

MORTGAGE
ORIGINATION:
OUT OF LEGACY
AND INTO THE
FUTURE



PERSONAL INFORMATION

Co-Applicant

First name:

Last name:

Birth date:

Marital Status

The top three challenges in mortgage origination are cost, customer expectation and time-to-market.



The cost double whammy: Ever since the financial crisis of 2008, the mortgage business, its epicenter, has witnessed steadily increasing regulation in the form of the Dodd-Frank Act, Real Estate Settlement Procedures Act, Truth in Lending Act, Gramm–Leach–Bliley Act, Conduct Regulation and Prudential Regulation (U.K.) etc. While this has succeeded in lowering the default rate, it has also increased compliance costs significantly to more than US\$ 1 billion for tier-1 banks^[1], according to one estimate. What's more, even when lenders automate processes to bring down these costs, the purpose is often defeated when the system is unable to comply with a regulatory change within the stipulated deadline and a large human workforce is brought in to do the job at additional expense. The Mortgage Banker's Association said the cost to originate a mortgage was almost US\$ 8,400^[2] in Q4 2018 (from ~ US\$ 4,400 pre-crisis). Similarly, today the servicing cost is estimated at more than US\$ 234 per loan per year (from ~US\$ 55 pre-crisis). The cost to service non-performing loans is rising too, such that it now costs 4 times what it used to cost to service a delinquent borrower just 4 years ago. Lenders make almost no money (and even losses at times) on origination and very little in servicing.



Steep slope of expectation: On the other side there is ever-increasing customer expectation – for better rates, better services and better experiences. Apart from low cost and quick turnaround, mortgage customers – especially the millennials – demand the convenience of digital/omnichannel/ mobile-first experience. They would like to reach their bank using a variety of channels and devices, and transition seamlessly from one to the other when needed. Traditional banks must meet these demands, or lose customers to non-banks such as FinTech providers, who are raising the bar with their digitally driven offerings and experiences. The best example comes from the United States where a mortgage lending company recently unseated a large bank (in retail origination) that had ruled the business for more than three decades; the company follows a purely digital model with no branches, and leveraging a variety of technologies, processes loans straight through in 19 days, versus the industry average of 45 days. It also passes some of the benefit of its low cost origination model to customers.



The battle against time-to-market: Because regulations are constantly being amended, lenders have to frequently make changes to their systems and processes. This is a hard and lengthy task with rigid legacy systems, where even

a simple price change can take months to execute. On the other hand, new-age providers running on the latest digital technology and contemporary architecture have no such constraints, and are able to launch new offers and even offerings in quick time.

The good news is that all these challenges can be overcome, or at least substantially mitigated, with the right mortgage origination solutions. Today, there are a number of solutions in the mortgage origination space effecting change in the short, medium and long term.

Short-term solutions are typically simple and offer quick wins. Robotic Process Automation (RPA) for automating routine, repetitive processes, and Straight Through Processing of origination activities across the front, middle and back office are examples of this. On the customer experience front, a good example of a short-term solution is a custom-made video statement. A home loan statement is quite complex, with three main components – interest, principal, and taxes & insurance (Escrow). When the monthly installment changes as a result of a change in interest or tax, it sets off a spate of customer calls that are managed by a sizeable service staff. A video statement is self service tool, like a chatbot, to handle numerous customer queries related to the product as well as to the entire origination journey. This not only helps to bring down the call volume – and therefore back-office operational costs – but also improves the customer experience. An example of a medium-term solution is to employ Artificial Intelligence (AI), Machine Learning (ML), Optical Character Recognition (OCR), Natural Language Processing (NLP) and Smart Workflows to automate the loan onboarding process (Purchasing Correspondent and MSR) to improve the Turn Around Time by up to 50 percent in the space of a couple of years. Long-term mortgage solutions (2+ years) such as paperless mortgage are often disruptive, strategic in nature and require buy-in at a senior level.



As the technology partner of a number of mortgage lenders around the world, Infosys keeps a close tab on the developments in this space. We are seeing how solutions with agile architecture are helping banks and other lenders overcome cost and regulatory pressures, while becoming more agile and innovative. While choosing a solution from the many options that are available, a mortgage provider must ensure that it addresses not just business, but also operational needs from end-to-end. For the purpose of illustration, consider a request for a change in mortgage plan from a borrower with an irregular income. Typically, mortgage lenders have a separate underwriting team attending to such customers. When this activity is digitized and automated, the system must assign the request to the right personnel. Should it not be capable of meeting this or other operational requirements, the lender may have to maintain a separate application to do the job. Often, such applications, which are intended to be temporary fixes, end up as permanent fixtures. As the applications multiply, they make the system cumbersome and inefficient. The only viable option therefore is an integrated solution fulfilling both business and operational requirements.

