

January 16, 2025

Clark Demasi Chief Executive Officer 6595 Roswell Rd Suite G2242 Atlanta, GA 30328 Phone: (305) 978-0994 Email: clark@demasi-group.com

# **Introduction to Risk & Litigation Analytics**

# 1 Introduction to DGA

DGA has been supporting clients in the litigation and risk management space since 2019, specifically in the practice areas of healthcare and motor carrier insurance. Our core offerings include:

- 1. In-depth quantitative analysis reports that help clients identify strengths and weaknesses, gap analysis, cost-optimization strategies, and model specification in the litigation and risk management verticals.
- 2. Cloud-based litigation application *Faro Litigation Analytics* that allows our clients to (a) leverage our advanced machine learning modeling approach when evaluating claims in real-time, (b) generate highly versatile Key Performance Indicator (KPI) reports, and (c) integrate directly into existing IT frameworks.
- Cloud-based risk management application *Faro Risk* that allows our clients to (a) leverage our advanced machine learning modeling approach when evaluating incidents/potential claims in real-time, (b) generate versatile KPI reports, and (c) integrate directly into existing IT frameworks.

A primary difference between DGA's offerings and competing risk management and legal software tools is DGA's unique modeling approach when evaluating claims. Not only does the DGA modeling approach incorporate objective claim facts (e.g., plaintiff demographics, venue, special damages, etc.), DGA claim valuation tools also quantify and incorporate subjective facts that seasoned trial attorneys intuitively understand drive claim values (e.g., witness testimony, photo/video evidence, expert support, etc.). As such, DGA is able to assign real-time 'risk scores' to claims or incidents from the moment the claim is filed or an incident is reported, allowing clients to forecast and simulate potential resolution outcomes across varying degrees of potential exposure.

DGA's litigation software has led to clients to achieve a number of drastic improvements in the litigation managements space, including:

1. 50% reduction in legal spend, annually;

- 2. 20% reduction in average cost per claim;
- 3. 50% reduction in time to settle claims;
- 4. Significant premium refunds, including largest refund for one client in over a decade after first year with DGA.

DGA's risk management software, *Faro Risk*, offers real-time risk evaluations of a client's operations, incorporating past incidents and potential compensatory events, predicted future level of risk, and potential losses from future claims (evaluated using the modeling approach described above). The risk management software offers geospatial analysis of facilities, risk levels of individual incidents, and evaluation tools that allow risk managers to assess the efficacy of interventions when assigning risk mitigation techniques in light of on-site process failures.

### **Document Overview**

DGA's expert team draws on our experience working with general counsels, VPs of risk management, claims managers, litigators, risk managers, and captive insurance managers to outline the advantages of the DGA suite of offerings. We have structured our outline in a manner that maps onto the industry's challenges to demonstrate how we assist clients in achieving crucial objectives in this space.

*Note*:DGA's core business is the development and delivery of risk management and claims management software and analysis. DGA is not a third party administrator (TPA), and does not offer many of the services of a standard TPA. DGA, however, does work directly with law firms that utilize DGA's data analysis approach and technology to deliver mutual clients the cost savings and administrative support beyond what a typical TPA can offer. By arming partner law firms with data analytics and administrative software, DGA gives its partner law firms the ability to manage and resolve claims pre-suit, intelligently manage the flow of potential claims against professional liability, and comprehensively evaluate the risk/reward of resolution strategies in real time, alleviating the need for TPA involvement. In the remainder of this document, we do not speak to this particular utilization of our software directly. We are, however, happy to discuss at length upon request.

### 2 Inefficiencies in Traditional Risk & Litigation

DGA has a suite of offerings that are directly applicable to Claim Management Systems (CMS), Risk Management Information Systems (RMIS), and Third Party Administration (TPA). Our *Faro Risk* and *Faro Litigation Analytics* tools are specifically designed to diagnose and fill process gaps and support risk mitigation and/or litigation management teams through advanced quantitative techniques and easy-to-use mobile and web-based software.

A primary component of DGA's CMS/RMIS offerings is quantitative gap analysis, which seeks to identify strengths and weaknesses in existing risk management, claims management, and litigation management operations. Drawing from extensive experience, DGA has identified a number of themes that present themselves inside traditional operations with respect to efficiently resolving claims and/or mitigating risk. In this section, we outline several of the most common inefficiencies we have identified as most problematic. We then discuss how our suite of offerings directly address these common issues.

