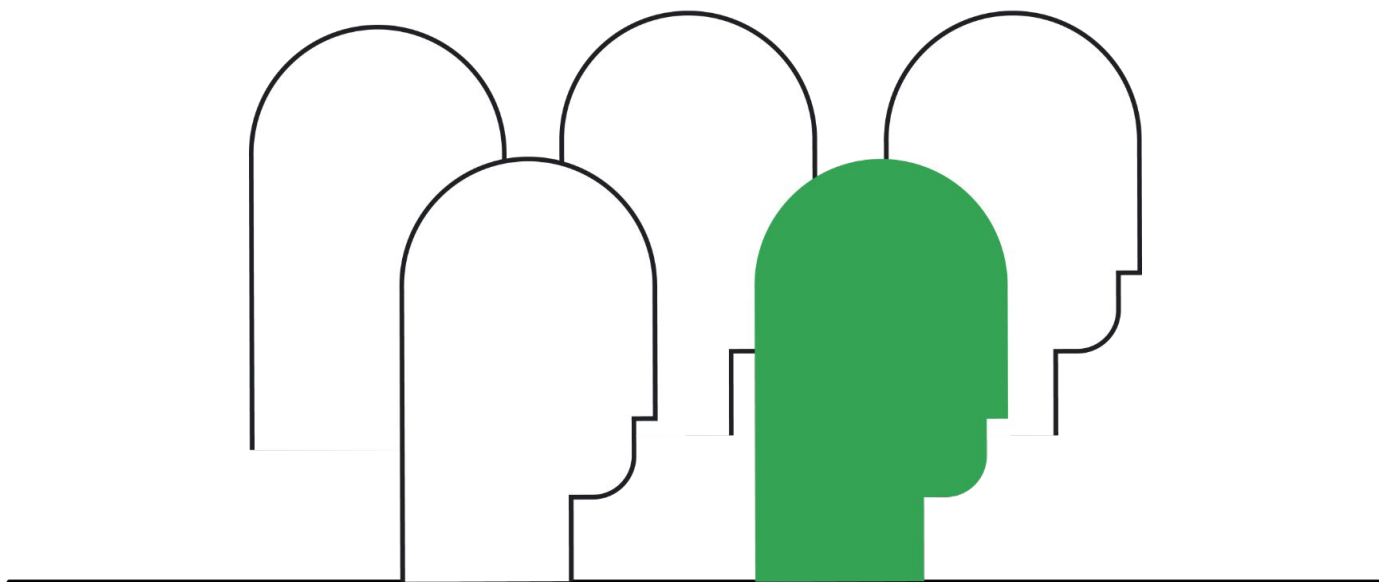
But the crucial first step on the lender's part is identifying those prospects based on your customer data segmentation, to create a smoother experience for all parties involved.

Identify the right prospects with data

To identify the right prospects, lenders need to know what keywords and search terms potential customers are using. After bank websites, search engines are the most used resource in property and home loan searches in Australia.

By partnering with Google, lenders can tap its machine learning expertise to identify, attract, and qualify prospective borrowers. When lenders identify what stage of the home loan journey potential customers are at, they will understand their intents and needs. In turn, they will be able to provide suitable products or services.

Google can help banks establish what a high-value prospective customer looks like based on criteria the banks provide, combined with an analysis of customer online behavior. When the prospective user's search for home loans is identified, banks, using Google's machine learning and automation targeting features deliver the right message, at the right time, to the right prospect.