While choosing a mortgage origination solution, lenders should also pay heed to the following considerations:



• **Flexibility:** While replacing a legacy system it is important to ensure the incoming platform is enabled with Microservices and APIs so new products, services and features can be introduced easily and quickly taken to market.



• **Bundled service offering:** Vendors commonly offer only application development and support, leaving the bank to deploy its own team to take care of operational support. However, select providers with extensive knowledge of these operational requirements have a bundled service offering, where a BPO team attends to operational needs, while a separate ADM team takes care of

tech support. This enables the lender to maintain a lean team and save a substantial portion of loan origination and servicing costs.



• **Alternative credit scoring**

model: Traditional mortgage lenders use established scoring models – CIBIL or FICO, for example – to assess creditworthiness of borrowers. Since most millennial generation customers don't have a credit history, the lenders are unable to give them loans. New-generation lending platforms are stepping into this white space, using alternative scoring models that track other financial behavior, such as rent repayment pattern, mobile payment etc. to not only earn revenue, but also acquire deep insight about young consumers. It is therefore advisable for lenders to choose a solution that can handle both traditional and alternative scoring methods, so they can service millennial borrowers and increase the customer base by up to 20 percent. Regulators and Government-Sponsored Enterprises have also started accepting loans following these alternative credit scoring models.



• **Customized lead generation:**

Currently, most banks offer standardized mortgage products through their distribution channels. Customization, which is very common in wealth management, is slowly catching on in the mortgage business. This is being achieved

by using robo-advisers to ask prospective borrowers a series of questions – where the response to a question determines the next one – to identify (or customize) the best-fit options. Apart from offering customers the most relevant mortgage product, this reduces operational cost, training cost and cost of quality, and also removes location constraints.



• **AI/automated feedback**

loop: From a lender's perspective, the mortgage cycle has three components, namely origination, servicing and default management. Since the components have linkages, the performance of the loan must be measured across all three, and data from each component should be fed back into the cycle to update the other components as required. An illustration may be useful: say that retrenchment in the automobile sector results in laid off employees defaulting on their home loan repayments. Hence scoring in loan origination needs to be modified by changing the risk weightage attached to automobile sector workers. In a traditional system, gathering insights and making changes can take several months during which new applications from automobile company employees continue to be processed according to the existing guidelines. But an AI-enabled system can quickly (within 3 weeks) feed data from the default management process into the origination process to change the risk weightage for new mortgage applications.





Accelerated Loan Purchase:

For large banks in the U.S., wholesale loan origination – buying loans from small banks who actually originate the loan – and bundling for onward sale to Government Sponsored Enterprises (GSE), is a huge profitable business in addition to originating through a retail channel. Before purchasing a loan, a bank needs to ensure it is compliant with all the investor guidelines. Funding process takes about 45 days, as bank officials have to manually validate several hundred pages

of documents. Automation here, can slash the time by more than half, starting from breaking down a single, consolidated PDF file into individual documents right up to indexing, versioning and extracting content in digital form. Now the officer only needs to do an eyeball check to verify that the extracted content is accurate, and make necessary amendments manually before the system processes it further. With accelerated processes, using the same warehouse line of credit, more loans can be generated and purchased. This solution may also be used for Post-Closing and purchasing Mortgage Servicing Rights.

Mortgage lenders are finding it challenging to fulfill the expectations of regulators and customers. On the other hand, new-age competitors, riding on the latest digital platforms, are taking market share by offering omnichannel experiences and agile services. Traditional players must transform quickly, or risk losing out. One way to do that is to progressively adopt digital solutions in different mortgage origination and servicing processes. However, lenders must exercise thought before selecting a solution to make sure it is the right one for their needs.

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Anu Beri is an Industry Principal and leads the Mortgage Practice for the Financial Services Domain Consulting Group at Infosys. She started her career in Investment Banking and Financial Services industry, later moving to Information Technology for Financial Services. She has work experience of over 22 years. She has extensive global experience in IT solution design and in managing and delivering large IT projects. In her current role, she and her team work with leading Mortgage firms and banks to implement the latest technologies, drive business growth and profitability and increase customer satisfaction. She can be reached at Anu_Beri@infosys.com



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Vishu has over 19 years of industry experience (mostly into Process and Domain Consulting, and Analysis) and 7+ years of experience in Mortgages with extensive expertise in Business Process Improvement. He has handled consulting engagements which helped the clients to reduce operational risk, optimize cost, drive productivity improvements, process standardization, aligning with industry best practices and establishing better governance structures.

Over the years, he has provided domain related knowledge to various teams owing to his huge experience. He is personally involved in guiding the teams in adopting latest Mortgage technologies. He is also guest lecturer in premium institutes of country such as IIT Madras - Department of Management Studies, IFMR - Institute for Financial Management and Research, NIT-Trichy - Department of Management Studies etc. He can be reached at Viswanathan_C@infosys.com

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