





IMPROVING MORTGAGE CUSTOMER EXPERIENCE

One of the longest relationships that a customer can have with a bank is also one of the least customer friendly. Ironic, isn't it? Taking out a mortgage draws the joy out of buying a house. But fintechs are changing that and forging ahead with smoother digital mortgage experiences. Banks and traditional mortgage providers are taking note, and are trying to catch up on customer engagement and satisfaction.

Mortgages — a reality check

Mortgages have historically been a profitable business for banks and lenders. And as such, investments towards customer experience were not prioritized. But the tide is turning. As shown in Figure 1, profitability has fallen while the cost of originating loans has increased among independent mortgage banks and mortgage subsidiaries.

There are multiple reasons for this. Heightened regulation is increasing costs, while growing competition from digital challengers is putting pressure on sales. Meanwhile, a history of underinvestment in legacy systems is holding back firms' agility to keep pace with these trends. The answer now lies in improving the customer experience.

For consumers, the process of obtaining a mortgage is one of the most challenging rites of passage. Consumers are undereducated about the mortgage process¹ and are faced with a heap of jargon over an unknown and long-drawn process that leaves them confused, frustrated and anxious. For many, this turns the

experience of buying a home into a nightmare.²

Mortgage lenders that get customer experience right will in turn create engaged customers who are more likely to return to the same mortgage provider

According to a 2015 Gallup study, only 22% of mortgage buyers were fully engaged with their mortgage lender throughout the mortgage lifecycle. Among them, 93% said they would recommend their mortgage provider to others, compared to only 3% of disengaged customers.³

End-to-end digitization is the answer

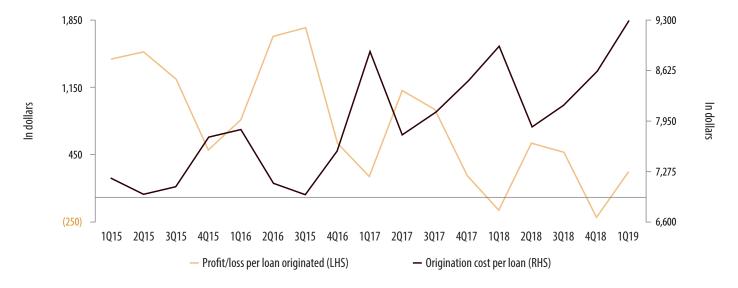
It's clear that the future of banking and mortgages origination is through digital channels. This structured and automated process is not only convenient for customers but is also something they have come to expect as a minimum, learning from their experiences with retail banking and

shopping. In the U.S., online loan originations have grown 30% annually from 2010 to 2017, according to the National Bureau of Economic Research (NBER). Surveys also show that 92% of customers researched mortgages online, versus only 57% in 2016. Meanwhile, digitization has helped fintech lenders process mortgage applications 10 days faster compared with offline traditional lenders.

Traditional banks do offer some form of online lending capabilities, such as checking loan status, accessing basic account information and making loan payments. However, the most important capabilities — online application, customer onboarding, loan processing, underwriting and disbursement — have yet to be technologically revamped.

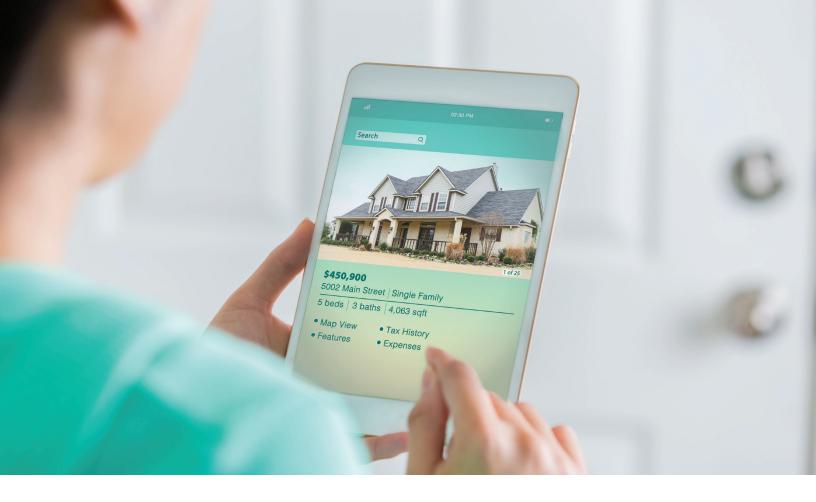
The challenge for large, established banks comes from their reliance on legacy systems that struggle to deliver necessary capabilities for a good digital customer experience. Making even minor changes takes considerable effort in terms of time, resources and money. And for traditional lenders, time is running short.