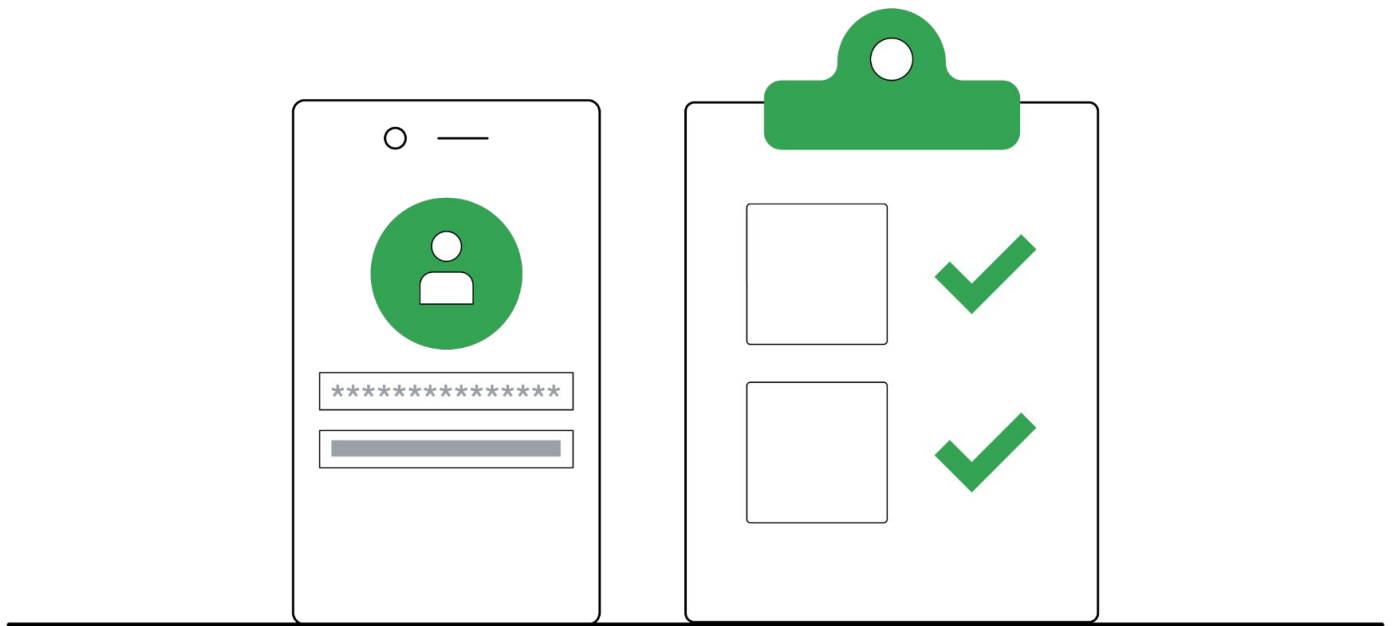


Ultimately, the more accurately lenders understand its customers, the better placed they are to outpace their competitors when a prospective customer shows up on Google Search.

A more targeted acquisition strategy is also crucial on another two fronts. First, targeting the right prospects creates a better overall experience for lenders and customers in the home loan journey. Not least, it supports lenders' responsibility in abiding by the Design and Distribution Obligations (DDO) regime as it comes into effect. The DDO is part of a governance framework that ensures issuers and distributors market to the right people when it comes to selected financial products.

“Banks that master the application of machine learning on their own data to identify what the best new customers look like will gain a significant edge.”

- Google Cloud Principal Architect,
Courtney McWatt



“Formless” applications

There’s nothing more frustrating than being asked to complete a blank application form by a lender who has also been your primary bank for years. Yet, this continues to happen frequently. The fact is, those banks have the data needed to prefill a loan application, but tapping into data residing in layers of legacy technology can be a complex task. It’s often easier for the bank to get you to tell them all about yourself over again.

But cloud-based data warehousing and analytics technology provide a viable solution. It's a scalable platform for consolidating and analysing customer data which may currently be separated across silos within the organisation. This would enable lenders to prefill lending applications more easily on behalf of existing customers.

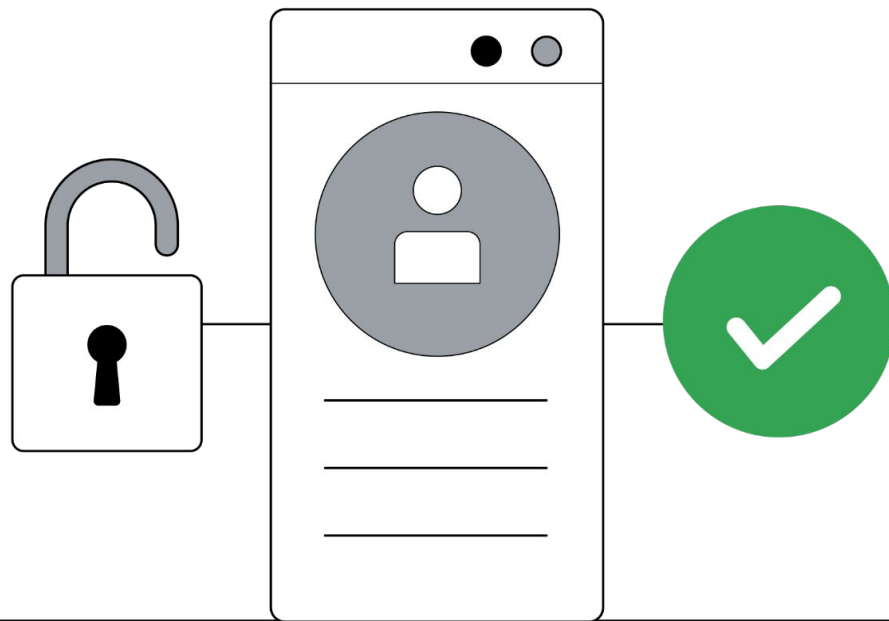
However, it's the ability to generate machine learning-driven insights from those data that represents the most potential. In 2021, it's reasonable to expect that your primary bank is able to complete most of a lending application without asking you many questions.

