WHITEPAPER

UNLOCKING THE SECRETS OF SUCCESS: NAVIGATING CONSUMER LOAN ORIGINATION SYSTEM MODERNIZATION

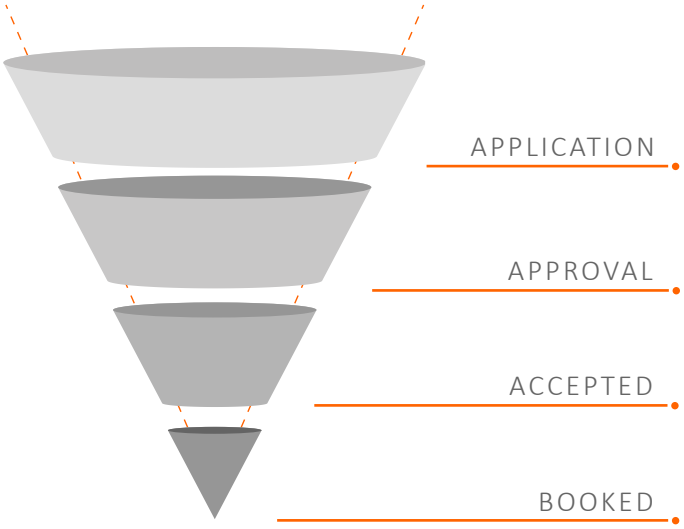
CC PACE

Implementing anything new comes with some peril, and this is certainly true for information technology projects. The Gartner Group reports that 75% of Enterprise Resource Planning (ERP) projects fail, and Big Data projects fail at an even greater rate. Furthermore, only 30% of digital transformation projects result in improved corporate performance[1]. Loan Origination System (LOS) implementations are a class of technology projects that are particularly failure-prone when failure is defined as going live a year later than planned, doubling the originally planned budget, or never going live. CC Pace's corporate experience spans scores of LOS implementations, and we can attest that nearly all of them exceed original budgets and timelines, with many shut down as sunk costs rise to exceed any future potential return on investment (ROI). But there are ways to mitigate these difficulties.

Two fundamental concepts cause this failure rate. First, the new system must ensure compliance with all applicable lending regulations and a moving target, but secondly, it must improve the shape of the lender's funnel. How can more profitable loans make it from application to booking? Business leadership will always seek ways to improve the funnel's shape, and these potential improvements will vary with changes in competitive forces, channels, interest rates, asset valuations, etc. A simple example that improves the shape of the funnel is the use of external income and employment verification sources. But when it comes to systems, the improvements to the funnel that matter most depend on the type of lending and competitive environment. The look-to-book ratio at a subprime auto lender will differ from that of a super-prime auto lender, and the ways to improve each funnel will vary.

Basic factors that affect the funnel are summarized below:

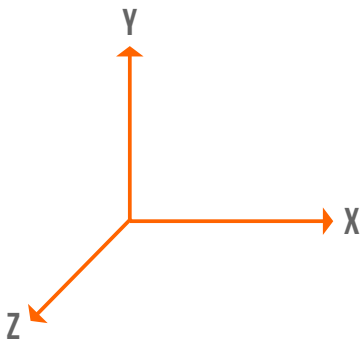
LENDING FUNNEL BASICS



- Lead quality/borrower pool
- Application abandon rate
- Time to decision
- Fraud controls
- Offer price
- Loan conditions and related clearance
- Interest rate environment/ credit cycle

The business executive is making a complicated choice in considering the application of improved LOS technology in their business model. This choice spans three primary axes, as shown in the table below:

AXES OF CONSIDERATION IN LOAN ORIGINATIONS SYSTEMS (LOS) IMPLEMENTATIONS



X Time: How long will it take to go live?

Y Feature set/Agility: Will we be able to get everything, including flexibility, that we consider important to the business with the solution?

Z Cost: What will the total cost of ownership be?

For a small, unsophisticated lender, a "cheap and cheerful" off-the-shelf solution that neatly boxes in scope is almost always the right option when looking across time, feature set/agility, and cost. But for higher volume, rapidly growing, analytically savvy organizations, the off-the-shelf solution provides for a speedy go-live but then buyer's remorse a mere six to nine months after go-live as the executive team realizes that they will only ever have 80% of what they were looking for and that critical last 20% is nearly impossible, and/or drives the total cost of ownership sky high.

