# **Bridging the Gap**

How to cost-effectively increase the ROI on a software investment that no longer meets all your business needs

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# 1 Overview of Key Points

- It is not uncommon that a software investment does not meet all your needs because your requirements have changed since the system was selected.
- Most companies research and find the best system available that meets their core business needs and then create the rest.
- Sometimes the limitations of an investment are not clear in the beginning. Other times the problem arises because senior management has a different focus than the day-to-day line managers or sales managers.
- Additionally, the industry changes so quickly, including new regulations, that it is hard to buy all the software and technology that you will want 12 months in the future.
- For mortgage companies who find that their software investments in an LOS or any other systems have significant shortfalls or gaps, there are essentially two options -- bridge the gap or buy a new system. The latter is likely to be cost-prohibitive in the near term.
  - What you must do:
    - A) Identify the gap
  - B) Quantify the cost of the gap (lost productivity, bad loans, and lost loans)
  - C) Determine how and what technology can bridge the gap
  - D) Compare the cost of bridging the gap with the cost of the gap

Even if the cost of the technology is more than the gap, it may still be desirable from a quality control, best practices, or SARBOX, GLBA or FACTA perspective.

# 2 Key Benefits

The key benefits of bridging the gap by adding functionality through the services of an offshore application developer include:

- Flexibility where there was none previously
- Additional functionality at a lower cost
- Ability to continually adapt to new needs in the fluid mortgage lending environment
- Improved data reliability by reducing key strokes (Interfaces)
- Increased efficiency by automating non-industry standard processes that would otherwise be done manually
- Scalability to manage future requirements

Investing in any enterprise class software system is a major business decision. In the mortgage industry, the Loan Origination System is the single biggest technology investment because it is the core technology component of the loan origination process on the front end. It must be able to automate all core mortgage processes efficiently, and provide the flexibility for the mortgage lender to adapt to industry changes as well as quickly take advantage of new business opportunities.

Most mortgage banks do a good amount of due diligence before making an investment in an LOS. In addition to meetings and demos with software vendors to evaluate the leading solutions in the marketplace, senior management, sales management, and IT management typically work together to identify system functionality requirements.

Yet, more often than not, the chosen LOS will not meet all business requirements exactly and will need to be customized to some extent. Ideally, all functionality gaps should be identified early on before the system is chosen, but sometimes they are not.

Senior management may be looking at different things than the day-to-day line managers or sales managers, or many months have gone by since the process started and needs have changed slightly in the meantime. Additionally, the changing compliance and legal landscape complicates matters because the process of managing the business requirements of the system is usually a moving target.

Most companies identify the best LOS that meets their core business needs and budget to develop additional applications, interfaces, and reporting tools either internally or through an outsourced services provider.

# 3 Categories of Loan Origination Systems

There are four basic categories of LOS:

- Those that essentially are not designed to be customized,
- Those that can only be customized through the vendor,
- Those that are customizable by the user or third-party, and
- Those that are designed to be customized and come with toolboxes of add-on functionality modules

Closely related to the ease of customization is the cost of the software. You may pay a lot less for a hard-coded, non customizable LOS, but you sacrifice in functionality. This may not be the most cost effective solution when you consider what you potentially sacrifice in business processes that must revolve around the inflexible software.

On the opposite end of the spectrum, many newer LOS are built on flexible Services Oriented Architecture (SOA), and are designed to be customized to meet individual business processes. Yet the toolkits that come with these systems require a great deal of programming, and development can still take many months and require assistance from external service providers.

Unlike larger lenders, smaller lenders are more likely to tweak their business processes to align with the capabilities of the LOS software. Yet smaller lenders often require customization in the areas of internal and external interfaces as well as enterprise reporting. These interfaces enable communication between disparate internal software applications as well as data communication with external mortgage service providers such as credit agencies.

The key issue is to analyze how bridging the gaps in functionality through customization can be most cost effectively accomplished—internally, or through an outsourced provider. To determine this you must identify functionality gaps; quantify the cost of these gaps in terms of lost productivity, bad loans, lost loans; determine how and what technology applications can fill the gap; and compare the cost of bridging the gap with the cost of the gap.

You must identify what is most strategic in the short-, medium- and long-term; and what is most flexible, most cost-effective, and most easy to accomplish in terms of a solution-- internal development or using the services of an external services provider that specializes in the mortgage industry. And even if the cost of additional technology applications are more than the cost of the gap, it may still be desirable from a quality control, best practices, or SARBOX, GLBA or FACTA perspective.

This is where partnering with an outsourced services provider with mortgage technology and LOS expertise makes sense. To be effective, the service provider needs to understand that lenders need the system to fit their business processes and not the other way around.

An outsourced service provider who has developed proven, flexible and affordable integration frameworks designed specifically for the mortgage industry and its most common internal and external interfaces and reporting tools will reduce the time and effort required to make the LOS fully functional in meeting your business processes.