Figure 1. Rising mortgage origination costs



Source: Mortgage Bankers Association





Fintechs lead in customer experience transformation

While traditional lending firms are providing unsatisfactory customer experience, fintechs, on the other hand, operate on a new operating model that keeps the customer at the center of the mortgage lending process. According to the J.D. Power U.S. Primary Mortgage Origination Satisfaction Study, Quicken Loans led the ratings in 2019 for a tenth consecutive year.⁷

Built on the cloud and open source, fintech startups have breathed life into customer experience and innovation in the mortgage industry

Fintech startups are redefining the ways customers shop for a mortgage,

interact with mortgage providers and apply for loans.

The core of the fintech push in mortgages is centered on streamlining processes and lowering costs, characteristics that banks have been significantly lacking.

From using innovative methods of credit assessment to adopting technology that reduces the time required to approve and disburse a loan, fintech startups are leading the way. Companies like SoFi and Aire break from the tendency to look backward into the past and instead use many forward-looking indicators to assess the creditworthiness of borrowers. SoFi takes into account factors such as the borrower's education and employment information, including graduating university, field of study and type of job, to determine the person's future potential for repaying the mortgage.8 Aire goes beyond just transactional banking data, incorporating each

borrower's finances, profession and lifestyle into its assessment; at the back end, the company's artificial intelligence system analyzes and scores borrowers.⁹

With the launch of Rocket Mortgage in 2015, Quicken Loans shook the traditional home loan application process by offering customers a mortgage application that can be completed in under 10 minutes.10 The company digitally collects documentation on the customers' credit history, their income and assets directly from bank statements and tax filings. This allows the firm to make approval decisions within minutes and reduce the mortgage processing time by nearly 12 days. The advantage resulted in Quicken Loans surpassing all incumbent banks to become the largest mortgage originator in Q4 2017.11

Another example of a fintech that has simplified and digitized the mortgage application process is Blend, which

processes over \$2 billion in mortgage applications daily for banks. The startup's "one-tap" product has shrunk the preapproval process by gathering customer information on income and assets from banks and providing an on-the-spot answer regarding preapproved loan amounts.¹²

Occasionally, due to poor communication from the lender, a customer's preapproved loan is rejected after a home selection is made, crippling the home-buying process and wasting the time of the buyer, mortgage broker and seller alike. Quicken Loans is once again a great example of how to solve this communication conundrum. The lender's Power Buying Process offering gives customers, their real estate agents and the sellers the confidence that the customer has qualified for the loan. Borrowers can also get a verified preapproval letter by uploading the relevant documents — W-2s, pay stubs, tax returns and bank statements — directly.¹³

Traditional customers are provided with hybrid offline and online touch points, but suffer from the lack of an end-to-end loan application process. This also results in increased paper documentation and a longer time to process loans. loanDepot aims to resolve these issues with "mello smartloan," an end-to-end digital mortgage that caters to online customers. By taking advantage of this loan application and processing approach, and the digitized validation, customers can reduce their time to close by up to 75%.¹⁴

Fintech startups are also partnering among themselves to provide new solutions to customers. Starling Bank partnered with digital mortgage broker Habito, which offers customers simple and intuitive products that deliver mortgage advice. ¹⁵ Another example is Hello Bank, which understood that it was very well positioned to become its customers'

real estate manager and integrated immovlan.be, a real estate website, in its platform to help clients search for a house.¹⁶

