

From Origination to Delivery: Improving Loan Data Quality and Compliance

A CEB Insight Brief Commissioned by



Executive Summary

Residential mortgage lending processes and technology continue to improve. Customers can perform many loan origination and servicing tasks online, and even using their mobile devices. Mortgage data standards combined with web services integration are improving the speed with which systems are updated and the accuracy of data processing. Yet there are still challenges. Mortgage lending ecommerce interactions are more complex – there are many more data, documents and back office processes to consider relative to other retail ecommerce transactions. There are non-standard paper documents, continuous change driven by new regulations, and greater due diligence scrutiny of loans by mortgage guarantors, investors and loan servicers. Nevertheless, new technologies are now available for lenders to achieve high digital efficiency with industry-specific solutions to reduce transaction processing time and improve the quality of the customer experience. Moreover, lenders can improve loan quality and automate quality control audits to further speed processing and reduce costs.

This insight brief provides a guide for lenders to identify the process and technology issues that lead to loan defects, presents strategies for fixing those issues, and recommends technologies to help lenders improve loan quality and compliance. Specifically, this brief:

- Describes the main areas in mortgage origination where loan defects occur;
- Analyzes the embeddedness of compliance in loan origination processes and why compliance must be more automated;
- Examines three root causes of loan quality problems and how to fix them; and
- Discusses general technology capabilities to integrate workflow-driven document systems with core lending systems.

We close by arguing that the processes and technology for regulatory compliance automation (“RegTech”) are so intertwined with core loan processing automation that lenders should increase compliance IT spending to improve loan processing timelines, the customer experience, and loan quality as well as compliance.

Loan Defects Impact Loan Quality and Increase Costs

Loan quality is generally defined as the characteristics of a loan that are different from (out of compliance with) the pre-determined loan policies of an originating lender, loan guarantor, loan investor, and/or regulator. Any aspect of the loan that is different from the loan policies is a loan defect, and loan quality can be measured by the number, type, and severity of the loan defects.

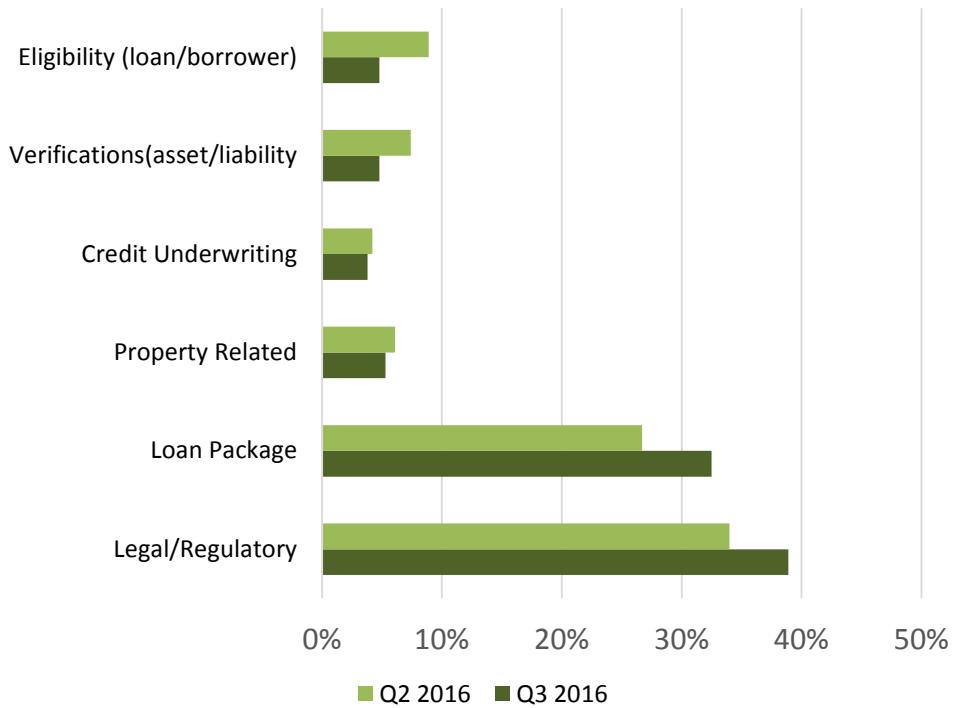
In U.S. mortgage lending, Fannie Mae distinguishes loan defects as either technical or critical. Critical defects are generally ones that cause the loan to be flagged by the lender's internal quality control or audit departments, or rejected and sent back for correction by mortgage investors such as Fannie Mae and Freddie Mac (the government-sponsored enterprises (GSEs)). In contrast with critical defects, technical defects are measurable and important, but are less likely to prevent loan sale or result in a loan repurchase. Loan defects that must be corrected lengthen processing timelines, and may require additional work not only by the lender but also by the loan applicant (customer), which reduces customer satisfaction and increases lender costs.

