# Streamlining Bulk Loan Onboarding and Servicing Process Using Blockchain

## Abstract

The mortgage servicing and default management industry is under tremendous pressure to enhance its business practices in loan onboarding. With the cost per loan serviced rising dramatically, supervisors and investors are directing industry players to contain costs, improve service levels, capture new markets, and increase profitability—all, while addressing the expanding regulatory requirements.

Regulators have expressed concern over servicers' ability to deliver payments from large delinquent loan portfolios on a timely basis to the two GSEs. The Consumer Financial Protection Bureau (CFPB) aims to protect defaulted borrowers who received promises of relief from their servicer, only to have that relief denied when a new servicer bought their loans. The agency has repeatedly warned servicers of problems with loan transfers, the integrity of consumer data, and loss mitigation activities.

This paper focusses on the need for an efficient bulk loan onboarding process, while highlighting measures to ensure compliance with CFPB guidelines and other regulatory requirements.

## Onboarding and Regulatory Challenges

Currently, instances of systemic misconduct during the mortgage servicing process are rampant. Errors made during the loan onboarding process include improper application of mortgage payments, incorrect borrower contact details, escrow analysis and payment, delayed interest rate adjustments, and the inadvertent issuance of lender-placed insurance. Any of these occurrences can push borrowers into foreclosure as a result of servicing errors.

When a loan servicer buys mortgage servicing rights or large volumes of whole loans, the loan boarding department becomes inundated with excess paperwork. Loans have to be onboarded with complete accuracy and within a few weeks, so that servicing can start on time for newly originated loans or continue without disruption for previously originated loans already in its payment cycle. The challenges pose multiple issues to the servicer—loss of revenue, penalties, additional rework or effort duplication, to name a few.

**Paper-centric manual process:** When a servicer onboards a loan, a lot of information changes hands. Since most of these loans were originated years ago, when processes were paper-centric, everything becomes manual.  This makes the transfer process long, tedious, manually-driven, and prone to errors

**Robo-signing:** This is the act of reviewing and signing the foreclosure documents without thoroughly checking the individual cases and making a lot of assumptions.

Dual-track foreclosure: This is when a lender or servicer processes a loan modification and loan foreclosure simultaneously. According to CFPB guidelines, dual tracking is prohibited. Delays or misses in passing information from one servicer to the other leads to this situation. Currently, there are no predefined steps. There have been instances, wherein the loss mitigation application processed by the transferor (outgoing servicer) arrives at the loan servicer’s office, after the transferee (incoming servicer) has initiated a foreclosure.

**Incorrect chain of title:** When it comes to real estate transactions, the property's title will be a major factor in determining how quickly a deal can be closed, or if at all, it can be closed. Banks have to currently rely on recorded documents that are filed at the county recorder or clerk’s office, and are also available to the public.

**Force-placed insurance:** Most mortgage contracts require homeowners to maintain hazard insurance on their homes, and if the borrower does not maintain the insurance, the lender has the option of force placing insurance on the property. The policies usually cost several times the cost of insurance policies acquired in the open market.

## Digital Technologies for Transforming the Loan Boarding Process

Let's examine some technologies that can prove immensely useful in countering the aforementioned challenges.

**Blockchain:** A proper governance system, while the portfolio changes hands, can help both the borrower and the servicer avoid such a situation. Figure 1 highlights how blockchain can be deployed – as changes across stages of the loan onboarding process are notified to stakeholders and are represented concurrently at every node.

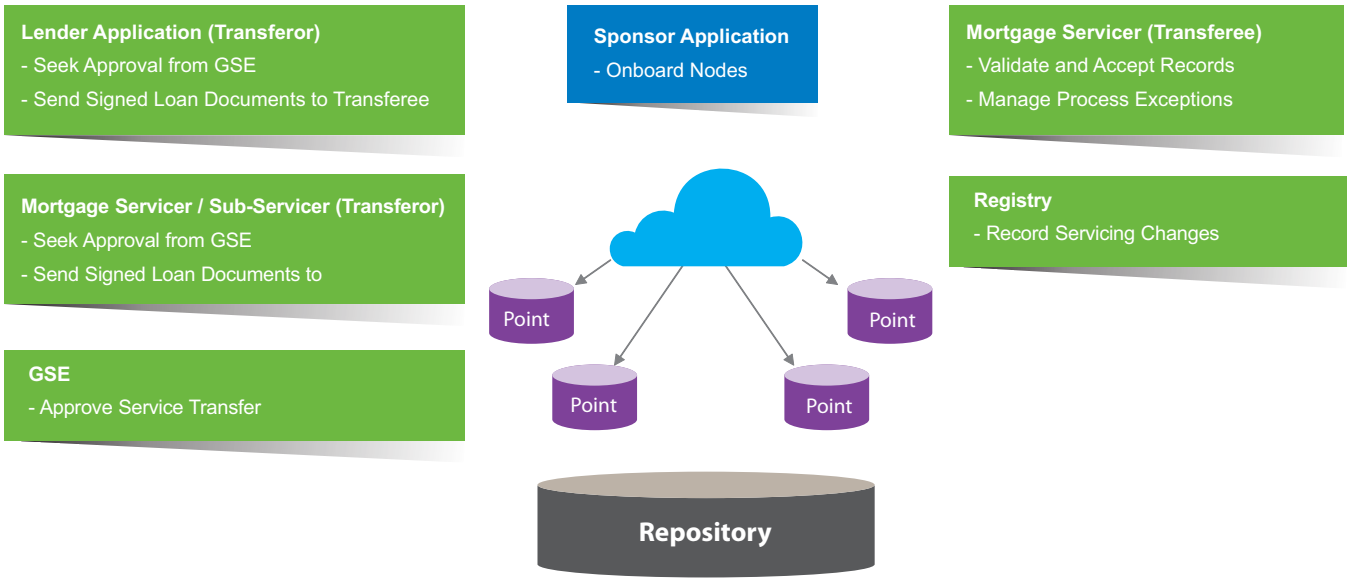


**Figure 1 : Blockchain at Work**

The transferor (outgoing servicer) will seek necessary approval from the GSE and then initiate transfer of data along with necessary documents to the transferee (incoming servicer). The blockchain will also manage exceptions, if any. Several industries have embraced this technology, for its secured yet transparent capabilities. And for these reasons, the same can be applied to loan onboarding process too.

