The Quest for Quality Data

The life insurance industry continues to receive demands for improving the quality of its data. Increased disclosure rules from both federal and state governments, heightened scrutiny from ratings agencies and investment analysts, and increased justification for pricing decisions have all dovetailed into increasing the threshold of data accuracy and timeliness.

Thomas M. Freitas, Senior Vice President, Operations and Information Technology, recently discussed data quality with Tony Fisher, President and General Manager of DataFlux, a SAS company. Tony believes that while expectations for the industry continue to increase, the industry itself stands to benefit most from greater data quality. And while this challenge is usually seen as a technology issue, it is really a business process issue at heart, meaning the most senior staff must focus on the issues to improve the quality of a company’s data.

Tony joined DataFlux as president and general manager in September 2000. Previously, he was the director of data warehouse technology at SAS. He has been a key technology leader at SAS, providing the engineering research and development direction that helped make SAS the market leader in data warehouse software sales. Tony earned a degree in computer science and mathematics from Duke University.

Thomas M. Freitas: More and more presentations and articles are being published addressing "data quality." What does data quality mean, and how does that definition differ among insurers, reinsurers and other interested parties?

Tony Fisher: Most fundamentally, "data quality" means that your data reflects your business requirements. This sounds straightforward enough, but business requirements differ among individuals, departments, insurers, reinsurers and others. The challenge is to ensure that data meets the business needs of the data users when the data’s consumed.

Life insurers deal in a consumer marketplace, whereas reinsurers operate in a business marketplace. As such, insurers’ data concerns range from having data that effectively drives a relationship with their customer and identifying cross-selling opportunities to having data to meet regulatory compliance. Reinsurers focus on the business-appropriateness the data represents. Is the policy covered under the treaty? Does the data support the underwriting decisions? Is the data incomplete?

One problem that life insurers face is that people look at the phrase "data
quality,” and immediately they think it’s a technology issue. It isn’t. Data touches every component of an insurance operation. If you don’t understand fully the information customers are feeding you, problems are bound to arise. Executives need to see this for what it really is: a business process issue. Once they have done that, they need to provide the necessary support to tackle this from an enterprisewide perspective.

**TMF:** Many times it can be difficult to know what piece of information is accurate or timely. How do you know you have achieved some level of data quality?

**TF:** The best way to ensure quality data is to have automated auditing that ensures your data reflects your business reality. Metrics report on the ability of your data to meet your internal business rules. Automated reporting should run continuously to ensure that your data meets your business needs.

But the real proof of knowing when your data is reliable is when you see a change in work focus. When your company is spending less time on processing information and instead focuses on business analysis, it has likely achieved a respectable level of data quality. You can’t effectively analyze unreliable data.

**TMF:** How does the insurance industry compare to other financial services industries with regards to this?

**TF:** Insurers have historically been successful in using data to prevent fraud. Recent industry and regulatory requirements have compelled insurers to be more proactive to data quality. However, insurers still lag other financial firms.

Some of this is likely because of the regulatory structure for various financial services sectors. Banks typically have one or two regulators. With at least fifty different groups potentially scrutinizing your business, some say insurance regulation can’t compare at all.

Additionally, banks and other intermediaries have been better at viewing data as proprietary at the corporate level. Insurers for the most part still cling to the silo approach, where a specific business line controls data access. As a result, these financial institutions better understand the client’s potential financial needs and can offer bundled services to cater to those needs. Life insurers interested in life needs-based marketing need to follow the banks lead if they want to do more than just sell product.

**TMF:** So what would you say is the value proposition of reliable data?

**TF:** A n organization’s data is one of the true proprietary competitive advantages that it has. Data contains the insight into a company, its profits, customers, competitors and the general health of the company and the industry. If the data is not consistent, accurate and reliable then the company will make poor decisions resulting in poor performance and results.

Quality data starts with the direct company. Risk increases as policy information changes hands. Each time data is passed through the process, risks to data quality increase as it’s manipulated, merged with other data and reformatted. The good news is that each time the data is handled, it’s also an opportunity to discover and repair data errors.

**Data Quality Drivers**

**TMF:** What and who are driving the move to improving our data quality and accuracy?

**TF:** Calls come from all over. Internally, each insurer’s goal should be to know their customers. Accurate customer data requires continuous maintenance. People move, change lifestyles, get married and so on. Data management can lead to better customer service, more effective marketing and regulatory compliance.

Regulators continue to ask for more detailed information that justifies the risk that insurers are accepting. They want to make sure insurers hold enough reserves to satisfy claims. The federal government is increasing demands for detailed information, especially through Sarbanes-Oxley, but also through agencies like the SEC and IRS.

The number of reinsurers has shrunk over the past few years. One possible problem was that reinsurers were accepting risks that they didn’t
fully understand at the time. I think that some of these companies likely weren’t confident in the quality of the business they assumed, and unreliable data probably played a role. The life reinsurance business can be productive, as your company can attest. But a good understanding of the risks you accept is crucial to excel in the insurance business. That requires reliable data.

