White Paper

“Underwriting Claims℠”

Leveraging Real-time Data and Advanced Analytics for Optimal Decisions Across the Claims-handling Spectrum

The first in a series of white papers created with insurers in mind.

Thought leadership from industry experts, sponsored by LexisNexis.®

LexisNexis®

Executive Summary

For years, insurance companies have used external data, in or near real time, combined with internal data and powerful analytics to help them evaluate and determine the appropriate rating algorithms and subsequent rating tier and ultimately rate for policy applicants. This sophisticated combination of internal and external data, powered by advanced analytics, has allowed insurers to segment risks with deep granularity, using the most current information available about the prospective risk. The resulting rate quote is generally done real time, with the customer online, or on the phone.

The ability to use technology to leverage both data and analytics in underwriting has also allowed insurers to dramatically redefine and improve their processes. Not only has the overall rate-quote cycle time been dramatically reduced, which benefits the consumer and allows the insurer much higher throughput, but the quantity and quality of data obtained in the process has improved, allowing further refinement of risk and segmentation of pricing in an ongoing continuous loop like process.

In claims, where the vast majority of the insurer's hard won premium dollars are spent, the level of sophistication in using all available data, combined with advanced analytics, to develop actionable information to triage a new claim, re-triage an existing claim, or an exposure within an existing claim is sorely lacking compared to the underwriting side of the business. Claims organizations generally do not use multiple data sources and analytics engines as tools when triaging an initial loss report, or throughout other points in the claim lifecycle. When claims does obtain and use data outside of the claims system, it is generally point in time information in the form of a policy detail snapshot, a police report, a returned index inquiry, medical reports, an estimate, etc. Other than periodically (usually every three to six months) re-indexing an injured party to identify other losses, claims operations do not routinely or proactively look for new and/or additional external data that might impact current handling.

This paper will explore the issues surrounding and opportunities present to more proactively "underwrite" claims using both internal and external data, combined with advanced analytics, both at time of initial report and throughout the life of the claim and the resulting opportunities to compress cycle time and improve overall process and results.

About the Author

Jim Porcari is Principal at Insurance Resources International, LLC (www.iripartners.com) and a 30-year industry veteran. Jim has over a dozen years of Chief Claims Officer experience, including seven-plus as President of a major US personal lines claims organization, where he led the integration of multiple stand-alone personal lines companies in addition to the integration of multiple acquisitions.

The Underwriting Analogy

Insurance companies devote incredible amounts of time, energy and resources to properly quantifying, segmenting, slotting and rating risks to assure they get the right premium for the risk offered. Personal lines companies have developed this art into a highly disciplined science, with auto risks segmented into literally tens of thousands of rating cells, using a multitude of factors that are calculated via complex multi-variant rating algorithms.

In broad terms, the approaches used on the underwriting side of the business include the following characteristics. These approaches are generally the same, regardless of distribution channel.

First, the insurer uses the vast amount of internal historical data available to define and segment risks with an eye on how these risks have performed historically from a loss ratio perspective. Next, the insurer pulls external data (some public, some private) from multiple sources, processes this through complex rating algorithms to match a rate to the offered risk, and delivers back a proposed rate that accurately reflects the risk (assuming the supplied information is accurate) efficiently and effectively.

The underwriting process is a fine tuned meshing of technology, data accumulation, analytics, product management skills and actuarial activity.

Even though insurers look at multiple factors and use complex analytics and detailed rating formulas to finely segment and price these risks, personal lines carriers have developed this rating approach into an almost real time process. Customers and/or agents can get a relatively accurate quote within minutes, even though the insurer has to obtain data from multiple sources, including external resources, to obtain information such as credit reports, vehicle history and driver history, etc.

This underwriting process is a fine tuned meshing of technology, data accumulation, analytics, product management skills and actuarial activity. The underwriting process is a dynamic process, which works to assure that the most recent data is used in modeling, analysis and rating. If there is new information obtained between the time of the initial quote and binding of the risk, the rate is adjusted accordingly.

