Mortgage Lending Markets: Building an Efficient and Qualitative Mortgage Lending Model for Tomorrow Employing the 24 Hour Knowledge Factory

Abdel Hernandez
University of Arizona
(ahernan2@email.arizona.edu)
(abdel.hernandez@gmail.com)
Abstract

The mortgage lending industry has come under fire as it has been considered one of the main culprits for the financial meltdown that created the great recession we are experiencing. This crisis was an “avoidable” disaster that was caused by a number of things that included corporate mismanagement in our banking system according to the conclusions of a federal inquiry” (Chan 2011). The crisis we experienced can be attributed to the ignorance of mortgage fraud in the lending industry. While new federal regulations have been put into place, a new business model that safeguards against fraud and manipulation should be introduced that further has the potential to being more efficient and robust to meet the current and future needs of consumers. The 24 Hour Knowledge Factory paradigm in the mortgage lending industry can potentially lead to the recovery of the real estate market. Research includes the possible means of implementation of this technology that continuously moves the financial components of the loan process that are not automated between New Zealand, India, and the United States. Interviews conducted with lenders will give insight into the challenges like government intervention and practicality of putting such an operation in place. The possibility of having a new type of system proactively instituted by industry leaders rather than regulation will also be investigated to bring about implicit benefits that may arise to lead to a competitive advantage for early adopters as mortgage fraud is a concern for businesses as well as for our entire economy. “From foreclosure frauds to subprime shenanigans, mortgage fraud is a growing crime threat that is hurting homeowners, businesses, and the national economy” (FBI 2011).
Building an Efficient and Qualitative Mortgage Lending Model for Tomorrow Employing the 24 Hour Knowledge Factory

I. Introduction

The mortgage lending industry and its processes have come under scrutiny throughout the years for different reasons. The purpose of this paper is to look at an innovative way that could both improve the efficiency of this industry and the quality of the loans it generates. Utilizing the 24 Hour Knowledge Factory concept taught by Dr. Amar Gupta at the University of Arizona, this new method of doing business may achieve our economic goals in this field. This research paper will give you a sensible look into the practicality of implementing this new technology into the mortgage lending business model and how some companies are already moving towards this as globalization is increasing due to technological advances. The decision to add additional anti-fraud safeguards into the underwriting components and their ability to be manual vs. automated has to be evaluated as this is the qualitative factor in this research paper. Interviews with industry professionals give us a firsthand look into the organizational aspects of implementing the proposed new technology into the system. As a final point, a viable analysis using the SWOT approach will conclude by helping us understand the potential positive and negative impacts this technology may bring about. The implementation of this new business model in the mortgage lending industry should prove to create a competitive advantage that is economically feasible for companies as efficiency and quality is increased.
Real Estate Mortgages & The Crash

Having worked in the real estate industry as a real estate agent prior to the financial meltdown and the housing bubble burst in 2008, working in unison with mortgage lenders was an everyday business ritual. Generally finding prospective buyers and sellers is a primary objective for most real estate agents and brokers. If a prospective buyer or seller in fact showed intent into either buying or selling a home, one would recommend possible lenders that would then “pre-qualify” them. These customers would receive a pre-qualification letter stating the maximum amount they were qualified for based primarily on their creditworthiness and income. After the process of looking for their home/investment and negotiating a contract for purchase, the buyer’s agent would send a copy of the contract to the lender, which would initiate a series of processes and underwriting procedures. Title search and property appraisal would be ordered in conjunction to this in order to achieve the main goal of getting a loan commitment from the lender. Typically this whole process, from experience, would be expected to take 30 days where then at this point the real estate transaction would close by transferring the deed to the new owner as in Figure 1.1.

Typical Real Estate Transaction

The transaction mentioned above would be what most would consider ideal as sometimes one would question some of the practices of certain lenders that would not be able to generate a loan commitment at the end of the 30 day period. The pre-qualifications by some lenders were in a sense sometimes useless in the meaning that they were not worth the paper they were printed on since at the end they were only empty promises. Here is where there was a telltale sign that the integrity of some, not all, mortgage lending documents were being falsely generated. Real estate agents began to scrutinize the validity of these pre-approvals and thus would question the lenders’ ability to close on the transaction. Most importantly the emotional stress that clients felt when deals went sour was heartfelt as the client-agent relationship grew stronger and clients became emotionally attached at the prospect of owning a new home.
The set of clients that were allowed to complete the transaction, yet had been “hard to approve” may have possibly been victims of mortgage fraud. In hindsight, the financial crisis we experienced was due in part to bad mortgage loans being packaged and sold as securities in the financial market. With weight from above and the commission based incentive to approve mortgage loans, lenders were under pressure to get as many loans approved as possible. FBI white-collar crime supervisor Ben Berry states "in the mortgage industry, there is an incentive to get the loan through; there is only a small incentive to uncover the fraud." This type of environment and unethical behavior served to be the devise that crushed our national economy in which we are yet to recover from and thus are in a period of convalescence.

