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Digital Borrower Engagement….

A Critical Tool for the Post-Forbearance Tidal Wave

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Table of Contents
White Paper

01. Executive Summary
Pandemic Impact

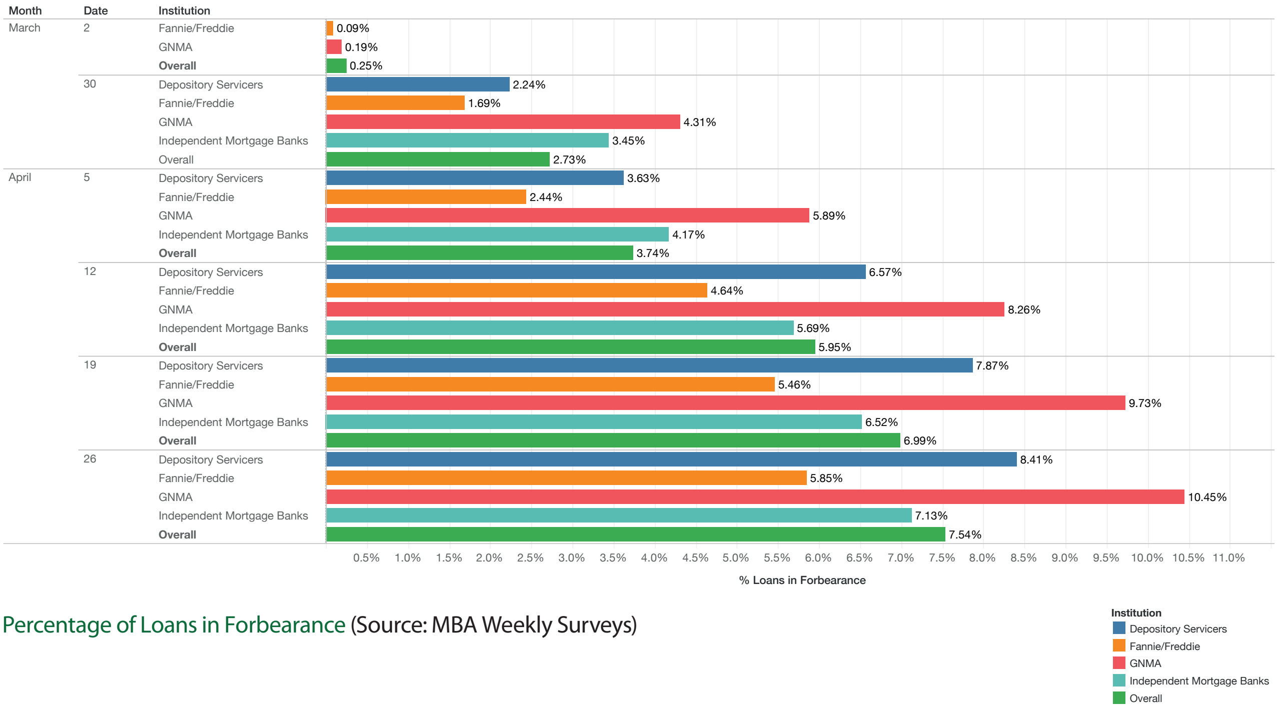
01

Covid 19's impact on the mortgage servicing industry is unlike anything we have seen before, not just in the magnitude of the economic downturn but also in its suddenness.

Unemployment increased from 4.5% in April of 2007 (when New Century failed and triggered the sub-prime crisis) to 10% in October of 2009, a 5.5% increase in 18 months. Covid has caused unemployment to jump from 3.5% in February of 2020 to over 13% (estimated) in about 6 weeks.

Covid's impact has manifested at **22 times the speed of the 2008 crisis**. After the havoc wreaked by the 2008 crisis, it took many more years to devise solutions, roll out programs, deal with options and ultimately resolve the issues.

Banks and Servicers took up to 6 years to process the backlog, partly due to a lack of preparation and partly due to systemic constraints: regulations and government programs took time to enact; technology was not as advanced; there was great uncertainty about the impact of programs; experience was lacking; consumers were not as ready for digital engagement; traditional practices were difficult to change and adapt; and institutions were unsure how to deal with and react to auditors.



Percentage of Loans in Forbearance (Source: MBA Weekly Surveys)

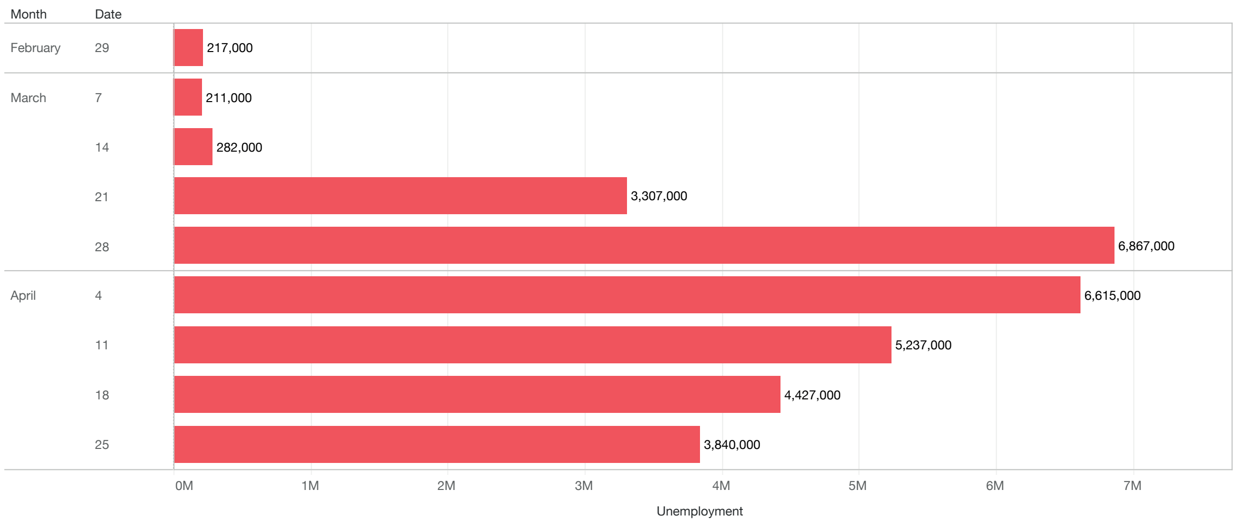
x22

Covid's impact has manifested at 22 times the speed of the 2008 crisis.

The challenge presented by Covid is far more concentrated and intense than that experienced during the 2008 crisis, but fortunately the landscape is very different. Having learned from the previous crisis, Congress has been very quick to respond through the CARES Act and with follow on packages and announcements. Ginnie, Fannie and Freddie are making announcements regularly and are working hard to develop streamlined programs to make it easier for everyone to deal with this crisis. There is a lot of activity designed to help move the proverbial "pig through the python".

Consequently, everything in this crisis will happen in a much more compressed time period. It starts now with the millions of forbearance applications and then will quickly transition to programs to help borrowers emerge from forbearance. Many borrowers will need to be enrolled in repayment programs, but a large percentage will require full modifications or an alternative approach. A percentage of these modifications will in turn lead to alternative loss mitigation strategies (such as Short Sale or Deed in Lieu). Ultimately, some loans will enter foreclosure, and thus REO and disposition strategies will become important again.

Call centers and prepared scripts will be unable to handle the number of borrowers emerging from forbearance in the condensed time frame that results directly from the concentrated wave of borrowers entering forbearance. Hiring and training large call center staffs will prove risky and challenging at best.



Weekly Unemployment Filings (Source: Federal Reserve of Saint Louis)

+30 Million

Unemployed over the first 6 weeks of COVID-19

Digital, user-friendly engagement with the borrower offers the only solution that can help manage the forbearance resolution and loss mitigation processes with a high level of quality and consistency, help keep borrowers informed of options, frequently communicate with worried borrowers to reassure them, and feed into backend technology solutions that are designed to move the volume through the pipe all at once without letting borrowers fall through the cracks.