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Figure 1 depicts the distribution of critical defect rates by lending category for over 65,000 loans evaluated in the ARMCO Quarterly Mortgage QC Industry Trends Report for the second and third quarters of 2016. The majority of the critical mortgage defects are concentrated in two key areas: 1) the loan package; and 2) legal and regulatory requirements.

Figure 1: Mortgage Critical Defect Rates by Lending Process
Percent, Q2 2016 – Q3 2016



Source: ARMCO.

A big challenge with the loan package is that it has a large number of documents that, even if digitized, are still often printed out during the loan origination process and again at loan closing. Loan documents contain most of the same data that resides in the core system of record, the loan origination system (LOS). Therefore, paper-based processing makes it hard to do version control, and to keep document-sourced data field's current with the same data fields in the LOS. Sometimes the problem is so bad that mismatched data fields aren't found until during the loan closing process or even afterwards.

In addition to the paper/data matching problem, incoming data is not checked for accuracy – or is checked, but is not matched against updated documents when data changes. Whether done manually or using analytics, data must be verified before it is accepted by the loan origination system. Too often, inconsistencies are found in the data later on in the origination process leading to poor processing and inevitably to unhappy customers who drop out of the process early. An additional necessity is the ability to track changes in customer data and update the document fields no matter the stage in the process. Without the ability to track changes in data, follow up communication could be sent incorrectly, or even worse someone could be denied a loan due to outdated information.

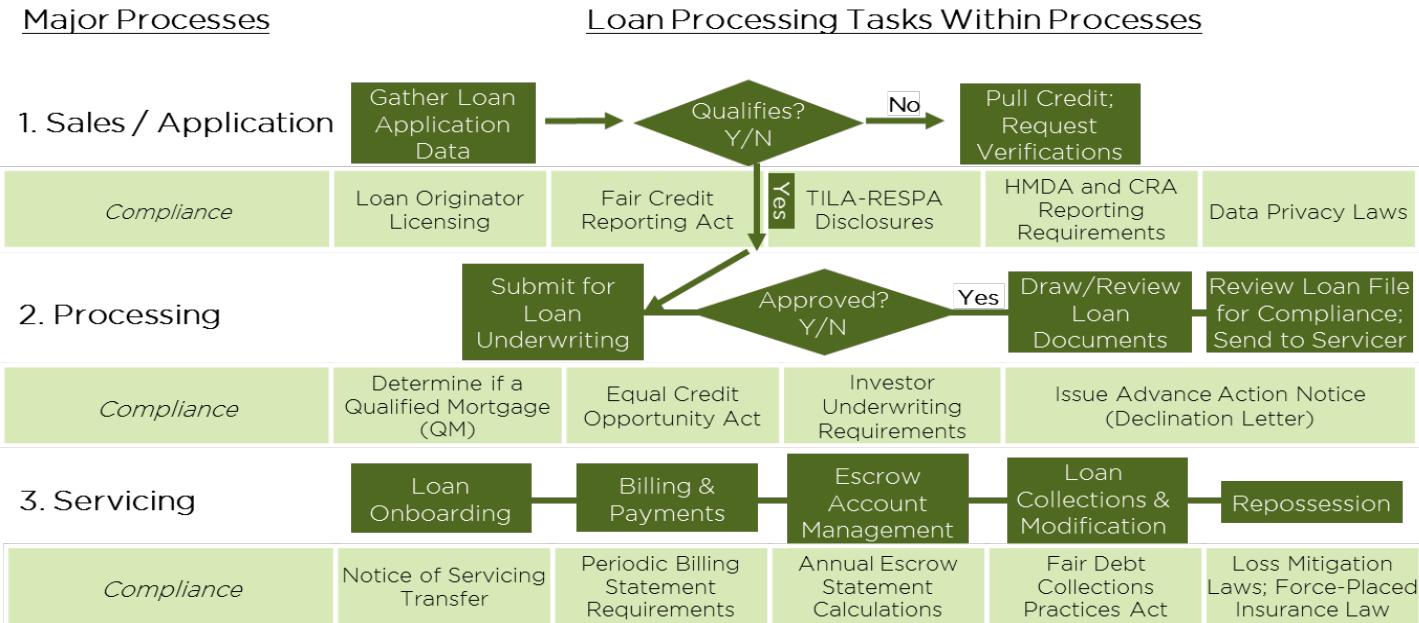
Making, auditing and correcting loan defects also increase lender costs: Mortgage origination costs in 2016 averaged USD \$7,209 per loan, approximately three times the level of a decade ago, according to Mortgage Bankers Association survey data.¹ In contrast, technology spending averaged USD \$147 per loan in 2016, grew at a slower rate than total costs, and remains at 2% of total direct expenses. The general strategy has been to create manual processes first and automate at an undetermined future date. However, subsequent automation all too frequently is not pursued. As a result, labor expenses account for the largest share of origination costs, and continue to rise, especially due to manual verification of documentation, mortgage investor compliance, and regulatory compliance following the subprime mortgage crisis and passage of the Dodd-Frank Act in 2010.