This three-dimensional concept is a significant contributor to the failure rate in loan origination solutions and the reason that even some of the largest banks and lenders remain reliant on woefully outdated technology, where in some cases, the technology stack would be remarkably familiar to the technologists of the 1980s with all the related inflexibility and costs to support/modify. Conversely, this is also why few, if any, fintech lenders leverage off-the-shelf solutions. Successful lending across the credit cycle requires quickly tuning lending strategies while constantly learning about prospective and existing customer behavior utilizing all available predictive data that passes its return on investment (ROI) test. When it comes to modernization, as Stein's law states, "If something cannot go on forever, it will stop[3]". The do-nothing strategy eventually fails miserably as adverse selection[2] creeps into the lender's portfolio. If a lender's competitors effectively use deposit data and the lender does not, poor credit performance is just around the corner. This difficulty in modernizing is also why the market regularly sees banks partnering with fintech lenders, as it is a wonderful way to put a clear price tag on improving customer acquisition capability. Look at the success of Upstart[4] and ZestAI[5], to name only two. Notice that the larger lending institutions are not partnering in consumer lending originations as they all use their own highly tuned capabilities across the funnel. The dynamics around efforts to modernize these capabilities warrant further discussion.

As a framework for comparison, the CC Pace team's firsthand experiences provide two examples of large LOS implementations, one that failed and one that succeeded, where the dynamics of each can be compared, providing the reader with some useful references for risk mitigation.

The "failure" occurred while working at a renowned global consulting firm where a large mortgage LOS implementation far exceeded any possible best-case forecast of prospective ROI at a now defunct but formerly massive lender. Beyond the difficulties of working the 3000+ billable hours/year on the engagement, the problems of the past are the problems of today: executive support, timelines/estimates, talent/experience, unproven technology, and vendor relations. The "success" occurred at a large telecommunications provider[6] where the engagement teetered during the implementation but became a runaway success as it went live, allowing the client to rapidly gain market share from the established players, year after year.

The table below provides a contrast to the key dynamics between the success and failure cases:

DYNAMIC	SUCCESS	FAILURE
Executive Support	Leadership involved in detail and committed to making challenging decisions	Leadership removed from the details
Timelines/Estimates	Well-informed; efficient back and forth	Major plan revamps with slow communication
Talent/Experience	Executives had implemented similar solution	Executives had never implemented similar solution
Unproven Technology	Proven technology	Unproven technology
Vendor Relations	High trust	Low trust

Executive support from both the business and technology side is critical to the success of these transformational implementations. There will be countless decisions to make in containing the scope of the implementation; esoteric rules and policies will spring forth from the legacy system as the delivery date approaches. The trick is that the business sponsor's delegates will be reluctant to go in with less than what is currently available, and then the trap is set. Behaviors here can range from the most dangerous, "everything must be in the initial release because we never get the follow-on phase," to the ideal, "let me make a few calls and see how we can make that work." If that delegate's relation to their boss is such that they do not feel empowered to make compromises, the delivery can come to a perilous point. Ideally, the executive is well versed enough in the details of the business that they can look in directly, understand, and empathize with the difficulty around what occasionally turns out to be a Hobson's choice, while in other cases tough decisions can be made to push to a later phase of the rollout. Regardless, there will come a time when the executive's commitment to the chosen path will be tested; at this critical juncture, competing vendors will be circling, alternative options that were ruled out for good reason will resurface, and the initiative can come to a hazardous frozen state. There are a variety of techniques in the following sections that can mitigate this risk.

Timeframes and estimating processes have their own dynamics in every organization. One widespread practice is that the go-live date is set based on an original budgetary expectation as to when the solution would start to bring business benefit. The seasoned executive buyer will know how to provide some buffer in this timeframe and be mindful of holiday lockdown periods. As part of arriving at this date, the team will have a lengthy list of risks and "known unknowns" at the start, but as the pace quickens and the design and development get moving, the ongoing cross-team dialogue related to the end date falls by the wayside. This trend continues until the delivery date is within a few months, bringing it into context for everyone's concern as vacations, holidays, and the remaining number of sprints are all equally precious and understood. Then, one Monday morning, the team learns that the program manager, or vendor, has re-cast the plan over the weekend, and suddenly, the go-live has been pushed out by at least a few months. In the author's experience, the delivery team typically has a keen sense that the date will not be met long before the executive team realizes it. Is there any medicine for this illness? CC Pace suggests two techniques: First, use a Wideband Delphi technique for the overall estimates. A cross-functional team of experts produces a view based on each team member creating an independent estimate, assumption set, and risk list, which, when carefully combined, is enormously valuable. This insight will provide the executive team with a sense of the best-case, likely-case, and worst-case scenario and why each of those cases could come to fruition during the implementation. It also addresses the "groupthink"[7] that can occur with the implementation date. The second technique utilizes agile techniques where a keen eye is kept on the backlog, which will quickly get out of hand. The ongoing prioritization and informed sizing of backlog by product owners is a critical insurance policy against the previously described 'Monday morning surprise.' An independent-minded release train engineer can make all the difference here as the common and continuous understanding of what it will take to deliver the minimum viable product (MVP) is the overarching goal until the initial go-live.

