

TransUnion analytics predicts life insurance lapses

Life insurance policies are generally one of the first items a consumer cancels when experiencing financial difficulty. With the current state of the economy, it is no surprise that consumers are searching for cheaper policies or even cancelling their policies altogether. According to the Association for Savings and Investments SA (ASISA), the value of lapsed life insurance policies shot up by 40% last year to R4.6 billion, as lower-income policyholders cut costs by halting premium payments. A loss on a policy lapse occurs when the policyholder stops paying premiums before the fund value exceeds the unrecovered costs.

From an insurance company's perspective, life insurance products typically entail large underwriting and upfront origination costs, which means that generally the company takes a loss on a policy lapsed within one year. It is therefore of utmost importance for life insurance companies to keep the lapse rate during the first 12 months down to a minimum.

The TransUnion generic lapse model is a quick solution for this problem. The model ranks consumers from high-lapse probabilities to low-lapse probabilities. By knowing an individual's probability of lapse at the time of origination, life insurance companies can adjust their strategies to minimize their lapse rate and the unrecoverable costs associated with cancellations.

For example:

- Different products could be offered to prospective policyholders in accordance with their lapse risk.
- The premiums for high risk applicants could be increased to cover the risk or the policy could be declined altogether in very high risk situations.
- The commission structure could be changed to a monthly payment for high lapse risk policies to minimize the losses experienced when a lapse does take place

Although the generic lapse model was originally developed for the short-term insurance market, it has proven its predictive power for life insurance. The model was developed for lapse within 6 months for short term insurance but could be extended to lapse within 12 months for life insurance (the lapse score could be applied for lapse within 6, 9 or 12 months since the results are proportionally the same).

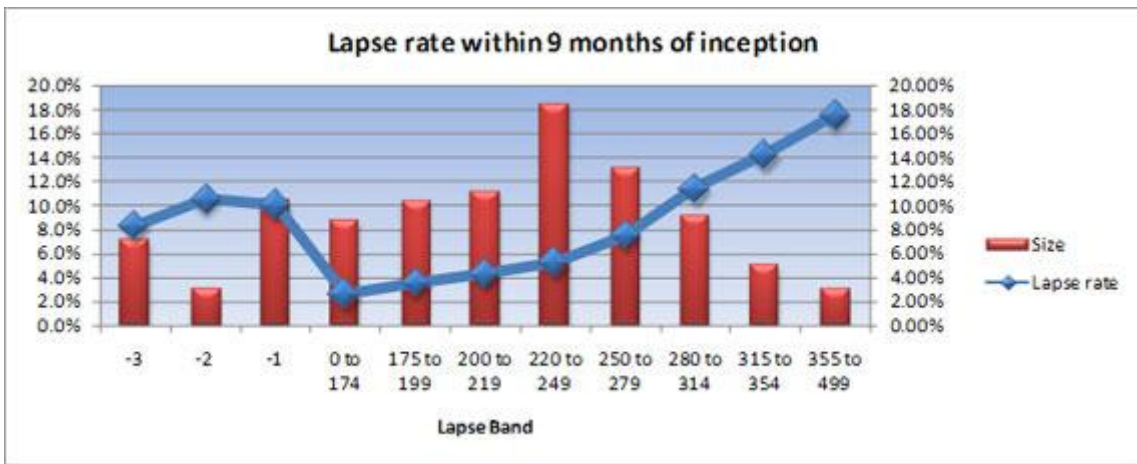
A retrospective study has been done with a high risk and low risk book, in both cases the model performed well, as can be seen in the tables and graphs below:

During the case study, a random sample was retrospectively run through the model and the lapses experienced on these policies were tracked over the following 9 and 12 months.

Low risk book - probability of lapse within 9 months

Lapse Band	Size %	Lapse Rate
-3	7.2%	8.36%
-2	3.1%	10.53%
-1	10.5%	10.04%
1	8.8%	2.59%
2	10.4%	3.56%
3	11.1%	4.26%
4	18.4%	5.26%
5	13.1%	7.56%
6	9.2%	11.41%
7	5.1%	14.23%
8	3.1%	17.57%
Total	100.0%	7.33%