Some large institutions with well-resourced technology teams have great strategies in place to leverage infrastructure investments they have made over the past several years, but others are less prepared. New programs are bound to emerge from Ginnie and the GSEs and the ability to communicate clearly, manage the qualification process, and manage the transition from one step to the next is critical.

This paper examines the challenges that arise from the current forbearance wave and how mortgage servicers and other industry influencers can respond. The primary tenet of the paper posits that borrower engagement through easy-to-use digital engagement is a critical weapon in the armory required to deal with these challenges and will result in better outcomes for all stakeholders.

02. What do the numbers and timelines look like?
Pandemic Impact

02

Projecting the impact of COVID 19 on delinquency and downstream activities is fraught with risk.

We therefore approach this task with some amount of humility and rely on multiple data sources to interpolate our estimates. We then offer a simplified hierarchical cascade to project a reasonable estimate of the total impact of forbearance volume that Servicers will encounter over the next 18+ months.

In our prior white paper, we considered a wide range of estimates of forbearance activity that ranged from 5% to 25%, with our central estimate between 10% and 15%.[1] With incoming data, we now refine our primary projections for forbearance requests to between 10% and 12% and use 11% as our baseline. We believe the risk is on the upside due to delayed forbearance processing by some servicers, the possibility of a second infection wave, secondary economic impacts such as decreased international trade, election year strife, or another unforeseen black swan event. We thus retain the upper threshold estimate of 15%, but do not model this below.

We summarize our other assumptions and our rationale in the table below and enter these assumptions into a simplified flow (first with percentages, and then with total loan counts). Our simplified flow assumes no cyclic events

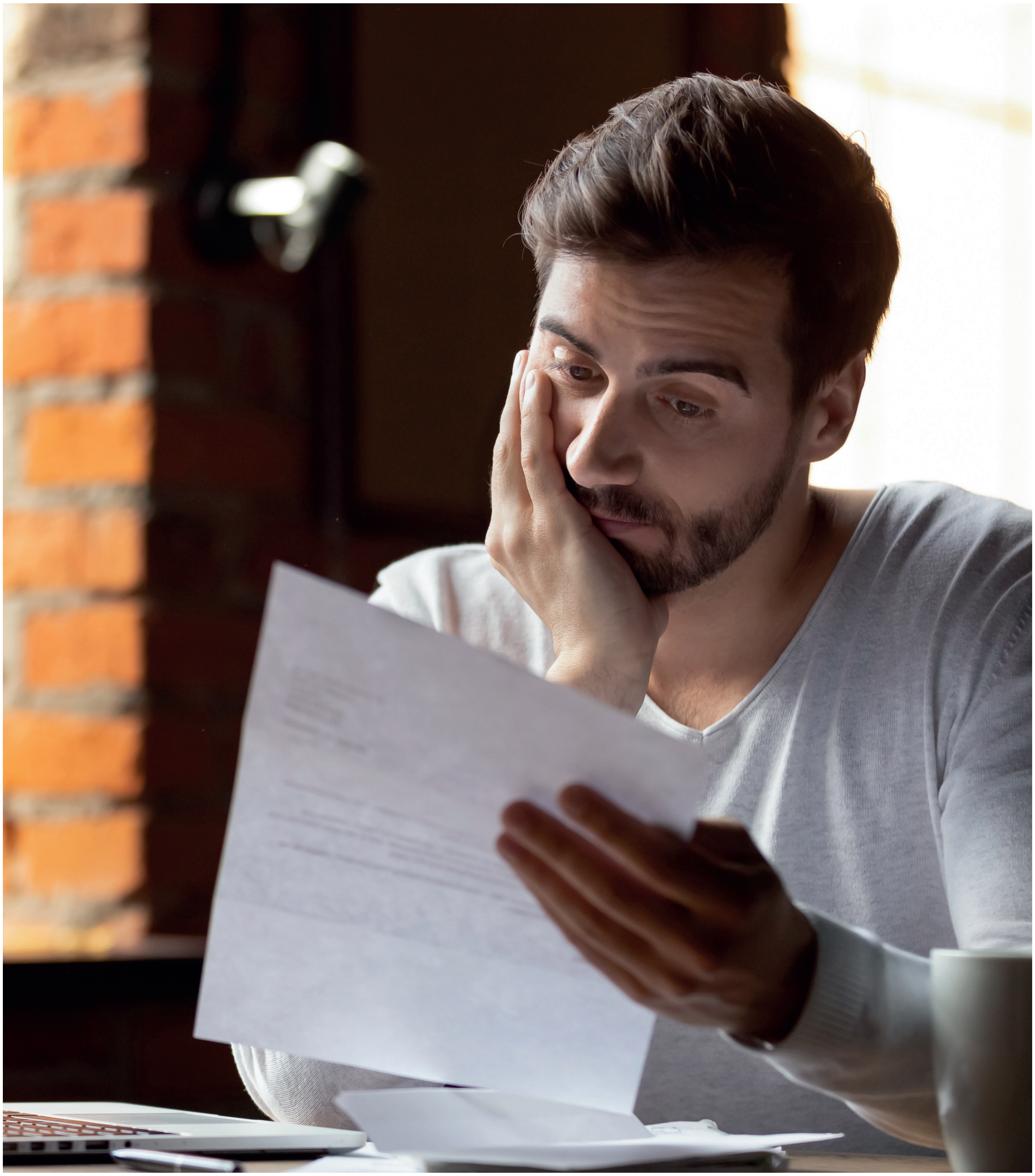
1 https://www.aspengrovesolutions.com/forbearance-in-the-cares-act/

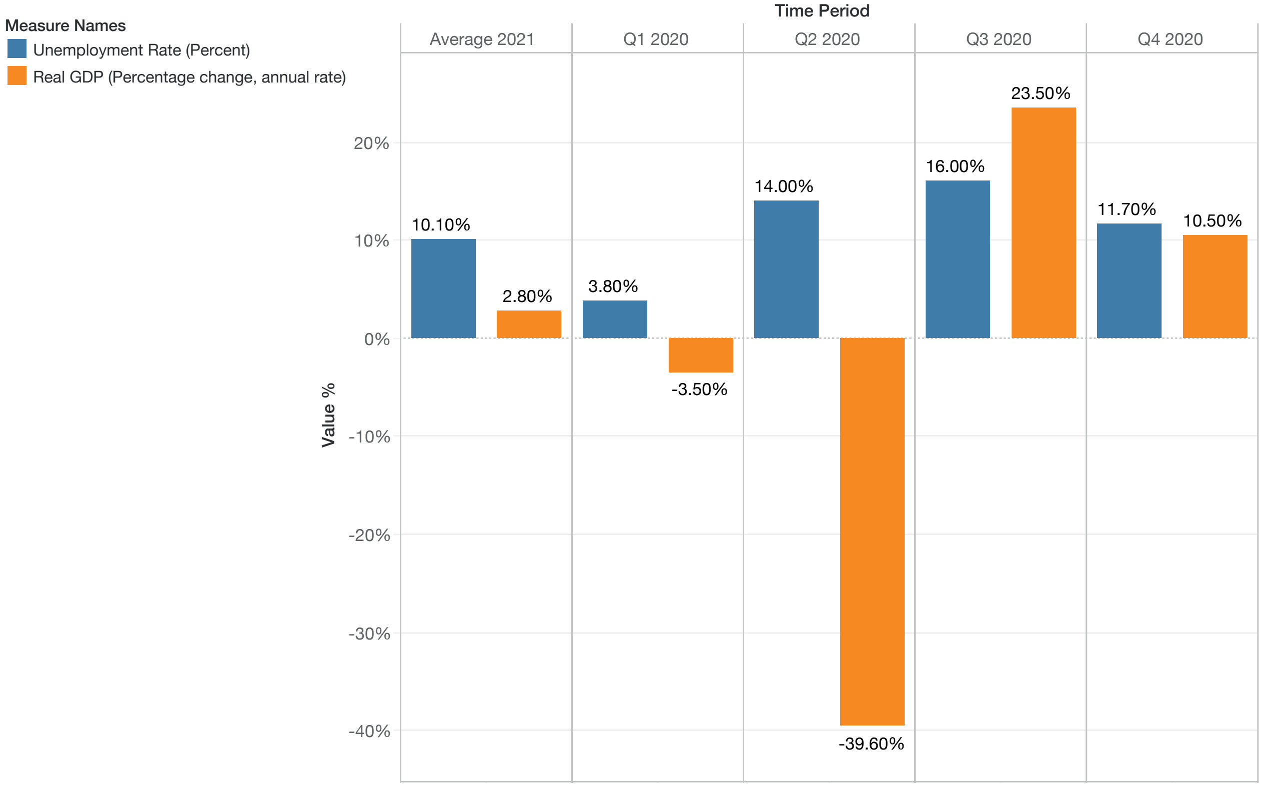
4 in 10

Americans would borrow money to cover a $1K emergency.

