the Risk Report

White Paper for the Banking and Lending Industry

PRYMAK

Installment One - Vendor Risk

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Risk in Banking and Lending

Risk is inherent in most business endeavors, but the word "*risk*" has special meaning in the banking and lending industry. Many financial institutions today have executive *Chief Risk Officers*, whose sole purpose is to manage risk throughout the organization and its processes. Those risks are varied, and include ensuring the organization is in full compliance with industry regulations and dealing with such topics as corporate insurance, internal auditing, corporate investigations, fraud and security.[1]

Secondary Marketing Managers spend much of their day hedging risk to organizational mortgage practices. Those risks include interest rate risk (risk of interest rate changes from lock to sale), credit risk (borrower defaults that cause repurchases), and fallout risk (locked loans that do not close). Secondary marketing managers have multiple hedging instruments at their disposal in order to offset risks including mandatory forward sale commitment, futures, options, and best efforts commitments.

Risk from Financial Legislation

Risk has taken a whole new meaning in the eyes of mortgage bankers as federal financial reform by Washington is inevitable. As Congress and President Obama's administration look to prevent another major financial crisis, both the House and the Senate had proposed bills that had strict risk retention requirements on lenders. The 1,300 page original bill known as *Restoring American Financial Stability Act of 2010* included rigid risk retention requirements for lenders. The bill contained a risk retention requirement for lenders to keep 5% of all loans originated in their portfolio so they would have "skin in the game". This requirement would not only add costs to consumers, but it would take small and mid-size lenders out of the business. For example, a mortgage company originating $500 million dollars in mortgages annually would be required to keep $25 million in their portfolio. With profits on mortgage loan originations having fallen to about 50 basis points[2], only highly capitalized lenders could survive such a requirement. What's more, the risk retention requirement would continue from year to year.

1 "The Rise and Rise of the Chief Risk Officer", Sheila Allen, May 12, 2005

2 "MBA Study Shows Narrowing in Profit Margins For Independent Mortgage Bankers and Subsidiaries", Mortgage Bankers Association, December 17, 2009

Fortunately, with the help of some great lobbying efforts by the Mortgage Bankers Associations and other trade organizations, an amendment exempting qualified, well underwritten mortgages has been proposed by Senators Mary Landrieu (D-LA), Kay Hagan (D-NC) and Johnny Isakson (GA-R), and appears to be heading into the final bill.

Financial Risk Update - July 22, 2010 - Financial Reform Bill Signed into Law - *Today, President Obama signed the Frank-Dodd Financial Reform Bill into law, mandating greater transparency, accountability, and oversight in the financial and mortgage industry. The exemption for "qualified residential mortgages," proposed by Senators Mary Landrieu (D-LA), Kay Hagan (D-NC), and Johnny Isakson (R-GA) appears to have made it into the signed legislation. Prymak will be providing future installments to the Risk Report that will address specific parts of this bill, so stay tuned.*

Operational Risks

McKinsey Quarterly states "operational risk is a financial institution's exposure to losses arising from mistakes (such as computer failure and breach of regulations) and conspiracies (including loan fraud and embezzlement) that affect its day-to-day business."[3]

Fraud has become among the leading risk factors for banks and lending institutions. During periods when real estate values appreciate, banks are more likely to recover from a borrower's fraudulent practices as long as the property has been reasonably maintained. But in these turbulent times with property values falling in many markets, fraud by borrowers can be devastating to lenders, servicers and investors. Mortgage fraud is not perpetuated solely by borrowers. Unscrupulous real estate agents, appraisers, and even an organization's loan officers can get into the act. There is enough important information available to publish an entire series of risk reports just on mortgage fraud. Prymak will address the use of technology to combat mortgage fraud in a future installation.

