Transforming Claims Management with Business Intelligence and Predictive Analytics

I n the age of Big Data, success is not just about how much or what kind of data you collect, but how you are able to leverage that data into intelligence that improves results.

In the claims space, business intelligence and predictive analytics tools have transformed how insurers think about and execute the claims management process. From identifying claims patterns to rooting out fraud, these modern tools have allowed insurers to perform tasks more quickly and approach claims management in a new way, helping them become smarter and more efficient.

The average claims professional has likely heard about business intelligence and predictive analytics, and most recognize how these tools are shaping the future of claims management. But claims organizations may be hesitant to take the plunge themselves for fear of not having the expertise necessary to take full advantage of the data and predictions.

Today's business intelligence and predictive analytics platforms, however, are easier than ever to use. Modern interfaces allow claims professionals to focus more on managing claims and less on technical processes.

Claims management: Transformed by business intelligence, predictive analytics

Modern business intelligence and predictive analytics tools allow insurers to go well beyond mere data collection. The act of analyzing data and turning it into intelligence that can improve results — or business intelligence — can be done more quickly and easily than ever. And by using existing data to predict future events — also known as predictive analytics — professionals can better identify and address potentially troublesome claims.

Without leveraging these tools, claims professionals generally view data as static. While an insurer's existing claims system and operational database may collect a vast wealth of information, outdated and static reporting tools simply can't deliver relevant insights from that data, frustrating insurance professionals and organizations.

If an examiner is looking for fraudulent claims, for example, he or she may be able to glean some information from claims data held on an insurance company's system. The adjuster could have a

theory about a possible pattern, create a static report by compiling all of the relevant data and then use the report to confirm or deny his or her theory. It is a time-consuming process that depends entirely upon the adjuster's knowledge of the data and his or her ability to form cogent theories based on it.

With modern business intelligence and predictive analytics, an examiner can uncover and analyze many of the trends and patterns in the organization's data. With business intelligence tools, data can be organized almost instantly and ad-hoc reports created by dragging and dropping fields into a chart. And with predictive analytics, the data can be fed into pre-defined models to predict outcomes.

The same examiner looking for fraudulent claims can feed predictive models with most fields in his or her company's claims database. Based on the input fields, the models will show him or her the likelihood of a fraudulent claim.

The potential goes even beyond fraud: Predictive models can reveal claims at risk of litigation, costly claims and claims that may take longer than expected.

The result is more information that can transform claims management. Claims at risk of fraud or litigation can be automatically assigned to experienced examiners or immediately brought to the attention of a supervisor. Actions can be taken based on predictions made by data analysis.

The state of business intelligence and predictive analytics within claims organizations

In some respects, the claims space still exists in a world without business intelligence and predictive analytics. These tools have a firm foothold on the underwriting side of the insurance business, helping property and casualty insurers decide whether to expand into a certain area or launch a new product. The claims side, however, has been slower to adopt, and while solutions certainly exist, they are not plentiful.

Insurer feedback suggests that companies should pay special attention to the importance and value of business intelligence and predictive analytics — but still, many have not prioritized investing in these areas.

In its August 2015 Claim Officer Survey, Willis Towers Watson (then Towers Watson) says 72% of claims officers mentioned "effective implementation of data capture, metrics and analytics" as a key challenge. It was the second most popular response, behind "attracting and retaining talent." And 70% of respondents recognized that the most significant opportunity in analytics is leveraging models to predict ultimate loss potential at the individual claim level for case reserving and actuarial analysis.

But while claims officers seem to grasp the importance of analytics, that survey noted that, when considering future enhancements to claims organizations, they said the least significant outcome was better claim outcomes and customer service. The report accompanying the survey stated, "This noticeable discrepancy of understanding between the importance and opportunity that analytics provide and the willingness to incorporate it into future enhancements needs to change if P&C insurers are truly committed to more precise claim settlement processes."

Willis Towers Watson noted that insurers must pay more attention to attracting and retaining the talent to build advanced claim departments — and must value data that "[provide] the compass to direct claim officers in the right direction."

Advances in business intelligence, predictive analytics

Luckily, there has been steady progression in the areas of business intelligence and predictive analytics, which means these tools are more accessible than ever to organizations without the means to build an advanced in-house claims department. Insurers that recognize the importance of these tools may be daunted by the required cost and expertise of implementing them, but shouldn't let that stop them from taking another look at what's available today.

Most significantly, many manual processes have been eliminated, allowing claims professionals to reap the benefits while avoiding the complexities of business intelligence and predictive analytics.

With predictive analytics tools, for example, users previously had to develop their own models in a process that was as complicated as it was expensive and time consuming. Today, claims organizations can leverage automation and vendor expertise to place results, not processes, into the hands of examiners.

Many vendors offer pre-existing models and will provide teams to help dig into an organization's data. Examiners are no longer relegated to sifting through reams of data, forced to determine on their own whether to flag a claim for something like fraud. Models are configured with business rules to automatically flag potentially suspicious claims and direct them to the appropriate people within the organization. The examiner, therefore, will only see flagged claims, allowing him or her to spend more time focusing on relevant claims.

On the business intelligence side, Microsoft's business intelligence tool, Power BI, is an example of simplified processes for today's claims professionals. Power BI features Q&A, which allows users to make queries using natural language. Claims professionals don't have to drag and drop a thing, or even know much about the data they are accessing. It's as simple as typing in a question: "What offices experienced the highest claims costs last month?" Q&A will then choose the best chart or graph in which to display that information.

Power BI also features Desktop, which allows users to easily transform data into interactive reports. And, Power BI allows users to access data anywhere, anytime via native apps on smartphones, tablets or laptops.

Today's business intelligence tools allow for faster report creation and more dynamic reports. Using reports, users can drill into the data as far as necessary to identify trends. Fields are updated as needed if another field is altered or added to the report.

SIMS Insight

Systema's SIMS Insight, the advanced business intelligence module of SIMS Claims, uses modern capabilities to allow claims professionals to more quickly and easily mine data, generate reports and pinpoint loss trends with predictive models. Users can create dynamic reports to comprehensively analyze data and identify cost drivers. Predictive models offer new insight that can help claims professionals truly understand their risks.

Plus, SIMS Insight now uses Microsoft's Power BI to create a more intuitive user interface. From customizable drag-and-drop dashboards that display relevant data and reports, to the ability to transform raw data into informative and visually appealing reports — and access those reports from anywhere — Power BI ensures that SIMS Insight users reap all the benefits of business intelligence and predictive analytics.

A look ahead

With better and more intuitive tools more accessible to claims organizations, it is an ideal time for insurers on the fence to take a second look at modern business intelligence and predictive analytics. Affordable solutions are available for just about any company, regardless of size, coverage lines or expertise and experience with data and analytics. Those that fail to leverage these emerging tools will fall behind, and in the future, it will only become harder to catch up.

Data and analytics have unlimited potential for professionals in all fields. More and more information is available from more and more sources, and analytics lets companies slice, dice, and use this information in new and more relevant ways.

The day is not far off when claims professionals can use data from a FitBit or Apple Watch to incentivize rehabbing claimants and verify that they are completing exercises necessary to recover from injuries.

Before peering into the future, though, insurers must catch up to the present. Those that familiarize themselves with existing capabilities will be best positioned to leverage new ones as they emerge.

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