

The Tip of the Information Iceberg



Data Analytics Driving Claims Performance

A Mitchell International Executive White Paper
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INTRODUCTION

Analyzing data to improve performance has long been the hallmark of successful companies. From Henry Ford conducting time and motion studies to accelerate his assembly lines, to Wal-Mart® tracking customer movement in stores to better locate and stock merchandise, data analysis is a key driver of operational improvement.

As a leading provider of information solutions and technology for both auto property and casualty claims, Mitchell is advantageously positioned to observe and evaluate the various and ongoing processes aimed at improving claims settlement practices—and has had the fortunate opportunity to collaborate with a diversity of experienced and influential claims professionals.

This white paper outlines Mitchell International’s perspective on the emerging importance of data analytics in improving claims performance. As the title of the paper—*The Tip of the Information Iceberg*—suggests, we perceive that claims organizations have only recently begun to embrace data analysis as a critical component of initiatives to drive business practice improvements, and have as-of-yet realized only a small fraction of its potential.

The following paragraphs provide examples illustrating how data analytics are currently being applied to drive improvements in claims performance, and also offer a glimpse into where we at Mitchell foresee their use evolving in the near future.

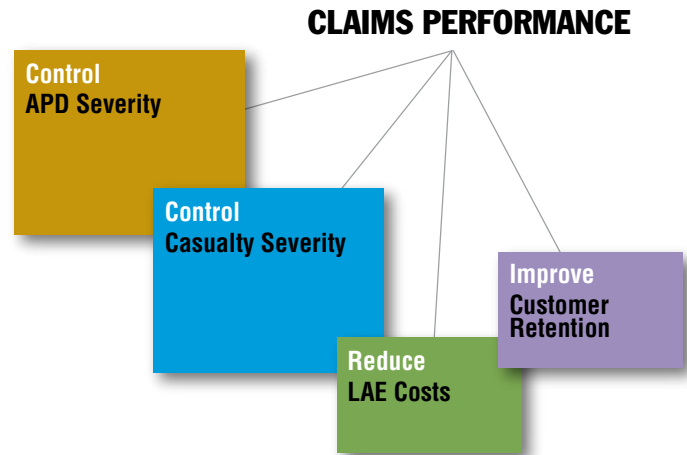
THE OPPORTUNITY

In auto insurance markets, data analytics have been used to drive dramatic improvements in pricing segmentation over the past ten years. While some carriers have led in the adoption of analytic methodologies and technologies in this regard, most notably Progressive Insurance, we think it’s safe to suggest that most insurers now apply such analyses in developing their pricing strategies to some degree.

Mitchell perceives additional, and potentially greater, opportunity to drive improvement using analytics *within the auto insurance claims process*, which is the single greatest generator of outlays and expenses for an auto insurance carrier. The benefit(s) to be realized: *more competitive claims performance (direct)*, *stronger overall financial performance (indirect)*, and greater financial/pricing flexibility (meta), can ultimately help secure higher market share.

It is worth noting that only in recent years has the application of comprehensive data analytics at an enterprise level begun to emerge as a practical possibility. The widespread adoption of automating technologies make it possible to collect data on many aspects of the claims process consistently, reliably, and cost-effectively. With the majority of claims processes now automated to at-least some extent, enterprising claims

departments are consequently positioned to collect and assess performance data and apply the resulting insights to leap ahead of the competition.



Claims professionals are now able to monitor and manage operational performance across all critical claims performance drivers. For example: automated estimating systems, bodily injury bill review, and liability solutions capture information on physical damage as well as casualty severity. Automated claims workflow solutions capture key process data points, such as cycle time(s). Customer satisfaction indexing can now systematically capture information on how favorably the claims process is viewed by its most important constituent—the customer.

THE CHALLENGE

The biggest challenge in any extensive application of data analytics is the inherent complexity of the data itself—which only becomes meaningful when thoughtfully structured. For instance, a typical automotive medical bill review solution captures so many data elements (diagnoses, procedure codes, geographic information, etc.), that altogether there are something on the order of 80 quadrillion potential data combinations. Auto physical damage claims are similarly complex. When dealing with such complexity, it is helpful to focus on the **three typical types of data insight (The “ABCs” of Data Analytics)**, thus establishing a framework for making sense of the information and realizing its value.

- **“A”ccuracy:** Analyzing claims data to uncover opportunities to improve the fairness and accuracy of payments and identify areas of fraud or build-up.
- **“B”enchmarking:** Comparing to industry data to identify and improve uncompetitive claims practices and policies.
- **“C”onsistency:** Identifying opportunities for more uniform claims practices, focused around best practice identification and mitigation of the legal risks that come with inconsistent application of the rules.



TAKING ACTION

Although identifying potential opportunities poses challenges, successful identification does not automatically result in enhanced performance in that area. A structured process for applying the insights derived from rigorous data analytics is necessary to achieve positive results. Often, adapting a process improvement methodology like Six Sigma™ can be helpful in creating the structure to drive to results.

A key step in any data analytics effort is **validating** the insight **with further analysis** of a larger sample of data. Carriers undertake this additional analysis to understand the extent to which various behavioral and environmental factors drive performance. Behavioral factors, such as adjuster skills and beliefs, quality of trading partners and company policies, can be controlled in the short-term. Environmental factors, such

as vehicle or policy mix and the regulatory environment, require longer-term actions such as changing underwriting practices or policy language. Taking action in the short-term generally takes one of three forms:

- 1.) *Changing Claims Guidelines and Practice*
- 2.) *Implementing or Customizing Technology*
- 3.) *Implementing Scorecards and Reporting.*

DATA ANALYTICS IN USE

The following tables illustrate how analytics produce Insights that can be applied as Action to yield operational improvements (Opportunity). The Opportunities cited (in terms of dollar values) represent individual customers, which translate to meaningful sums for any size carrier when aggregated.