Here is where Open Banking provides the much-needed solution. It allows individuals to take control of their financial history, and provide lenders access to these data at their discretion. Cloud technology can also provide banks with the ability to rapidly ingest and interpret a new borrower's Open Banking data — their “financial résumé”. When a new customer approaches lenders for a home loan, they will be able to treat that prospective borrower like a long-standing customer.

It's crucial to note that there's no Google data that's being transferred to the bank. Rather, it's the bank that will ask the customer for consent to access their financial data through the Open Banking ecosystem.

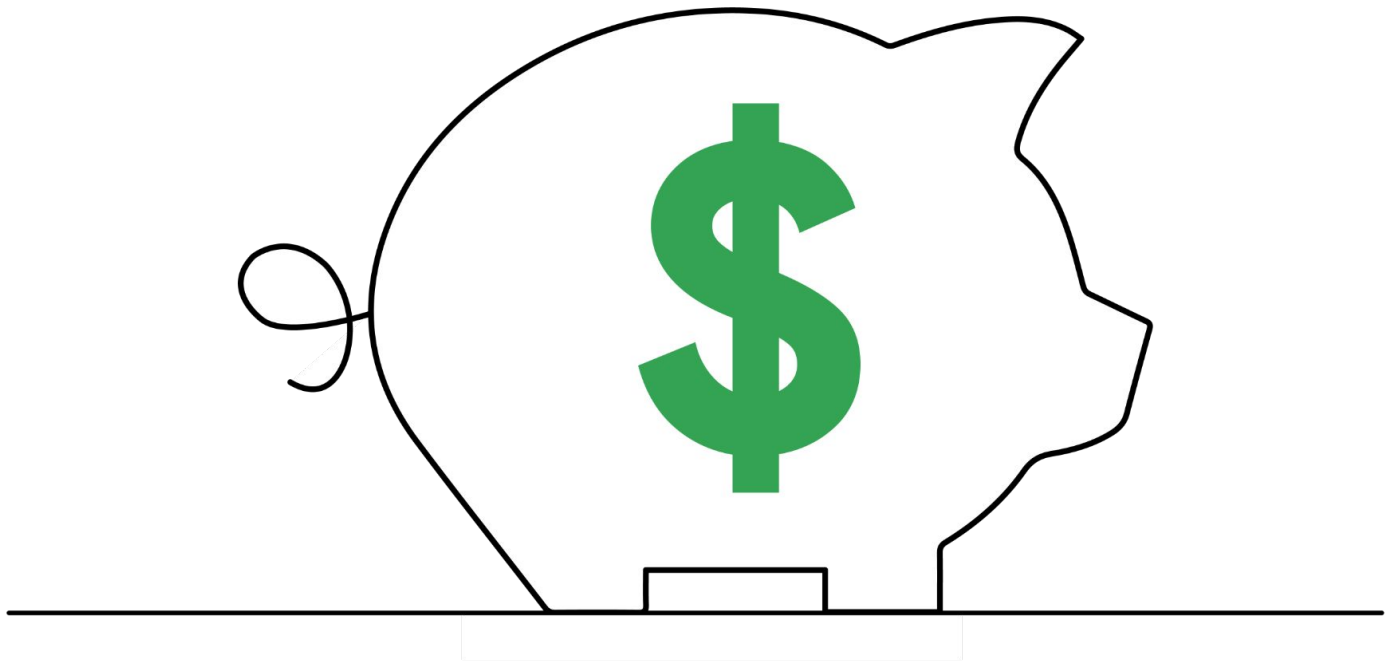
With the applicant's transaction history at hand, lenders can intelligently profile customers' income and expenses to identify patterns, and make a serviceability determination.