#### 2.1 Reactive vs. Proactive Risk Management

Traditional approaches to risk management offer reactive solutions when pursuing risk mitigation. These reactive approaches find risk managers waiting for something bad to occur, attempting to mitigate the damage of said event, and implementing processes that will (hopefully) reduce the likelihood of the same event occurring in the future. The limitations to this approach are twofold:

- 1. a reactive strategy does not allow the risk manager to identify process failures and proactively prevent incidents from occurring in the first place;
- 2. a reactive approach does not offer the risk manager a straightforward (i.e., quantitative) method to evaluate the efficacy of the process failure mitigation strategies.

For example, consider a given facility that experiences 10 incidents in Month 1, a mitigation strategy is implemented, and the facility experiences 8 incidents in Month 2. Was this mitigation strategy a success? Without a proper evaluation tool, the risk manager is left guessing at what he can expect to realize in Months 3, 4, 5, and so on.

*Faro Risk* addresses both of these gaps in the risk management process. Informed by machine learning models, our technology is custom-built for each client to identify, prioritize, and call attention to potential future "hot spots," or problem areas, for the risk manager **before** the incident occurs. This allows mitigation strategies to be implemented prior to costly incidents taking place. Furthermore, our evaluation tools assess the performance of an implemented mitigation technique against counterfactual scenarios so that risk managers can evaluate their team's performance in real time. Using the above example, Month 2's eight incidents may in fact be a stark improvement over the anticipated *fifteen* incidents that would have occurred in Month 2 had no intervention been in place. Additionally, because *Faro Risk* seamlessly integrates with *Faro Litigation Analytics*, users are able to assign quantitative metrics (e.g., dollar figures) to their risk mitigation strategies. A reduction from fifteen incidents to eight is a positive outcome in the abstract, but the counterfactual becomes a far more impactful tool to stakeholders when, for example, the sum of legal fees and litigated settlement payouts across those seven prevented incidents would have been \$700,000.

Thus, risk managers using *Faro Risk* have the benchmark tools necessary to inform stakeholders, quantify the performance of mitigation strategies, and evaluate their team's performance in real time.

### 2.2 Validating Resolution

Treating litigation as an "art" rather than a "science" has created inefficiencies in the claims management space that provide an unnecessary advantage to legal counsel and, furthermore, a significant detriment to the client. Practices such as hourly billing and partner-level oversight incentivizes attorneys to treat each case as a potential candidate for trial, sparing no expense on the path toward resolution, regardless of the claim facts. Clients have been unable to counter this incentive structure because, prior to *Faro Litigation Analytics*, outside counsel has served as party that both evaluates the claim and executes the resolution through the litigation process. In other words, if an attorney spends 2.5 years billing for work on Claim X, values the claim at \$500,000, then settles the claim for \$475,000, they can present this outcome as a success and as optimal work on behalf of the client. The client is in no position to question the claim evaluation or the settlement figure.

*Faro Litigation Analytics* values claims in real time, from the moment the claim is filed, and offers forecasted valuations of any claim conditional on potential variation in the claim facts. Considering Claim X from above, enough information may be revealed at the six-month mark for *Faro* to offer a valuation range that will not fluctuate regardless of the amount of work done on the claim over the next two years. Therefore, the client is armed with information to confidently push for an early resolution at that six-month mark, not only saving two years of superfluous legal spend but also validating the desired settlement figure using large, accurate datasets combined with advanced quantitative approaches.

### 2.3 Narrative & Anecdotal Bias

An attorney's justification for treating each and every case as a candidate for trial is further supported by highly publicized "nuclear" verdicts that often become front page news. An attorney can then argue that his legal fees are justified because he's kept his client from massive jury awards and associated public relations nightmares. Relying on a small, limited sample of cases that result in unfavorable outcomes for

the defense is a wholly inefficient manner by which to practice claims management. Similarly, in many practice areas, attorneys rely on personal bias when developing and executing litigation strategies that may or may not be grounded in data. For example, a medical malpractice defender may have at one point in time realized a sub-optimal outcome in a claim because of bad photo/video evidence, despite the client's record keeping being fully intact. From that point forward, the attorney may overvalue the effect that photo/video evidence has on claim value and subsequently undervalue the effect of proper record keeping. This biasing of evidence is not necessarily malicious, but rather a product of human nature that naturally creates inefficiencies to the detriment of the client.

*Faro Litigation Analytics* manages "nuclear" verdict bias by leveraging legal analysis and data analytics to treat each claim in the manner most advantageous for the clients - encouraging litigating the claims that require it and resolving the "low hanging fruit" early so that our clients never overpay plaintiffs or get stuck with superfluous legal bills. Similarly, *Faro* considers the evidence of a given claim in its totality when assessing a risk score and valuation. While a seasoned attorney will tell you bad photo/video evidence is indeed bad for the defense, the DGA modeling approach assigns a dollar figure to that "bad" evidence while also considering how those bad photos will interact with others aspects of the claim facts so that each claim valuation is treated objectively and in its totality. Thus, our modeling approach is strictly quantitative, but is guided by both "hard" facts (e.g., plaintiff age, outcome of the event, nature of the event, etc.) and qualitative information surrounding the evidence of the claim that often provides the "gut-instinct" upon which many seasoned attorneys rely.

