Beyond Loan Origination Systems

A Decisions White Paper





EXECUTIVE SUMMARY

Many traditional vendor Loan Origination Systems (LOS) provide narrow function and limited flexibility, crimping some lenders' ability to innovate. The Decisions platform can easily augment or in some cases replace an LOS, freeing lenders to build workflow and rules without restrictions.

INTRODUCTION

The lending business, traditionally a paper-driven and human workflow process, is now awash with data, from literally thousands of data sources. Also changing quickly are the human workflow aspects of lending. In some forms of lending, a loan can approved and funded without any human interaction, though that's still pretty rare. Most lending still includes some human touches to complete the loan process.

Many lenders have moved relatively quickly to leverage more data and newer technology to make better lending decisions and streamline workflow. We've seen the rise of the FinTech business - Lenders heavily leveraging financial technology to speed approvals and improve portfolio results. The next frontier of machine learning and AI in lending is already upon us.

However, the vast majority of lenders can't readily utilize all the available data, still have lots of inefficient manual workflow, and feel that things like machine learning are simply out of their technical reach. For many lenders, the ability to innovate by better leveraging technology is often constrained by the Loan Origination System (LOS) choices available in their market. Lenders in non-traditional verticals typically face the difficult choices of buying an ill-fitting LOS off the rack and trying make their workflow fit, paying for custom integrations, building workflows and rules outside the LOS, or building their own applications from scratch. None of those are good choices, but there is a better option. Lenders who want to compete and differentiate based on technology can look beyond traditional vendor LOS soft-ware - to where data, rules, and workflow have no real limits - Decisions Business Process Management (BPM) software.

STATE OF THE LOS MARKET

Loan Origination Systems are available from many vendors worldwide, for a wide variety of traditional lending verticals. There are multiple vendors of mortgage loan origination systems, auto loan origination systems, payday loan origination systems, consumer-direct loan origination systems, commercial real estate loan origination systems, and a few other verticals.

Lenders who want to push the boundaries of their markets and lenders who don't fit into one of the traditional verticals face difficult LOS choices. Every LOS on the market started from one lending vertical market and they're all built based on the usual workflow and rules for their particular market. Traditional mortgage or auto lenders can probably find an LOS that mostly fits their needs, for example. They might need to compromise on some desired functionality, but they can be reasonably confident that their mortgage or auto LOS can do the basic job it was designed for as long as they stay within the confines of how the LOS was built.

Solar and home energy efficiency lenders, on the other hand, simply cannot buy an LOS off the rack because none exist that were truly built from first principles to handle solar loan origination workflows. So solar lenders either try to adapt an LOS built for some other market or they're forced to cobble together custom code and/or various other technologies to make an "LOS" that works for their business. Both choices eventually fail - the sort-of-adapted auto or mortgage LOS runs up against solar workflow or rules that it can't handle, or the custom/cobbled system can't be adapted quickly enough to keep up with the extremely rapid pace of change and tough competition.

Even within lending verticals that seem well-served by specialist LOS vendors, lenders are challenged when they want to add new loan products, new origination channels, new process flows, new types of rules, new integrations, or pretty much anything that's not part of the base LOS. Every LOS vendor in every lending vertical claims to be configurable, adaptable, extensible, flexible, easily integrated, etc. Within the framework of their products for their markets, they are indeed adaptable to some degree. But trying, for example, to add a separately risk-modeled add-on product to the base loan throws a curve that most LOS software doesn't handle well.

The most difficult barriers for vertical-specific LOS software are in workflow. As noted above, each LOS is built for the rules and business processes typical in its target market. The process steps in mortgage or auto lending workflows are deeply ingrained in vendor LOS software - certain workflow steps must take place in the prescribed order and are extremely difficult to move elsewhere in the workflow. As a basic example, in a typical vendor mortgage or auto LOS something like "verification of income" is always in an underwriting or a discrete vendor-defined "verification" workflow step. What if a lender launches a new loan product that's based on income and needs verification of income to be done before underwriting or verification or anything else? While most LOS workflows are "configurable" within their base structure, doing something that really alters the base workflow either isn't possible or requires some complex enhancement by the vendor. And this example is within the LOS software's home vertical - step outside that vertical and the whole deeply ingrained workflow structure is fundamentally incorrect and generally unusable.

AN LOS ISN'T BPM SOFTWARE

What is Business Process Management software? CIO magazine defines it - "BPM software is the 'oil that lubricates corporate machinery', allowing workflows to span multiple systems, coping with semi-structured or unstructured processes and allowing highly business-specific processes to be built and maintained." That pretty accurately describes the loan origination process that LOS software is intended to serve. Unfortunately, this isn't what LOS systems actually accomplish, especially outside their specific area of focus.