About The Risk Report

This risk report will be an evolving series of white papers that focus on the current risk facing operations managers at banks, credit unions, and lending institutions. It is intended to provide guidance in preparing for the risks that will come with the pending financial reform bills that will likely pass through the House and Senate and onto the President's desk for signature this summer. This summer's monthly series will focus on 2 facets of technological risk management - ***(1) exploring strategies to offset risk with the operation and deployment of complex banking and lending systems, and (2) using technology to better hedge against operational risks.***

Installment 1 – Vendor Risk

This first installment will focus on vendor risk. Unless you appear on the *Fortune 500* list, your

3 "Managing Operational Risk in Banking", Robert S. Dunnett, Cindy B. Levy, and Antonio P. Simoes, February 2005

organization probably has multiple vendor supported technology solutions helping to manage day-to-day operations. While technology vendor partnerships are essential for most lending organizations, they are subject to risk when depending on external resources to meet operational objectives. Two such risks that we will explore are vendors not meeting regulatory compliance needs quickly, and vendors becoming insolvent.

"You have reached a number that has been disconnected or is no longer in service".

We have all heard this dreaded message. Back in the late 1980s, I was a Systems Manager for a New York based commercial bank – *Dime Savings Bank*. Some years after my departure, it was absorbed by *Washington Mutual* and today is probably buried somewhere in the mammoth loan operations world of *JP Morgan Chase*. At the time of my tenure, *Dime Savings* was using Cambridge, Massachusetts based *Saddlebrook* Corporation's *System M* loan origination platform (on *DEC's VAX* minicomputers) for the mortgage division's extensive real estate finance business. At the time, *System M* was a leader in loan origination functionality. It was a very flexible application, with tools that allowed bank programming to staff make customizations to the work flow and application content. *Saddlebrook* was among the top 5 loan origination vendors at the time, including some of the largest lenders in the country as clients.

On a Tuesday following a three day weekend, in what appeared to be just another day at the office, we called the *Saddlebrook* customer service line (no online help back then) and received that familiar disconnected message. We first thought that it must be a mistake, as we had heard nothing from *Saddlebrook* about financial troubles. But after some panicked research, we confirmed our worst fears - *Saddlebrook* had gone into bankruptcy, leaving *Dime Savings* with no support safety net for its lending platform.

Fortunately, the software source code was in escrow, and eventually the *Saddlebrook* customer steering committee was able to work out a deal through the bankruptcy court. *Sanchez Computer Associates* of Malvern, Pennsylvania, was to take over support and development of the *System M* platform. The transition was fairly smooth and eventually we were back on track. ***Tragedy was narrowly averted, but several lessons were learned during the harrowing process:***

Lessons Learned from Vendor Collapse

The *Saddlebrook* bankruptcy happened during a relatively good economic time, and their demise surprised the lending and banking industry. But with the current state of the industry being the worst that most of us have experienced, risk of vendor collapse is all too prevalent.

Since 2002, *Mortgage Technology* magazine provides an annual synopsis of the top service providers in the mortgage technology industry. Back in 2004, the top 100 vendors were identified based on demonstrable market share, proven business benefits and excellent technology.[4] ***Of the 100 vendors listed in 2004, 13 are no longer in business while 22 have merged with other entities or changed ownership.***

In a related survey, the editors of *Mortgage Technology* identified the Top Rising Tech Stars of 2004, of which *Prymak* was proud to be included.[5] Of the ten (10) companies identified, *Prymak* is one of only four (4) that are still intact, while two (2) have changed ownership hands and the remaining four (4) are out of business.

Unfortunately, this industry will continue to struggle in the near term, with continued loss of service vendors. The *Mortgage Bankers Association* performs a monthly commentary and forecast on the current mortgage finance climate. *The Mortgage Finance Commentary: June 2010*[6] report predicts that mortgage origination volume will drop to $1.4 trillion in 2010, down sharply from $2.1 trillion in 2009 and remarkably down from the nearly $3 trillion mark from 2005. The dismal forecast shows 2011 being even worse, declining to an estimated $1.2 trillion, with the biggest decline coming from refinancing.

Vendors that rely on transaction based fees are immediately impacted by such drastic volume reductions. As they look to offset revenue shortfalls by controlling expenses, vendors that rely on new sales to maintain their viability will continue to be faced with falling margins.

Bankers and lenders need to be prepared for hearing that fated "you have reached a number that has been disconnected or is no longer in service" message on the other end of the line. But with preparation and ongoing proper due-diligence, your organization can be prepared and hedge against this risk.