Lastly, insurers are increasingly looking to risk securitization opportunities. This interest has further raised the bar on required information and modeling. Calls for increased quality and transparency won’t be going away.

**TMF:** How might data quality factor into principles-based reserving (PBR)?

**TF:** My understanding of the concept is that the NAIC accepts the idea of moving to PBR but details are currently being worked out. Under PBR, reserves ideally will more accurately reflect the characteristics of an individual life insurer’s business. For some products, reserves may ease from today’s requirements. But firms will need to demonstrate that the level is appropriate.

Poor data quality will bear on a company’s ability to comply with the new reserve regime’s requirements and its ability to demonstrate that its reserves are appropriate. These factors could force companies to post additional margins in reserves due to uncertainty, putting the company at a competitive disadvantage relative to those with better data quality. This alone should be an incentive for insurers to improve data reliability.

**Standardization**

**TMF:** How important is data standardization?

**TF:** Standardization, almost by definition, reduces risk. By having all parties reading from the same page, room for error greatly decreases.

Standardization ensures that everyone is “speaking the same language.” It can be as simple as ensuring consumer data is readily shared as complicated as standardizing policies across the industry.

Something as simple as a non-standardized address can affect risk assessment. To query the risk associated with policies in New York, for example, various representations such as “New York”, “NY” or “N.Y.” can confuse reporting and provide invalid assessments. Standardizing attributes will allow data to be better analyzed.

As information is passed among insurers and reinsurers, products and policy information ideally should be standardized to ensure that each party operates from the same assessments. Therefore, consistency in defining key attributes - such as underwriting class - should be sought. Confusion about policies and their attributes will lead to poor relationships among parties. Poor data will also lead to inaccurate reporting within a company that may affect its ability to assess risk and take on new business. Effective data quality and management techniques allow data to be analyzed for consistency and accuracy before it is interpreted by stakeholders.

**TMF:** Are there operational benefits that we could experience from standardization?

**TF:** Certainly. Let’s view it from the perspective of securitization. There’s some expectation that, sometime in the relatively near future, capital markets will play a role in life insurance similar to the role they play in the mortgage and credit markets. But the credit market has a standardized classification of risk - the FICO score - that allows a potential investor to immediately assess the risk and return associated with a credit instrument. Life insurers have nothing comparable to this. A risk that one life insurer may classify as standard, another may assess as preferred.

Until the industry develops some form of standardization, investors will continue to demand a premium to pass the risk on to them. In addition, risk assessment will have to be done on a company-by-company basis, possibly involving the guarantee of an outside monoline. All of this adds up to higher costs, greater inefficiency and likely a smaller group of interested investors. Standardization in definitions and in data reporting could help push these inefficiencies out of the system.

Interestingly, one of the smaller costs is in the actual software. Many companies have been leery about investing in new technologies, even when the ROI argues in its favor. Moreover, such
systems should improve the ROI of existing systems, as management capitalizes more from existing technology investments.

The biggest cost is in people. Standardization requires organizations to agree on business requirements. The biggest single burden will be in getting the agreement industrywide as to the definition and standardization of business policies and procedures. Working groups that work across participating organizations will be required to define the business standards. Those standards will then need to be incorporated into process via data management technologies.

The Future

TMF: What are the prospects of developing some industry standardization over the short term? What will it take to get there?

TF: Other industries have accomplished data standardization, reporting and management in equally difficult or more difficult environments. Consumer products, telecommunications and even other financial services sectors have shown that standardization can be done.

Unfortunately, the insurance industry is behind in many areas of data management, quality and transparency. The good news is that the task in front of insurance companies is no more complicated than what other industries have faced. With cooperation within and across organizations, data can drive effective compliance, risk and customer relationships, and ultimately improve profitability.

Improvements in data reliability hold the promise of improving the entire business process. Quality data entered at the front end reduces errors and reconciliation further into the business cycle, improving internal efficiencies of any business. For our industry, our mortality models are only as accurate as the data populating the model. The costs of incorrect or misinterpreted data could be manifold: low quality increases the uncertainty of the results based on that data. This in turn can result in increased risk in mispricing and higher costs of capital.

The burden to monitor and improve data reliability lies equally on both life insurers and reinsurers. Life insurers need to ensure that data is entered correctly on the front end, and reinsurers must work with clients in ensuring that they appropriately interpret that data.

Transamerica Reinsurance is diligently working with clients to more accurately understand and map reported data to avoid errors and improve service turnaround. While this has required effort at times, we think the potential benefits – more accurate claims payment and posting of reserve credits, fewer errors, omissions and contested claims, and improved profitability – far outweigh the work required. We look forward to continued collaboration with our clients as we transition from data processing to results-oriented business analysis.