To have a grasp of how big this problem is the United States Department of Treasury has a Financial Crimes Enforcement Network that publishes an annual report titled Filing Trends In Mortgage Loan Fraud. Suspicious Activity Reports (SARs) are filed with this organization to isolate potential criminal activity. To summarize their report, the yearly trend for mortgage loan fraud SARs has increased over the years with a 44% increase between July 1, 2007 and June 30, 2008 fig.1.2 (FinCen 2008).

![Yearly Filing Trend for Mortgage Loan Fraud SARs](http://www.fincen.gov)

New Technology Proposal

This turning point in our economy has brought us to question what needs to be done to prevent history from repeating itself. While the Financial Reform Bill passed legislation in 2010, many would argue that it does not provide a complete solution. The real estate market has yet to bottom out as of this date and conflicting opinions between experts predict different time frames of when this may happen. Freddie Mac's chief economist Frank Nothaft predicts housing prices...
to bottom out sometime in spring of 2011 (Reuters) versus Prudential Douglas Elliman Vice Chair Dolly Lenz which sees us having housing inventory for the next three years (Fox Business). Nevertheless, the mortgage lending industry needs to be redefined as our entire economy depends on this vital market. Today there is a need to consider a new business model that will identify and uncover fraudulent manipulation while at the same time being operationally efficient and robust. The 24 Hour Knowledge Factory is the technology for this model.

The 24 hour Knowledge Factory defined by Dr. Amar Gupta as having multiple collaborating centers in time zones six to eight hours apart hand off work around the clock, ensuring that each center completes its respective part during the daytime (Gupta 2009). This concept of following the sun can be utilized to expedite the loan process. Moving the financial underwriting components in this fashion once a loan application is received, regardless of time of day should be processed to continually until an actual loan commitment is generated. The countries we will consider are the United States, New Zealand, and India. Figure 1.3 shows the financial components being moved globally between these countries respective of their time of day.

The 24 Hour Knowledge Factory – Mortgage Underwriting Model

Industry leaders and innovators have already embraced some of the theoretical components that we will continue to see in the coming years. HSBC is the world's sixth-largest banking and financial services group and eighth-largest company according to a composite measure by Forbes magazine in 2010. This company provides a variety of international banking and financial services. Their website renders a global approach to doing business, which include mortgages. According to their website one is able to apply for a home loan, be it at home or abroad. With about 7,500 offices in 87 countries and territories around the world (HSBC 2010) this company is able to provide multiple lending services across its international network.
One of the biggest obstacles that many mortgage lenders will have if they not only want to employee the 24 Hour Knowledge Factory model into their business, but also want to expand to global mortgage lending is an access to local expertise barrier. Director of International Trade & Business Law – Professor David A. Gantz emphasized the differences in law in individual countries, highlighting that mortgage lenders would need to be well versed in local laws by optimally having local expertise in the country they are doing business (Gantz 2011). Thus, companies like HSBC are more easily able to leverage their local branches and provide loans worldwide. And therefore, small to medium companies that are especially in a growth strategy mode should adopt the 24 Hour Knowledge Factory in their business plan to expand and be able to better compete globally.

E-Loan is another company that takes the process of securing a mortgage on-line rather than the traditional brick-and-mortar method. Founded in 1997, this company also provides various financial banking services. Prior to 2009 E-Loan was a direct mortgage lender and has now moved its mortgage portion of its business as a loan portal to Lendingtree.com. As most of us know the Lendingtree.com business model is essentially a referral based model which sends leads to traditional mortgage lenders. While this may facilitate finding an acceptable loan rate with favorable terms, it does not differ from the rest of the industry in the loan origination process we are investigating.