It's no surprise that fintech startups, with their lack of legacy technology and a singular focus on easing customer experience, have garnered significant market share. In 2011, 50% of mortgage originations in the U.S. were offered by three banks — JPMorgan Chase, Bank of America, and Wells Fargo. By September 2016, their share of loan originations dropped steeply to 21%. Meanwhile, six of the top 10 largest lenders by origination volume were non-banks, including Quicken Loans, loanDepot, and Freedom Mortgage.¹⁷ Their mortgage originations have grown annually by 30%, from \$34 billion in 2010 (2% of market) to \$161 billion in 2016 (8% of market).6 A Federal Reserve Bank of New York study showed that if mortgage application volumes doubled, the loan processing time for traditional lenders increased by 13.5 days, compared to only 7.5 days for fintech lenders.6

Grassroots customer issues

Mortgages are complex and take a long time to process, and the experience is stressful for customers, with 97% of surveyed borrowers feeling frustrated with the mortgage process.⁴ And that's not all. Nearly all the 189 first-time customers surveyed by YouGov are worried about purchasing a home. Cost and uncertainty were the primary drivers of their fear. But most shocking is that 62% of customers reported that they suffered from "mortgage-related stress." ²

Despite all the heartache, you would hope most customers are satisfied with their lender. Yet a J.D. Power study shows that 27% of first-time buyers and 21% of all borrowers regret their choice of lender.¹⁸ Customers were dissatisfied with their lender due to a lack of communication, unfulfilled promises and pressure to choose a particular loan. With a host of other issues that customers need to address, this is just the tip of the iceberg.

Inaccurate credit scoring - Customer issues begin from the word "go." Credit agencies rely on backwardlooking assessment methods developed decades ago that don't accurately represent consumers' creditworthiness.¹⁹ For their part, banks' credit assessments do not take into account consumers' reality and today's changing lifestyles. Although these organizations have huge volumes of customer data, they struggle to know their customers. Ben Bernanke, the chairman of the Federal Reserve until 2014, was shockingly denied a mortgage refinance despite taking a role with a prominent think tank in Washington and earning \$250,000 for his first public speaking engagement since stepping down from the Fed.20

Lack of transparency – Customers are kept in the dark as to what stage the mortgage application is in, where the roadblocks are, how long it will take to close, and whether the bank will approve the final amount they are expecting. Nor are refinancing customers spared this trouble — research by Habito has found that 60% of mortgage holders end up postponing the switch due to confusing contracts.²¹

Inefficient document management

– According to Bill Emerson, vice chairman of Quicken Loans, the average U.S. mortgage required 300 pages of documents before the housing crash. This number has ballooned to 800 in 2018, owing to various new regulations.⁴ In any given year, the mortgage industry generates over six billion new pages of paper.²²

The lack of automated processes to manage documents restricts a





lender's ability to collect accurate and complete customer data that affects loan delivery. This has a direct impact on customer experience and the cost of operations.²³

Prolonged loan process – Today, customers aren't willing to wait for months to find out whether they will be able to finance their home purchase. Yet in 2018, it took an average of 44 days to close a mortgage, according to the Mortgage Bankers Association.

Banks need to improve their processes so that they can improve productivity; close more loans; and increase revenue per loan with cheaper, faster and automated services. Customers expect improved experiences and fintech lenders are able to cater to their call. Yet, most banks lag behind on providing such experiences.

Lack of an end-to-end online platform – Mortgages are complex, and customers have to deal with

multiple systems and touch points. Currently, customers are not provided with a single interface for mortgage application, documentation and follow-up. A few processes are offline, while others are on a single channel only. Customers today expect a simple end-to-end home purchase experience that minimizes the friction caused by multiple parties involved.

