WHITE PAPER

TECHNOLOGY ADVANCES IN MORTGAGE INDUSTRY

A rise in Millennial's population and fall in mortgage rates fueling the mortgage industry

It is a well-known fact that 'Millennials' constitute the largest share of the mortgage market for the last five years. According to research on US Census data by PeW Research Center, "Millennials have surpassed 'Baby Boomers' as the nation's largest living adult generation". As Millennials are now entering their peak home-buying years, their desire to settle down would fuel the home sales. Millennials are techno-savvy, they own smartphones, have grown up with advanced technologies at their fingertips and expect the kind of personalized experiences provided by Facebook, Amazon, Netflix, and Spotify.

A close look at historical interest rates (30-year fixed-rate mortgage) reveals that after reaching a high of nearly 19% in 1981, mortgage rates have gradually declined and remained in the low single digits for the past twenty years. Federal Home Loan Mortgage Corporation forecasted that average 30-year fixed-rate mortgage would further decline to 3.7% in 2020, however it has already dropped to record low of 3.29 % due to COVID-19 pandemic. This decline has inundated lenders with refinance applications as homeowners are rushing to take advantage of competitive rates. Increasing Millennial's population and declining mortgage rates has set the stage for continued improvement in the housing market.

Emerging technologies have the potential to change the present and future of the mortgage industry

Following five customer expectations are set to drive future technology trends in the mortgage industry

Speed
I expect things to be done quickly, if not instantaneously

Seamlessness
I expect interactions to feel frictionless

Convenience
I expect to be able to do things how I want when I want

Personalization
I expect options to tailor products & services to me

Transparency
I expect to know where I stand in the process

To serve tomorrow's borrowers, lenders need to create online experience that reverberates with the millennial crowd. Apart from providing amazing customer service online, lenders should be using social media and technology to create seamless experiences across all contact points.

As non-banks such as Quicken Loans, Guaranteed Rate, LoanDepot, and LendingTree have emerged as leaders in mortgage lending space, it is no longer a choice for traditional banks to adapt to the latest technologies. According to ADV ranking, Quicken Loans is the US's third-largest retail residential mortgage lender, behind Wells Fargo and JPMorgan Chase but ahead of banking giants such as Bank of America and Citigroup.

Below are some key digital technologies which are set to transform the entire mortgage lending lifecycle from loan origination, processing, underwriting, closing, to funding:

i. APIs are the future of the mortgage industry

According to Fannie Mae's Mortgage Lender Sentiment Survey, "lenders view Application Programming Interfaces as the top technology with the greatest potential to streamline business processes".

Using APIs, mortgage lenders can leverage existing solutions to achieve specific functionality. APIs can also help in Workflow-automation. For example - banks can connect their loan origination system with credit scoring agency using APIs to immediately determine loan eligibility, which was quite a long process earlier. APIs also play a key role in ensuring data consistency and accuracy by openly sharing information between platforms, such as loan origination and servicing. It eliminates the need for data migration.

APIs can also facilitate compliance with frequently changing regulatory requirements. Lenders can quickly and accurately set up processes to generate reports or send data in compliance with prevailing regulations.

ii. A unified omni-channel experience is vital

Since customers use online banking very frequently, it becomes essential for mortgage lenders to capitalize on customer's online footprint by providing seamless omni-channel experience. 'Lead conversion' can be significantly enhanced if lenders can provide online calculators, scenario analysis tools and keep the online or mobile communication channels open with borrowers during the loan origination process.

As today's customers want to engage with mortgage providers with their preferred channel, it is essential for banks to invest in their digital capabilities. A borrower may fill the mortgage application online via desktop, use mobile for transaction services such as document upload or status checking of loan application but finish the application in person at bank.

iii. Artificial Intelligence can be game changer

Artificial Intelligence (AI) and machine learning (ML), with enormous potential, have just started to make inroads into mortgage space. Anyone who has ever applied for a home loan is aware that it is a document-intensive process. This is one area where AI/ML can improve operational efficiency by organizing and analyzing all the paperwork.