Every vendor LOS is in fact very specialized transaction software specific to the vertical they are serving. Originating a loan is actually a classic BPM scenario – meaning data comes in, rules are applied, work flows based on rules, tasks are created and assigned, tasks are completed, outbound documents are created, inbound documents are attached, and the state of work in process is reported upon. Lenders can manage some part of their business processes within the reach and scope of the LOS.

Business Process Management software, on the other hand, extends that reach and scope to the many lending and loan origination business processes that happen before an LOS starts, after an LOS ends, or outside the scope of an LOS. Some examples:

Solar lenders need to verify and report on numerous workflow steps that happen after
a loan is approved and initially funded. Installers get paid in stages of completion,
PACE program docs get filed, local agency permits are verified. There's also a
comparable amount of work in solar lending that happens before the application is
submitted - rooftop surveys, site access, and much more.

- Consumer and mortgage lenders have huge webs of lead-gen and referral data sources that require workflow and rules before a loan application is ever received.
 Connecting to lead-gen sources, deciding which leads to accept, lead pricing, lead filters, and managing the same lead from multiple sources is a huge business process management job for every high-volume lender.
- Lenders of all types sell insurance and other add-on products, many of which are
 highly regulated on a state by state basis. Multiple, large matrices of risk, compliance,
 and pricing rules for the add-on products need to be run parallel to but separately
 from the loan underwriting.

All of the above examples are absolutely part of the loan origination process. Some LOS vendors will write custom enhancements or use scripting tools for some of the examples. For big table logic, multi-matrix rules, and complex ruleset waterfalls, lenders often use a "black box" with hard-coded calculations and rules. All are done every day at lenders, none easily, with extra people, emailed spreadsheets, CRM tools and myriad other workarounds.

None of the examples above are easily within the scope of a typical LOS. All are well within the scope of high-function Business Process Management software. Decisions is the highest-function BPM solution in the market, with no limits on where workflow and rules sit in any business's process flows. Decisions lets a lender automate and manage everything in the true end-to-end lending workflow, from initial lead to final closing.

KEEP AND EXTEND LOS SOFTWARE THAT MOSTLY WORKS

Some lending verticals are pretty well served with generally competent LOS solutions, mortgage and auto lending in particular. Mortgage and auto lending are also by far the most regulated forms of lending, so most vendor mortgage and auto LOS software does a pretty job of keeping lenders compliant. Mortgage and auto lenders in a large part depend on their LOS vendors to ensure that their systems are up to date with compliance and regulatory requirements. That's a pretty good reason to not reinvent the whole LOS.

However, as shown in the examples above, even pretty well executed vendor software for a given vertical rarely covers everything. Things that an LOS can't do need to happen before,

during, and after the LOS's built-in workflow. Some examples of ways most lenders and LOS vendors solve for these gaps in workflow and functional capabilities:

- Vendor enhancement Pay the vendor to enhance their software, then wait for them to build it. Or don't pay, but wait even longer for the vendor to have enough time to develop an enhancement.
- Use other software and connect via API CRM software for front-end things like leads, document management software for back-end things like post-closing workflow.
- Custom web site development For loan application portals, dealer portals, contractor portals, and other borrower-facing and partner-facing web apps.
- Custom scripting within the LOS JavaScript or VB-style scripting capability of some sort is part of most vendor LOS software. Complex rules, special workflows, data manipulation, and custom calculations are often handled in this manner.
- Custom software outside the LOS The "Black Box" for complicated risk scoring and
 pricing rules execution is a typical example. Built by risk gurus in Java or C, but could
 also be Excel, called via API or entered manually into the LOS from a separate system.

"All of the above" is the actual answer for most lenders and LOS vendors. That may get the job done, but it really complicates things. All of those individual pieces of software and their respective interfaces have to be maintained separately.

Doing some of the LOS's work in a CRM system is clunky at best, especially when the work needs to move from the CRM system to the LOS, back to the CRM system, and then back to the LOS.

Scripts within the LOS are code - when there are 100 lines of variable declarations, calculations, and if-then-else statements, that's code, in spite of vendor suggestions otherwise. Scripts are also fragile - when a lender or vendor changes a data object name somewhere, things break.

Custom web and mobile development for front-ends takes on a large life of its own, even for simple online forms and mobile apps.

Custom software, especially the black box, is a maintenance nightmare. If it's a set of automated algorithms sitting on special server, only the person who wrote it really knows how it works. If it's in Excel, everybody knows how it works and it's easily manipulated. Either way it's also a potential compliance problem.

The better answer for lenders and LOS vendors is Decisions. Decisions is a code-free, completely visual workflow and rules building environment. All of the scenarios described above can be handled by Decisions, as can anything else in lending that involves workflow, rules, data, web forms, or reports. Instead of covering LOS gaps with five or more different tools, approaches, and sets of people, weaving Decisions into an LOS strategy delivers a single solution option with the power to do everything lenders need.