Many banks have learned that an end-to-end view of the entire customer journey was a critical success driver, as per McKinsey. For example, a Benelux bank increased efficiency by 30% after it redesigned its business-lending process from end-to-end and eliminated the need for multiple handovers.²⁴ Yet, only 7% of bank products can be handled digitally from end-to-end, as per Bain and SAP Value Management Center estimates.²⁵

Lack of an omnichannel experience

- Customers demand tailored services, whenever they want,

wherever they are and however they interact. Currently, their experience is fragmented across multiple touch points — from mobile apps, social media platforms and local branches to customer service centers. Engagement across multiple channels becomes extremely tedious during the loan origination process. One study showed that over 75% of millennials would prefer to bank with institutions that offer both in-branch and online operations. According to McKinsey, a European bank that offered a seamless omnichannel experience saw consistent sales growth of as much as 20% over two to three years.26

Technology stacks that fintechs thrive on

Fintech startups have understood early the benefits that technology offers. They use analytics to perform better credit assessments and debunk myths, such as the belief that subprime borrowers who own a house and pay a mortgage are more stable than subprime borrowers who rent. ¹⁹ With new insights gained from analytics and machine learning, lenders can make more informed decisions when evaluating loan applicants.

Cloud-based and API-enabled fintechs such as Blend help cut the time and expense of originating a mortgage, while also integrating their platform.²⁷ This helps them make changes to their products and services quickly.

Mortgage lenders offering online loan origination platforms that are built on algorithms have risen in recent years. Of the 2,098 lenders analyzed in an NBER study, 45% offer some form of online or app-based mortgage contracting. The study indicated that although lenders continued to provide offline loan applications, the trend was clearly toward providing automated underwriting.²⁸

Rocket Mortgage has created a platform that makes it easy for customers to submit the required documentation online to get an underwriting decision. Customer data

is automatically pulled into the system, and algorithms work toward providing a set of loan options; the fintech also uses eSignature and custom preapproval letters for borrowers.²⁹ This has enabled its online platform to grow and account for two-thirds of its parent company Quicken Loans' \$32 billion in originations in Q2 2019.³⁰

Artificial intelligence and machine learning is being used to automate various functions in the mortgage process and is also expected to automate nearly 85% of the paperwork.31 Take Unisource National Lenders for example. The title insurance and escrow services provider uses artificial intelligence and machine learning to offer customized lending solutions for mortgage and real estate agencies.32 In another example, loanDepot has partnered with OJO Labs to use artificial intelligence for services that help customers communicate with realtors.33

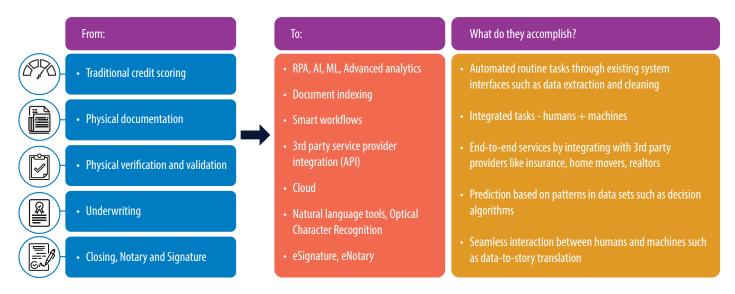
Digital signatures save time and effort for all parties involved — the customer, the notary and the lender. Quicken Loans offers a remote online notarization process in which

all documents are digitally signed and notarized. Notaries connect to customers via videoconference who walk them through each step of the closing process.³⁴

Deploying robotic process automation in the mortgage lending process will result in closing loans faster, with higher data accuracy and lower risk. Validation of customer data such as credit checks, repayment history, employment records between two systems can be completed within seconds. Introducing bots for such manual processes can also reduce processing costs by 30% to 70%.³⁵

loanDepot's digital mortgage product was introduced to eliminate paperwork, increase security and reduce mortgage origination turn time. The platform automates backend loan operations, and processes data that allow it to be used from loan processing, to appraisal and validation.³⁶ DocuSign APIs were used to build the customer portal to manage workflows, including eSignature.³⁷

Figure 2. Digitizing mortgages to improve customer experience



Source: Infosys Ltd

Speed up or fall behind

Whether it is a fintech or an established mortgage provider, the gold standard in mortgage experience is believed to be one that truly supports the house buyer end-to-end along with their experience. This could be from searching for a house through an estate agent to identifying local schools and amenities. Once a house has been selected it could include also finding a mortgage broker or researching

mortgages, before applying and completing on the purchase through legal services provision. Finally, once purchased, the buyer could also be provided with auxiliary services such as change of address, utility connections or building maintenance.

