***HSBC’s Mortgage Lending Decisions and the Big Melt***

1. **What problem did HSBC face in this case? What people, technology, and organizational factors were responsible for the problem? Did HSBC management correctly identify the problem?**

As the housing boom entered its final stages, HSBC continued to increase its subprime loan holdings. Even though high interest rates were appealing, they also increased HSBC’s exposure to increased default rates.

**People**: the company’s analysts failed to adequately assess the types of loans the company was buying. They purchased stated-income loans even though 90 percent of applicants for these loans inflated the numbers. Bobby Mehta, the top HSBC executive in the U.S. described the development of the bank’s mortgage portfolio as disciplined. He reported to investors, “We’ve done them conservatively based on analytics and based on our ability to earn a good return for the risks that we undertake.” That doesn’t appear to be the total truth.

**Organization**: HSBC used FICO scores even though they weren’t a reliable measure of whether people would repay loans. FICO scores did not adequately distinguish between loans where borrowers had put their own money down and loans with no down payment. The models did not take into account what would happen if housing prices fell to the point where the amount owed on some mortgages exceeded the value of the homes they covered.

**Technology**: The CEO touted his company’s ability to assess credit risk using modeling techniques designed by 150 PhDs. However, those modeling techniques proved to be flawed and did not take all factors into account. In fact, there is no model for inter-market risk or for the behavioral factors that drive correlation across markets.

1. **HSBC had sophisticated information systems and analytical tools for predicting the risk presented by subprime mortgage applicants. Why did HSBC still run into trouble?**

It appears the company chose not to use the available information systems and technology until after its crisis boiled over. It also appears that the pursuit of profits overrode the use of information that could have helped avert the crisis. In response to its subprime loan crisis, HSBC made changes in both personnel and policy. The company ceased originating and purchasing stated-income loans and boosted the required FICO score for some loans.

1. **What solution is HSBC relying on to deal with its problem going forward? Will these solutions be sufficient to turn the subprime mortgage business around? Are there additional factors for which HSBC has not accounted? What are they?**

HSBC began utilizing information technology to pinpoint ahead of time which customers are most in danger of failing to meet their monthly payments once their adjustable-rate mortgages jump from their initial teaser interest rates to higher rates.

It finally adopted business analytics software to help support the decision making processes of its credit application processing staff. The software provides users with the ability to consistently deploy scoring models and portfolio segmentation. It also includes tools for managing customer relationships and improving risk management decisions. By using these tools, HSBC should be able to create strategies for individual applicants, assess the value of each applicant, and then customize a loan offer that suits the customer’s needs as well as the bank’s business.

1. **HSBC made a decision to pursue subprime mortgages as a segment of its business. Explain how this was a structured, unstructured, or semistructured decision. Then, present your opinion about where in the decision-making process HSBC went wrong. Finally, apply the decision quality concepts of accuracy and comprehensiveness to this case.**

For the most part, the decision to pursue subprime mortgages as a segment of its business appears to be initially a semistructured decision because it used a process for forecasting how many of the loans it purchased from wholesalers were likely to default. First, the bank would tell the wholesaler what types of loans it was interested in, based on the income and credit scores of the borrowers. Once the wholesaler offered a pool of mortgages, HSBC analysts evaluated the lot to determine whether it met HSBC standards.

However, due to the intense competition for mortgages, HSBC made an unstructured decision to accept pools that included stated-income loans.

To help the company resolve the crisis it finally turned to structured decision-making software that helped it analyze its loans and customers more forcefully. The software provides users with the ability to consistently deploy scoring models and portfolio segmentation.

Accuracy is one important dimension of quality: in general, we think decisions are “better” if they accurately reflect the real-world data. Comprehensive decisions reflect a full consideration of the facts and circumstances. The stated-income loan applicants were known to have a 90 percent chance of mis-stating their income levels. HSBC chose to ignore this real-world data when it began accepting large pools of these loans. The company blatantly took on these loans knowing full well they were extremely risky and had a potentially high default rate. Profits overruled respectful consideration of the accuracy and comprehensiveness of quality decision-making.

1. **Do you think one solution to HSBC’s poor risk management practices is more and better information supplied to decision makers, or is something else required to improve its risk management?**

In theory, more and better information always helps decision makers make wiser, more sound decisions. However, as the case study points out, there were many causes, involving many different actors that contributed to the big melt HSBC experienced.

One cause was the failure of decision-making models, both the model builders and the financial managers who relied on those models. As it turned out, the basic assumptions included in the models were wrong. While most blamed the models, and modeling in general, others pointed a finger not at modeling as an activity, but at the faulty application of the modeling, poor assumptions encouraged by senior executives who did not want to understand the “real” risks they were taking as long as they made money, and the failure to take into account human behavioral issues. These human behavioral factors included bankers around the world acting like herds rather than independent decision makers, all relying on the same convenient models and assumptions, which predicted incredible profits and a rosy future. The modelers also failed to understand that when one multitrillion dollar credit market collapsed in a global banking system, other credit markets would shut down, and major financial institutions and millions of ordinary citizens would panic, run for the exits, and just stop borrowing, lending, and spending.

The bottom line is that computers don’t make the final decision in any situation. People do.