



U.S. MORTGAGE ORIGINATION AND EFFICIENCY IN A POST- PANDEMIC WORLD



Introduction

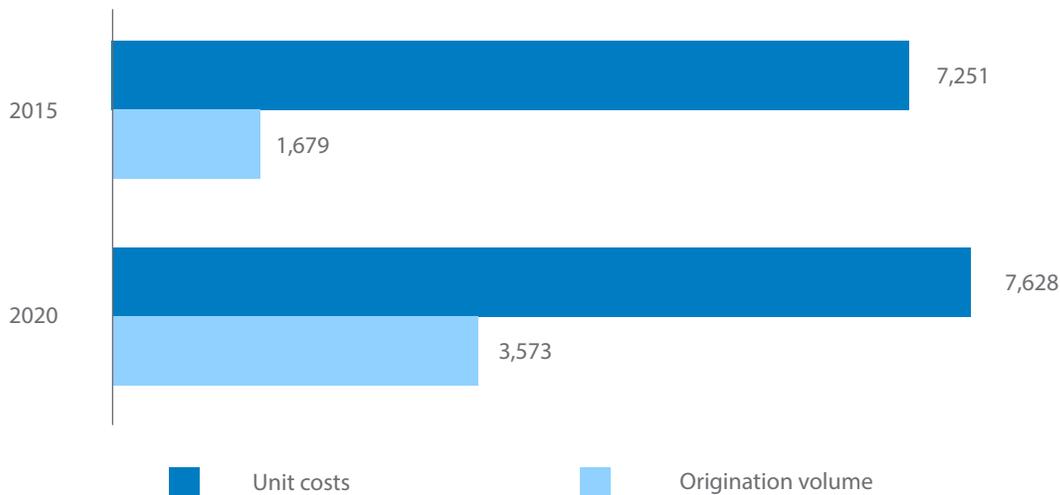
The COVID-19 pandemic has been an unprecedented shock to the global economy. Nevertheless, the mortgage market in the United States prospered in 2020, with volumes increasing to record levels on the back of low mortgage rates. However, this positive performance has papered over the fact that origination costs are not falling despite the availability of many new technologies to improve processes and efficiency. As origination volumes have started to decline, lenders are starting to see margin compression. The focus for lenders will now shift to reduce costs through automation and process transformation.

Trends in mortgage origination costs

The unit cost of originating a mortgage in Q4 2020 was US\$7,938 according to the Mortgage Bankers Association¹. The quarterly figures vary but the average during 2020 has been US\$7,628 – (see Chart 1). Back in 2015 the average unit cost was US\$7,251 so there has been an increase of 5%, even though the value of mortgages originated has more than doubled. A global survey of over 308 mortgage industry executives by Infosys in March 2021 also found that origination costs were increasing – 87% of respondents reported increasing origination costs in the previous 12 months and only 13% reported decreasing costs².

Excluding sales and marketing costs, lenders will need to significantly look at optimizing their technology and operations costs with shrinking volumes. At the same time, investing in technology and transformation projects to compete with new digital native lenders investments in technology to cater to a growing demographic of millennials and Generation. The recent Infosys global survey noted that incumbent players are now stepping up their digital transformation efforts in response, with 92% reporting a doubling of the pace of digital transformation in the past 12 months and 20% quadrupled the pace of digital transformation in their firms³.

Chart 1. Unit costs of origination have risen in the past 5 years even with significantly higher volumes



(Unit Cost is the fully loaded production expense per loan)

Source: Mortgage Bankers Association, Urban Institute⁴

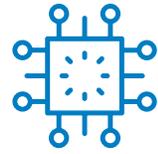
Key takeaways



Unit origination costs for mortgages have not been falling even though record volumes are being processed and the technologies exist for a step change in efficiency.



Lower volumes in 2021 and 2022 are expected to result in a squeeze on profitability and put further pressure on mortgage lenders to transform their operations and increase efficiency.

