WHITE PAPER

LITIGATION PORTFOLIO MANAGEMENT

THE LEGAL KARMAN LINE℠

WHAT LEGAL WORK IS RIGHT FOR AI?

Above a certain altitude, the air thins, aerodynamic lift fails, and forward motion requires a rocket. Aerospace engineers call that boundary the Kármán Line.

Litigation has an equivalent boundary: the altitude where repeatable patterns run out and only real expertise and judgment will fly. Yet buyers of defense-side services keep paying for every hour as though the work above and below that boundary were the same kind of flight.

This white paper sets out a method for locating that boundary inside a portfolio — what distinguishes the two kinds of work, why the division runs through the middle of every matter rather than between one matter and another, and how to test the question against billing data a legal department already holds.

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THE LINE A LAWYER DREW

In the 1950s, aerospace engineer Theodore von Karman posed a fundamental question about high-altitude flight: at what altitude must an aircraft travel so fast to generate aerodynamic lift that it reaches orbital velocity? His calculations placed this boundary at approximately 84 kilometers. Below this threshold, conventional lift applies; above it, wings cease to function regardless of speed, requiring an entirely different propulsion system.

Von Karman never formally published the calculation. The concept was codified by his counsel: *Andrew G. Haley*, General Counsel to the American Rocket Society and a pioneer in space law. Recognizing the jurisdictional implications, Haley proposed this altitude as the international boundary dividing national airspace from sovereign-free outer space, naming it in honor of his client. The defining threshold of modern aerospace was established by an attorney to demarcate where one legal regime ends and another begins.

WHERE ONE MODE STOPS AND ANOTHER BEGINS

Hospitals do not bill an entire patient stay at a chief surgeon's hourly rate. Care is triaged: phlebotomists draw blood, radiologists handle imaging, nurses monitor recovery, and surgeons operate. Each task is performed by the appropriately credentialed clinician at a price point reflecting that specific function.

Litigation defense already operates on this tiered model internally—partners direct strategy, associates draft pleadings, and paralegals manage cite-checking. What remains broken is the procurement model. Insurers and corporate legal departments continue to retain outside counsel under monolithic fee structures, paying premium law firm rates for routine, repetitive hours simply because they sit within a complex litigation matter.

The line does not separate easy cases from hard ones. It cuts horizontally through every file.

A catastrophic product liability suit is not uniformly complex. It consists of high-stakes strategic decision-making sitting atop a massive volume of standardized work: discovery responses, records collection, document indexing, and scheduling control. These are the same procedural tasks found in a routine bodily injury claim, scaled in volume.

True legal complexity is real, but it is concentrated in a small fraction of overall case hours. The rest can be identified, unbundled, and priced on its own terms — routine execution separated from high-value judgment, each purchased for what it is.

That is what Merrill's *Legal Karman Line*℠ services are built to deliver: the work below the line, on your file, while lead counsel keeps everything above it.

MAPPING THE BOUNDARY

Enterprise legal departments and insurance carriers already hold the data needed to draw this boundary: years of task-coded billing records across every panel firm and matter.

The line does not divide categories of tasks. It cuts horizontally through them. Nearly every legal task comprises both patterned mechanics and high-value legal judgment. Taking a deposition requires acute, unpatterned tactical skill during the examination itself, yet the surrounding workflow (such as noticing, scheduling, exhibit binder assembly, and deposition summarization) is highly standardized.

The relevant inquiry is therefore not whether a task contains repeatable elements, but how much of it does. In practice the boundary is a variable band rather than a rigid altitude. It shifts with matter type and operational context across a portfolio, and hours assigned to a single task code frequently land on both sides of it.

Mapping this band allows legal operations and panel managers to identify precisely which workflows can be unbundled, automated, and reallocated to drive material cost savings across the litigation portfolio. Merrill's *LEGAL KARMAN LINE*℠ services are built to take on the portion that falls below it.

