Property Loss Estimation - Survey-based Pricing Method (XACTware and Symbility)

XACTware uses a contractor-based approach to build its pricing database.

A major benefit to using this type of software gives insurance adjusters and idea of where price points should be before they even go out into the field.

Symbility's database is compiled at CoreLogic, CoreLogic uses a component-based approach to build its pricing database.

We found that XACTware uses a contractor cost approach to survey-based pricing analysis. We found that Simbility contributes to the CoreLogic component cost approach with the prices of current claims. Below are the pros and cons of using this type of software and the pros and cons of using surveys to collect data. Also, we share some information on the accuracy of this type of data below.

EVALUATION OF XACTWARE'S DATABASE BUILDING

XACTware's pricing is based on rigorous multi-phase contractor cost approach that includes millions of data points that are updated and reviewed annually. The phases are:

1 – Market Pricing Research

2 – Verify and Check the Integrity of the Data

3 – Perform a Propriety Multi-Node Regression Analysis, to Identify Median Price Points.

4 – Report and Publish Results

5 – Evaluate, Refine, Rinse and Repeat.

Phase one is where the pricing database is built. Here they use anonymous data from claim companies that have been using their product over the years, survey industry professionals, conduct retail pricing research, survey other insurance carriers, use government tax data, catastrophe-specific cost data, and many other research initiatives. Pricing is updated on a monthly basis in North America and quarterly in the UK and Ireland.

The website lays out an example of how the database has been built for building cost data, listed out below:

1 - Time and materials costs

- Surveyed over 35,000 material, equipment, labor and installation providers costs.
- Gather over 300,000 data points annually.

2 – Analysis of actual damage repair estimates

- Input over 4 million estimates annually.
- Input over 9 million data points monthly.

3 – Direct surveys of construction market costs.

- Restoration/remodeling/new construction
- General contractors and sub-contractors
- Over 7,800 data points monthly.

EVALUATION OF SYMBILITY'S DATABASE BUILDING AND HELPFUL INFORMATION

Symbility's case is a bit more complicated as far as their specific methods of database building. In 2013 Symbility, sold 61,404,748 shares of its common stock to CoreLogic. The purchase included Symbility's holding of Marshall & Swift/Boeckh (MSB) and Quick Data. All of these companies work in tandem to generate pricing models for all aspects of the insurance world.

Going over the websites, there were no direct references to how databases were collected and compiled. We did, however, find an investment research report on CoreLogic by The Howard Group Inc. On this report, it is stated that CoreLogic covers 752 regions in the US and Canada. That it produces a pricing handbook once a quarter. The database building approach is a component cost approach where tens of thousands of labor rates, material prices, and equipment prices are surveyed. Local multipliers are applied to the data. Symbility adds to price analysis by updating the cost data with actual claims.

On the Simbility website, there is nothing about data collection and processing; they do have a desk assistant that helps adjusters come up with claim pricing. It appears as though CoreLogic uses the claim pricing data from Symbility in its survey-based pricing model.

The CoreLogic website states that they assess costs by location using their proprietary algorithms.

PROS AND CONS OF SURVEY BASED PRICING ESTIMATION

Pros

Survey-based pricing estimation provides insurers with regionally specific costs for construction. For example, labor will tend to cost more in highly urbanized areas as compared to small townships. This information is helpful to adjusters. First, if an adjuster does not have specific expertise in what they are being called to appraise, this data is helpful. Second, as prices change in the region, adjusters will have access to new price points on a monthly basis. The same is goes for personal property; this method allows for the enumerative parsing of price points for contents, so the adjuster may produce fair prices for insurance customers.

Cons

The cons of using this method, insurance companies could be flooded with disputed claims, due to pricing inaccuracy for one reason or another.

PROS AND CONS OF USING LARGE POPULATION SURVEYS

Pros

The margin of error is low. In these cases, where the sample size is 2,000, and higher, the 95% confidence interval will be +/- 2. Surveys make data gathering fairly easy. Subjectivity is lower, as the sample size is increased.

Cons

Once a survey is designed it can be hard to adjust as time passes. Surveyors need to be sure they are asking the appropriate question to achieve their ends.

MARGIN OF ERROR

METHODOLOGY

Reported margins of error for each insurance adjustor software were not reported on websites or in any other research that could be found. There was a forum, where we found people complaining about the inaccuracy of pricing by XACTware. The link is here, is that is of interest.

Other than that, we can use basic margin of error estimates for surveys of large sample sizes. This was reported above, a survey with a sample size of 2,000 will have a 95% confidence interval of +/- 2 as calculated by iSixSigma. We assume that sample sizes of the pricing model surveys are 2,000 and up since the XACTware data gathering process reported that its data inputs are in the millions. From the example given by XACTware above, it appears as though sample sizes will vary, but are likely to be above 2,000.

Margins of error become less and less as the sample size becomes larger and larger. The primary driver of margin of error in this case is the compilation of minute amounts of anomalous data in the sea of usable data. That said, price discrepancies could happen, for an amount of time, but only in extreme cases. For example, construction labor costs increased about 10% in the 12 months following Hurricane Katrina. These types of situations can bring inaccuracy to these types of history-based pricing models.

CONCLUSION

Overall, survey-based pricing for property loss uses very large databases. These databases consist of pricing information on goods and services in the construction industry. XACTware's approach is focused on surveyed contractors, where Simbility's/CoreLogic's approach focuses on component cost. This type of software gives insurance adjusters and idea of where price points should be before they even go out into the field. The margin of error on this type of analysis is fairly low, with a 95% confidence interval of at least +/- 2.