Compliance Complicates Workflow and Must Be Automated

Regulator and investor compliance further complicate core loan processing and customer engagement. A simplified, automated mortgage lending process is not easy to achieve because it is filled with literally dozens of federal, state and local regulations; GSE requirements; and internal quality control (QC) checks. When a new compliance change is introduced, the easy fix is to add a manual workaround process instead of investing in technology to automate. All of this leads to rising costs which institutions are incurring by way of hiring additional qualified staff, and in some cases paying fines. However, this compliance is the core component of loan quality.

Figure 2 depicts a basic lending process (in dark green boxes) from the point of sale to post-closing loan servicing. It includes collecting a credit application, processing, adjudication, funding, onboarding, and loan servicing. For example, a complete mortgage lending process is much more complex: it includes gathering application data, checking credit, underwriting, drawing loan documents for the servicer, onboarding, billing, and finally managing and collecting payments.

Figure 2: Loan Origination Processing and Compliance Overview
Illustrative



Source: CEB analysis.

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Figure 2 also overlays a number of federal regulatory compliance processes and GSE requirements (in light green) that occur at different stages, and depicts how compliance is embedded throughout the loan origination process across a loan file containing dozens of documents totaling between 250 to 400 pages with thousands of data elements.

Moreover, when mandatory compliance steps are added, lenders must collect new data, and apply rules, tests and analytics to the data. This often needs to be done in real time, and relies on core lending systems as well as specialized compliance systems. But by manually adapting to new regulations, lending institutions further fragment the loan origination process and increase errors. Absent digital data and documents, there is never ending circle as poor data and documents are both the cause and the result of disconnected processes.

However, compliance data and analyses are everywhere; they reside in various software as well as in documents and manual process where the data may not be the same. The responsibility for compliance should be owned not just by the quality control function; it should reside with every process, system and employee to improve loan quality. Therefore, workflow-based regulatory compliance technology, or “RegTech”, must be a core technology at every mortgage lender, and should be included as a nondiscretionary spending item.

It is important to mention that wholesale and correspondent lending is even more fragmented because lenders acquire in process loans or closed loans from independent mortgage brokers and retail lenders. This increases errors and quality control needs because paper data and documents are constantly changing hands.

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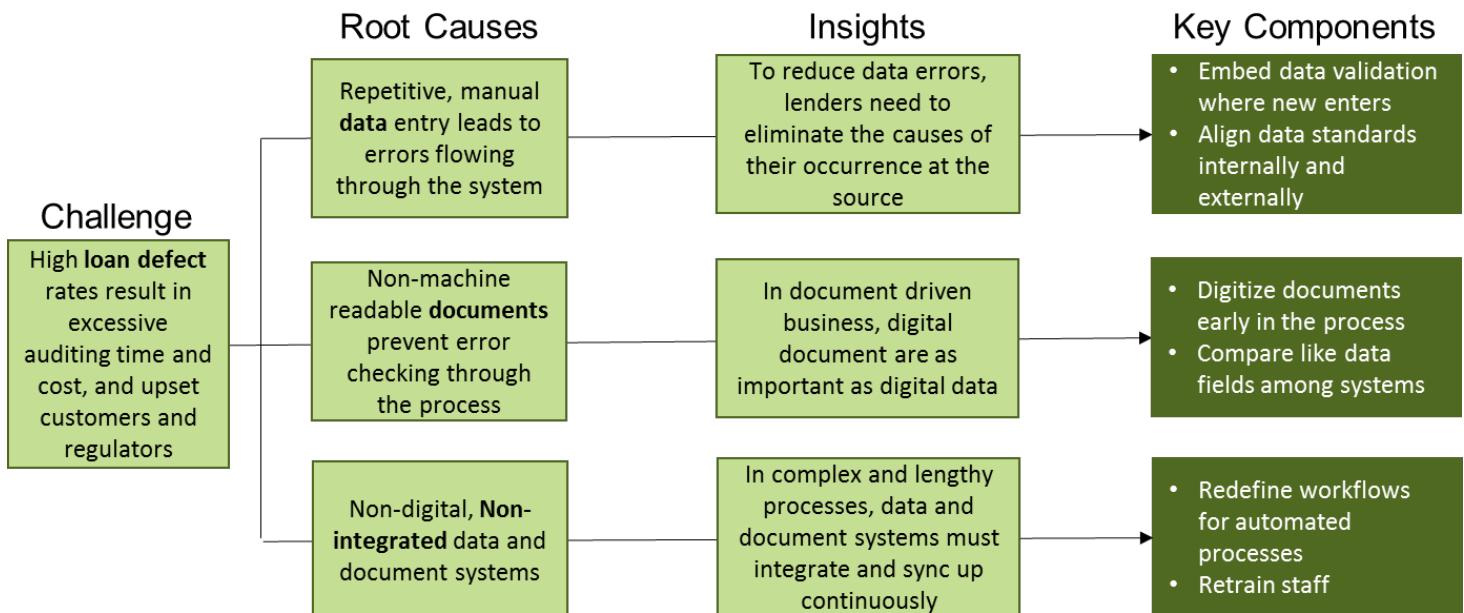
Rooting Out Problems to Create Quality Processes