## 4 Internal and External Interfaces

Some of the common internal and external interfaces that typically need to be developed around an LOS include:

Most of these Interfaces are built from/to the LOS to the Applications/Systems mentioned below. The effort to integrate some of these Systems can vary from several thousands to several Millions depending on the size of the Lender and their Systems. Enterprise Lenders have huge Integration requirements between multiple Systems. In fact, from our experience, the single most expensive item in an Enterprise LOS Implementation is the integration efforts required between different Systems. Integrations requirements are much lesser in small to medium sized Lenders where they typically tend to use the Out of the Box functionality of the LOS. So the Bigger the Lender the more complex the Systems and more effort required for Integration.

#### 4.1 Internal Interfaces:

- Channel sites (Consumer/Broker/Correspondent Portals)
- AUS interfaces
- CRM systems
- Secondary marketing & risk management systems
- Back office interfaces (G/L, finance and accounting systems including commission systems)

#### 4.2 External Interfaces:

External interfaces which are usually to 3<sup>rd</sup> Party services and fulfillment provider, include:

The time and effort varies depending on the size of the Lenders. But one thing is guaranteed that there is not only too much time spent on these Integration efforts but also many times the effort is redundant. That's where we can help the Lenders utilize our Frameworks where we re-use most of the code that we have developed earlier.

- Credit
- Compliance
- AVM (Asset Value Models)
- 3 AU/Risk assessment and/or pricing engines (Fannie DU, Freddie LP, Others)

- Warehouse line interfaces
- Enterprise Reporting Systems (LOS data feeds can be batched into Data Warehouses or for Lenders who have invested in Real Time Dashboards and Real Time Reporting systems, Interfaces have to be built from LOS into the Reporting System Databases)

Depending on the system, the interfaces can be EDI, XML, MISMO, Text/CSV, or other formats. Although the industry is slowly heading towards MISMO compliance, the full adoption of MISMO is still a long way away. This, in itself, creates more work during porting and mapping of data.

The most cost effective services provider will have already developed a proven set of components/applications for the mortgage industry that are Open Source, Web-services, SOA-based set of applications that address the most frequently occurring technology challenges related to systems integration.

#### 4.3 Examples of frequently used components would include:

#### 4.3.1 Data Converters, Parsers, Adapters & Transformers

- Fannie DU to MISMO & vice versa
- Fannie DU & MISMO Parsers into Business Objects
- MISMO Adapters (MISMO black boxes which provide mapping facilities to convert data streams into appropriate MISMO format)
- Transformers which convert MISMO data packets into Web pages. (For example, the credit pulls from credit agencies are transformed into Web pages.)

#### 4.3.2 Credit Reporting Services

• Credit Agency Interfaces (either direct, via ePass or Fannie XIS)

#### 4.3.3 Verification Services

 Verification Services Provider Interfaces (AVM (Asset Value Models), Address Verification, SSN Verification)

#### 4.3.4 Compliance Services

• Compliance Service Provider Interfaces (Section 32, High Cost, OFAC etc)

#### 4.3.5 Automated Underwriting System Interfaces & Services

- LOS Interfaces to AUS
- Sophisticated testing tools around typical AUS Black Boxes.
- Broker Portal Frameworks
- Pricing System Interfaces

It's important to understand that these components don't eliminate development efforts, but they minimize the effort required thereby allowing the lender to react to market demands more rapidly.

A large wholesale lender which was in the process of building their broker portal to be tightly integrated with their home grown LOS and the Mindbox AUS System recently needed to fill such a functionality gap. The lender needed an external interface with its credit agency to access credit reports. This required integration with the credit agency in order to send the request, process the response, and customize it as required by the underwriting engine.

The lender used the services of an offshore services provider who used proven, pre-built components/building blocks that could be easily "plugged in" to enable the request to be sent and received in a standardized MISMO-based format. The credit services building block does all the processing for the request.

The credit service application was available either in component toolkit form or as a web-based service-

-which could also be installed at the lender site--and reduced the implementation time by at least 5-6 man months including development and testing efforts, and provided a clean, well-defined interface. It also freed the lender from purchasing expensive vendor systems for accessing the credit networks to which some of the networks are tied.

### 5 Conclusion

In summary, the key benefits of bridging the gap by adding functionality through the services of an offshore application developer include:

- Additional functionality at a lower cost
- Additional flexibility
- Adaptability to new needs in the fluid mortgage lending environment
- Improved data reliability through reduction in key strokes (Interfaces)
- Increased efficiency through automation of non-industry standard processes that would have been done manually
- Scalability to manage future requirements

In conclusion, optimizing LOS functionality is often an ongoing process as business processes and business compliance regulations continue to evolve. Mortgage lenders can reap the benefits of cost effective, strategic outsourced services to integrate their in-house systems together and integrate externally with vendors who provide data and services to the mortgage industry, integrate disparate systems internally, and increase LOS operational efficiency. This enables them to bring products and services to the market more rapidly, while continuing to achieve full compliance with regulations and guidelines that govern the industry.