Lenders have an opportunity at this point to create a value exchange with the customer. When customers allow lenders to access their financial history, it allows them to improve their machine-learning models. At the same time, lenders are able to present customers with useful information about their income and expenditure profile, to help them understand how different factors affect loan serviceability.



Automated verification

Of course, there are certain details that transaction history cannot provide, such as the split between base income and overtime, or commission. Here is where smart tools such as Lending DocAI can aid the verification process. In cases where supporting documentation such as payslips are required, Lending DocAI will extract the relevant data from such documents. At the same time, this regulations-compliant, data-secure technology is equipped with fraud detection capability, ensuring banks meet responsible lending requirements.



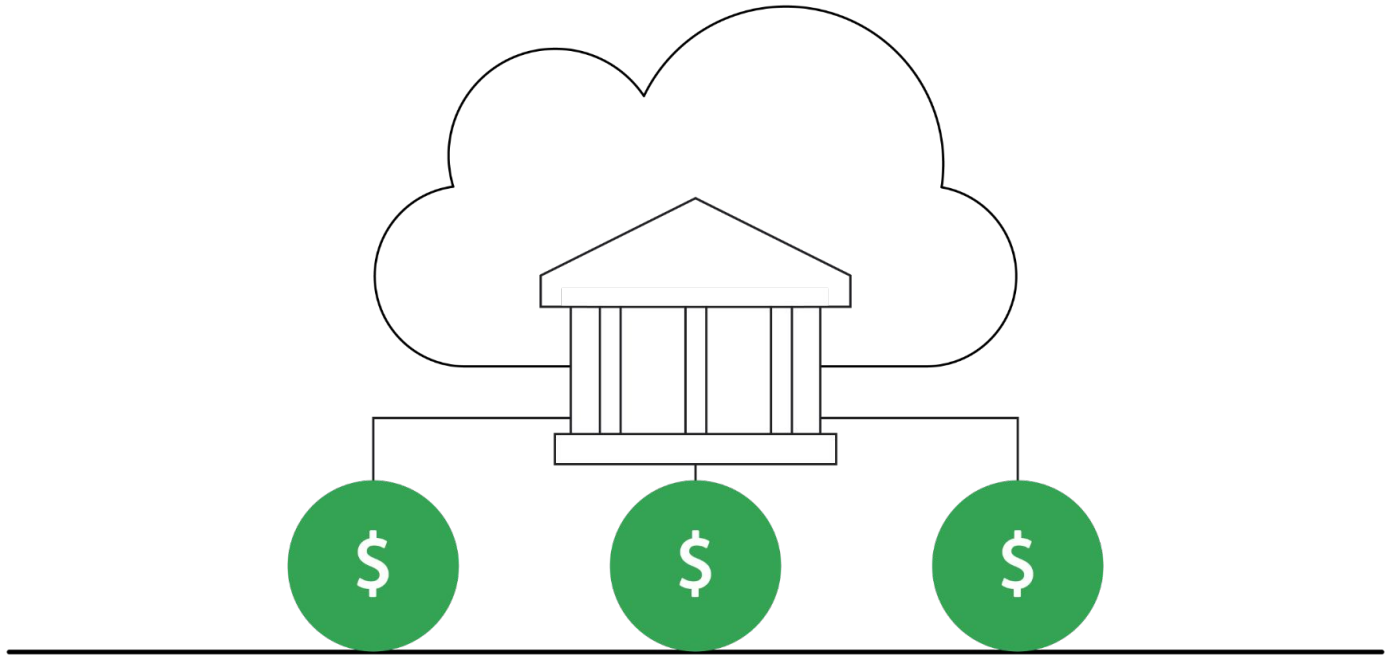
Automated valuation

Confirming that the property is actually worth what the buyer agrees to pay largely depends on data that external property valuation bureau services provide banks. These bureaus provide automated valuation models (AVMs) which return the value of a given property, along with a “confidence score.” This allows the bank to determine whether it can accept that valuation within the thresholds and risk appetite of its business.