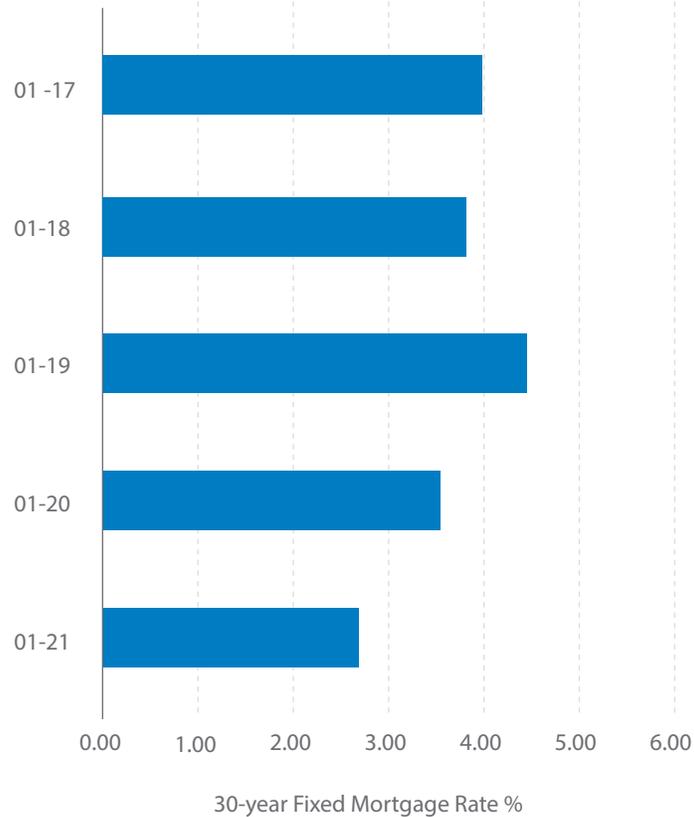


Mortgage companies will benefit from strategic partners who have deep domain and technology expertise to help them navigate the uncertain future.

The impact of covid 19 On the mortgage market

When the COVID 19 pandemic started to take hold in the United States at the end of the first quarter of 2020, most market participants would have been somewhat pessimistic about the outlook for the rest of the year. However, the stimulus and liquidity provided by the Fed's monetary policies reduced interest rates to such an extent that the 30-year fixed mortgage rate fell from around 3.50% in February 2020 to 2.65% at the end of 2020, an historic low – see Chart 2⁵. This led to a refinancing boom.

However, mortgage rates have now risen since the last few months, and the refinance boom is coming to an end. Freddie Mac was predicting that originations for 2021 would be 18% down on the exceptional year of 2020, and down a further 27% in 2022. In Fannie Mae's Q2 2021, lender sentiment survey, 69% of lenders were expecting profit margins to decline over the next 3 months, and only 11% were expecting profit margins to rise⁷. This was the highest percentage of lenders expecting a profit margin decline since Q1 2018.

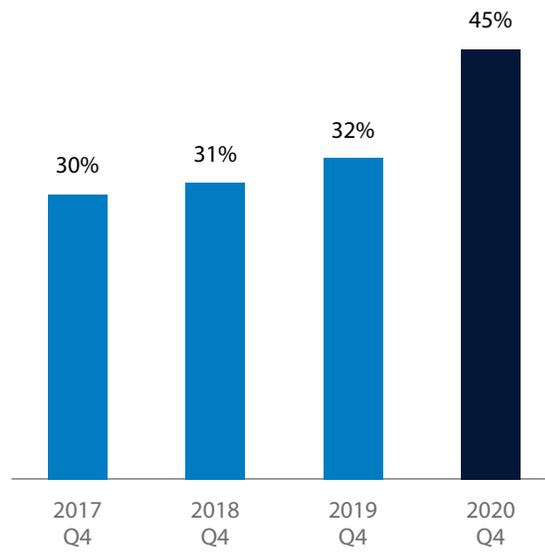


Source: Freddie Mac⁶

Chart 2. The 30-year fixed mortgage rate was on a steady decline from end 2018 but is now starting to rise

Covid 19 and the acceleration Of digital trends

The pandemic has accelerated digital trends in the mortgage process. At Bank of America, for example, digital product sales as a percentage of total sales had been growing relatively slowly in 2018 and 2019, reaching 32% in Q4 2019 – see Chart 4⁸. By Q4 2020, this figure had reached 45%. Subscribers to Bank of America’s digital personal assistant, Erica, increased by 67% in 2020, reaching 17m total users.