https://www.bankrate.com/banking/savings/financial-security-january-2020/

(e.g. second modification attempts) and that once a borrower leaves forbearance they cannot re-enter forbearance. In the real world, actual flows are more complicated, but the model does provide us a baseline against which to gauge overall numbers. Please see Appendix 1 -Data and Analysis for data sources and in-depth analysis/rationale of the numbers.





Congressional Budget Office GDP and Unemployment Projection

+10%

Anticipated Unemployment into 2021 – if so this crisis will not be short-lived.

Perhaps the most notable observation emerging from our analysis is the suddenness of the event. Unlike in the 2008-2009 crisis which built over time (peaking at 11.7% delinquency rate in 2010),[2] millions of recent forbearance requests have been crammed into an 8-week period. This creates a situation in which all the loans will be renewing forbearance and/or emerging from forbearance at essentially the same time. Accommodating the rise and subsequent decline in volume will create significant operational challenges for banks to train and staff call centers, underwriters and other specialists. Having good digital borrower engagement solutions will take some pressure off.

Our baseline projection anticipates an initial wave of 2 million borrowers exiting forbearance at 6 months while 4.6 million will exit forbearance at 12 months. Although servicers will and should encourage borrowers to re-establish payment currency as quickly as possible, we anticipate that a combination of borrower hardship and the generous terms of the CARES Act will cause most borrowers to delay emergence from forbearance. Supporting this conclusion are the unemployment and GDP projections from the Congressional Budget Office released on April 24th, which anticipate unemployment remaining above 10% into 2021.[3] If this happens, it is likely that later

2 https://fred.stlouisfed.org/series/DRSFRMACBS
3 https://www.cbo.gov/publication/56335

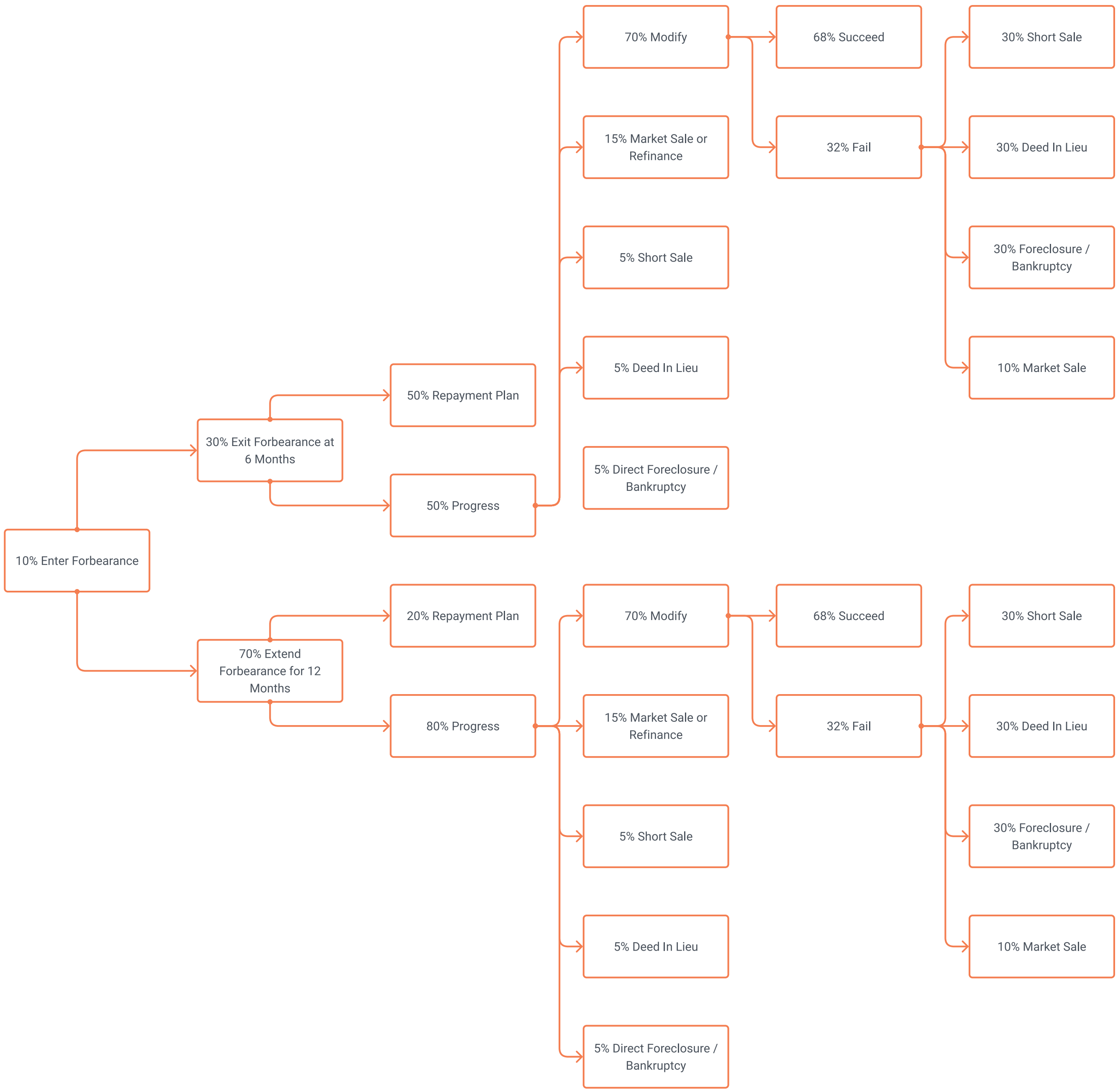
"just on the U.S. economy, there are things you can say, one can say, the first is that, in the near term, we're going to see, you know, significant declines in economic activity, significant declines in employment, & increases in unemployment."

Jerome Powell
Chair of the Federal Reserve

stage unemployment will shift from transitory unemployment to structural unemployment,[4] with corresponding consequences for forbearance resolution.

Assuming relatively optimistic acceptance of forbearance repayment plans, similar to what has been experienced after recent major hurricane disasters, we anticipate a million full modification workouts in 6 months, followed by a larger wave of over 3.5 million modification workouts at 12 months. The larger second wave is driven by our assumption that the majority of borrowers extend their forbearance (given the CBO's expectation that over 70% of the spike in unemployment rate persists into Q4 and beyond) and our belief that the much larger arrears after 12 months of non-payment will make forbearance repayment plans increasingly untenable for borrowers.