If new information becomes known during the life of the policy, say the insured adds a new vehicle, new driver, new residence address, etc., the policy is re-rated and premium adjusted accordingly. It is generally done real time while the policyholder is on the phone relaying the information.

When the overall book of business is evaluated, all of the information gleaned during the rating, policy writing, life of policy and loss data is used to evaluate the success of the rating algorithms, pricing segments and marketing approaches. The process is continuous and action is taken as soon as the results indicate tweaking is needed.

The most nimble and forward thinking insurers have used this virtuous cycle to continuously look for ways to eliminate steps and touches and reduce overall cycle time, while gaining information advantage.

What have been the benefits of this Underwriting approach?

Insurers and their customers have realized enormous benefits from this sophisticated and constantly evolving underwriting process.

With this multi-faceted approach, insurers have been able to improve their results on several levels. In addition to improving rate segmentation granularity, they have been able to take a process that was highly dependent on internal data, added vast amounts of current external data, combined it with advanced analytics and multi-variate analysis to produce finely segmented risk analysis and pricing.

While this underwriting transformation has benefited carriers on the accuracy front, it has also benefited carriers on the service delivery front. Carriers have leveraged technology and advanced analytics to enable them to obtain current external data (MVR, C.L.U.E.®, auto info) in real time that allows them to deliver a rate quote while the customer is online or on the phone.

This delivers significant benefits to the consumer and the insurer. The consumer benefits in speed and convenience. The insurer has significantly reduced the rate quote cycle time, quote accuracy and better use of their human resources. The insurer, by more effectively leveraging people, capital and technology runs a more efficient operation, allowing them to pass the reduced costs on to customers in the form of lower rates, greater ease of use and real time initial rate quotes.

A true win/win, in insurer accuracy, speed of turnaround for the customer and customer satisfaction with the process and interaction.

"Underwriting" Claims – Bringing Underwriting Best Practices to Claims

Given the significant impact of this approach on the underwriting side of the business, the question becomes – If insurers can use a broad swath of real time data (internal and external) combined with advanced analytics to more efficiently and effectively underwrite risks, why can't the claims area also use the same approaches to more efficiently and effectively "Underwrite Claims?"

If insurers can use a broad swath of real time data (internal and external) combined with advanced analytics to more efficiently and effectively underwrite risks, why can't the claims area also use the same approaches to more efficiently and effectively "Underwrite Claims?"

Every insurer strives to provide claims handling that is fast, fair, accurate and customer focused. Claims departments invest heavily in people and technology and work constantly to match the right people to the most efficient processes possible to provide these outcomes. When an insurer receives a new first notice of loss (FNOL), the insurer claim system generally queries the policy system for data, matches basic insured participant data against the policy and assigns the claim to a basic handling track and adjuster(s) based on a handful of relatively static rules, generally in a decision tree fashion.

This next generation approach to claims handling uses the evolved underwriting approach, leverages it for first notice of loss (FNOL) triage and takes it a step further by applying this approach of using multiple sources of data and advanced analytics to effectively re-triage the claim throughout the claim lifecycle as new and/or additional information becomes available. In effect the insurer is "underwriting" the claim, from FNOL to closure. Claims handling is a very complex process, with multiple effected parties and multiple dynamics in play at the same time, that can impact process and progress on multiple fronts. The handling protocols at many companies tend to be linear and somewhat less dynamic than the advanced analytic approaches used in underwriting and pricing policies.

The key to this approach, much like the front end underwriting approach is real time access to as much data as possible (internal & external) combined with advanced analytics to identify the best possible handling track and/or tasks with as much individual granularity as possible.

A data pre-fill process using external data in addition to internal data will allow more accurate initial triage of the claim & exposures. For example, knowing with certainty that the claimant is insured at FNOL will assure the claim gets on the right track at a much sooner point in the lifecycle of the claim, rather than waiting until the claim is closed and sent to internal or external subrogation. Another example is using external data during FNOL to provide information relevant for CMS reporting, eliminating the steps and touches the adjuster might need later on in handling to secure data relevant to CMS reporting.