Lesson One - Ongoing Due Diligence

Most financial institutions do a decent job in screening new service providers. Key elements of the initial due-diligence include reference checks, customer list research, site visits to similar clients and vendor's headquarters, financial reviews, insurance coverage examination, verification of vendor's continuity of business or disaster recovery plans, and in-depth discussions on customer service procedures. However, many companies do not continue these reviews after the initial contract execution.

Institutions that conduct annual vendor reviews can better predict and prepare to replace a failing vendor.

Important things to note and ask when performing annual vendor reviews include:

4 Mortgage Technology, Top 100 Vendors of 2004, Anthony Garritano & Scott Kersnar, June 1, 2004

5 Mortgage Technology, Rising Tech Stars of 2005, Anthony Garritano, November 1, 2004

6 Mortgage Finance Commentary: June 2010, Mortgage Bankers Association

- ***Is their customer list shrinking or growing?*** During this economic downturn where banks, credit unions, and lending institutions have been absorbed by other entities or shut down, vendors' client lists are expected to shrink. However, leading edge providers will find a way to recover and even grow their portfolio of business. If your vendor is shrinking, asking them to explain their recovery plan can provide valuable insight to their long-term viability.

- ***Are the types of clients they are adding or losing in a specific market sector of a certain size?*** Vendors that were relying heavily on large clients such as *Countrywide*, *Washington Mutual* and *Wachovia* learned that acquiring institutions often have a competing product and thus their present solution is being sunset. If a large percentage of their revenue was from one of these absorbed major entities, make sure they can explain how they will maintain their viability.

- ***Is the company profitable, and if not, what are their ongoing capital requirements and plans?*** This can be difficult to assess for a privately held company but frank discussions with the CFO can shed light on their viability.

- ***Have discussions with other vendor clients to gauge their experiences in the last year with the vendor.*** Hearing from the other side of the table about vendors is often valuable in discovering information that your experiences have not revealed, as well as confirming assumptions and even fears.

- ***Ensure the vendor is performing at least an annual test of their continuity of business or disaster recovery plan and review the results.*** While assumed a standard process for any responsible organization, you would be surprised at how many do not perform this important exercise.

- ***Review insurance coverage and ensure the vendor is properly insured against unexpected business losses.*** This is a standard request of vendors from clients that understand the risks involved in vendor relationships.

- ***If the vendor supports an enterprise-wide major system for your organization (such as a retail banking platform, loan origination system, loan servicing system or investment portfolio application) conduct an annual site visit.*** Pay particular attention to changes to personnel, office space, and equipment. Meet with some of the vendor's staff, especially customer service, to get a sense of how things are going.

Although annual vendor reviews can be a time-consuming task, it is certainly less costly and disruptive than being caught off guard with a service provider's demise.

So what do you do if you are noticing red flags that indicate the vendor may be in trouble?

- ***First, make sure that your organization is involved with the vendor's customer steering committee or user group.*** If there is not one, reach out to fellow clients to enact a group that meets regularly and can help oversee the vendor's operation. In future installments of The Risk Report, we will discuss the details of setting up a customer steering committee from scratch.

- ***Second, always keep on eye on products that compete with those of your vendor.*** Although a source code escrow arrangement can help maintain a defunct product in the short term (more on that later), ultimately a financial institution will be better served by finding another suitable vendor. Keep a spreadsheet of similar products with contact information and general product specifications. Keep vendor brochures of the products close at hand in case a search for a new product has to be initiated quickly.

- ***Third, always have open communication with the product's leadership team.*** Let them explain those red flags and what their plans are to adequately maintain their products and their business. Most service providers want to do best by their customers and treating the relationship as a partnership can help prevent surprises and makes the provider a stronger company.

Lesson 2 - Source Code Escrow

Consulting for various types of financial institutions, *Prymak* is often surprised at the lack of source code escrow agreements that clients have with vendors. All too often, we have to actually explain what a source code escrow agreement is.