Digital as % of Total Sales

Source: Bank of America⁹

Chart 3. Bank of America’s digital sales saw a significant jump in 2020 due to the pandemic

Key technology trends which can impact the mortgage process

There are several key technologies which are driving digital transformation, and which will provide the basis for improving mortgage productivity. These include APIs, Artificial Intelligence/Machine Learning, Robotic Process Automation, Microservices and Cloud.

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Sixty-five percent of financial services CIOs surveyed plan to increase spending on infrastructure technologies such as APIs, microservices and cloud in the coming year, and over half plan to invest in automation that reduces the need for high-touch processes and contributes to cost optimization.

Gartner¹⁰

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01 Artificial Intelligence/ Machine Learning

Mortgage is a very document intensive process and one of the biggest areas of innovation in recent times has been the use of AI, Machine learning and Natural Language Processing technologies for document indexing, classification and data extraction. These have use cases across the mortgage lifecycle ranging from

automating processing and underwriting activities in origination, prioritise collection calls and reminders, to predict mortgage book performance, and to predict customer retention¹¹.

02 Cloud

The adoption of cloud technology in financial services has been relatively slow – primarily due to regulatory and security issues. This is now changing, and more

and more financial services companies are adopting cloud technologies to support digital transformation, increasing their systems flexibility and scalability. Some firms, such as Capital One, have closed their physical data centers and moved all their IT to a cloud environment. According to Jay Nair, Senior Vice President of Financial Services at Infosys, in the mortgage domain clients are increasingly relying on the cloud for document management and AI solutions for mortgage origination as well as servicing¹².

03 Robotic Process Automation

Robotic process automation (RPA) is a technology that can automate basic processes using software robots or 'bots'. These bots or applications run automated scripts that perform routine tasks (such as entering data on a form) faster and more accurately than a human. Cognitive automation takes RPA a step further by incorporating machine learning and other artificial intelligence to enhance the level of automation. This means that the software robot can deal with

structured and unstructured data and, more significantly, learn on-the-go so that the results of operations improve over time. There are multiple stages in the mortgage origination process that can benefit from RPA including, for example, missing document checks, document expiry checks, validation of disclosures, and checking fees for compliance.

easier and broader integration of services. They can range from private APIs used in a firm's internal systems, to open APIs which link systems to external data sources and are essential for services like Open Banking. Open APIs facilitate the integration of ecosystems across various disparate business processes across CRM, point of sale and Loan Origination Software systems.

04 APIs

Application Programming Interfaces (APIs) allow the transfer of data or instructions between software components enabling



The impact of covid 19 on the mortgage market

Infosys has broad experience and capabilities across the technology and operating elements of the mortgage process.



Digital customer journey

User journeys across various personas - borrowers, loan officers, operations to help clients create target state operating model



AI driven Process automation

An AI first approach to make the entire process of loan processing digital and using intelligent automation to reduce cost per loan



Data & Analytics

A centralized data repository and single source of truth on which predictive analytics and insights on KPIs can be built across the mortgage lifecycle



Loan Origination Transformation

Reduce time to close a loan to best in class in industry of 14 days through a Tech + Ops solution orchestrating core Loan Origination Software platform along with internal and external applications