Combining multiple sources of data (internal policy level data & relevant external data) with advanced analytic tools would allow the claims organization to develop much more sophisticated company specific claims triaging and slotting algorithms, which would provide the insurer a much more powerful way to evaluate and assign the claim, its components and the various tasks associated with the claim. This approach would allow transformational process improvements vs. simply looking to incrementally reduce the cycle times of the current processes. Every claims organization is constantly looking for ways to improve their processes and customer service. This approach allows transformational change vs. just ongoing improvement.

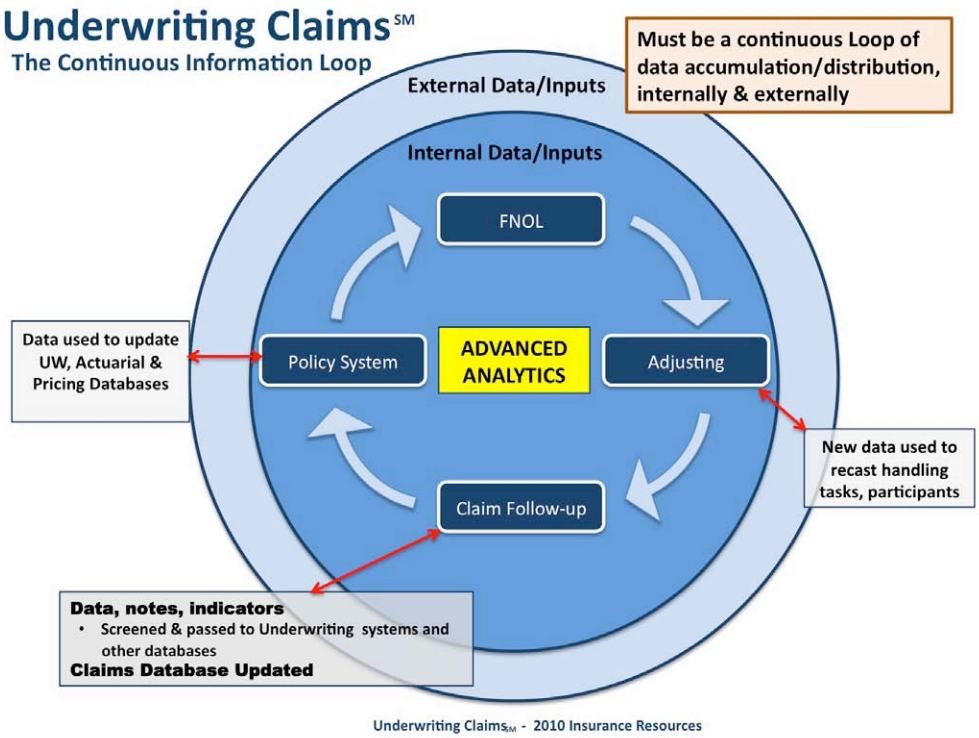
This next generation approach to claims handling uses the underwriting approach, leverages it for FNOL triage and takes it a step further to effectively re-triage the claim throughout the claim lifecyle...

If a claims operations moved to use this approach when taking a new loss and triaging the newly reported loss for next steps and task handling assignments, the next logical step would be to use this same approach throughout the lifecycle of the claim. The claim process is very dynamic. The tools and processes used to support claims handling should be equally dynamic. Periodically throughout the life of the claim, new/additional data is being added and evaluated. More proactively pushing this new or additional data into robust analytic engines can provide actionable information that allows the claim system to essentially re-triage the claim, or individual exposures on the claim, with alerts to the handling adjuster and/or manager based on company determined rules.

This reassessment, or re-triaging process would be a continuous loop not only impacting claims, but that rely on claims data and outcomes (within, of course, permissible use restrictions governing that data).

A visual representation might look something like the following diagram.

If a claims operations moved to use this approach when taking a new loss and triaging the newly reported loss for next steps and task handling assignments, the next logical step would be to use this same approach throughout the lifecycle of the claim.