### 2.4 Scope of Functionality

In addition to the major features of our *Faro* suite of products detailed above, there are a number of additional layers of core functionality for stakeholders' reference.

- 1. Auto-generation of custom claim/event reports
- 2. Manipulation of full dataset via interactive tables and graphs for auto-generation of summary statistics (e.g., by facility or region, risk-level, process failure, etc.) and global reports
- 3. Process failure tracking
- 4. File upload and tracking within claims
- 5. Task list creation and tracking within and across claims
- 6. Address book and relevant contact tracking within and across claims

### 3 Supporting Captive & Self-Insurance Environments

When operating in a captive or self-insured environment, cost predictability and early claim evaluation are two of the most important aspects of the claims management process. DGA's software tools, *Faro Risk* and *Faro Litigation Analytics*, are designed to enable users to address both cost predictability and claim evaluation. These tools will help to significantly reduce the time that it takes to develop and fine tune the internal processes related to these aspects of claims management. This will help reduce the trial and error that comes with developing these processes and gives a company a historical data set that is much more robust than what is typically developed by risk managers and claims handlers.

From a cost predictability standpoint, by utilizing DGA, clients will be able to quickly understand, based on historical claims and expense spend, the predicted worth of a claim by allegation, as well as what expense can be expected based on the firm that is representing the client. This information enables our clients to take control of legal spend by building an outside counsel panel based on alternative fee arrangements. By understanding a defense firm's historical fee billing compared to average settlement values of claims, our clients will be well informed to take charge of the negotiating process. Our clients can tailor case assignments to firms that perform best relative to claim value of specific allegations. DGA's analysis will also allow clients to better assign defense counsel to cases filed by plaintiff firms to which the data shows they best perform, which is a unique cost predictor that is often overlooked in the predictive cost modeling process.

This also plays into the early claim evaluation process on two fronts. First, the analysis provided by DGA allows clients to make informed decisions in setting early indemnity reserves on claims and pursuing early resolution of claims, if desired. Second, the analysis allows clients to assign counsel that, historically, have been the most cost efficient in getting high value claims evaluated and put in an early resolution posture.

The final fee models that are developed and the counsel assignments that are made while relying on DGA's analysis will lend to more predictable overall cost forecasting in a captive or self-insured environment.

## 4 Supporting Complex or Layered Risk & Litigation Management

The incorporation of machine learning for data assessment and analysis in DGA's risk and litigation management tools align with the needs of large or complex firms with a desire to control costs associated with the diverse array of operations covered by professional liability. Firms with a high volume of claims across a host of operational verticals naturally generate data that serves useful when training any type of predictive model, leading to more consistent and valid outcomes. As such, DGA might begin its analysis of a client's operations by looking for trends in past claims across all sub-departments, identifying what constitutes optimal performance vs. sub-optimal performance and identifying the key drivers of variation in outcome. These conclusions, for example, may find significant trends in how claims are litigated, expert usage, effect of venue, timeliness of resolution, and the like.

After establishing a broader understanding of what drives outcomes in claim management across all departments, DGA would then dive in to each individual department, identifying what factors unique to that department drive outcomes. Professional liability insurance, for example, would be treated as a distinct entity from workers' compensation insurance. As such, the data exploration, model selection, correlation analysis, and machine learning train/test approaches would be unique. Separating the modeling approach by department will allow the predictions and recommendations to be more refined, and thus more accurate to supporting the risk management team throughout its day to day work.

DGA may find that, when evaluating liability insurance claims, that on-site proactive risk management interventions would be a primary component in driving down potential compensatory events. Conversely, DGA may find that on-site interventions have little to no impact on the number of workers' compensation claims. This is critical information to have on hand when allocating limited time and resources to perform on-site visits to mitigate future potential risk.

By treating each sub-department as its own entity, DGA will also be able to prioritize high-exposure areas of a client's operations when building out any and all support tech. Rather than treating all client's professional and general liability sub-departments with a "one size fits all" approach, analysis may reveal that liability insurance demands 3 distinct dashboards, utilizing data and visualization techniques in multiple ways to achieve optimal outcomes, while a single dashboard may be suitable for the worker's compensation sub-department.