To gain a better understanding of the actions required to resolve these problems, this insight brief has identified a number of root causes of loan quality and service issues. A structured methodology for problem solving is root cause analysis, which helps identify the true underlying reason why a problem exists. This insight brief identifies data (manual entry, wrong data, missing data), documents (paper-based, wrong version, missing) and processes (manual, no workflow and not integrated) as root causes of loan defects and compliance problems. Then lenders need to reengineer the processes to build error-free processes they can then automate with new technology.

Figure 3 analyzes these root causes and provides insights and recommendations for business and technology executives to eliminate loan defects. For data defects, errors need to be prevented at the source by eliminating manual data entry and performing data checks when new data is added to systems. Since lenders receive data from outside firms, lenders also need to define data definitions and formats with these third parties.

Figure 3: Root Causes of Mortgage Loan Defects

Illustrative



Source: CEB analysis.

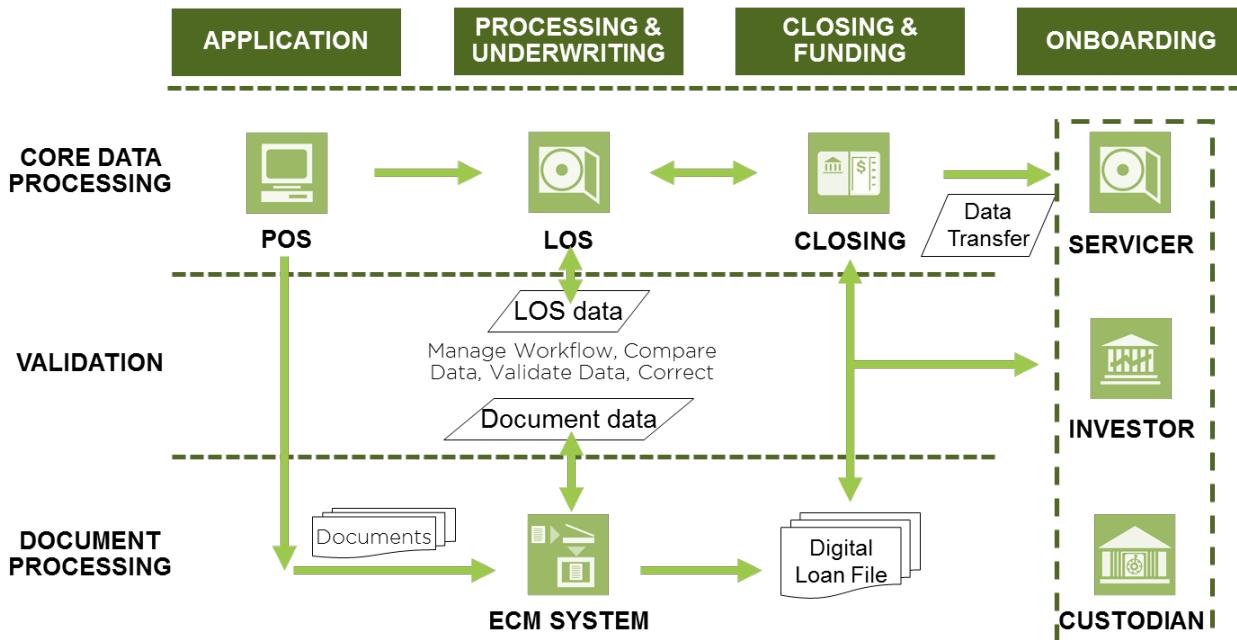
Paper documents are often photocopied and transferred to others to complete loan processing. However they are often changed and reissued, resulting in version control problems. To make mortgage loan origination digital, all critical documents must be digitized early in the process as they are received, and remain digital throughout the entire process. Lenders need to define data-driven and human workflows to incorporate digital, as opposed to paper, document receipt and distribution. The best solution for achieving this is an enterprise content management (ECM) system, customized for lending processes, data and documents and with built-in workflow. These systems also use optical character recognition (OCR) to reduce data entry, perform document validation, and identify different document versions.