Underwriting Claims - Execution

While access to and effective use of composite data should positively impact the initial triage and ongoing handling of claims, exposures within claims and tasks within exposures, the full power of having this additional data cannot be realized without applying advanced analytics.

While there are as many definitions of "analytics" as there are articles on the topic, one working definition of analytics is ***using data to arrive at an optimal or realistic decision.*** Properly used, analytics, especially predictive modeling, turns data into actionable information. Timely access to and use of actionable information is the key to competitive success.

In the claims world, the impact of using analytics to provide actionable information is what facilitates and enhances the leverage of people, capital and technology. Every insurer has oceans of data. Not many claims organizations have effectively turned that ***data into actionable information*** - information that the adjuster can use to move the claim process forward and that is received in a timely manner. Fewer yet have combined internal data with external data into analytic models to provide an even richer palate of actionable information. To be actionable, information must be relevant, timely and consumer oriented. The consumers in this context are the areas within the insurance organization that would use and derive benefit from the information, including areas outside of claims. An example in this area would be information from an outside database that indicates the driver of the insured vehicle may be a resident of the household.

To be relevant, the information needs to be a factor in the decisions made in one or several areas of the insurer. Another current process example would be information from the claims data warehouse indicating a persistently high frequency of treatment on PIP claims with a certain medical provider. This data could be useful information to the claims area that would likely warrant pursuit of external data that might be helpful for additional review by the SIU area. The same information might be useful to marketing to understand if these losses are from customers concentrated within certain geo-areas or with a limited number of agents. It is useful to actuaries in helping understand and project frequency and severity.

Information is of limited use if it is not timely. It would be critical for this information to be identified as soon as possible for any follow up to be most effective. Timely receipt of information can change the characteristics and handling needs of a claim. Identification of a claimant's insurer at FNOL instead of post payment could eliminate multiple steps & touches for the first party claims handler, reducing overall cycle time and providing superior service to the insured.

Every insurer has oceans of data. Not many claims organizations have effectively turned that data into actionable information - information that the adjuster can use to move the claim process forward.

Data from the police report might reveal an unlisted driver of the insured vehicle. Analytic tools can match the police report data to the policy data, automatically raising a flag for the claims handler while simultaneously placing an indicator in the policy system to be addressed by underwriting. Most claims systems rely on the adjuster to spot the data and send some type of notice to the underwriting department. Using analytics to collate the data and notify both claims and underwriting, increases accuracy, while eliminating steps and touches. The technology to move to this next level, this transformational approach, is available today.

This interaction of many consumers of information (actuarial, finance, underwriting), driven by claims data happens routinely in most insurance companies today. However, the challenge to consistency and accuracy is often the human link.

While all claims organizations use data and various key metrics, either static or analytic enhanced, to manage process and resource allocation, the leap forward for many claims operations would be the addition of external data, combined with internal data and robust analytics. The key is the effective use of advanced analytics, particularly predictive modeling, to provide actionable information when using this much more robust data set. This helps claims managers more effectively link daily execution with strategy.

The key is the effective use of advanced analytics, particularly predictive modeling, to provide actionable information.