No player has yet been able to capture all of this journey on their platform – and the jury is still out on whether it is even valuable to do so for either the consumer or the bank. Nonetheless,

the race is on to provide the best service and experience for buyers. And established banks will have to deal not only with fintechs but also with technology giants such as Amazon. The e-commerce giant's recent partnership with Realogy, the largest U.S. residential real estate brokerage, has signaled that technologists, too, are coming for a share of the mortgage pie.³⁸

References

- ¹ "Number of mortgage providers with revenue over \$500 million in US, UK, Germany, France, Australia," Fannie Mae, June 2019, https://www.fanniemae.com/resources/file/research/housingsurvey/pdf/consumer_understanding_research.pdf
- ² "Daniel Hegarty Habito: How tech is taking the misery out of mortgages," 11FS, May 30, 2019, https://11fs.com/blog/habito-how-tech-is-taking-the-misery-out-of-mortgages
- ³ "Getting a Mortgage: Lousy Experience for Customers," Gallup, November 10, 2015, https://news.gallup.com/businessjournal/186557/getting-mortgage-lousy-experience-customers.aspx
- 4 "The Future Is Digital Mortgages," Veri-Tax, October 12, 2018, https://veri-tax.com/2018/10/the-future-is-digital-mortgages/
- ⁵ "The Role of Technology in Mortgage Lending," Federal Reserve Bank of New York, February 2018, https://www.newyorkfed.org/medialibrary/media/research/staff_reports/sr836.pdf
- ⁶ "What fintech innovations can the UK mortgage market learn from and adopt?" Mortgage Finance Gazette, April 11, 2019, https://www.mortgagefinancegazette.com/features/fintech-innovations-can-uk-mortgage-market-learn-adopt-11-04-2019/
- 7 "Mortgage Customer Satisfaction Improves but Loan Boom Reveals Foundation Cracks, J.D. Power Finds," J.D.Power, November 14, 2019, https://www.jdpower.com/business/press-releases/2019-us-primary-mortgage-origination-satisfaction-study?utm_campaign=2019%20US%20FS%20Primary%20Mortgage%20Origination%20Study%20Promotions&utm_source=hs_email&utm_medium=email&utm_content=79421673&_hsenc=p2ANqtz-9xUohA47bhVji-Aa2z3f_dxr9k-oO56eHGqHy_wnW-MHVUW4HjXI_nvpPYoyXKtLpEKdwiBSj6s64AD7T4I-Q4W0wlqFw&_hsmi=79421673
- ⁸ "5 Reasons New Lenders Are Ignoring FICO Credit Scores," Forbes, April 21, 2015, https://www.forbes.com/sites/nickclements/2015/04/21/5-reasons-new-lenders-are-ignoring-fico-credit-scores/#c2fcc9528385
- 9 "Online Lender SoFi Debuts Two Free ETFs," PYMNTS.com, February 26, 2019, https://www.pymnts.com/loans/2019/online-lender-sofi-free-etf-investments/
- ¹⁰ "The growing market of online alternative and nonbank mortgage lending," Business Insider, September 5, 2019, https://www.businessinsider.com/alternative-nonbank-mortgage-lending-2019-9?IR=T
- "THE ONLINE MORTGAGE LENDING REPORT: How banks are striking back against Quicken Loans and other digital-first lenders in the \$9 trillion US mortgage market," Business Insider, July 12, 2019, https://www.businessinsider.in/finance/the-online-mortgage-lending-report-how-banks-are-striking-back-against-quicken-loans-and-other-digital-first-lenders-in-the-9-trillion-us-mortgage-market/articleshow/70182987.cms
- ¹² "Start-up Blend gives big banks `one tap' home loans to compete with Quicken's Rocket Mortgage," CNBC, September 23, 2019, https://www.cnbc.com/2019/09/23/startup-blend-gives-banks-one-tap-to-fight-quickens-rocket-mortgage.html
- 13 "Breaking Down the Power Buying Process," Quicken Loans, June 25, 2018, https://www.quickenloans.com/blog/breaking-power-buying-processtm
- 14 "loanDepot Introduces New Digital Home Loan Solution," The M Report, February 20, 2019, https://themreport.com/headline/02-20-2019/loandepot-introduces-new-digital-home-loan-solution
- 15 "Wealthsimple and Habito go live in Starling Bank's in-app marketplace," Starling Bank, May 3, 2018, https://www.starlingbank.com/news/wealthsimple-habito-marketplace/
- 16 "When your real estate agent decides to become a bank," Medium.com, August 2, 2019, https://medium.com/the-banking-scene/when-your-real-estate-agent-decides-to-become-a-bank-cfdc1b0710d1
- 17 "The mortgage market is now dominated by non-bank lenders," Washington Post, February 23, 2017, https://www.washingtonpost.com/realestate/the-mortgage-market-is-now-dominated-by-nonbank-lenders/2017/02/22/9c6bf5fc-d1f5-11e6-a783-cd3fa950f2fd_story.html
- 18 "Buyer's Remorse Is Relatively High despite Rising Satisfaction, J.D. Power Finds," J.D. Power, November 10, 2016, https://www.jdpower.com/business/press-releases/jd-power-2016-us-primary-mortgage-origination-satisfaction-study