One lender that's using this technology to simplify its mortgage processing is the U.S.-based digital lender, Roostify. The company recently adopted Google Cloud's Lending DocAI machine learning platform to automate documents needed in a home loan application.

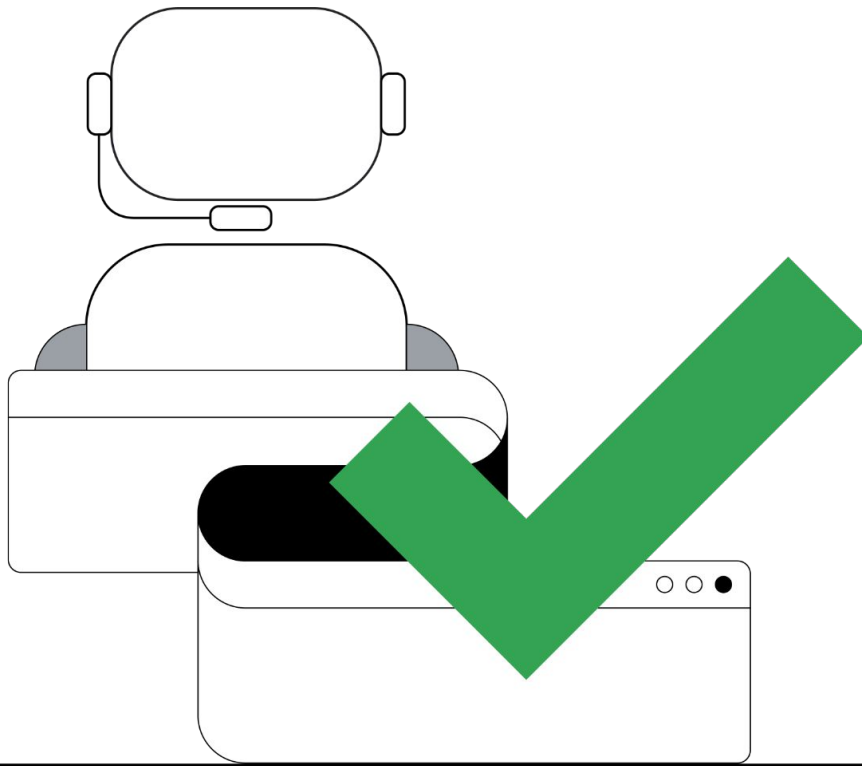
Where an AVM cannot be accepted, it's often a result of the bureau having insufficient data to assess the property. For example, a property that has come onto the market for the first time in decades, or a house that's undergone a recent rebuild. In these cases, valuations need to be performed manually, potentially adding many days to the approval process. Further, the process of valuing a property is as much an art as it is a science. Often, it is reliant on a valuer's personal expertise or knowledge of a particular suburb.

Cloud analytics and AI technology can assist banks in analysing more data points on a property, from a wide variety of structured and unstructured sources, from real estate listings to aerial imagery.



But AI can be applied to interpret the contents of such data sources automatically, whether it's understanding a body of text or identifying specific aspects of a property, such as the roof material or number of solar panels. Additionally, AI can play an important role in helping assess the interior of a property based on applicant-provided images.

In combination with existing valuation methods, banks have the opportunity to reduce the number of manual property assessments, and increase the confidence in the valuation outcome. Most importantly, days can be shaved from the application process for customers.



Automated approvals

The reality is that a large percentage of borrowers don't fit neatly into the pay-as-you-go earner category. Trying to determine the loan serviceability profile for self-employed, shift, or gig economy workers means subjecting applicants to the frustrating process of answering endless questions and providing more information at every stage of the process.

But the fact is that banks have provided loans to hundreds of thousands, or millions, of individuals who fit the “nonstandard” earning or expense profile. What they're missing is the technology to harness insight into data to show them these “nonstandard” applicants fall within the bank's risk category.

Advanced analytics and machine learning allow the banks to look at their historic data in completely new ways. The technology enables lenders to make nonlinear connections between data points that would have been impractical within traditional databases.

Beyond automating the approval process, machine learning has the potential to assist lenders in understanding a customer's profile, and make inferences about their interests and goals. This opens the doors to advanced personalisation opportunities, and the ability to identify customers who might be facing financial hardship.