4 This concern was echoed in recent statements by Jay Powell at the April 29, 2020 press briefing. https://www.federalreserve.gov/mediacenter/files/FOMCpresconf20200429.pdf

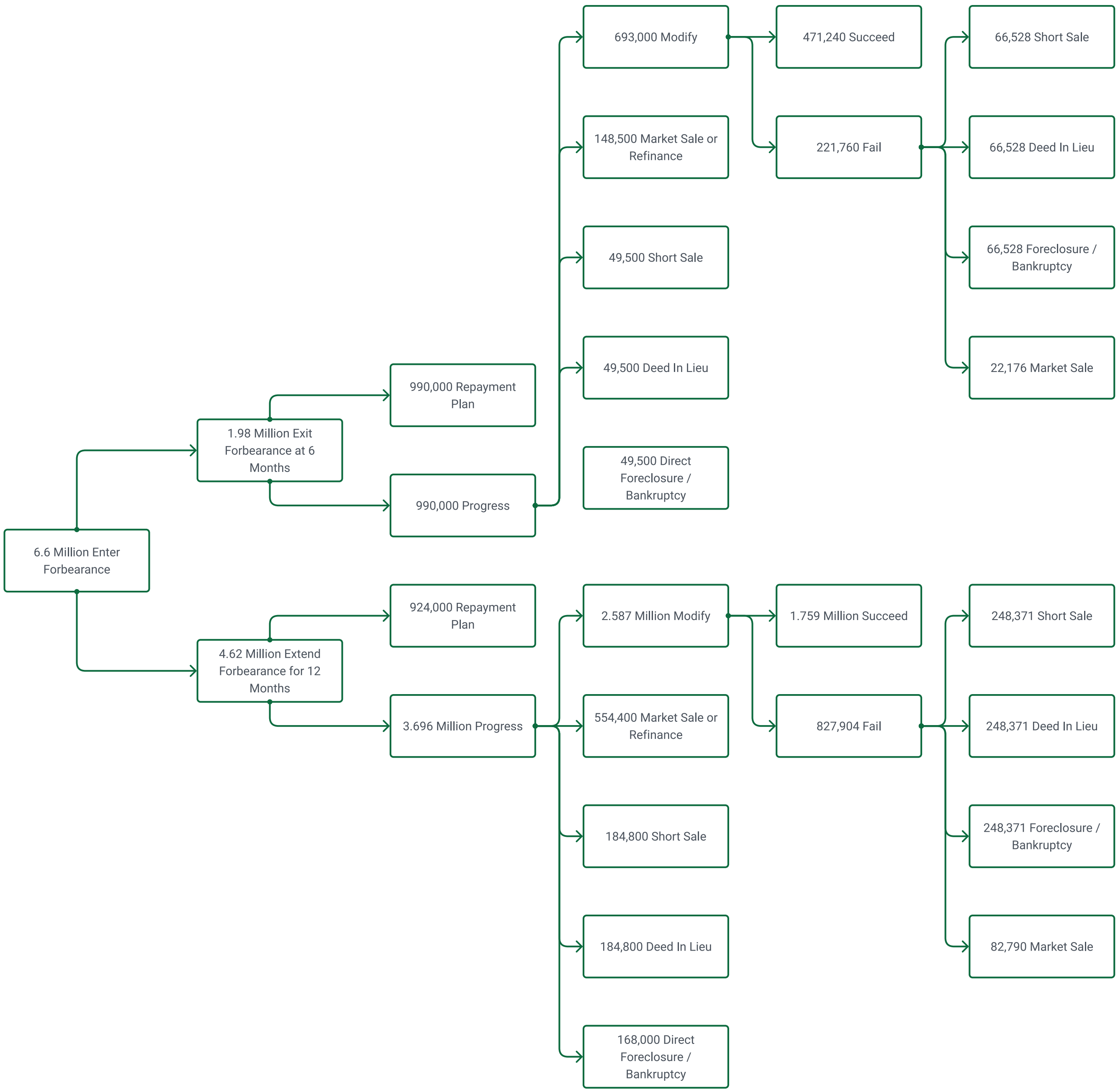


57%

the percentage of borrowers in forbearance who needed a mod after short term disaster relief following recent major hurricanes.

https://www.fanniemae.com/portal/funding-the-market/credit-risk/news/hurricane-affected-regions-performance-update-090619.html

One bright spot in our analysis is the expectation of higher modification success rates compared to the mortgage industry's experience in the 2008 crisis. Recent improvements in streamlining modification programs and engaging borrowers early in the delinquency process have shown significant improvements in outcomes, with over 2/3 of borrowers ultimately succeeding on their modifications. We strongly believe that having good borrower digital engagement will positively impact the outcomes for all



68%

Recent success rate for streamlined modifications in recent Urban Institute analyses

stakeholders. Unfortunately, this still leaves over a million borrowers who may ultimately require some other form of resolution, including short sale, deed in lieu, bankruptcy, or foreclosure. This latter set of borrowers represent the longest tail in the process, and could extend up to 3 years past the initial rush of forbearance requests (and possibly longer in judicial states). Even for this cohort, early and easy engagement through all channels will increase the likelihood of better outcomes.

03. The 3 Biggest Challenges
Pandemic Impact

03

The biggest challenge for everyone in our industry is to keep as many people as possible in their homes. With that overarching goal, Servicers will face three major challenges over the coming months, all of which can be ameliorated with digitization of borrower engagement processes:

Cost Control

During the last crisis and over an extended period, Servicers hired people and ramped up costs to deal with the problem. In recent conversations with several Servicers and industry experts, we have observed that Servicers are already planning to sharply increase the size of operational teams to deal with this wave, with the expectation that these increases will be temporary as teams are subsequently ramped down. Servicers anticipate significant costs and increased operational and regulatory risk associated with this effort.

Sheer Volume

How do Servicers handle the volume spike and prevent borrowers and processes from falling through the cracks? Hiring large teams does not necessarily solve the problem if Servicers lack consistent processes and strong technology infrastructure. Channeling forbearance resolution activity entirely through hastily expanded call centers creates extreme operational and training challenges. Even if such teams can be hired and trained to the required level during the current work-from-home environment, managers still need exceptional oversight and reporting tools to ensure success.

$243 Billion

Sum total of bank fines directly relating to 2008 housing crisis, excluding indirect compliance costs.

Compliance and Risk

Our industry experienced multiple failures in this area during the last crisis. Robo-signing alone resulted in massive fines and unwanted media attention. Fines on Banks and Servicers ultimately totaled $243 billion.[5] With prior experiences as a backdrop, compliance expectations for banks are higher than ever. Regulators and courts are likely to hold Servicers to a high standard. We know from a recent memorandum from HUD's Office of the Inspector General[6] that many of the top 30 Servicers are already struggling to inform and engage with borrowers. According to analysis of the memo by Michael Stegman[7] and posted by him on Linked In, specifically, IG found that as of April 17.

- 10 servicers had no information about forbearances readily available on their websites.
- 14 servicers offered no information on the duration of the initial forbearance period.
- 4 servicers correctly indicated initial forbearance periods could last 180 days, with two of them correctly listing possible extensions for an additional 180 days, but 2 others provided nothing about a forbearance extension.
- Several servicers gave the wrong impression that lump sum payments would be required at the end of the forbearance period.

Benefits of Borrower Engagement Digitization

Digitization of the borrower engagement will help significantly with these 3 challenges. An article from 2016 by Bain[8] puts the cost of a digital interaction at $0.10 and the cost of teller or call-agent transactions at $4. Given the need to train new people in such a short period and the complexity of the issue at hand, it is likely that $4 is a very low estimate for the cost of each transaction. Whatever the real numbers, the delta between the cost of a digitized transaction and a non-digitized transaction is enormous.