- 19 "Reimagining Credit Assessment For Mortgage Borrowing Enabling Dreams And Bottom Line," Express Computer, March 6, 2019, https://www.expresscom-puter.in/artificial-intelligence-ai/reimagining-credit-assessment-for-mortgage-borrowing-enabling-dreams-and-bottom-line/33766/
- ²⁰ "Ex-Fed chief Bernanke denied loan to refinance his home," Fox News, October 6, 2014, https://www.foxnews.com/politics/ex-fed-chief-bernanke-denied-loan-to-refinance-his-home
- ²¹ "Why are mortgages broken and confusing?" 11FS, May 14, 2019, https://11fs.com/blog/why-are-mortgages-broken-and-confusing
- ²² "Electronic Loan Delivery," Xerox, https://www.xerox.com/downloads/usa/en/m/MORTAGE_SVC_ElecLoan_WP.pdf
- 23 "Iron Mountain Mortgage Servicing Document Management," Iron Mountain, 2019, https://www.ironmountain.com/resources/data-sheets-and-brochures/m/iron-mountain-mortgage-servicing-document-management
- ²⁴ "The lending revolution: How digital credit is changing banks from the inside," McKinsey & Co, August 2018, https://www.mckinsey.com/business-functions/risk/our-insights/the-lending-revolution-how-digital-credit-is-changing-banks-from-the-inside
- 25 "Retail Banks Wake Up to Digital Lending," Bain, December 15, 2015, https://www.bain.com/insights/retail-banks-wake-up-to-digital-lending/
- ²⁶ "The balancing act: Omnichannel excellence in retail banking," McKinsey & Co, January 2019, https://www.mckinsey.com/industries/financial-services/our-insights/the-balancing-act-omnichannel-excellence-in-retail-banking
- ²⁷ "In Fight To Make Mortgages More Nimble, Blend Bets On Partners," Forbes, April 17, 2018, https://www.forbes.com/sites/samanthasharf/2018/04/17/in-fight-to-make-mortgages-more-nimble-blend-bets-on-partners/#71ae07802788
- ²⁸ "Consumer-Lending Discrimination In The Fintech Era," National Bureau Of Economic Research, June 2019, https://www.nber.org/papers/w25943.pdf
- ²⁹ "Lessons from Rocket Mortgage: create a hybrid mortgage machine," Floify, https://floify.com/blog/hybrid-process-rocket-mortgage
- ³⁰ "Digital Mortgages Reduce Discrimination (And Loan Costs) For Black And Latinx Borrowers: New Study," Forbes, October 1, 2019, https://www.forbes.com/sites/alyyale/2019/10/01/new-study-digital-mortgages-reduce-discrimination-and-loan-costs-for-black-and-latinx-borrowers/#7a7cbf27af3b
- ³¹ "Improving document management in financial services," BAI, October 20, 2015, https://www.bai.org/banking-strategies/article-detail/improving-document-management-in-financial-services
- ³² "This Company Uses Al To Help Lenders Automate The Mortgage Loan Process," Forbes, August 22, 2017, https://www.forbes.com/sites/julianmitch-ell/2017/08/22/this-company-uses-ai-to-help-lenders-automate-the-mortgage-loan-process/#d78da482809a
- 33 "loanDepot Announces Agreement with Artificial Intelligence Real Estate Technology Company, OJO Labs," PR Newswire, October 23, 2017, https://www.prnewswire.com/news-releases/loandepot-announces-agreement-with-artificial-intelligence-real-estate-technology-company-ojo-labs-300541108.html