II. Modularizing Lending Components

Technology has evolved the way business is done today though out the world. Lenders today use complex computer algorithms to evaluate the level of risk each borrower carries. However, basic fundamental principles are still used when lenders lend money to help borrowers purchase what their lives desire. The most basic principle of all is calculating the probability of repayment and default. The components in this evaluation are what we will be addressing and looking at the potential for modularizing them across multinational teams dedicated at closing a loan.

As stated in the previous sections, pre-approvals are done as a courtesy to all parties that will be involved in the transaction to gauge the ability of a lender to fund the loan. We will focus on the intermediate components between the pre-approval and loan closing process.

The mortgage loan process is the second step that starts once a borrower has found a house and has a signed offer to purchase from the seller. In this step the “mortgage loan processor” verifies that all stated information and documents are accurate. The W-2s, paycheck stubs, other sources of income etc. is checked to be valid by the processor. In order to do this, the processor for example may get validation directly from an employer. While this part of the loan process has the potential to be outsourced, it does not fit into the 24 Hour Knowledge Factory model as processing speed is determinant on third-parties responding to validation requests in the same time-zone. It is safe to assume that most human resource departments here in the United States are yet to be open 24/7 as of 2011.
The underwriting process of the loan is where we can conceive there is more potential for this new model. The important components of the underwriting process weigh the different aspects of the loan; their creditworthiness, borrower’s income, and the collateral for the loan (the property itself). While it is common practice to have a dedicated person do all of these components per loan, this is where we speculate that there may be areas for further specialization and thus have the ability to move them across teams.

The creditworthiness of a borrower is measured in this processed by assessing different factors in their credit reports. One major factor is the credit scores that are reported by the three credit bureaus. A FICO score that ranges from 300-850 is what the underwriter judges, which are an amalgamation that is formulated by the Fair Isaac Corp. a major producer of credit scores to lending institutions (Bankrate 2011). The higher the FICO score, the higher the creditworthiness of a borrower in terms of risk to the bank.

The next component to examine is the income analysis that underwriters perform to measure the capacity of a borrower to make installments on a loan. This process includes evaluating the borrower’s outstanding debts, assets, and sources of income. Without going into all the particular elements that go into this analysis, ratios have become the industry standard to assess the capacity of the borrower to pay their mortgage payments.

The primary ratio that is used to scrutinize the ability to repay is called the Debt to Income Ratio. The “ratio tells a lender how much of your monthly income is being used to pay things like mortgage payments, car bill, credit cards, and any other expenses you might incur.” (LendingTree 2010). An example, a person with monthly gross income of $4,500 and total expenses of $2,800 is said to have a DTI of 62 percent ($2,800 / $4,500 = 62 percent). Conversely, a front-end DTI ratio measures and compares monthly income to mortgage payment. In other words, if your monthly gross income is $4,500 and are looking to get a loan with a $1,200 monthly mortgage payment your front-end DTI ratio would be 27 percent ($1,200 / $4,500 = 27 percent). The industry average standard maximum is for this ratio not to be higher than 36 percent. (LendingTree 2011)

One of the other pieces that the underwriter analyzes is the collateral. In other words, the type of property and its value need to be assessed. This can be done by utilizing other ratios Loan to Value and Combined Loan to Value are the two ratios that are primarily used in this step. Once an independent appraisal is done to determine the market value of the property at hand the underwriter can determine these ratios. For instance, if a potential borrower has a down payment of $40,000 on a home appraised at $200,000, the mortgage loan would be for $160,000. The LTV ratio would be 80 percent in this case since $160,000/$200,000 is 0.8 (LendingTree 2011). In comparison to someone that has only $10,000 down payment for the same home, their LTV ratio would be 95 percent ($190,000/$200,000). To summarize this component the lower the LTV ratio has the lower the risk for the lender.

At these stages is where there is potential to modularize these components and have the task of analyzing these ratios universally in a 24 hour business cycle. The task of balancing lending risks in association with all the above components can be done ultimately at the final
stages. Doing this allows for modularization of the above components and facilitates the underwriting process by preparing all bringing together all the components into a final package. Once the packaged is labeled “cleared to close”, funding for the property can be completed (Kale 2002).