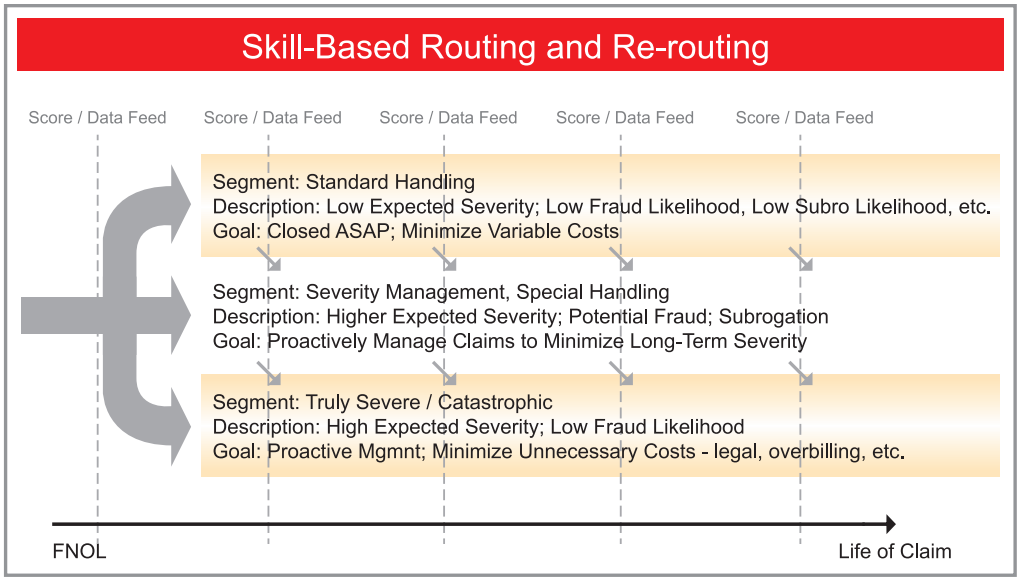
While the philosophy of shifting handling needs, based on new/additional information has been a core claims practice for decades, the key difference with this approach is on two levels. First, is the inclusion of near real time externally available data, which with the right vendor partner, is a one of a kind advantage. While claims has used external data for decades, it generally is procured well into the claim lifecycle (e.g. - police reports, obtained in days at best, sometimes in weeks) and is usually point in time, static data, that is not always recognized or turned into actionable information.

The second is the impact of using advanced analytic tools on a regular basis (transactionally in real-time as the claim changes or perhaps nightly batch cycle) to search for, identify and weigh additional data that would provide an automated update to the handler about these changes. An example here would be a first party property loss, where a couple of weeks post loss report, a systematic review of public databases turns up a recently filed bankruptcy on the part of the insured.

The broader data set, refreshed regularly, combined with analytic tools provides the claims handler the most relevant current portrait of the claim. This provides the opportunity to recast handling, potentially eliminating steps and touches, which is a win for all involved.

Claims and Exposure Triage Throughout the Lifecycle of the Claim

The impact of any of the above examples, or other scenarios that change the complexity of the claim will most likely result in a shift in claims handling needs, possibly even a shift in adjusters, based on a new skills based need. This dynamic shifting across various "swim lanes" throughout the life of the claim as new/additional information becomes available is the key to leveraging external data, now combined with internal data and powered by advanced analytics.



It will be important to also develop "intervention indicators," that signal to a claim rep and/or manager or even to a system that the original projected path of an individual claim or exposure, has changed. Based on rules established by the carrier, alternative next steps could be recommended, including new tasks, new handling path, new reserves, etc. These indicators should also be simultaneously sent to the current adjuster and to exception based reports for managers.

The strategic implications of this approach impact not only claims, but also many other areas of the insurance organization.

Strategic Implications and Claims Impact Areas

This approach in claims allows the claim business leaders to ***more effectively leverage People, Capital and Technology.*** With claims costs, indemnity and expense, comprising 65-75% of an insurers overall spend, claims efficiency and effectiveness is a key driver of overall company success. While all claims organizations strive to be fast, fair, accurate and customer focused, linking day-to-day execution to this strategy is easier said than done. With the myriad tasks associated with each individual claim, the multiple (sometimes competing) parties involved on any given claim, the cumulative impact of improving fractionally on multiple facets in any one claim can have a massive cumulative impact on overall results. Claims handling is incredibly complex. Unlike underwriting, where the insurer only has to get the information and analysis right for one policy, the insured, in claims there are often multiple parties to the loss in addition to outside parties including vendors and attorneys.

This produces a very complex amalgam of parties and information, that must be obtained, understood and acted upon, oftentimes concurrently. Many companies do this pretty well today. The opportunity with this new, transformational approach, is to have access to more robust data at a much earlier point in the lifecycle of the claim, allowing insurers to make more informed decisions sooner, which will result in claims concluding more quickly and accurately, a win for the customer and the insurer.