- 34 "Quicken Loans Becomes the First Mortgage Lender With Ability to Perform eClosings in All 50 States," Markets Insider, October 7, 2019, https://markets. businessinsider.com/news/stocks/quicken-loans-becomes-the-first-mortgage-lender-with-ability-to-perform-eclosings-in-all-50-states-1028580651
- 35 "Robotic Process Automation (RPA) in Banking Industry [Updated 2019]," Automation Edge, https://automationedge.com/robotic-process-automation-rpain-banking-industry/
- ³⁶ "loanDepot shatters mortgage industry norms with mello smartloan, a first-of-its-kind end-to-end digital home loan that--in just seven minutes--can identify significant time- and cost-savings and enable customers to close in as few as eight days," PR Newswire, February 20, 2019, https://www.prnewswire.com/news-releases/loandepot-shatters-mortgage-industry-norms-with-mello-smartloan-a-first-of-its-kind-end-to-end-digital-home-loan-thatin-just-seven-minutescan-identify-significant-time--and-cost-savings-and-enable-customers-to-close-in-as-few-a-300798561.html
- ³⁷ "loanDepot Streamlines End-To-End Loan Process with the DocuSign Signature API," DocuSign, July 5, 2016, https://www.docusign.com/blog/loandepotstreamlines-end-to-end-loan-process-with-the-docusign-signature-api/
- 38 "Amazon's new real estate partnership with Realogy promises homebuyers up to \$5k in credits," Geek Wire, July 23, 2019, https://www.geekwire.com/2019/amazon-moves-real-estate-inks-new-deal-brokerage-conglomerate-realogy/



Authors

Anu Beri

Industry Principal – Financial Services, Domain Consulting Group Anu_Beri@infosys.com

Samad Masood

Infosys Knowledge Institute Samad.Masood@infosys.com

Sharan Bathija

Infosys Knowledge Institute Sharan_BP@infosys.com



About Infosys Knowledge Institute

The Infosys Knowledge Institute helps industry leaders develop a deeper understanding of business and technology trends through compelling thought leadership. Our researchers and subject matter experts provide a fact base that aids decision making on critical business and technology issues.

To view our research, visit Infosys Knowledge Institute at infosys.com/IKI



For more information, contact askus@infosys.com

© 2019 Infosys Limited, Bengaluru, India. All Rights Reserved. Infosys believes the information in this document is accurate as of its publication date; such information is subject to change without notice. Infosys acknowledges the proprietary rights of other companies to the trademarks, product names and such other intellectual property rights mentioned in this document. Except as expressly permitted, neither this documentation nor any part of it may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, printing, photocopying, recording or otherwise, without the $prior\ permission\ of\ Infosys\ Limited\ and/\ or\ any\ named\ intellectual\ property\ rights\ holders\ under\ this\ document.$





