

# Using analytics to improve motor profitability

Analytics can change disorganised companies into risk calculating, efficient organisations, writes Hatim Maskawala.

**W**hen it comes to analytics the characteristics of motor insurance departments in most companies in the GCC can be divided into two broad categories: Legacy and Sophisticated.

Under the Legacy category are the ones carrying out motor underwriting the same way that they were doing 20 years ago. Paper heavy departments, tariff based rates, rates that rarely change, no MIS, loss ratio calculated as paid claims divided by written premium, etc.

Then there are the sophisticated ones with risk based pricing which allow for risk factors of the drivers, real time online dashboards and MIS, rating engine integrated in the system, etc.

Most local insurance companies that are operating in the region and enjoying combined ratios of 80 percent follow the legacy system. The multinational companies that have come in to the market recently and brought in their experience from the more developed ones follow the latter system. They indulge in proper risk selection and are hence able to grow their portfolios profitably.

This causes top-line and bottom-line pressure on the former group who then resort to reducing prices without proper analytics. They are also bullied by brokers who offer a portfolio of say, USD20 million, for a fixed rate of perhaps 1.75 percent. Very difficult to let go of the topline if one does not know what the predicted burning cost is and then might take a risk.

Recently we have seen legacy insurers evolving and resorting to more sophisticated pricing and analytical tools to improve profitability. The general misconception is that analytics are only used in pricing. Apart from pricing there are many other areas in which analytics can be used to improve overall portfolio performance.



### SALES/RENEWAL PRESERVATION

During pricing we generally decide on which segments we want to target actively. These are the segments which are preferred risks and for whom we can have lesser underwriting requirements. At the same time internal MIS reports should also be synchronised to these segmentations. For example, during pricing we create segments by sum insured bands and we want to concentrate more on the expensive vehicles. MIS reports for pipeline monitoring should be available by the same sum insured bands so that we know what is our quote to bind ratio for the preferred vs the other segments.

Analytics can also be very helpful for cross selling. Say an insurer writes both group medical and individual motor. In UAE Emirates ID number is mandatory before

issuing medical cards. It would be an interesting KPI to monitor how many of these Emirates ID appear in the motor database also and what processes can an insurer put in place to ensure that this percentage grows over time.

Customer retention ratio is a very important KPI that many insurers ignore. If a company's persistency or customer retention ratio is below 75 percent then they should be looking into their renewal process. Is the renewal process a passive process in which the reminders are sent and then the insurer just waits for the customer to call? As individuals we receive so many emails and SMS that it's easy for one to go down the queue. In such a case if any other company calls (who is aware of our vehicle registration date) it's convenient to confirm with that one.

As part of monitoring we should also be looking at persistency by channel or scheme. If there is a specific scheme or channel where the persistency is low then it necessitates a discussion with that channel partner. This would be possible if we have in place a good reporting or MIS facility, which has a dashboard built-in for this purpose. Otherwise if we rely on ad-hoc reports this will happen one quarter and will be forgotten for the next few.

### PRICING

Many insurers tend not to use actuaries for motor pricing and rely on experience based pricing as it has been working for them in the past. There is a specific value addition that the actuarial profession brings in when it comes to pricing. As an analogy, anyone with a DSLR camera can take pictures. However, when you see the result from a professional photographer using the same camera you realise the difference in quality. Similarly, using experience (without analytics) for pricing is easy and one may be right in many cases. However, when we are working on wafer thin margins the specialisation and accuracy brought in by the actuarial profession makes a difference.

The most profitable and happy insurers are the ones who are combining the expertise of underwriting and actuarial science in

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the motor pricing project. One brings the market feel while the other brings data analytic expertise and makes it a successful tag-team. On a lighter note, it is easier for this tag-team to defend continuous demand for reduced rates by business development division.

### PORTFOLIO MANAGEMENT

Although this is a basic requirement many insurers still struggle in getting policy level loss ratio or combined ratio reports at policy/vehicle level. They might have this on a line of business or branch level from the financial systems but struggle to get it at a more granular level at the click of the button. If required such reports are prepared manually in a time consuming manner. This either delays decision-making or eventually forces the decision maker to stop asking for such reports. In order to handle the portfolio in an effective manner facility needs to be present which can produce such reports in real-time or near-real time basis.

### FRAUD DETECTION

Many believe that the second largest source of fraud in claims in GCC happens in the motor line of business. However, sometimes there is a tendency to turn a blind eye and deny the existence of any fraud. Many try to control fraud by investing in sophisticated high-end solutions.

Fraud detection and investigation is also an area in which analytics is useful. Finding fraud is like finding a needle in the haystack. With big data it's a big haystack.

When using analytics for fraud we need to break the reports into two sections: Historical or descriptive analytics and prospective or predictive analytics.

Historical analytics utilises data from standard reports or statistical reports. Some examples are utilisation per garage, top claims per accident type, among others. Statistical reports look at various distributions and averages, minimum, maximum, outliers, etc. These historical reports help us create rules which are either



HATIM MASKAWALA,  
MANAGING DIRECTOR,  
BADR MANAGEMENT  
CONSULTANCY

deterministic or complex probabilistic rules which can work on scores etc. These rules then help develop predictive rules which alert you real time when processing the claim or giving approvals.

This is a journey that the company has to go through. In this you will learn more about your data, data structures, and processes. You cannot have complex probabilistic rules without having deterministic rules. You cannot have deterministic rules without statistical reports and for statistical reports you first need standard reports. The reports mature along with the analytical maturity of a company.

It's better to start small and simple and then go towards complex. Don't aim for complex from day one, because analysing fraud is a complex business. It needs to be handled in a structured manner. Give analytics the attention it deserves. Insurers need to have people who are expert in analytics and not just those who can multi-task. Claim processors that can run SQL queries are not the same as statisticians. The company needs appropriate subject matter experts.

Have regular data discovery meetings between actuary, claims and fraud management unit and get the right tools. There are many complex tools available but they come with a big price tag also. But companies do not have to spend millions without a business case. Start small with a simple analytical tool and the right expertise; let it reap value and then scale up. If by using a low cost solution you can save a million or two in claims, then you will have greater buy-in from management to expand. Analytics can be useful for many areas when it comes to handling motor portfolios. The key is to start simple and then grow as the analytical maturity of the organisation grows. 📌

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