The data-document matching problem is exacerbated by weak, and often manual, workflow processing. Workflow management integrates the data-centric LOS with the document-centric ECM. A workflow-driven ECM system completes the automation of data and document-based mortgage loan origination through loan servicing and loan sale to mortgage investors. Properly integrated with the LOS, the system can own and be responsible at every step of the process for data quality, which should be owned by all departments, not just the quality control department.

Technology Strategy and Solutions

Figure 4 depicts a summary of the workflow for mortgage data and documents throughout the loan origination process. Data flows into the LOS which integrates with many data sources and is the primary work tool for loan processors and underwriters. At the same time, documents flow into a workflow-driven ECM that provides functionality that the LOS does not. For example, the LOS cannot resolve discrepancies between data and documents, and it lacks ability to effectively manage feedback messages and eligibility exception resolution.

Figure 4: Integrated Data and Document Processing
Illustrative



Source: CEB analysis.

The ECM system captures, indexes, classifies and stores documents. The system also extracts data from structured and unstructured documents and compares it with data from the LOS as well as comparing for data accuracy between documents containing the same data. It will also collect and manage new versions of documents, while ensuring that the data remains consistent with LOS data. Finally, integrating a workflow-driven ECM system with the LOS can build and deliver digital loan packages to loan servicers, investors, document custodians and others.

These ECM system capabilities enable lenders to identify exceptions and automate their resolution. This is critical because manual exception processing is slow and expensive. In addition, the ability to aggregate transactional information into automated management reporting improves standard and exception processing, as well as data quality and compliance.

Compliance checks (rules and analytics-driven) and consumer disclosure creation can also be performed by the ECM and specialized compliance systems. In this way quality and compliance are built into document-driven processes simultaneously.

For example, lenders are successfully using this ‘comparalytics’ technology to automate management of the TILA-RESPA Integrated Disclosure (TRID) rules implemented in October 2015. The system captures and compares thousands of data fields from settlement statements, utilizes a configurable rules engine to ensure TRID tolerance thresholds are met, and identifies and summarizes exceptions found outside of tolerances. This simplifies auditing at every step of the process, reduces risk of investor penalties and loan buy-backs, minimizes manual processing and reduces manual errors, and provides evidence of compliance for regulators by maintaining data and document versions for each iteration of collaboration.

Similarly, lenders are also utilizing these systems to comply with the Uniform Closing Dataset (UCD) requirement of the GSEs effective September 25, 2017. Lenders can deliver required data from the mortgage closing disclosure document electronically, along with the closing disclosure document itself. This improves the quality, consistency, and accuracy of loan data, enables lenders to deliver loans with granular data using MISMO terms and formats, and detects loan sale eligibility issues earlier in the process, enabling the timely sale of loans to investors.

Lenders need a system that can automatically extract and validate thousands of data points, ensure that accurate document versions are delivered to any requestors, and interface with third party compliance systems and GSE’s to automate delivery and collect eligibility issues.

Conclusion

Notwithstanding excellent technology advances in mortgage lending, there is significant room for improvement from mortgage loan application through loan delivery to servicers and investors. This includes increased use of consumer-direct digital channels, which has increased customer expectations that will require improvements in the back-end processes and technology that power the digital experience. Digital lending processes, including workflow-driven digital document management, can improve cycle time and loan pull-through rates, which increases revenue. This technology can also improve loan data quality and compliance while lowering the cost of doing business.

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Sources

1. Mortgage Bankers Association, "Quarterly Mortgage Performance Report Q1 2016," June 2016, <https://www.mba.org/news-research-and-resources/research-and-economics/single-family-research/mortgage-bankers-performance-reports-quarterly-and-annual>