With the application of machine learning, banks' models can identify inconsistent income and expense profiles presented by applicants and process applications without placing unnecessary burdens on them.

A word on AI ethics

Google is acutely aware of not only the benefits of applied machine learning, but also the perils if it's not done within an ethical framework.

Through our AI principles, Google holds itself accountable for ensuring that AI is applied in an ethical way. Each use is assessed against its expected social benefits, safety, and the ability to avoid creating or reinforcing unfair biases.

As this is done, Google ensures that models are accountable to humans. We're seeing many banks developing their own AI ethics frameworks in a similar fashion. Although some AI models such as those Google uses to understand images in Google Photos are relatively benign in nature, application of AI model requires caution. In particular, using AI to assess an individual's creditworthiness, or make inferences about someone's lifestyle based on historic transactions.

Though historic data are typically used to train predictive models, a bank that uses decades of loan approval data in this way may be unintentionally introducing significant unfair bias into its models.

For example, such historic data may contain loan approval outcomes that were unfairly biased against certain segments of the community, and machine learning models trained on those data may inherit such biases. To help financial institutions accelerate their adoption of AI, Google Cloud is providing an increasing number of tools and frameworks that support AI “explainability.”

AI “explainability” is the ability to understand how an AI model arrived at its decision, which features carried the most weight, and how the model would behave in different scenarios.

These tools are an externalisation of Google’s own approach to meet our AI principles, and will help provide the confidence, trust, and governance that banks will need to adopt AI at scale.

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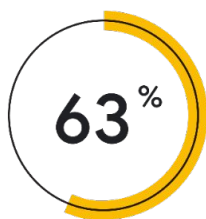
What do
customers
want?

The upgrade of Australia's home loan application process has been a long awaited one. And the overwhelmingly positive reaction to Google's proposed home loan concept shows that brokers and borrowers are more than ready for a new and improved home loan experience.

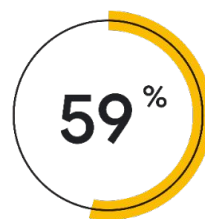
Not only will Google's proposed digitised mortgage reduce the time taken to apply for a home loan, it promises to slash the amount of paperwork involved and offer more transparency, all of which means less stress and frustration for everyone involved.

That said, there are other factors that prospective borrowers look for in a home loan, besides speedier approval. For instance, they are unwilling to trade speed for favorable interest rates and fees, among other factors. Interestingly, respondents shared that they would doubt the credibility of an application process that was too quick – less than a day.

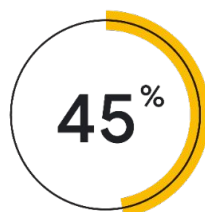
Top three things applicants look for in a home loan:



want competitive interest rates

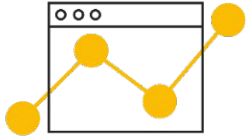


desire competitive fees



are looking for good online banking options

Applicants have a wish list as well, and would find the following features useful:



85% want a live tracker showing the exact status of my application



84% are after an estimation of the value of a property in advance of official valuation



82% want ongoing interest rate updates



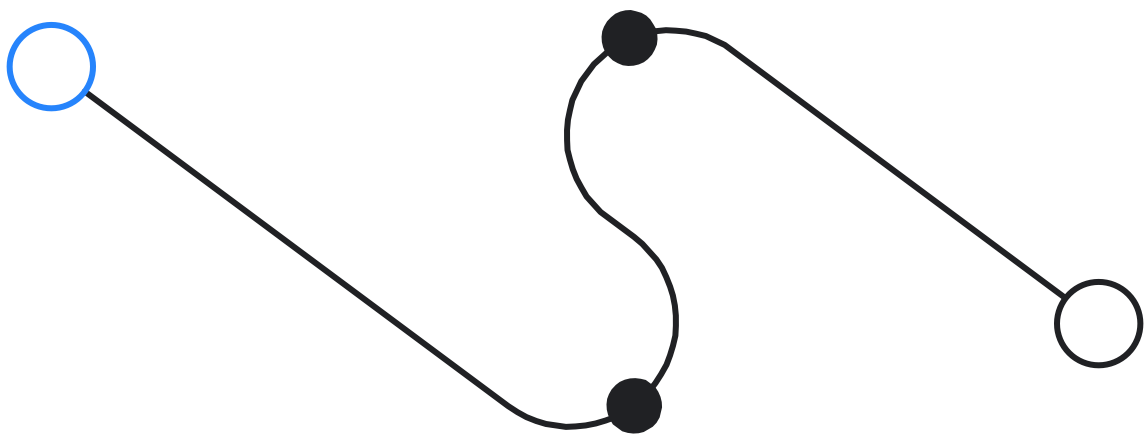
81% seek financial advice tailored to my specific situation