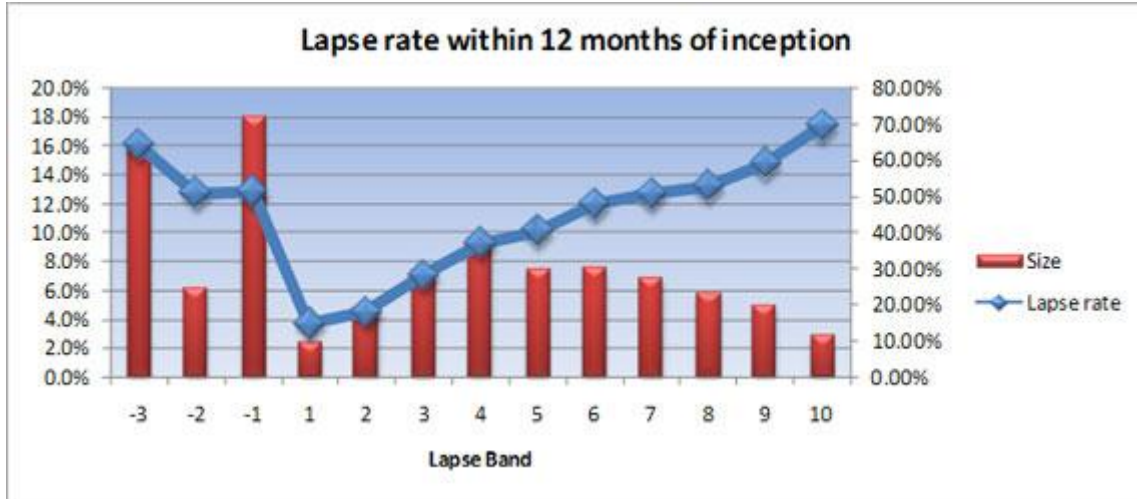
- 3: Negative Credit Performance Alert
- 2: Immature Credit Alert
- 1: Credit Inactive Alert



High risk book - probability of lapse within 12 months

Lapse Band	Size	Lapse Rate
-3	15.9%	64.19%
-2	6.1%	50.99%
-1	18.0%	51.26%
1	2.4%	15.00%
2	4.8%	18.13%
3	7.4%	28.16%
4	9.6%	37.11%
5	7.5%	40.56%
6	7.6%	47.81%
7	6.9%	50.66%
8	5.8%	52.88%
9	5.0%	59.15%
10	2.9%	69.47%
Total	100.0%	47.64%

- 3: Negative Credit Performance Alert
- 2: Immature Credit Alert
- 1: Credit Inactive Alert



Note the monotonic increasing trend for both samples, ranging from low probability of lapse to high probability of lapse with more than 69% of the worst predicted band ultimately lapsing during the first year.

The generic lapse model can also be used to augment a company's existing internal model, for example, by combining the models in a matrix, as seen below. This way, the predictive power of the data held by the insurance company, as well as the predictive power of the data held at the credit bureau are utilised to identify the lapse risk of a consumer.

Lapse Model	Internal model					Total
	1	2	3	4	5	
-3	7.1%	13.3%	6.1%	8.6%	8.7%	8.4%
-2	5.9%	5.3%	2.3%	14.8%	26.3%	10.5%
-1	6.4%	8.7%	11.0%	10.5%	16.7%	10.0%
1	3.3%	2.1%	1.4%	2.3%	0.0%	2.6%
2	3.9%	1.8%	5.7%	3.2%	0.0%	3.6%
3	2.1%	3.0%	3.8%	6.9%	10.0%	4.3%
4	1.7%	5.6%	5.2%	6.5%	18.6%	5.3%
5	5.3%	3.9%	6.3%	9.5%	14.3%	7.6%
6	7.5%	4.8%	11.7%	14.1%	17.6%	11.4%
7	20.6%	12.8%	8.5%	14.6%	23.5%	14.2%
8	12.5%	5.9%	6.1%	24.3%	25.0%	17.6%
Total	4.3%	5.3%	6.4%	10.0%	15.9%	7.3%

The lapse rate for the different groups in the above matrix is given in the table below:

Lapse&Internal	Size %	Lapse Rate
X	20.8%	9.53%
1	25.9%	2.79%
2	20.3%	4.68%
3	16.2%	7.40%
4	13.9%	13.04%
5	2.9%	22.70%
Total	100.0%	7.33%

These results were obtained with a retrospective scoring run, with actual outcomes from life insurance companies. Even though times are tough and consumers are financially stretched, the TransUnion generic lapse model together with the right strategies would keep lapse rates low, profit margins high and you, as the underwriter, a step ahead of the competition

*Issued by: **TransUnion***

Contact: Elbie Taljaard
Telephone: (+27) 12 365 9677
Email: etaljaard@transunion.co.za