	INSIGHT	ACTION	OPPORTUNITY
CONTROL APD SEVERITY	Poor compliance to carrier adjusting rules.	Technology: Implement new rules in an estimate compliance solution.	5 year PV of \$3.8 MM
	Benchmarking of best practices repair / replace behavior on frequently damaged part.	Reporting / Scorecarding: Measure particular part repair incidence on minor hits and set a target.	5 year PV of \$8.7 MM
	Wide variations in salvage values drive sub-optimal totaling behaviors.	Technology: Create a process to set a dynamic total loss threshold.	\$500 to \$600 per total loss claim
REDUCE LAE EXPENSE IMPROVE CUSTOMER RETENTION	Benchmarking—Higher supplement percent than industry, plus direct relation to increased rental expense.	Technology: Change workflows for simple supplements and implement an estimate audit tool.	5 year PV of \$4.9 MM (lower rental fees only)
	No statistical relationship between Alternate Parts Utilization and decreased customer satisfaction.	Policy / Practice: Alter claims guidelines to drive more alternate parts utilization.	\$5 to \$10 per claim per percentage point increase
CONTROL CASUALTY SEVERITY	Untapped opportunity to use Usual and Customary rates for many customers.	Technology: Implement benchmark fees in bill review software and operation.	\$171 MM per year across all Mitchell Medical customers
	Geographic pinpointing of benchmarking revealed wide difference to industry on East Coast of Florida.	Policy / Practice: Change policies to allow more usage of SIU, IME and nurse review in problem geographies.	5 year PV of \$17 MM
	Fraud flag: Providers who have more auto claimants, specify more treatment per claimant.	Technology: Implement fraud detection algorithms and forward to SIU for investigation.	Example: 28 chiropractors audited in FL—\$2.4 MM over two years.



NEAR-FUTURE USES OF CLAIMS DATA

Most early applications of data analytics in claims focus on producing an insight (identifying an opportunity or inconsistency), creating a report to track certain metrics, and changing rules or features in claims systems to capture the opportunity. Future applications of claims data analysis will capture the learnings from these early stage efforts and effect change earlier in the process—something we call “Real-Time Performance Improvement.” Some examples of potential developments in claims analytics techniques include:

- **Common Data Presentment:** Presenting relevant medical and auto physical damage to claims adjusters together in order to drive better decision making about the relatedness of injuries and to present a more holistic picture of the circumstances of the claim.
- **Fraud Identification:** Using scoring tools and predictive analytics for earlier identification of likely-fraudulent claims, or those with the potential for build-up.
- **Trade-off Management in Workflow:** Capturing and decision-enabling the trade-offs that are made at almost every step of the claims process (e.g., Assign a physical damage estimate to a staff or shop estimator based on the probability that the claim will have a medical claim).
- **Straight-Through Processing:** Processing claims “straight-through” without human intervention when the claim conforms to statistically determined thresholds and predicted values, and may reasonably be deemed routine in nature, according to a carrier’s rules and criteria.

Each of the above applications of data analytics is under active evaluation (and in some instances, actual practice) by carriers, and information solutions providers.

STARTING CAN BE SIMPLE

Mitchell is committed to helping clients apply more rigorous analytics to make the best use of their business data in identifying and driving “**Real-Time Performance Improvement.**” Continuing to advance our expertise in this field has been a core element of our strategic focus, but

beginning the process of putting analytics to work in your own organization is simple.

We recommend taking inventory of your organization’s usage of data in claims and determining what, if any, additional opportunities exist. Mitchell has developed two approaches to ‘getting started.’ These paths share a common goal but are more a function of where a customer’s interest lies:

- **Best practices approach**—working closely with clients, and leveraging a series of commonly utilized analyses, Mitchell can help assess potential opportunities for improvement. Best practices are identified looking both at internal and competitive performance, and potential opportunities then prioritized for phased implementation.
- **Tailored approach**—for customers with specific areas of interest, Mitchell can perform targeted and tailored analyses to assess potential opportunities for increased accuracy and consistency in the claims process. Targeted analyses are scoped, a project plan is agreed to, and Mitchell works collaboratively with the client to complete the analysis and transfer understanding of the data and findings.

SUMMATION

Driving claims performance through data analytics requires organizational commitment, cooperative partners, and the willingness to take action based on data-derived insights, experiment, and even make mistakes. Most organizations are in the early stages of implementing data analytics: capturing data and basic reporting. A handful of forward-thinking carriers are analyzing the data more aggressively to drive better decision-making. A very small sample of early adopters are using data to drive decision-making in real time. The next frontier, yet to be fully explored by any carrier, is using data to predict claims outcomes.

In highly competitive industries (like auto insurance), competitive differentiation through data analytics is becoming ever more imperative to the long-term survival and success of companies. The good news, as we see it, is that the **data exists.** *The question then becomes: Where does the use of such data rank amongst your organization’s priorities?*



Stages of Data Analytics

Mitchell International

Mitchell International is a leading provider of information services and technology used to automate and optimize the auto insurance claims process. The Company is uniquely positioned as the only provider of solutions that service all major aspects of auto claims performance—auto physical damage, bodily injury, as well as customer satisfaction indexing. Based in San Diego, California, the Company has approximately \$200 million in annual revenues and employs approximately 1,000 professionals.



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