79% want banks to store information to speed up re-application

With a new home loan journey, applicants would want assurance about how their data are gathered, how long they are kept, and where they go. They would feel more assured if the data collection methods were comparable to existing government services such as myGov. Ultimately, respondents see a digitized home loan journey as a natural next step, and most believe one of the bigger banks will be able to deliver it.

Conclusion and implications

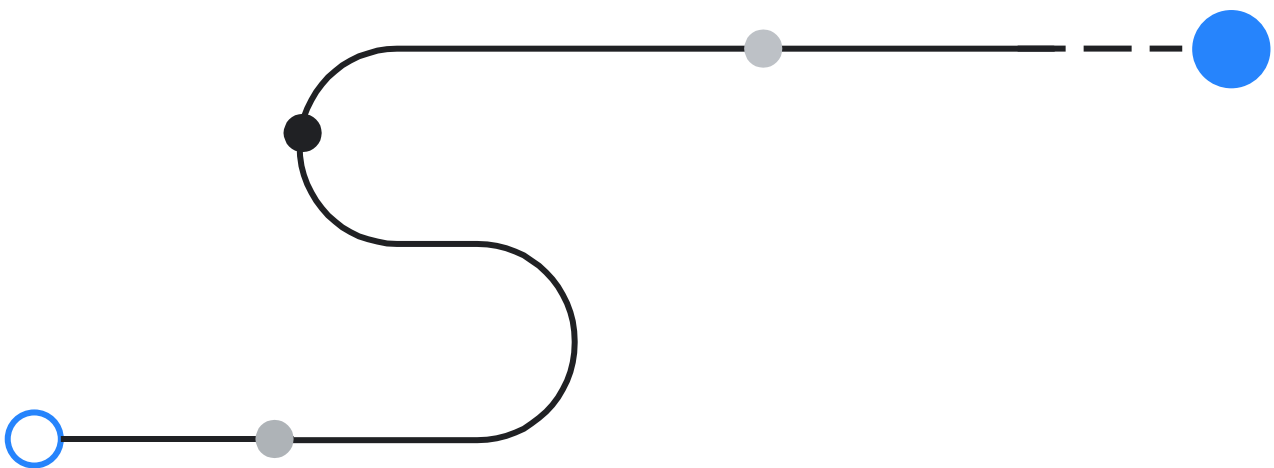


Conclusion and implications

- Australians are ready for a digital home loan journey. They see it as a natural next step for financial institutions, and most believe one of the bigger banks will be able to deliver it.
- The main pain points in the existing home loan journey are lack of transparency, overwhelming paperwork, and delays. These issues affect borrowers, brokers, and lenders alike.
- A digitized mortgage journey powered by Google will automate key stages in the home loan journey with “formless applications,” automated verification, valuation, and loan approval. Resolving these friction points empowers lenders to deliver a pleasant customer experience from start to finish.
- With machine learning, lenders are able to harness artificial intelligence and data to get an edge over competitors in the home loan life cycle, from customer acquisition to loan approval.
- Machine learning will also reduce the amount of paperwork required of borrowers and brokers, from forms to documentation.
- Automation will help lenders ease the complexity of the home loan process for borrowers in different types of borrowing situations.

Conclusion and implications

- A virtual journey will also give borrowers more flexibility with 24/7 applications, and secure video-call meetings with lenders and brokers.
- Although applicants want a speedier process, they are unwilling to compromise on competitive rates, fees, and good online banking options, among other factors.
- Data security is a concern for them as well. They'll want to know how their data are being accessed and how long they will be stored.
- Borrowers are inclined to go with a lender that offers a digitized process similar to Google's proposed home loan concept.
- Although nonbank lenders are gaining ground in the mortgage market, bigger banks still hold sway over customers because of their reputation. However, it is crucial that they pivot to digital to catch up with the competition and establish their dominance in the market.



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