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5 https://www.marketwatch.com/story/banks-have-been-fined-a-staggering-243-billion-since-the-financial-crisis-2018-02-20
6 https://www.hudoig.gov/sites/default/files/2020-04/Single%20Family%20Mortgage%20Forbearance%20Brief.pdf
7 Michael Stegman – Senior Research Fellow at Joint Centre for Housing Studies, Harvard University
8 https://www.bain.com/insights/customer-loyalty-in-retail-banking-2016

Sample Call Center Incremental Costs

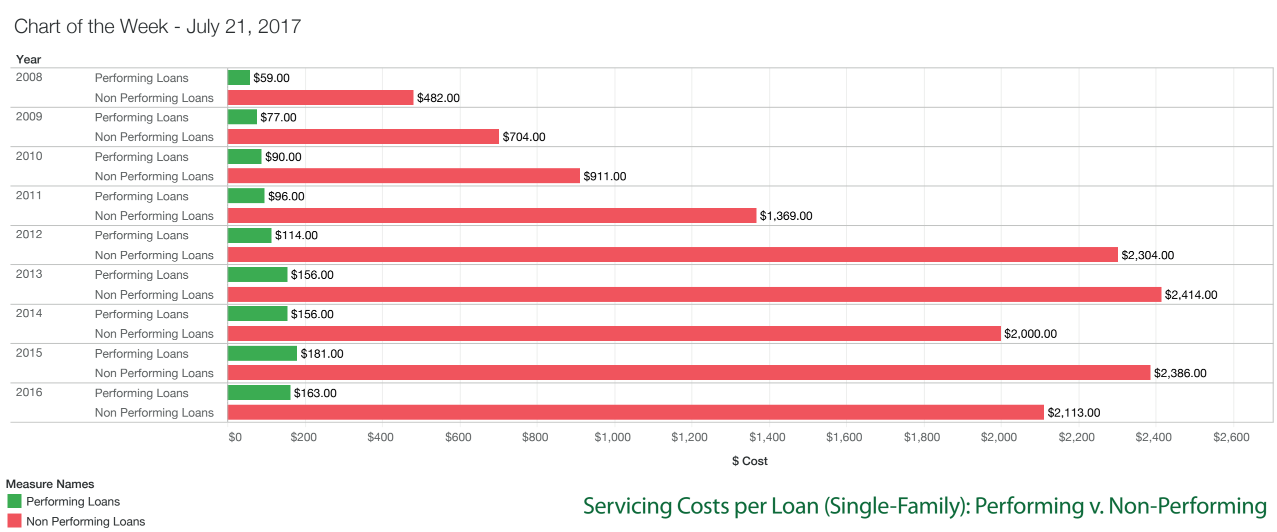
Average Number of Contacts	**20**
Average Handle Time	**12 minutes**
Hourly Costs	**$30**
Training and Management Overhead	**30%**
Call Center Handle Costs Per Borrower	**$156.00**

4,000%

Efficiency improvement from digital interactions vs. live interactions, according to Bain analysis.

Although significant, this sharply underestimates the total cost due to the increase in complexity caused by lack of automation. A timely update on default servicing best practices by the MBA in February 2020 recommends borrower contact as frequently as every 7 days, which would easily triple the costs above.[9] Moreover, the contact costs are only a small part of the overall costs. MBA estimated the servicing costs for non-performing loans at $2,113 in 2016, a modest reduction from prior years (but a massive increase from pre-2009).[10]

Alternatively, we might evaluate the overall operational cost savings by considering the

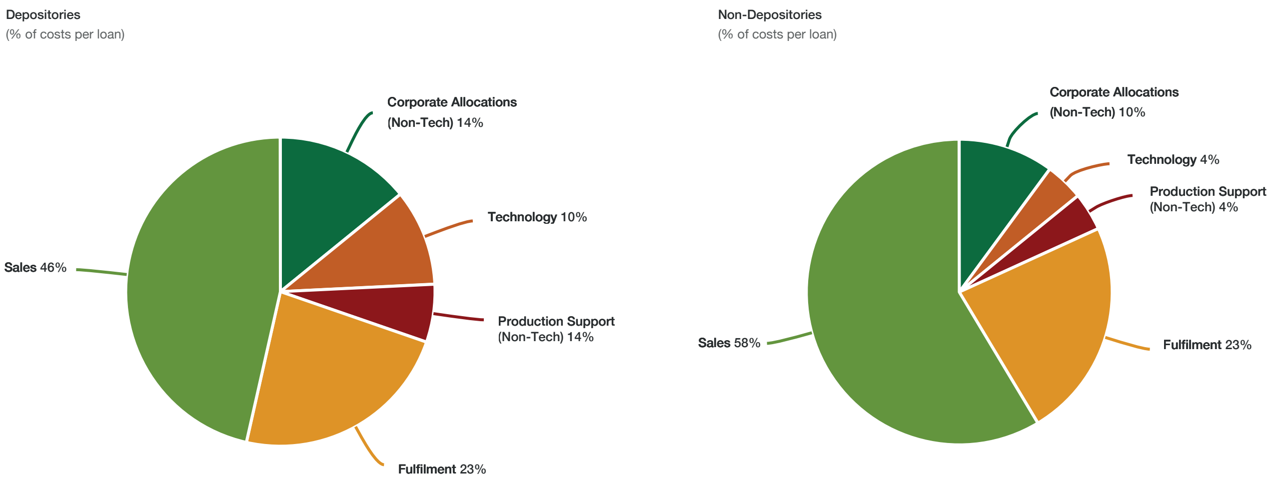


Servicing Costs per Loan (Single-Family): Performing v. Non-Performing

9 https://www.mba.org/Documents/Policy/21340_MBA_Servicing_Alignment_Whitepaper-Pages.pdf

10 https://www.mba.org/publications/insights/archive/mba-insights-archive/2016/mba-chart-of-the-week-servicing-costs-per-loan-(single-family)-performing-v-non-performing

Chart of the Week - July 19, 2019



Components of the Cost to Originate in the Retail Production Channel

37.3 Months

The average total time from delinquency thru REO and conveyance for FHA properties in Feb 2020. Down from 40.9 in Feb 2019, but up from 27.4 in Dec 2012.

https://www.hud.gov/sites/dfiles/Housing/images/FHALPT_Mar2020_FNL.pdf

operational cost structure involved in loan origination, since much of the activity involved in modifying involves similar processes. Industry experts say that in 2019 typical loan origination costs averaged $8,000 to $10,000, a decrease from the average cost of $10,200 in 2018,[15] with breakdowns noted in the chart.[11] The production support activity alone cost between $400 and $600 depending on the type of originator, and requires about 60 days to complete. This reflects a far more limited set of activities than is required to manage an 18-month forbearance-to-modification process and also benefits from significant technology enhancements in the origination process, but still offers another view into costs.

The transactional cost difference needs to be multiplied by the sheer volume of contacts. A well-trained agent working using a back-office workflow and queue management system with automated rules helps reduce these costs. Marrying back-office systems with customer-facing digital borrower communication has a synergistic effect, greatly enhancing the agent's ability to communicate and respond digitally to multiple borrowers at once while maintaining superior standards.

Finally, through digital engagement, every transaction and interaction can be logged and documented. Every decision – whether automated or manual – is tracked and reportable. Best practice still requires additional checks and balances to avoid system bias, but recording and audit-tracing every interaction with a borrower dramatically alleviates downstream concerns on compliance and risk.

11 https://www.mba.org/publications/insights/archive/mba-insights-archive/2019/mba-chart-of-the-week-components-of-cost-to-originate-in-retail-production-channel

04. Digital Interaction in Default Servicing – Why Has This Not Been Done Already?

Pandemic Impact

04

Many industry leaders have observed that the digitization of many aspects of "Life of Loan Services" has lagged far behind origination technology.[12] Why is that?

Practically every aspect of banking and lending over the last decade is benefiting from digitization. There are numerous digitized mortgage application and approval processes.

Every mainstream bank has its own app that allows borrowers to manage their accounts and manage their mortgage loan in respect of payments and simple transactions. Non-bank Servicers have been slow to the party but in recent years we have seen the emergence of borrower portals for borrowers to log-in and review their mortgage account, escrow status, etc.