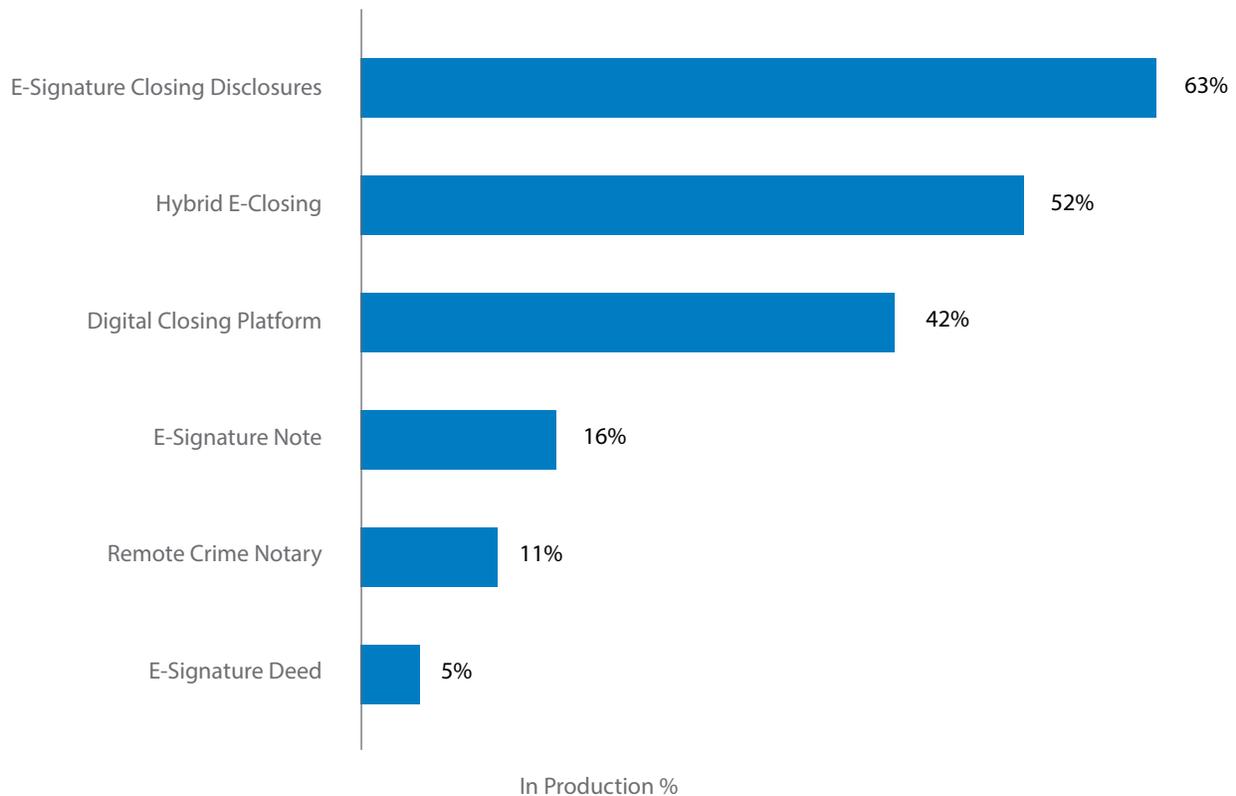
Digital channels

Create a frictionless experience for borrowers using digital tools across CRM, Sales and Marketing, Point of Sale and Mobile solutions



Cloud migration

Create a cloud native eco system leveraging poly cloud solutions such as Cobalt to provide a seamless customer experience



Source: Mortgage Bankers Association¹³

Chart 5. Digital technology adoption in the closing process is still relatively low

(Percent of firms with the technology in production)

Conclusion

Following the boom of 2020, the US mortgage market is heading for greater challenges in the short to medium term as interest rates rise again, origination volumes decline, and competition increases. The technologies are available

for traditional mortgage originators to achieve a more comprehensive digital transformation, both to increase efficiency and improve the customer experience, but making this a reality will take time and careful planning. Working with partners

such as Infosys who have the domain expertise and technology/operational capabilities will help to ensure this transformation is a success.

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