Talent and experience make a significant difference in the likelihood of success for LOS implementations; in the successful case, the key business executives had previously implemented a similar solution, albeit in credit card lending, where they were aware of the difficulties and risks and had been successful at doing so on a smaller scale. Their talents in operating at both a strategic and operational level were critical to the success of the engagement. Similarly, lender talent must be positioned and groomed in parallel to vendor efforts so that the post go-live is not met by a durable need to rely on a large team of vendor staff to support what was built. Trustworthy vendors will have transition plans and suggestions for support team structure. In the failure example, talent that had "been there and done that" was not present, nor was a strong transition plan in place. If you are going to climb Mt. Everest, the author suggests that you choose a guide who has not only successfully done it before but also one who has laid out how they will go about doing it again[8].

The chosen technology matters, and the unproven use of technology can present an insurmountable pitfall. In the failure experience, the workflow components were extremely enticing on paper and at low scale/volume but failed to scale to the configured need. In this case, the diligence should have required performance testing of the solution as typically configured early in the engagement. In the successful case, the technology was proven and only moved laterally into the business line with a higher availability requirement. From the experiences of a former software salesperson, I encourage any reader to be leery of being the first to implement any vendor-provided solution or function. It is extremely rare that a fast-follower strategy is the best. An additional mitigation strategy is to ensure that the team's technologists have the business's basic domain knowledge documented, covering seasonality, peak volumes, availability, typical high-priority change requests, an understanding of packet sizes, and rules/workflow complexity.

The importance of vendor relationships strength and trust is often underappreciated. In sales, you quickly learn how you will lose every deal if you do not think through and understand how to portray best-case, likely, and worst-case implementation timelines. Software vendors will never go in with a likely scenario; it will almost always be the best-case, albeit with caveats. If they are a trustworthy shop, they will be upfront about what it takes for the client to achieve a best-case scenario regarding team composition, change management processes, and executive-level decision-making. However, this approach is not often the case, nor is it followed through on post-sale.

Another critical point is that as a vendor, you are likely working on multiple implementations simultaneously across similar clients. As a buyer, you change your LOS technology once a decade at most. So, while both sides can agree during the sales process on the high-level concepts, "I'd like to be able to add a new interface in a month," the details of how this will work specifically at the lender become lost in translation in the implementation. In an environment without trust, the lender's team will have to deal with all sorts of inefficiencies. One example is the "I expect you'll half it, so I'll double it going in," where the reverse is even more concerning, "when I asked them questions about their estimate, it suddenly became much smaller." This behavior is mitigated by establishing expectations around trust early in the engagement. An example of this is to say to the vendor, "I am going to expect that you will provide estimates that stand up to my team's scrutiny; let me know where you see gray areas. In return, I will ensure that if there are change orders, they are signed expediently, and I will keep your team continuously busy." When vendor trust is lacking, it is exceedingly difficult to establish a true understanding of what it will take to deliver the minimum viable product.

A wide array of complexities in the LOS Implementations contribute to the difficulty and associated risk. The fundamentals of the business model directly affect this risk, including product lines, number of channels, volume expectations, countries, asset-backed lending (e.g., auto or mortgage) considerations, and many more. The table below provides some samples, typical implementation time frames, and key risks for consideration:

	Decisioning	LOS	>1 Product	>1 Channel	Multiple Countries	High Volumne (>1M applications)	Asset backed lending	Typical time frames (months)	Fail rate	Key Risks
Enhanced automotive lending decisioning capability in an existing LOS at a high volume	Y					Y	Y	9-18	Med	Existing LOS will try to obviate the need for the external call
New mortgage LOS for a small conventional retail lender	Y	Y	Y				Y	6-9	Low	Vendor solutions are largely for purpose
New personal loan originations platform at a de novo lender	Y	Y		Y		Y		12-24	Med	Gaps in pricing and workflow strategy
New personal loan originations platform at a national lender	Y	Y		Y		Y		18-36	Med	Replicating policy in legacy is difficult
Establishing common decisioning across all consumer product lines at a large retail bank	Y		Y	Y		Y	Y	48+	High	Each product line has differing needs/view of the customer

There is much more that could be said, but in summary, while the perils of consumer loan origination system modernization projects are many, there are a variety of techniques to mitigate these risks across the key dynamics of executive sponsorship, talent/experience levels, timelines/estimates, and vendor trust. Doing nothing will eventually fail. CC Pace suggests that an independent partner can tip the odds of success in the lender's favor.

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FOOTNOTES:

- [1] 3 Main Reasons Why Big Technology Projects Fail – & Why Many Companies Should Just Never Do Them (forbes.com)
- [2] Adverse selection- Wikipedia (the banking section provides a particularly good explanation)
- [3] Herbert Stein- Wikipedia
- [4] Upstart powered lenders- Upstart for Lenders
- [5] AI-Driven Credit Underwriting Software (zest.ai)
- [6] Handsets are financed in the United States, creating a credit decision at point of sale for post pay wireless plans. For more information Smartphone Financing: What You Need to Know (investopedia.com)
- [7] Groupthink | Psychology, Decision-Making & Consequences | Britannica
- [8] Compare the highest-rated Everest guides 2023 (expedreview.com)