The traditional lending model primarily depends on the credit history of borrowers to access their ability to repay a loan, but AI/ML can do a far better job and enhance this evaluation by considering hundreds of data variables and finding the hidden correlation. This opens up loans for the wider population which was ignored earlier due to lack of credit history data.

Lenders can gain a competitive advantage by bringing AI to their customer base in the form of chatbot mortgage adviser. This not only enhances customer experience but also provide insight based financial product recommendations.

iv. Robotic process automation has the potential to transform mortgage providers

Mortgage giants are leaning towards RPA for reducing their operational costs. RPA can help increase productivity and accuracy by replacing time-consuming, repetitive and rule-based tasks. In mortgage companies, critical functions such as loan origination, processing, quality control, and servicing are good candidates for applying RPA.

Identification and resolution of errors during loan origination, an error-prone step, is highly manual. RPA is perfectly suited to automate the resolution of these errors and exceptions leading to faster approvals and higher customer satisfaction.

v. Blockchain can help reduce cost and increase transparency

According to a PwC report, "Blockchain technology may radically alter the process through which consumers buy a home, as well as the way financial institutions handle mortgages. Specifically, the technology could remove cost and friction from the process, create transaction records that are infallible and incorruptible, and facilitate near-instantaneous settlement."

Currently, the mortgage industry is facing various challenges -- it is filled with brokers who add their own profit to the overall costs; mortgage application process lacks transparency as bank accounts, title deeds, and government records are held by separate organizations. Lenders depend on correct information from all these intermediaries to find if a loan can be approved, making it a very time-consuming process.

All these challenges can be resolved by making every property trackable digitally with the help of a unique ID, which can be generated using blockchain. With the help of blockchain's distributed ledgers and smart contracts, such intermediaries are unnecessary, thereby reducing costs and time.

How leading banks and fintechs are embracing the latest technologies

Banks that fell behind when Quicken Loans became the biggest U.S. mortgage lender are now fighting back by digitizing their lending process or teaming up with Silicon Valley start-ups. U.S. Bank recently launched a new digital mortgage experience for its customers. Its mortgage process can accurately evaluate how likely a borrower is to repay, at the mortgage application submission stage. Its secure digital hub allows borrowers to upload any required documents, track application status and electronically sign disclosures.

Startups such as Blend have built a lending solution using ML and AI that can fast-track the paper intensive mortgage application process by requesting required information from applicants with no manual interference and minimum errors. Another start-up, Homeland is building a blockchain-based mortgage crowdsourcing platform. The system will connect borrowers with private individuals to build custom mortgage solutions.

Citizens Bank has recently implemented Black Knight's Servicing Digital platform for its new Citizens One mobile app. This powerful, interactive tool delivers detailed, timely and highly personalized loan information to its mortgage customers about the value of their real estate assets.

HSBC, one of the largest banks in the world, in partnership with Roostify has recently launched a digital mortgage lending platform. This partnership with Roostify will help HSBC provide its customer with a faster and easier digital experience. The platform allows HSBC lending team to efficiently interact with the customers and enable customers to apply for loans online, submit required documents digitally and track the status online in real time.

Looking ahead – uberization of mortgage

Although the lending banks and fintechs have made technological progress on several fronts, they are still far behind when compared to innovations showcased by companies such as Airbnb, Amazon, and Expedia. The industry is far from reaching its full potential. For the last few years, a revolution is underway in the mortgage business, as the industry moved closer to a fully digital mortgage. The wants, needs, and expectations of customers are changing. The mortgage companies that can change with them will be the most successful ones.

Due to the presence of multiple stakeholders within mortgage process and lack of real-time information sharing, processes are still working in silos throughout the industry leading to greater lead time, poor customer experience and low satisfaction. There is a genuine need to unite these disparate pieces for borrowers.

All these problems can be alleviated by building a single application similar to Uber app which can use today's advanced technology to connect the fragmented pieces from an end-to-end perspective. It will require a lot of information sharing, joint-partnerships, and industry standardization.

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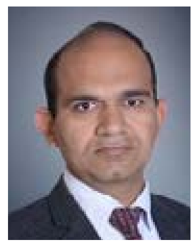

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