We define a Life of Loan Service as a transaction that can occur between a Borrower and a Servicer once the loan moves into the servicing phase (post origination). We have identified 50 Life-of-Loan Services that could be requested by a Borrower from their Mortgage Servicer and 13 Life-of-Loan

12 https://www.housingwire.com/articles/servicing-solutions-need-to-catch-up-to-the-efficiency-of-lending-tech/

Services that a Servicer could initiate with the Borrower over the Life of the Loan. Of these 63 services, 58 of them can occur when a loan is in some form of default and 43 of them can occur for a performing loan. Because the 43 services that occur for performing loans have had legacy "solutions" in place for many years and because there was no desire to invest in default digitization due to the falling number of defaults over the last 10 years, digitization of these interactions has lacked investment and focus. With foreclosures dropping below 2005 levels,[13] default departments within most Banks and Servicers have been reduced to skeleton crews.

MSR Pricing and Incentives

Mortgage servicing rights are priced with default servicing cost as a component of the pricing model. Estimated default rates are calculated based on the recent very low levels of default and rising property prices. Competitive bidding and commoditization of the MSR market has impacted servicing margins. Servicers have had to become more efficient working to reduce costs to remain competitive and maintain margins. With this unexpected event disrupting the Mortgage Capital and Servicing markets those efficiencies, in many cases, will not be enough to maintain today's margins on conforming servicing let alone address the significant impact on default servicing profitability. With the price of default processing already paid and committed, there is little incentive to invest in systems that improve default operations or drive engagement unless these activities can generate short term returns on small volumes.

13 https://www.attomdata.com/news/market-trends/april-2019-u-s-foreclosure-activity/

7-8 Basis Points

Portion of the servicing strip (typically 25 to 44 basis points) that actually goes to cover operational costs, with the remainder allocated to purchasing servicing rights or profit.

Source: Conversations with industry insiders

Siloed Operations

We must look at banks and non-bank Servicers differently when considering the lack of digitization. Nearly every high-street bank has digital channels to interact with their customers. However, the internal organizational structure in banks often hampers holistic consumer engagement. Origination departments manage origination, credit card departments manage consumer credit, and servicing divisions or departments manage servicing. They have their own team and budgets.

Everyone recognizes the need for a consumer to see their mortgage in their banking app, but beyond that it is a challenge for the servicing division to get the attention and resources needed to enhance borrower engagement over the Life of the Loan. Consumer/ digital engagement in larger institutions is often owned by a different department (e.g. marketing) and loan servicing is not necessarily high on the priority list of consumer engagement plans. So if we take a single task such as a request for Private Mortgage Insurance Waiver (one of the 63 services that could be requested), banks servicing teams will have a workable solution. The old adage, "if it ain't broke, don't fix it", has become prevalent in the current risk-focused environment. Banks and Servicers have thus lacked an incentive to roll a request like that into an overall borrower engagement strategy over the Life of the Loan. Servicing teams thus continue to rely on legacy systems that require call centers to manually respond to the request by accessing core servicing system screens.

Borrower engagement for Life of Loan services has received even lower prioritization for distressed loans, partly because the number of such loans has declined and partly because distressed borrowers are not high value consumers that banks need to work to retain and upsell. For example, enhancing the customer experience for borrowers who need to submit a Request for Unemployment Forbearance has traditionally not been seen as a priority, but rather as a cost center that

must be contained. Non-bank Servicers have even greater barriers to enhancing the distressed borrower experience since they only have the loan relationship with the borrower, and little opportunity to build longer lasting relationships in other domains. They do not provide banking apps as they do not support current accounts, credit cards, business loans, international wires, or other such services. With thin margins and only one revenue stream, investment in borrower engagement capability over the Life of the Loan has simply never been mission critical.

Default Servicing is a Cost Center amid what was shrinking default servicing portfolios

As noted above, Default Servicing is a cost. Cost centers struggle for investment at the best of times, even though creating efficiencies through better borrower engagement across default servicing would reduce costs and increase profitability over the long term.

Strong Property Market and Refi Environment

The strength of the property market and low interest rates over the last 12 to 18 months has kept the focus firmly on the front end of the business. As recently as 70 days ago, the number one priority of most Servicing centers was loan recapture due to high repayment rates from mortgage refinancing.

Agency Polices

The GSEs (Fannie and Freddie) have been working hard to make engagement with distressed borrowers easier but it is true to say that FHA still has numerous issues that complicate the engagement and make it more difficult to implement a digitized process. A recent paper from the MBA[14] captures these issues very well. It is a challenge to enact easy-to-use digital borrower engagement when there are mandates to make physical contact. The paper highlights the ineffectiveness of some of the borrower outreach requirements in distressed situations and urges the FHA to make changes to the requirements to simplify the process for all parties. It is worth noting that FHA have issued a temporary waiver[15] of some contact responsibilities due to Covid – which makes huge sense given the physical contact requirements.

14 https://www.mba.org/Documents/Policy/21340_MBA_Servicing_Alignment_Whitepaper-Pages.pdf
15 https://www.hud.gov/sites/dfiles/Main/documents/Face-to-FaceRegulatoryWaiver_3.13.20.pdf

05. Missed Opportunity
Pandemic Impact

05

Lack of investment in the digitization of Life of Loan services for the last number of years was a missed opportunity for the industry.

If the Covid 19 cloud has a silver lining for the Servicing industry, it just might be that it is a catalyst to enhance borrower engagement across the Life of Loan services. The following diagram outlines the social, rational and emotional benefits of long-term borrower engagement.