DON'T KEEP LOS SOFTWARE THAT DOESN'T WORK

For lenders not in mortgage or auto, options are considerably worse. Robust LOS software that adequately serves the needs of emerging lending markets and innovators simply doesn't exist, as was described above. Lenders in these markets generally believe there are only two choices. They can buy something that seems sort of close and kludge it together with all of the examples above for mortgage and auto, plus many more. Or they can build their own, from scratch, using standard software development tools and timelines.

The much better answer for lenders in markets like solar, home improvement, online, direct consumer, payday, and other lending verticals who want really advanced workflow, rule, and data capabilities is a high-function BPM solution like Decisions. The tradeoffs and workarounds in using a round-peg LOS in a square-hole lending business are so significant that they should dissuade lenders from trying. But they do try, because they believe solutions should exist for their market. And solutions do exist, just not where lenders most commonly look.

Nothing that an LOS can do can't be done in a high-function BPM solution like Decisions, but Decisions is not built to just do loan origination, so some there are some differences in how it's implemented as compared to an LOS. The key differences are in the "out of the box" experience - the typical LOS comes out of its box with things like basic credit bureau integration and the aforementioned basic lending workflow constructs for its particular lending ver-tical already in place - basic queues, standard roles, standard tasks. All of these still require configuration, but there's a rough framework.

Decisions comes out of its box also with lots of basic workflow constructs in place, but they're not unique to lending. What every lender thinks of as a "queue" may be called a "task

list", for example. The credit bureau API is easily configured, but it's not hard-wired like in an LOS. It's a little bit of a blanker slate to start.

Decisions is a code-free, completely visual workflow and rules building environment. The entire lending workflow can be built graphically, from initial web forms or lead-gen APIs, to credit rules and risk models, to underwriting, funding, and post-closing. Instead of using Visio diagrams to design the workflow and then coding or configuring it, Decisions users design the workflow just as visually as Visio, but there's no translation - the design is the system. Instead of building rule models in Excel and then trying to translate them into something the LOS can run, Decisions users build and test rules directly within the system.

In Decisions, getting to a base-level framework configuration might take two weeks instead of the one week a vendor LOS takes to get to the same point. But that's where Decisions' advantages put it ahead to stay for lenders outside of an LOS vendor's core market. There are none of the constraints on workflow, rules, or data that the LOS user faces. The code-free, visual workflow building capabilities are something that no LOS currently offers and provide a huge productivity advantage. There are no vendor-imposed limits on where Decisions starts a lending workflow, no limits on where it ends, and no limits on its reach for data. The Decisions rules engine is orders of magnitude more robust than an LOS's rules abilities - what needs to run in a "black box" outside an LOS lives in Decisions.

The bottom line on implementation for lenders in markets without well-fitting LOS software: Decisions will take you anywhere an LOS can, just as quickly. Any nominal advantage an LOS might initially have "out of the box" is quickly surpassed by a vastly more productive, vastly more flexible, and vastly more capable solution. Past the basics, when the workflow gets tricky and the rules get complicated, Decisions accelerates at about the same point where a less than a perfect-fit LOS runs out of gas. No code, no limits on creativity or innovation.

INFRASTRUCTURE OPTIONS

Most higher-end, reasonably modern LOS software is sold only as SaaS - Software as a Service, on a subscription model. SaaS-only works for many lenders, but often not for banks, credit unions, and other highly regulated lenders who must be able to guarantee compliance and data security and who are extremely reluctant to let external SaaS applications connect to customer financial data inside their firewalls.

Decisions covers all the bases and lets lenders decide where they want their lending systems to live. Decisions can be licensed for installation on a lender's own servers, hosted at AWS or Azure, or on a subscription SaaS basis, hosted by Decisions or hosted elsewhere.

COSTS AND ROI

Decisions is licensed based on servers or subscription, never any per-transaction or perloan fees.

The high level ROI analysis for Decisions in lending is pretty easy. Lenders and LOS vendors in mortgage, auto and a few other mostly well-served verticals can consolidate and simplify a wide range of extensions and enhancements on a single code-free platform that's easily integrated into both the lender's business and the LOS. For lenders outside of well-served verticals and innovators who need to go way beyond vendor loan origination systems, there's no faster or more efficient way to get exactly what you need.

CONCLUSION

For some lenders in mortgage, auto, or a couple of other verticals, off the shelf LOS software for their specific vertical may fill the bill as-is. For lenders in every vertical who need to extend, innovate, or change things, and particularly in lending markets that aren't well-served by packaged LOS software, Decisions is the answer you've been looking for. Decisions is also the answer for LOS vendors looking to greatly extend their capabilities with a single platform partner.