By starting with the macro-analysis and then delving deeper into sub-departments, any support tech back-end specifically designed for our clients will be refined and optimized to treat *each claim* and *each department* with a unique and appropriate approach. That said, user interfaces to *Faro Risk* and *Faro—LA* will allow for simple, seamless movement between sub-departments so that the user may access the appropriate interface for a given claim without superfluous data entry or white noise.

## 5 Custom Solutions to Specific Problems

The DGA software tools are designed to be customizable to the specific requirements and opportunities of each customer. We have found that a "one size fits all" approach to data analytics cannot support the complexities of risk and litigation analysis across the wide range of potential users. Just as each client has their own set of challenges and gaps in their processes, so too does each client's application require a dedicated and proprietary modeling approach. As such, the presentation, U/X, data entry and extraction, etc. must be customized to meet each clients specified needs.

DGA starts with the same framework and core functionality when developing client applications - industry standard security, dedicated cloud based servers, optimized memory, etc. All front facing dashboards, workflow support, reporting schema, and data visualizations are custom built around the client's needs. Because DGA adapts its core software to each unique client, the development process for any new client, regardless of industry or level of complexity, would mirror that of DGA's standard business practices.

## 6 Cloud based SaaS as a Preferred Solution

The current DGA risk and analytics software tools, *Faro Risk* and *Faro Litigation Analytics*, are cloud based, providing DGA the ability to keep these tools aligned with market direction, cost efficient, and secure, and also enables customers to take advantage of these improvements without having to rehost software applications on individual machines. Also, the customizable nature of these cloud-based tools enables them to be seamlessly integrated with legacy and ancillary systems.

Given DGA's experience supporting clients in corporate and legal settings, we recommend two technological pathways towards integrating RMIS / CMS systems with existing IT, *API Integration* and a*Cloud Based Web Application*. Both approaches empower our clients' practitioners to leverage real time analysis when valuing and managing claims, assigning interventions to mitigate risk, and retrospectively evaluating claim strategy and performance, while differing in degrees of customization and scope.

The first approach, *API Integration*, encompasses DGA building a dedicated system that will communicate directly with a client's existing IT infrastructure so that operators may access customized analysis on a per-claim basis. Under the *API Integration* model, our client's operators would continue to track incidents and claims on existing software. This data would be encrypted and sent to DGA's external software, DGA's software would then operate on this data (run analysis, make predictions, etc.), and then return the new information to a secure container inside our client's existing IT where it would be displayed visually to the user.

The primary advantage of an *API/Microservice Integration* is that our clients may continue to use familiar claim and incident tracking software, reducing on-boarding time and any potential learning curve for practitioners. The disadvantages of this approach are two-fold. First, any and all modeling approaches that DGA would seek to implement to support a potential client would be limited to the scope of data collection available in existing IT. In other words, DGA could potentially run into limitations from a modeling perspective if, for example, our analysis indicated that legal venue had a large effect on the litigation model, but legal venue is not a data point tracked in the client's legacy software. The second disadvantage of *API Integration* is the potential limitations in software and user-interface functionality that DGA can build and customize for its clients. Aspects of the software that make the *Faro* suite of products so user friendly (custom look and feel, custom reporting, mobile access, etc) would (likely) be reduced to visual displays of data/analysis.

The second path - a *DGA Hosted Web Application* - gives client operators the ability to customize and access DGA's proprietary *Faro Risk & Litigation Platforms*, wherein client operators will have access to the same data analytics tools found in the *API Integration* approach while also leveraging the scope of DGA's tech stack offering, which currently supports clients through mobile and web based incident and litigation management, tracking, reporting, geospatial analysis, and other customized features. Because each client's needs are different, DGA does not utilize a "one size fits all" approach. Rather, DGA works with each client to ensure that the data entry, dashboards, reports, data visualizations, alerts, sharing,

and accessibility are tailored to meet the client's specific needs.

The primary advantage of a cloud-based approach, such as secure web apps like the *Faro* suite of offerings, are security, mobile integration, and indifference to operating systems. DGA would counsel a potential client to pursue such software, which would allow practitioners the simplest and most direct user experience while also expanding potential scope of services as our client's disposal.

### 7 Conclusion

Industries that experience routine high volume claims against their general and professional liability (e.g., long-term care, motor carrier, etc.) are vulnerable to a host of inefficiencies throughout the risk and claims management processes. These inefficiencies result in the delivery of substandard care, repetitive and preventable failures, and costly resolution tactics. DGA has tailored its products to address many of these inefficiencies, not only arming our clients to save money, but to optimize performance in a vertical that continues to puzzle many of its operators.