An interview with Mr. Mark Unger, Vice President & Senior Residential Loan Officer for National Bank of Arizona indicated that while the premise of the 24 Hour Knowledge Factory sounds good, he was not completely sure if would answer all the questions to speeding up the mortgage lending process. According to Mr. Unger, the mortgage lending process is heavily dependent on the borrowers themselves. There is heavy documentation that needs to be delivered and returned between the borrower and lender. Government regulation requires disclosures such as a Good Faith Estimate, Intent to Proceed, and Truth in Lending Disclosure to be approved by the borrower which limits the speed of the process. He mentions that these disclosures need to be approved and delivered to the lender before the underwriting process can continue. He also explains the constraints such as having to validate source of funds and weight the ratios that were discussed on the previous sections as other limiting factors to reaching an optimal speed. When asked if under ideal conditions and an appraisal and title search were done and ready within a week after receiving a copy of an offer to purchase, what would be the fastest time to close? He stated that on many instances two weeks would be a fair statement. He did add thought that the additional regulations, post 2008 have increased the average time to close to about 30-45 days. (Unger 2011)

As indicated by research, not all aspects of the mortgage loan process can be modularized and in many regards initial and intermittent steps in the processes are reliant on third parties. The assessment of valuing the creditworthiness, borrower’s income, and the collateral of the loan is where there is space for opportunity. Kale Enterprises states that the “time required to do this [clear to close a loan] is driven by the volume in the market” (Kale 2002). This indicates that there is a bottleneck in the system that should be solved. The 24 Hour Knowledge Factory model solves this by alleviating heavy underwriting department workloads, by allocating them to employees around the world, creating a smoother and faster process flow that benefits consumers. The movement to improve the speed and efficiency has long been in place as many aspects of the mortgage lending process have been automated by the introduction of computers and the internet in recent decades. Next we look into this phenomenon.

**Freddie Mac**

The mortgage lending model has been impacted in the past by other financial institutions. One institution has been Freddie Mac, one of America's biggest buyers of home mortgages, that keeps money flowing to mortgage lenders in support of homeownership and rental housing. This financial institution which bundles mortgages and sells them as mortgage-backed securities to private investors has an automatic underwriting tool called Loan Prospector®. According to their website, this tool “dramatically speeds up the mortgage lending process and reduces the cost of getting a mortgage by using statistical computer models based on traditional underwriting factors” (Freddie Mac 2011). This tool assists mortgage third party originators and mortgage
lenders by allowing them to sign in and automatically getting a loan assessed by Loan Prospector®. This service while available for the most part of a day, it is still limited as it is not operational for the entire 24 hour period, see figure 2.1. This powerful tool also comes with a cautionary disclosure from Freddie Mac, the website states, “Please note that Loan Prospector assesses only a loan's eligibility for sale to Freddie Mac and does not analyze compliance with laws, regulations or ordinances, or any requirements imposed by your regulator” (Freddie Mac 2011).

This statement contemplates that this assessment state of the loan processes does not encompass the entire transaction. Thus, the four week period of the real estate transaction would only be slightly be minimized by this tool. This also does not address the notion that the primary mortgage loan originating company will accept the terms within that loan. The automatic underwriting process that Freddie Mac utilizes does compel us to see that what other processes in the mortgage lending model can be either automated or assigned to be evaluated by actual workers around the world.

### Loan Prospector Hours of Operation

<table>
<thead>
<tr>
<th>Time Zone</th>
<th>Days</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eastern</td>
<td>Mon-Fri</td>
<td>5:30 a.m. to 2 a.m.</td>
</tr>
<tr>
<td></td>
<td>Sat</td>
<td>5:30 a.m. to 11 p.m.</td>
</tr>
<tr>
<td></td>
<td>Sun</td>
<td>11 a.m. to 2 a.m.</td>
</tr>
<tr>
<td>Central</td>
<td>Mon-Fri</td>
<td>4:30 a.m. to 1 a.m.</td>
</tr>
<tr>
<td></td>
<td>Sat</td>
<td>4:30 a.m. to 10 p.m.</td>
</tr>
<tr>
<td></td>
<td>Sun</td>
<td>10 a.m. to 1 a.m.</td>
</tr>
<tr>
<td>Mountain</td>
<td>Mon-Fri</td>
<td>3:30 a.m. to 12 midnight</td>
</tr>
<tr>
<td></td>
<td>Sat</td>
<td>3:30 a.m. to 9 p.m.</td>
</tr>
<tr>
<td></td>
<td>Sun</td>
<td>9 a.m. to 12 midnight</td>
</tr>
<tr>
<td>Pacific</td>
<td>Mon-Fri</td>
<td>2:30 a.m. to 11 p.m.</td>
</tr>
<tr>
<td></td>
<td>Sat</td>
<td>2:30 a.m. to 8 p.m.</td>
</tr>
<tr>
<td></td>
<td>Sun</td>
<td>8 a.m. to 11 p.m.</td>
</tr>
</tbody>
</table>