Since all the details would now be digitized and every step recorded, it will clearly show the movement of documents. The transferee will also be clear on the current status of the loan, any requests that the borrower would have made for modification or foreclosure, updates on the title of the property, and so on. This will save a lot of effort and time for the transferee and allow him to quickly initiate the actual servicing process, from where it was left off by the transferor.

**Robotic Process Automation (RPA):** While most lenders or servicers have initiated digitization and automation, the industry has noticed a slower up-take of this technology for bulk loan boarding. Several lenders have described their loan original systems (LOSs) and servicing platforms as being difficult for envisioning automation use cases, with concerns about regulatory oversight and due diligence. However, these legacy environments are prime candidates for RPA technology. Where providers don't own the LOS' and are remotely logging in, intelligent automation is the next bastion of effective operations.

During bulk acquisitions or servicing transfers, the mortgage documents need to go into a document repository, and data needs to be extracted. To effectively manage electronic mortgage documents, it is necessary to use advanced document scanning and capture software that includes document classification, optical character recognition (OCR), and workflow automation technology.

**Cloud Infrastructure and On-demand Computing Server:** Cloud infrastructure will allow server computing to become dynamically scalable and flexible in response to demand, keeping utilization levels of costly computing infrastructure in control. Most of the servicers are small banks, who cannot afford to revamp their entire loan system, and cloud computing can help them in a big way. It will allow them to bypass the huge investments they would have had to make in data centers, software and hardware, and technology personnel to deal with the explosion of digital data. With these rapid changes, importance of information security and compliance, the need of the hour is to use shared resources. The usage of shared server is similar to cloud computing, where data and applications are stored and accessed over the Internet instead of the computer's hard drive. Servicers can have the platform hosted or manage it themselves. Such a platform can store and add data from multiple sources as required.

**Big Data and Analytics:** A characteristic of the fast-moving mortgage market is the enormous volumes of data generated through business actions ranging from wholesale acquisitions of lenders to selling tranches of loans for sub-servicing. The ability to analyze the vast amount of data (ranging in petabytes) with multiple structures to determine an acquisition target's (new servicer) risk profile and portfolio worthiness is vital to effective due diligence.

Many loan servicers handle either paper documents or scanned documents that cannot be read or queried using a PDF reader or an optical character recognition file. The first critical stage is to generate loan documents with a loan processing system that generates images as well as indexes to the images. First, this will sharply reduce the time to onboard a file. Second, it will make it possible to do validations that are impossible to conduct without an electronic file.

As we make strides toward intelligent automation, rules and descriptive analytics can be used to guide processes like foreclosures without the need for extensive human intervention. In other words, if servicing tasks can be distilled to purely operational over functional, technology can replace many of the manual tasks that are costly and can ensnarl servicers in regulatory compliance issues.

## The Way Ahead

The future success of the onboarding market will depend on various drivers, many of which are already evident. Diversity in business models allows for healthy competition and pushes market dynamics to fill demands when certain participants exit or reduce their positions. The challenges faced by the industry are also driving new entrants and growing companies to use disruptive methods to bring value to the consumer. Several business model strategies centered on blockchain have emerged and provide indications of where certain servicers are heading: there is certainly no one-size-fits-all approach to success.

**About The Author**

R. Nitikesh Singh

R. Nitikesh Singh is a domain consultant with TCS' Banking, Financial Services, and Insurance business unit. He has over 17 years of experience in areas such as new loan setup and audit, loss mitigation, commercial mortgages, claims filing and support, and loss analysis. Singh has Bachelor's degree in Commerce from the DG Vaishnav College, Chennai, India, and a Post Graduate Diploma in Business Administration from the Symbiosis Institute, Pune, India.

**Contact**

Visit the Banking & Financial Services page on www.tcs.com

Email: bfs.marketing@tcs.com

Blog: Drive Governance

Subscribe to TCS White Papers

TCS.com RSS: http://www.tcs.com/rss_feeds/Pages/feed.aspx?f=w
Feedburner: http://feeds2.feedburner.com/tcswhitepapers

**About Tata Consultancy Services Ltd (TCS)**

Tata Consultancy Services is an IT services, consulting and business solutions organization that delivers real results to global business, ensuring a level of certainty no other firm can match. TCS offers a consulting-led, integrated portfolio of IT and IT-enabled, infrastructure, engineering and assurance services. This is delivered through its unique Global Network Delivery Model™, recognized as the benchmark of excellence in software development. A part of the Tata Group, India's largest industrial conglomerate, TCS has a global footprint and is listed on the National Stock Exchange and Bombay Stock Exchange in India.

For more information, visit us at www.tcs.com

Experience certainty. IT Services
Business Solutions
Consulting



TCS Design Services I M I 09 I 18