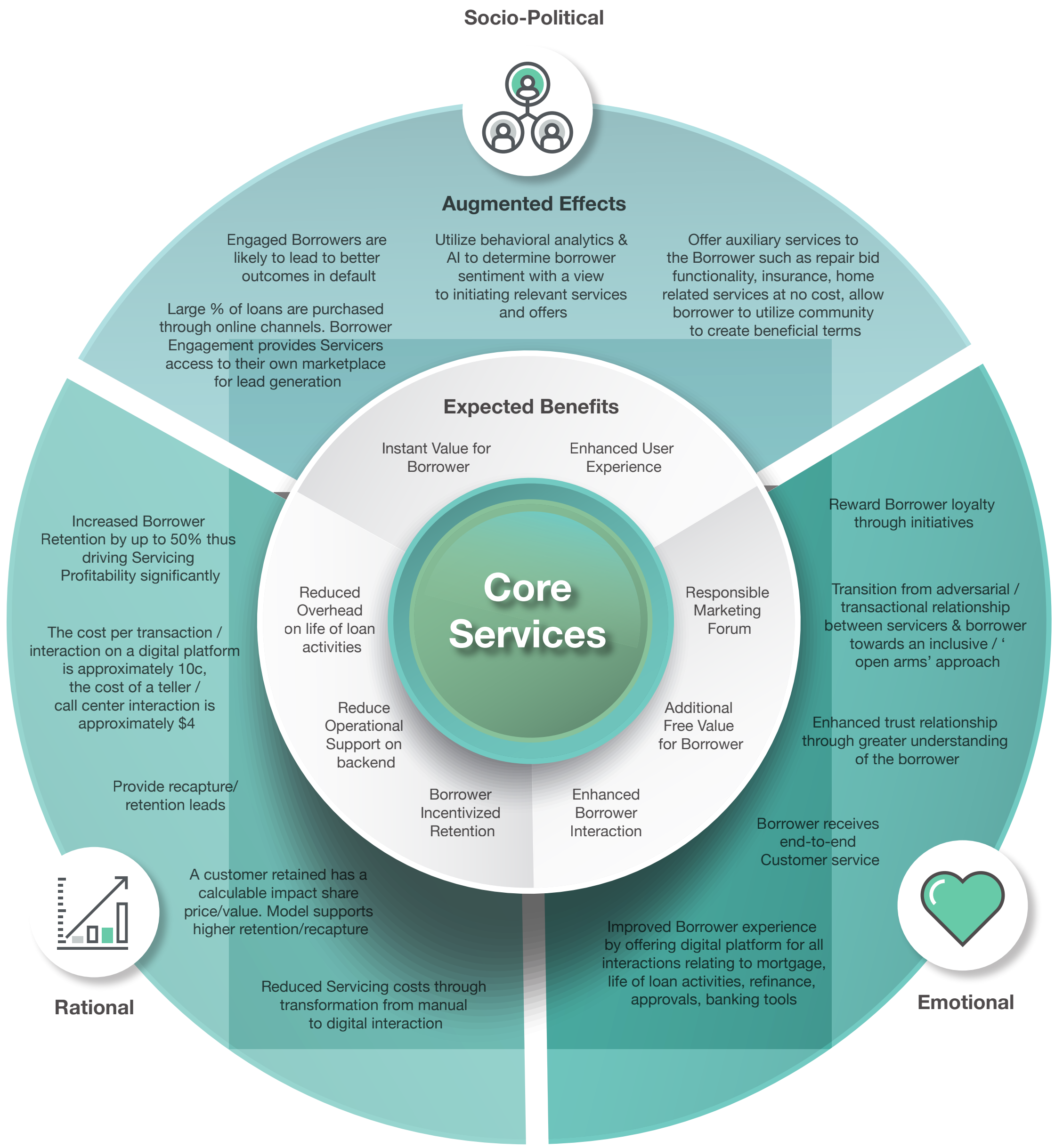


Figure 1 - Benefits of a Life-of-Loan Borrower Engagement Portal

Covid is likely the catalyst for many Servicers to digitization the borrower engagement journey for forbearance and loss mitigation. When servicing departments discover the substantial benefits of these systems, they are likely to extend into Life of Loan services for performing loans after the crisis abates. The long term value of borrower engagement digitization almost ensures this transition over time – the borrower retention/recapture possibilities alone justify the business case, and the cost savings offer further upside. Once solutions have been implemented to handle the immediate need to manage the "pig in the python" of forbearance activity, Servicers will find additional ways to engage borrowers to create value while simultaneously insulating themselves from operational risks and costs from future crises.

06. What's Required?
Pandemic Impact

06

Technology has advanced considerably in the 12 years since the last crisis hit. Digital lending solutions, bank apps, money management apps, digital payments, and the general digitization of lending and money management have progressed rapidly.

Given the timelines dictated by the Covid forbearance wave, we believe that Servicers need to rapidly implement this capability in the next 3 to 4 months in order to be prepared for the first wave of forbearance exits. Fortunately, existing capabilities in the marketplace and software ecosystem enable much faster development: low code workflow systems, design-centered tools, web 2.0 development paradigms, and API-first integration patterns. Modern software frameworks enable rapid embedding of consumer-focused and design-driven, easy to-to-use widgets onto Servicer web sites that can directly connect to operational workflow management systems, thus allowing Banks and Servicers to rapidly roll out an engagement strategy to support borrowers suffering from financial distress.

Banks should not feel restricted in engaging these applications. Multiple software providers can support white-labeling of borrower engagement interfaces to match the look and feel of the Servicer's brand. Instead, Servicers should focus on ensuring that any borrower engagement capability they deploy includes 3 core components:

1. **A communication platform** – the ability for a borrower to quickly and easily communicate with their Servicer through multiple channels (email, SMS, etc.), receive and track answers to their requests, and ensure that this communication is securely logged.

2. **Document gathering and management** – the ability for a borrower to submit documentation and sign electronically, and for the Servicer to send documents back to the borrower, in a manner that ensures all documents are tracked, traceable and logged.

3. **Education and support** – the ability for a borrower to learn about their options, check their status, and receive reassurance that they are on track and their pending items are being duly processed.

These 3 components are required for all the borrower journeys through the Life of Loan but are particularly important for modification and loss mitigation journeys.

Finally, the borrower engagement solution must integrate with a back-office work queue and work management capability to ensure that the Servicer's operational teams can manage every process to its conclusion without losing track of any task or timeline.

The back-office tools can include existing loss mitigation platforms if they are available and support integration via API, and must include automated calculations and decisions matrices to ensure the volumes can be handled in a safe and expedited manner. To ensure that the correct decisions are made in all circumstances, the logic should be audited and pass appropriate control mechanisms. There should also be ongoing audit, review and other checks and balances to ensure the ongoing accuracy of the process.

Nearly 8 in 10

People conduct all of their banking business online or via a mobile app whenever possible.

https://www.magnifymoney.com/blog/news/bank-branch-survey/

Given that many Servicers plan on taking on more staff to deal with the Covid volumes, it is imperative that back office controls are in place, systems are easy to learn and that the systems are designed in a way to track all activity. In the short period available, it will not be possible to "code" every path and every outcome in an automated fashion, but it is definitely possible to track and manage every action.

Finally, any system must be subject to a review process to ensure that it does not unduly and often unknowingly show bias in the decision-making process. This applies regardless of whether the system leverages automated technology or manual processes. Appropriate oversight requires regular and ongoing review of the data and analytics from the application; we would strongly recommend internal auditors become involved in the process from day one.

07. Design-Driven Approach and User Testing

Pandemic Impact

07

The last 5 years has seen a renaissance in consumer-centric thinking that guides process development by beginning with the customer experience instead of the operational needs of the business.[16]

Servicers can benefit greatly by using a design-driven approach to the creation of journeys. Such journeys will quickly and easily guide borrowers to the solutions that are best for them and that also comply with the regulations and available programs. Building user-engagement applications and interfaces is easy from an engineering standpoint, but it is critical that the end-product generates ease-of-use and guides the borrower to build trust in the application and the organization. Creating friendly experiences, both in delinquent borrower onboarding and in ongoing interaction is critical to success – a strong borrower engagement platform should reassure borrowers rather than frightening them into calling an agent. Failure to develop and extensively test a digital borrower engagement channel can undermine most of the benefits that digitization can bring. Indeed, some Servicers may inadvertently perpetuate an often-adversarial offline relationship to an adversarial online relationship, which will not benefit any stakeholder.

16 https://www.mckinsey.com/business-functions/marketing-and-sales/our-insights/building-a-design-driven-culture

89%

Share of banking customers who interact with their bank Contact Center less than once a month.

https://www2.deloitte.com/us/en/insights/industry/financial-services/digital-transformation-in-banking-global-customer-survey.html

Timing should be another consideration for Servicers. Customers often take time to warm up to new digital tools,[17] and it is particularly difficult to win customer adoption in stressful and complex situations.

Servicers would thus benefit tremendously by rolling out their digital engagement platforms before the first wave of borrowers exit forbearance, and onboarding their borrowers with simple and friendly journeys to win their trust before progressing to more complex journeys (like modification package assembly).

Fortunately, user testing can be done quickly and easily with a representative number of borrowers before releasing anything to a production web site. Taking a design driven approach with rapid testing ensures that when a journey is released on a Servicer web site, it will deliver on its many potential benefits.

17 https://www.businessinsider.com/mobile-banking-market-trends

08. Conclusion
Pandemic Impact

08

There are numerous studies indicating that consumers want and are comfortable with digital engagement and that net promoter scores can increase dramatically with easy-to-use, self-serve digitization journeys.

There are also several studies that indicate that engagement with borrowers will greatly enhance retention/recapture business case. As we have demonstrated above, digitization of Life of Loan services will also reduce the costs of servicing and in distressed situations will lead to better outcomes for all stakeholders.

Finally, once in place, a borrower engagement platform will enable Banks and Servicers to extend services they can offer to their borrower customers, and will help build loyalty and engagement not just through this crisis but into the future.