**Fig. 2.1**

### Safeguards

The qualitative part of in the mortgage lending model is something that needs additional consideration. As we have read in the previous paragraphs, the level of foreclosures due subpar lending standards have brought into question the quality control companies have or do not have in place to protect themselves against fraud. The addition of new quality control anti-fraud safeguards built into the lending process that ultimately decrease the amount of fraudulent loans processed sounds good, unfortunately, economically speaking this will indeed take more resources in the form of time, labor, and capital. Having an additional labor force or complex computer systems can be costly in this task. This is where companies can take advantage of the 24 Hour Knowledge Factory approach by leveraging an offshore workforce that can handle this additional workload during “non-business” U.S. hours at a minimal cost.

Having an offshore labor force that is neutral in validating information makes sense in this case. First, an impartial party (offshore worker) can be given the time consuming task of looking for red-flags that may prompt further investigation into possible fraud. The second benefit of having this lower cost labor force on call is that they can potentially not be restricted to only verifying the authenticity of mortgage loan documents and information, but helping in
expediting the entire loan process as a whole. There are many other prospective uses a company can have for this 24 hour global workforce that we cannot completely cover in this research paper. Delegation of tasks will depend on individual companies and their organizational culture.

The area of integrating specific safeguards into the lending model respectfully needs consideration. In the interview with Vice President & Senior Residential Loan Officer for National Bank of Arizona, Mark Unger, he describes some safeguards that are coming in place. An anti-fraud safeguard that is in place already and is being more utilized is the Credit Report Refresh. This is an important step as lenders utilize this to make the credit standing of a borrower has not changed substantially or they have taken any substantial additional debt. He explained how at times borrowers would apply for several home loans with multiple mortgage lending companies and try to purchase multiple homes at the same time. This from the standpoint of the lenders would increase their risk as that borrower would be taking on a higher level of debt than previously anticipated. In regards to this, we can see that fraud is not something that lenders are solely to blame, but were susceptible to fraud themselves from unscrupulous loan applications.

This type of safeguard is just one example that is utilized today. While companies may want to design certain quality control checks into their business processes, it does not have to be as complex as many would think.

Mr. Vivek Shivpuri, who co-founded and served as Chief Executive Officer and President of WNS-trinity Mortgage Services of WNS (Holdings) Ltd. a leading BPO/KPO firm during an interview stated that small to medium sized mortgage lending companies need to stay ahead in three ways to compete with bigger financial institutions since mortgages have become more of a commodity in recent years. The three competitive factors were low rates, quick turn-around times, and quality control checks. The quality control aspect as he phrased it was “having more eyes on the quality.” A scenario he illustrated was having 80-90% of the domestic and outsourced underwriting staff processing the loans, while having 10-20% doing quality control. He explained that outside of top management, underwriters are some of the highest paid employees in the mortgage process and they should be utilized to their max potential. Having underwriters overburdened with bad or questionable loan packages does not make sense and in these scenarios a process redesign where bad files are sent back in the system needs to be incorporated.

As an expert in Business Process Outsourcing, Mr. Shivpuri revealed the time related to how smaller companies could start incorporating these quality checks into their standard...
operating procedures. The scope of this paper restricts writing on the substantial phases and strategies related to outsourcing, nevertheless in brief, what was surprising in his response was the quickness of implementation. In a matter of two to three weeks, a company that is contemplating on outsourcing can get an assessment on the business processes that can be outsourced in a short period of time. Companies would continue by eventually migrating one process after another in different stages. The quality checks mentioned above would be designed into the new process design, making the transition as seamless as possible. These quality control phases within the mortgage lending model would increase the quality of the loans affirmed Mr. Shivpuri during our conversation.