Most clients of vendor provided solutions only possess the application's ***object code***. The object code contains the components to run the product but not the ability to change the underlying functions. Even products that have toolkits to allow modifications to the application provide limited access to the product's underlying engine and functions. The source code is the foundation for the application that is being run. It is "human readable" (that is, only if one understands the language in which it is written), and is used to compile the machine-readable software application. It is also where important changes to the application's functionality are made. ***Without access to source code, very few modifications or enhancements can be made to the product.***

Source Code Escrow is where the developer or vendor of the product "deposits" the underlying source code with a neutral third party agent. There are source escrow agents that specialize in this field or a vendor may also use an outside law firm to manage the software escrow process.

The Source Code Escrow Agreement is a legal contract between the licensee of the software (i.e. the financial institution), the licensor (i.e. the software provider) and the escrow agent. It is a legally binding agreement that does the following:

- ***Requires that the licensor make regular deposits of the object code, the source code, and any licensor built development tools to the escrow agent.*** Although the details vary by vendor and product, the key is to ensure that deposits are made at least quarterly and when a "major" software revision is released to customers. You want to ensure that beta versions, test versions, and in-development versions are not made in lieu of released product versions.

- ***Clearly states the conditions in which the escrow agent will release the deposited objects and code to the licensee.*** The San Francisco firm of Farella Braun + Martel LLP point out that a broad definition of a "source code escrow event" be established and include "the licensor's closing its doors, ceasing to provide maintenance other than for licensee's breach, making a general assignment for benefit of creditors, having an appointed receiver, suffering termination of the source code escrow for non-payment, suffering a foreclosure attachment or levy on significant business assets, admitting its inability to pay debts as they mature, filing a bankruptcy, or having an involuntary bankruptcy filed against it."[7]

- ***Requires notification to the licensee when a deposit is made and the software escrow agent has verified the deposit.***

- ***Requires that the escrow agent can verify the contents of the source code escrow deposit and that it can attest to its contents and working functionality.*** Just because a deposit was made does not mean it was done so in good working order.

- ***Outlines the tools used, including version information, and requires notification to the licensee and escrow agent if there are any changes to the tools being utilized***. The tools necessary to rebuild source code into object code are essential. Organizations need to be kept informed on changes to the toolset so you and your fellow licensees are prepared.

But what do you do if a source code event occurs and you receive a delivery from the escrow agent?

Many financial institutions may not have the internal expertise, tools, or availability to adequately maintain the source code. If the product has a customer steering committee, or user group, it is helpful to discuss with fellow clients the plan of action if a source code event occurs. Since most clients will be running the same version of the object code, it would be in the best interest of the entire user community to have a central source for the continuation of the product. Finally, understanding the hybrid of development tools used to create the product will help identify suitable technology firms that can maintain and further enhance the application.

Not all vendors have a software escrow arrangement. Requiring such an arrangement not only

7 "Typical Source Code Escrow Agreements: What's Broken and What Works Instead", Dean Gloster, Farella Braun + Martel LLP, May 25, 2005

protects your organization, but can also differentiate the software from that of competitors and thereby gain a competitive advantage in the market place. [8]

Lesson 3 – Watch for the Signs

"The first rules of holes, when you're in one, stop digging."

As banking revenues go down, so do those of service providers. Although we have touched on the worst-case scenario with a vendor being able to stay in business, there are other situations that will occur during economic downturns that are just as concerning to a client of a vendor provided solution.

Seven years of my banking career were spent with FiTECH Systems, a one-time major provider of credit union and mortgage lending systems. During that tenure, our company expanded and contracted based on growth and our financial health. Many of the recommendations on relations with service providers that *Prymak* provides comes from the applied experience of actually being a service provider.

All companies have to make adjustments to offset falling revenues. Although Tom Peters' book on business leadership states the obvious in its title *You Can't Shrink Your Way to Greatness*[9], sometimes "shrinking" is the only way to temporarily stay afloat to achieve greatness in the future.

Unfortunately, cuts in staffing typically come in the important areas of Research & Development and Customer Support. This is usually first reflected by a scale back of product releases, enhancements, and updates. Although a lack of new slick technology enhancements and functionality may not be detrimental to the financial institution as a whole, missed regulatory enhancements and poor quality assurance can be devastating. As the banking and regulation industry we are about to enter an era of rapid and sweeping financial regulatory reform, financial institutions cannot afford to have vendor supported applications lag behind required effective dates. ***There are several ways to help organizations predict and prevent this from happening:***

- ***Make sure you are receiving regular communication from the service provider and their view of new regulatory compliance issues.*** Ensure that your compliance group is reviewing such communications, and they concur with the roadmap that the provider has laid out.