If you have questions related to any of the topics discussed in this paper, please contact Aspen Grove Solutions

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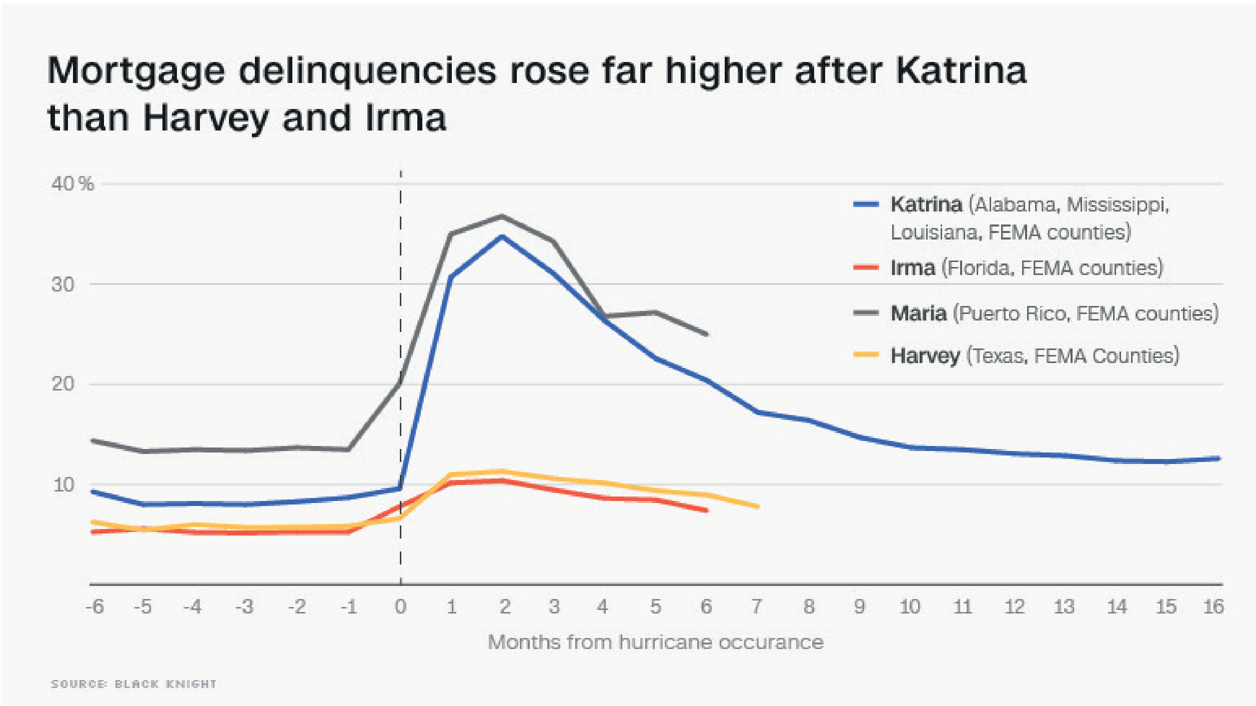
09. Appendix 1 - Data and Analysis

09



https://money.cnn.com/2018/04/22/news/economy/hurricane-foreclosures-houston/index.html

Variable	Projection	Justification
Forbearance Rate	10% to 12%	• Forbearance was 7% as of April 19th and appears to track unemployment rate with a one week lag, suggesting it will level off soon. • However, we anticipate that forbearance rate will continue to marginally increase even after unemployment levels off due to a backlog of requests that banks are still processing, increasing awareness among borrowers of the generosity of the CARES Act provisions that will build in the media, and an increase in the number of borrowers approaching month-end payments who are suffering hardship. • We model at 10%, but believe the risk is to the upside.

Variable	Projection	Justification
Forbearance Extension Rate	30%	• The CBO currently projects that unemployment will peak at 16.0% in Q3 2020, and then drop to 11.7% in Q4, suggesting a 27% reduction. We round up because we believe that some percentage of borrowers who may claim will be suffering only mild hardship and may wish to resolve arrears earlier • Downside Risk: More borrowers seek to extend given the limited financial consequences • Upside Risk: Servicers proactively manage communication to bring borrowers current faster
Repayment Plan Participation	50% for 6 month exit 20% for 12 month exit	• Ratio of borrowers with forbearance who avoided modification after a hurricane disaster was 25:33, or 43%. We are slightly optimistic on borrowers leaving forbearance early, and pessimistic on borrowers leaving forbearance late due to accumulation of deferred payments. • Downside Risk: Risk here is primarily to the downside, since borrowers leaving forbearance after a hurricane generally entered extremely strong job markets in the last several years.
Market Sale / Refinance Rate	15% Pre-Mod 10% Post-Mod	• Following hurricane disasters (https://www.fanniemae.com/portal/funding-the-market/credit-risk/news/hurricane-affected-regions-performance-update-090619.html), 9% out of 58% repaid loans for a relative rate of 15.5%. We assume refinancing will be less likely for borrowers who have failed a modification, leaving market sale as the primary option. • **Downside risks:** If property market is depressed, market sales could be more difficult • Since the COVID crisis, banks have increased lending standards for refinances despite record low treasury rates https://www.reuters.com/article/us-jp-morgan-mortgages-credit-exclusive/exclusive-jpmorgan-chase-to-raise-mortgage-borrowing-standards-as-economic-outlook-darkens-idUSKCN21T0VU • Upside risks: • Low rates may prove compelling for borrowers with equity and income who wish to avoid a black mark on their credit score.

Variable	Projection	Justification
Short Sale Rate (among borrowers not engaging in a forbearance repayment plan)	5% Pre-Mod 30% Post-Mod	• Urban Institute analysis of non-performing loans from deals sold in 2011 to 2016 finds that 33% of loans were disposed via short sale. (https://www.urban.org/urban-wire/selling-distressed-loans-investors-significantly-cuts-foreclosure-rates) This represented borrowers who had remained in their homes for an average of 28 months of delinquency and failed prior resolution attempts. • In 2010, the Minneapolis Fed (https://www.minneapolisfed.org/article/2010/short-sales-stand-tall) observed short sales accounting for 18% of the 4.18 million homes sold that year, rising to 22% of the 4.66 million units in 2012, suggesting an upward bound of about 1 million short sale transactions annually in a housing driven recession. The delinquency rate peaked at 11.5% in 2010 (https://fred.stlouisfed.org/series/DRSFRMACBS) vs. approx. 60 million loans (or about 6.9 million loans), and short sale rates rose (vs. foreclosure rates) as they proved most advantageous than foreclosure. All of this data suggests that up to 30% of all delinquencies may end up in short sale during a damaged market when mortgages are underwater. • However, the current single family housing stock is not oversupplied. This suggests that fewer borrowers will attempt to exit their loans before at least attempting a modification, and so we assume a much lower rate of borrowers seeking a short sale pre-modification after leaving a forbearance plan.
Deed In Lieu Rate (among borrowers not engaging in a forbearance repayment plan)	5% Pre-Mod 30% Post-Mod	• Urban Institute analysis of non-performing loans from deals sold in 2011 to 2016 finds that 29% of loans were disposed via Deed In Lieu. Our analysis here parallels our analysis for Short Sale rates.
Foreclosure / Bankruptcy Rate (among borrowers not engaging in a forbearance repayment plan)	5% Pre-Mod 30% Post-Mod	• Urban Institute analysis of non-performing loans from deals sold in 2011 to 2016 finds that 32% of loans were disposed via Foreclosure. Our analysis here parallels our analysis for Short Sale rates.
Modification Success Rate	68%	Urban Institute analysis of success rate of streamlined mods. https://www.urban.org/urban-wire/streamlining-increases-success-mortgage-modifications-34-percent) Downside Risk: This success rate was experienced outside of a severe labor market recession; prolonged structural unemployment could depress it substantially.

Variable	Projection	Justification
Modification Rate (among borrowers not engaging in a forbearance repayment plan)	70%	This represents the residual among borrowers not prepaying, seeking a short sale or deed in lieu, or entering foreclosure or seeking bankruptcy protection. Although high, it is consistent with observations of modifications following natural disasters and anticipates streamlining of modification programs. Downside Risk: Servicers fail to proactively engage borrowers and encourage modifications Downside Risk: Housing market suffers unexpected declines, forcing more borrowers underwater and encouraging them to walk away.