FIGURE 1 THE LINE INSIDE EACH PHASE OF LITIGATION LIFE CYCLE

Each column is all of one task code's hours. The split is that task's Pattern Rate - pattern work below the line, not so much above it

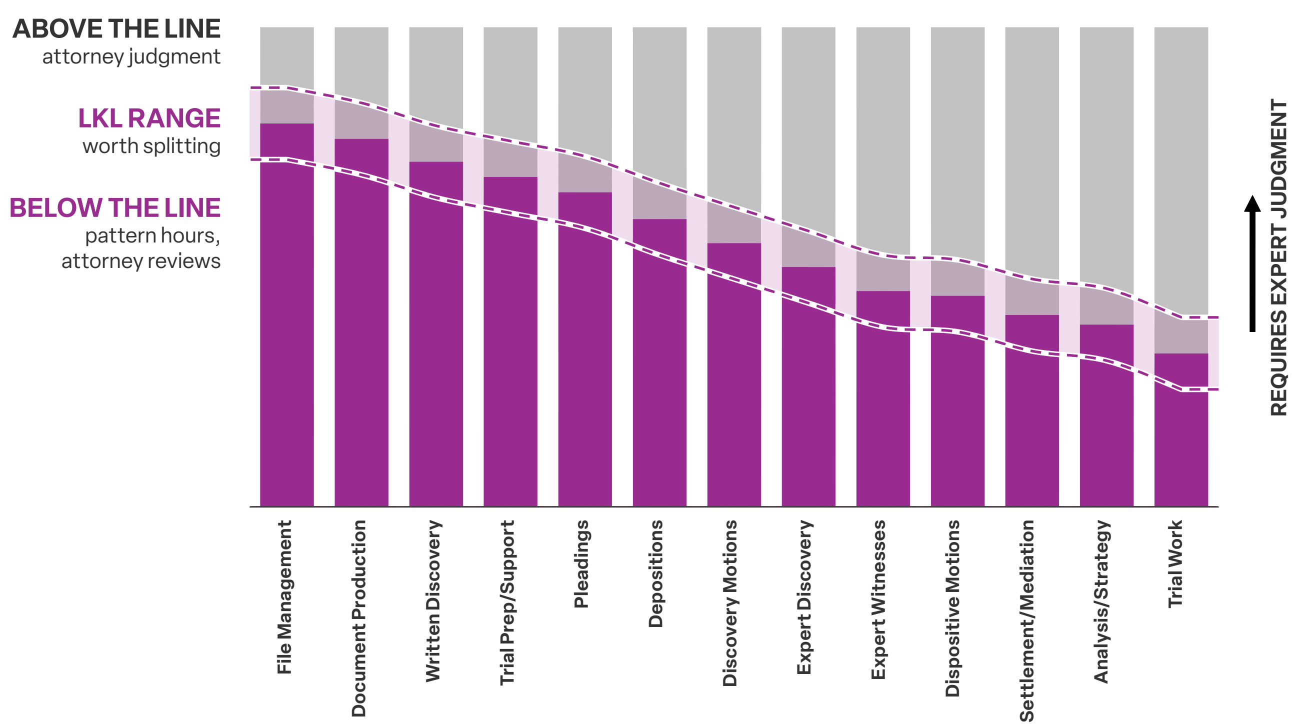

Figure 1 uses depositions to illustrate this division. Administrative mechanics—noticing, exhibit prep, and transcript summarization—fall well below the line, while conducting the examination sits firmly above it. Even trial attendance contains roughly 30% standardized work (e.g., jury instructions, exhibit logs); however, because these tasks are tightly coupled with live advocacy, unbundling them yields diminishing returns.

DEFINING "PATTERN WORK" IN LITIGATION

Calling work "patterned" does not mean it is simple or unrefined. Painting by numbers is not the same as painting badly. The canvas can be intricate and the execution demanding, but the composition is settled before the brush is ever lifted.

We define pattern litigation work as any process where identical inputs in a given procedural posture reliably yield the same standard, defensible output. The blueprint exists before execution begins.

As detailed in Table 1, this threshold varies significantly depending on the nature of the claim. In high-volume, low-exposure matters like standard personal injury claims, tight damages bands and predictable legal issues keep variance minimal. The line threshold sits high, placing the vast majority of file hours beneath it where automation and structured workflows can operate safely.

Conversely, in catastrophic injury or high-stakes liability litigation, financial exposure and nuanced human factors dominate. Critical tactical decisions, such as how aggressively to cross-examine a treating physician, when to make a strategic concession, or how a specific narrative will land with a jury, rely entirely on unrepeatable counsel judgment. In those matters, the threshold drops accordingly, preserving bespoke advocacy where it matters most.