By using as many data sources as possible and combining the data with advanced analytics, insurers would be able to more finely segment claims and tasks within claims, which would enable the insurer to more effectively leverage people, capital and technology.

By using as many data sources as possible and combining the data with advanced analytics, insurers would be able to more finely segment claims and tasks within claims, which would enable the insurer to more effectively leverage people, capital and technology.

Some examples of how this might enable insurers to improve process, outcomes and customer satisfaction in the areas of people, capital and technology include:

Leveraging People

- Create more finely focused specialty units that focus on specific claim tasks and/or types, with associated production and quality standards for each unit.

- Combining a richer data set (external data as well as internal data), combined with advanced analytics, the insurer can determine at an earlier point, which exposures might warrant moving into a fast track path, or a serious loss path, or other special handling path.

- Determination at time of FNOL that the adverse party does in fact have valid insurance can change the handling track and avoid referral to that outside vendor specializing in "uninsured" subrogation pursuit.

- Quicker recognition of facts that drive outcomes allows insurers to reduce overall cycle time. Reduced cycle time is a winner for all parties – insureds, claimants and the insurer.

- Spend more time on claims with complex variables, ones that do not move quickly, ones where friction potential is high (fire & theft, low impact soft tissue and total loss for example). This increased focus and attention on difficult claims better serves customers and is better reflected in outcomes.

- A collateral impact of reduced cycle time is customer satisfaction. J.D. Power has shown the causal relation between customer claim satisfaction and retention. With customer retention a key non-claims goal and success metric, the impact of increased satisfaction has tangible bottom line impact.

Leveraging Capital

- More easily (accurately) establish initial formula reserve amounts.

- Identify serious losses sooner in the claim lifecycle.

- Reducing claim lifecycle impacts needed open reserves and IBNR.

- More efficient and effective claims handling impacts staffing need.

- More accurately identifying insured wrongdoers, effectively reducing outside vendor spend.

- Claim handling systems already have external links to some outside vendors. Linking the claim system to a provider of robust external public data should be low cost and low complexity. In fact, it may be as simple as getting additional information from an existing, already networked vendor used in underwriting or another part of the organization.

- Leveraging existing vendors, more efficiently uses IT resource, reduces the overall number of vendors and quite likely allows the insurer to better manage overall vendor spend.

- This approach helps drive claims and other areas within the insurer to reduce complexity and feeds in population of data into a common data warehouse.

- Having claims move to a systemic use of external data as an integral part of the claims handling process, provides additional richness to the consolidated data set, which with the rapid advancement of analytics, might provide new insight to many areas – pricing, marketing, claims, etc.

The Ultimate Claims Business Benefits

Examples of other impact areas within claims include:

- Impacts LAE – by providing the opportunity to improve process, reducing cycle time, which leverages people, capital & technology – reducing LAE, which can be passed along as lower rate need.

- Impacts Indemnity – by increasing speed to close some claims, more quickly identifying claims that require additional focus, better identification of other insurance, etc.

- Progressive use of Analytics - this approach also allows an evolutionary, iterative approach to progressions of claims handling track algorithms, assuring a constantly refreshed look at new and existing losses and revised claims approaches.

- Further supports a multi- company business model – Intelligent FNOL & triage coupled with dynamic handling tracks throughout the life of the claim allows for a company, channel and/or coverage specific claim focus.

- More effective identification of exceptions – combining the data from the auto damage estimating tool, along with claims history and the predictive modeling can produce a much more powerful reinsepection identification and supplement trend (by shop, appraiser, part or procedure type) tool.

- Additional processing tracks. The analytic output of this aggregated and periodically updated data allows insurers to define handling tracks and associated processes with much more granularity.

- Improves customer satisfaction – the goal of all parties to the loss is to return to their pre-loss state as soon as possible. To the extent that the claims process can be faster, more efficient and fair to all parties, then participant satisfaction improves along with outcomes.