III. Organizational Value

The organizational value in implementing this new business model into an organization needs to be viewed in perspectives. Two dominant perspectives are the stockholder approach and stakeholder approach. In either case a balance scorecard and a return on investment (ROI) analysis are instruments in determining an implementation of the concepts reviewed in this paper. I will not make an attempt at explaining what a balance scorecard is or how to calculate your return on investment on outsourcing/offshoring business processes. While we do make some argument for the cost savings in direct labor, it is important to scrutinize all the costs that are involved and make adequate comparisons in your analysis. According to a recent article on CIO.com there are factors that are usually ignored in analyzing offshore ROI such as hidden cost that are not immediately apparent (CIO 2008). The intent is to have an accurate quantifiable measurement of value by not ignoring hidden costs associated with a transition. This actual value is what can be added to the organization once the model is deemed as a suitable investment for the company.

Costs & Benefits

It is instrumental to measure the costs and benefits of implementing this global model in financial terms. To assess some of the cost savings, further international labor comparisons will be calculated utilizing median annual wage/salary for “skilled” professionals in their respective industry. The U.S. Bureau of Labor Statistics compiles the median annual wage of a United States Loan Officer as $54,700 per year as of May 2008. “The middle 50 percent earned between $39,710 and $76,860. The lowest 10 percent earned less than $30,850, while the top 10 percent earned more than $106,360” (BLS 2011). Here while we will be using the median, we emphasize the disparity that many U.S. companies will typically pay more for these professionals than the median. This being said, we continue with New Zealand and then India.

In comparing international salaries careful deliberation needed to be made since multiple databases were accessed, and while the objective of getting “apples to apples” comparison was intended, it was problematic to get job specific data. However, the International Average Salary Income Database calculates average gross income in the New Zealand financial sector as $55,644 U.S. dollars per year during 2005. This data base extracts this information for New Zealand straight from the governmental website Statistics of New Zealand (World Salaries
Further assessment needs to be made to have a better indicator of job salaries for these professionals in New Zealand. A job posting for a Lending Officer/Credit Controller was found on a popular national jobsite Seek.co.nz during the research of this paper on April 28, 2011. The salary range listed for this position was $30,000 - $39,000 and had all the job duties of a typical loan officer listed. Functions like assessing loan applications, producing loan documents, credit control, and signing off loan documents which all relate to the job functions of mortgage processing (Seek 2011). The comparative pay scales between the United States and New Zealand are quite analogous and no cost advantage would be gained.

In India PayScale.com indicates loan underwriting professionals to make on average 401,705 Indian Rupees (Pay Scale 2011), when converted this translates to $8,969 in U.S dollars per year. This is where it becomes economically sensible to employ this professional workforce to augment the financial underwriting department of mortgage lending companies.

The case for outsourcing and all the benefits as well as some of the complications has been made to date. Notably, not all companies that offshore are able to realize offshore expectations utilizing this strategy according to a 2007 study by management consulting firm A.T Kearney. The article referencing this study states that offshoring should not be treated as a magical silver bullet for cutting cost, but rather a strategy to improve performance. The amount of savings that can also be achieved is determined by the complexity of the functions being offshored. In spite of this, savings have been realized by utilizing technology to collaborate across the world. We see this trend today as multinational companies continue to shift their practices where resources are plentiful.

There is no other that can put it more eloquently than Thomas Friedman in his most famous book - The World is Flat, on technology. The internet “created a global platform that allowed more people to plug and play, collaborate and compete, share knowledge and share work, than anything we have ever seen in the history of the world.” The 24 Hour Knowledge Factory is conceptually the next phase in globalization that is occurring and the benefits in developing this approach into our business models are yet to be gained by this industry.

**SWOT Analysis**

We start our analysis of utilizing the 24 Hour Knowledge Factory by using the SWOT analysis method. The strengths of incorporating the 24 HKF into the mortgage lending process are highlighted in the diagram below. Three fundamental strengths would be the 24HKF methodology to improve quality of loans, speeds up the loan process, and realizes cost savings in form of labor costs. These strengths can be supported by a study done at IBM where co-located and Globally Distributed Teams were given a project to accomplish within a year. Utilizing internet technology to leverage spatial and temporal separations the Globally Distributed Team was able to collaborate, and achieve the same quality of work as the co-located team (Gupta 2008). On the application of adding anti-fraud safeguards and additional cost effective workforce, the 24 Hour Knowledge Factory can in due course provide several strong points.
The weaknesses in connection to implementing the 24 Hour Knowledge Factory in the mortgage lending industry is due to its early stages. Mortgage lenders thinking about gaining a competitive advantage against their competitors will have to bear the nuances of experimentation. Knowledge management of transfers from one mortgage underwriter to another would need to be developed in this stage. The other weakness, while not directly related, is the fact that global home lending is still in its primitive stages. Global home lending has not been widely accepted by the lending industry for the exception of multinational banks like HSBC. As banks continue to consolidate and merge we should expect to see these types of loans available, but as of right now not many banks would be able to fully capitalize on economies of scale by having three distinct global locations funding home loans in each country.