TABLE 1 WHERE THE CEILING SITS, BY CASE TYPE

CASE TYPE	THE CEILING SITS	WHAT DRIVES IT THERE
Personal Injury (within policy limits)	●●●● Highest	Low severity and tight exposure bands make the error term small, so less pattern confidence is required before work moves; the ceiling sits high and most of the matter flies under it
Employment (Single Plaintiff)	●●●○ Mid to High	Moderate severity, but real procedural variance in how matters reach disposition pulls the ceiling down at the back end
Product Liability	●●○○ Low to Mid	High exposure and expert-driven divergence raise the confidence required, which brings the ceiling down
Catastrophic Injury	●○○○ Lowest	Severity dominates the error term; the ceiling comes down until only the most reliably patterned work can fly under it

PATTERN WORK BELOW THE LINE

Four operational markers identify work sitting below the line: three evaluate whether the process follows a predictable, repeatable workflow, and one tests whether attorney substitution materially alters the work product.

Does it take the same time?	**Effort Predictability.** Residual variance in hours once matter size, venue, stage, and firm are accounted for. Work that follows a pattern takes a predictable amount of time. Work that does not, does not.
Do different firms describe it identically?	**Cross-Firm Recurrence.** How closely a narrative matches those written by other firms on other matters.
Was it expected to happen?	**Sequence Predictability.** How surprising this step is given everything the matter has done so far. Patterned matters follow a stereotyped path; the moment one departs from it, the departure is measurable.
Does seniority change the result?	**Staffing Indifference.** The same work is staffed differently across firms. Where a partner and an associate produce the same outcome, rework rate, and write-off rate, the work did not require the partner.

EXPERT JUDGMENT ABOVE THE LINE

Four core signals indicate that a task has crossed above the line: two evaluate whether the legal or factual issues have become novel or unsettled, and two test whether the key insights reside in human experience and tactical instinct rather than the written record.

Has this produced an answer before?	**Novelty.** No prior instance to match against, a theory of first impression, a new statute or rule, an untested venue or regulator, a term nobody has papered. Pattern requires a prior correct output. Where none exists, there is nothing to pattern against.
Do prior precedents agree?	**Divergence.** Plenty of precedent, no consensus. A split in authority, competing expert methodologies, two defensible readings of the same clause.
Are dynamic responses required?	**Adaptivity.** A counterparty who adjusts to your choice. Cross-examination, negotiation posture, whether to disclose now or later. The correct output depends in part on a decision that has not been made yet, so it cannot be read off history.
Need to read the room?	**Human Read.** How a witness will hold up. How hard to press a treating physician. When a deposition should be gentle. How the case will land with twelve strangers. This is knowledge an experienced attorney carries and cannot fully articulate, acquired by repetition, but never reducible to a repeatable input. It leaves no trace in any prior file, which is exactly why no prior file can supply it.

RUN IT AGAINST YOUR OWN PORTFOLIO

Five structured steps—using data already captured in your e-billing system—allow you to test this framework against your own book. This streamlined diagnostic quantifies what percentage of your total litigation spend sits below the line and is immediately eligible for automation and cost optimization.

1. **Pull twelve months of closed matters with their line-item detail.** Task and activity codes, hours, and timekeeper level. Closed matters only, so the denominators are real.

2. **Estimate a patterned share for each task code, separately for each case type.** Not per entry, and not a yes-or-no answer, since almost no task is all one or the other. Doing it once across the whole book will average motor vehicle together with products liability and hide the finding.

3. **Total the patterned hours in every task that flies below its case type's ceiling, including in the complex matters.** This is the number that surprises people. Excluding your hardest matters from the exercise excludes most of the answer.

4. **Apply the four pattern-breakers to the specific tasks they touch. Not to whole matters.** A dispute breaks the strategy and motion tasks in that matter; it does not make its document production unpatterned.

5. **Multiply the remaining patterned hours by your blended panel rate.** That figure is what your portfolio currently pays in bespoke pricing for patterned work. It is usually the largest single number in a defense spend analysis that nobody has ever calculated.

REQUEST A PORTFOLIO REVIEW

Merrill AI was founded by practicing litigators and legal technology engineers who developed this methodology. We operate as a law firm, not a software vendor. Your billing data is received within a professional attorney-client relationship and protected by strict duties of confidentiality.

A portfolio review relies entirely on the e-billing data you already generate. It delivers a detailed analysis of your firm's Pattern Rate across every task code and matter type, pinpointing exact opportunities to reduce litigation spend.

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