Challenges and Proposed Solutions

There are many challenges in effectively moving to this approach, some claims in general, some company specific. Some of these challenges include the following:

Using new technology in old ways. As companies evolve and transition to new tools and new technology, there are many examples of well-intended claims managers working very hard to figure out how to use new technology and new tools within the borders of the existing processes they understand and are comfortable with. They work very hard to use new technology in old ways.

It requires leadership and consistent follow up from the highest levels to assure that new technology is used in new ways, to improve process and reduce overall cycle time. As a rule of thumb, every new implementation should require that every step and touch in the current process be looked at through one of four lenses – improve, automate, outsource or eliminate.

The preferred outcome is the elimination of steps and touches, compressing cycle time, which improves outcomes for the customer and the insurer.

Resource allocation. Every operating area within the broader insurance organization has to manage with finite departmental resources and compete for overall corporate resources as well. It can be argued that effectively leveraging this "Underwriting Claims" approach can have tangible claims impacts in all four key quadrants of a balanced scorecard type strategy – the financial, process, people and customer quadrants.

What claims executive hasn't wrestled with the following challenge?

Departmental silos. To effectively execute this approach requires that claims work across several non-claims areas, such as underwriting, actuarial and IT to assure the understanding, buy in and participation of these areas. This means developing the data inputs, analytics and process approaches in collaboration with these areas vs. in a vacuum.

Tactical thinking. There will always be the current initiative or "crisis du-jour" that can tempt claims leaders to push such a strategic initiative off to a future date. There is no such thing as a good time to begin a transformational approach to claims process. Claims leadership simply has to manage tactical and strategic concurrently, they do it every day.

Summary

Every successful business does a good job linking execution with strategy. The idea of using a broader data set, including external data, that is updated on an ongoing basis combined with effective analytics to turn the data into actionable information in the claims environment is a concept that can now be executed with existing tools and vendor partners.

There are many factors and dynamics affecting claims and therefore outcomes. The question is, how can we better identify some of these key factors, both internal and external, and deliver them into an analytics driven engine that slots claims into multiple buckets (some discrete, some shared) for initial distribution to different claims adjusting groups and subsequent redirection and/or redistribution as new information becomes available. Like the underwriting

The idea of using a broader data set, including external data, that is updated on an ongoing basis combined with effective analytics to turn the data into actionable information in the claims environment is a concept that can now be executed with existing tools and vendor partners.

side of the business, claims has an opportunity to obtain more robust data, make it more actionable via advanced analytics and compress the overall claim cycle time – a true win/win.

Timely, actionable information allows the claim to move forward more quickly and nimbly. This is a win for the customer and the company. Forward thinking claims and corporate executives will understand this common sense extension of underwriting approaches and practices to the entire claims handling spectrum. The data sets and advanced analytic tools to make this possible are available today. While the challenges around execution will be numerous, as is the case in the introduction of any new strategy that ripples though multiple areas of an organization, forward thinking insurers recognize these challenges and will team with the right partners to overcome the hurdles.

For more information contact Insurance Solutions:

Phone: 877.719.8805
Email: insurance.sales@lexisnexis.com

About LexisNexis®
Sponsored by LexisNexis® Risk Solutions. LexisNexis® Risk Solutions is the leader in providing essential information that helps advance industry and society. Building on the legacy of proven LexisNexis® services from the past 30 years, our cutting-edge technology, unique data and advanced scoring analytics provide total solutions that address evolving client needs in the risk sector while upholding high standards of security and privacy. The LexisNexis ClaimFocus℠ Platform and Product Suite is one of the insurance industry's most comprehensive predictive modeling-based claims analytics systems, helping insurers more effectively incorporate analytic technologies into vital aspects of their investigation and claims processes. LexisNexis Risk Solutions serves commercial organizations and government agencies and is comprised of several affiliated corporations, each offering premier customer-focused solutions. For more information, visit lexisnexis.com/risk.

Underwriting claims as used in this white paper is not used to mean "underwriting" in its common connotation, which refers generally to evaluating a potential risk and assigning a rate for insurance coverage of that risk.