24 HKF in Mortgage Lending - SWOT Analysis

**STRENGTHS**
- Increases Quality
- Speeds-up Loan Process
- Human Resources

**WEAKNESSES**
- Experimental Stage
- Global Home Lending

**OPPORTUNITIES**
- Competitive Advantage
- Global Expansion
- Intellectual Property

**THREATS**
- Industry Acceptance
- Government Intervention

There are different opportunities that present themselves by implementing the 24 Hour Knowledge Factory model into the mortgage lending industry. The most evident is the competitive advantage one would have against other companies that have lengthier turn-around times and higher default rates in their portfolios. Two overt possible opportunities that this model would provide, is allowing room for future expansion into world markets and rights to the intellectual business processes that materialize.

Our last step in our SWOT analysis looks at the possible threats associated with implementing a new mortgage lending model that utilizes the 24 Hour Knowledge Factory methodologies. Industry acceptance and government intervention are two threats that we see. While it has become socially acceptable to outsource business processes in a wide array of industries, many components of the mortgage lending process is still being done in-house. We should expect concerns or resistance to outsourcing and the common preconceived notions that come along it during a proposal or implementation stage. In connection, navigating the political arena may conceivably be needed as financial regulators and interest groups may pose barriers to this proposition. These political considerations lead us to question the possible legal risks that may also be associated with the new proposed business model.
Legal Implications

The legal ramifications of this new business model hold are yet to be known and consequently the risks in implementing a new system needs to be evaluated. What has been proven are consequences of the current model. Comparing the two new business models should aid us into concluding that further research need to be done on managing the risks of the 24 Hour Knowledge Factory business model into the lending industry.

We have seen numerous lawsuits have occurring from customers suing mortgage lenders all the way to other spectrum where investors are suing mortgage lenders themselves. Recently on April 20, 2011 Michael Brautigam, who owns 380 shares of Citigroup Inc. filed a lawsuit against the company for essentially breaching their fiduciary duty to its stockholders. Michael Brautigam states “They failed to implement and maintain adequate internal controls to manage the foreseeably immense financial fall-out from the inadequate residential mortgage loan underwriting standards” (Reuters 2011). According to the article, a recent agreement between financial regulators and 14 major financial institutions is estimated to run in the billions of dollars which will overhaul mortgage operations and compensate wrongfully foreclosed customers. These cases and the costs associated with maintaining the status-quo are evidence that serious reconsideration of the current models need to take place.

To evaluate some of the potential risks and legal costs of implementing the proposed business model in their company, companies should individually perform a risk assessment with their law advisors to assess their level of risk on a national level and in the countries of interest they plan on doing business in.

IV. Conclusion

We have taken account that while mortgage lenders were not solely to blame for the financial meltdown, there is much improvement that can and needs to take place in this industry which is vital to our national economy. It is with apprehension that we see opportunities for companies to become more proficient in their practice by utilizing this “follow the sun”, 24 Hour Knowledge Factory model. In today’s competitive market it is crucial to be able to provide customers with what they need faster than your competitor, while still achieving a level of high quality and return for your company. The potential to implement this model by having three globally distributed locations such as in New Zealand, India, and here in the United States allows organizations to have another solution to their problems or a new means of meeting new business goals. In our research we see that there is much more investigation to be done in this field. Companies looking to expand into global markets would be wise to benchmark and learn from organizations endeavoring in these global practices. Industry insiders have given us a look into the practicality of implementing this model, without us being there to witness an actual transition for an organization. The value that can be created and other areas of expansion were seen in our analysis and we conclude that there is a greater competitive advantage can be created by utilizing the 24 Hour Knowledge Factory methodology.
References


<http://www.hsbc.com/1/2/about/network>.


Unger, Mark. "Thoughts on Utilizing the 24 Hour Knowledge Factory in Mortgage Lending." Telephone interview. 2 May 2011.