- ***If you are concerned about the vendor's ability to attack the montage of regulatory changes that will require major revisions to their product, you may have to seek an alternative before mandatory implementation dates are missed.***

8 "Source Code Escrow – A Win Win Solution" , Atkins, MacAulay & Thorvaldson LLP, December 18, 2006

9 "The Circle of Innovation: You Can't Shrink Your Way to Greatness", Tom Peters, November 4, 1997

Replacing a technology solution is costly, disruptive, and time-consuming. Because there is inherent risk in making a major change, the optimum scenario is to continue a positive working partnership with the current provider. However, sometimes you have to stop digging that hole and make a change.

In a future installment of the risk report, we will detail the most time effective and risk adverse way of finding a new vendor solution if your current service provider is not meeting expectations.

Conclusion

In today's volatile economic and regulatory environment, it is imperative for banking and lending institutions to understand the inherent risks involved with process technology. Pending financial legislation will require that technology and vendors of those technologies comply and stay abreast of new regulations. Operational risk, including systems failures, breach of regulations, loan fraud, and embezzlement also poses a threat to the success and failure of loan providers. Vendor Risk is included in the latter category.

Through years of experience as both vendor and client, *Prymak* offers *Lessons Learned* to help banking and lending organizations avoid the pitfalls that can cause catastrophic consequences to profit and survival. *Ongoing Due Diligence*, including annual vendor reviews, can raise red flags about the health and longevity of those providing outside technology solutions. Requiring that vendors have a *Source Code Escrow* will ensure that software platforms can survive the collapse of the original provider, to allow client operations to continue. Finally, *Watching for Signs* of declining vendor updates and service can give insight into future problems, and prevent unexpected delays and expenses.

About The Risk Report

*Future installments of **The Risk Report** will delve deeper into many of the technology issues that lending and banking institutions will face in coming months.*

If you would like to receive monthly installments of The Risk Report by email, go to
http:///www.prymak.com/riskreport

*If you would like to have a no-cost, **Risk-Free Initial 90™ Technology Risk Review** of your organization, please contact Prymak at **877-977-9615** , or request an appointment online at*
http://www.prymak.com/initial90

About the Author:

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In 1993, he joined FiTECH Systems where he provided customer support, implementation services, application development, and quality assurance for the mortgage lending products *division. In 1996, he was promoted to Manager of the Application Development Department, and in 1999 became Senior Vice President for the Customer Services division. From 1985 through 1993, Peter managed IT in the lending division for Dime Bancorp (now Washington Mutual) in New York.*

Peter earned a bachelor's degree in Economics from Stony Brook University in New York, and is a 2006 graduate of MBA's Future Leaders program. Peter can be reached at 877-977-9615.

About Prymak, LLC

Prymak is an experienced business information technology services firm that provides both strategic leadership and tactical technology expertise to banking and lending institutions. Founded in 2000, Prymak understands that in this complex market of regulatory compliance, data security, and fraud prevention, companies confront enormous challenges in finding, deploying, and maintaining systems that best match their unique business models. With no affiliation to any particular software or packaged solutions, our assurance is to take an objective and unbiased approach to each customer's unique technology needs.

Headquartered in Greensboro, NC, Prymak works with the nation's best financial institutions, helping their leaders drive performance and add value to their processes. With established and proven methods for approaching the tough decisions that financial and lending institutions face today, we offer a full circle of **information technology solutions** ***– Initial 90™ Technology Risk Review, Discovery 180™ Technology Selection Process, Deployment 270™ Project Implementation Method, and Innovation 360™ Technology Support and Maintenance Services.*** *Together, these services and technology solutions assist regional banks, credit unions, community banks, and mortgage companies improve existing systems, choose the right technologies and best industry vendors, successfully deploy chosen technologies, and maintain a complex information technology infrastructure to add value and maximize return-on-investment.*