



SURPLUS LINE
ASSOCIATION
OF ILLINOIS

Exploring AI-Powered Analysis in the E&S Space

Grace Hanson, Founder & CEO  Elysian



41st Annual Meeting

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AI-Native Claims Handling. Built for Complexity.

Elysian is an AI-native third-party administrator (TPA) purpose-built for commercial P&C claims — combining licensed claims expertise with frontier AI to deliver quality that traditional TPAs and pure software cannot.

HUMAN-IN-THE-LOOP

Regulatory compliance requires licensed experts, a permanent structural moat

AI-NATIVE CORE

Not a bolt-on, not a feature layer. AI is the operating system.

COMMERCIAL P&C FOCUS

E&S, specialty & complex claims — the hardest cases are our core competency

INVESTOR-BACKED

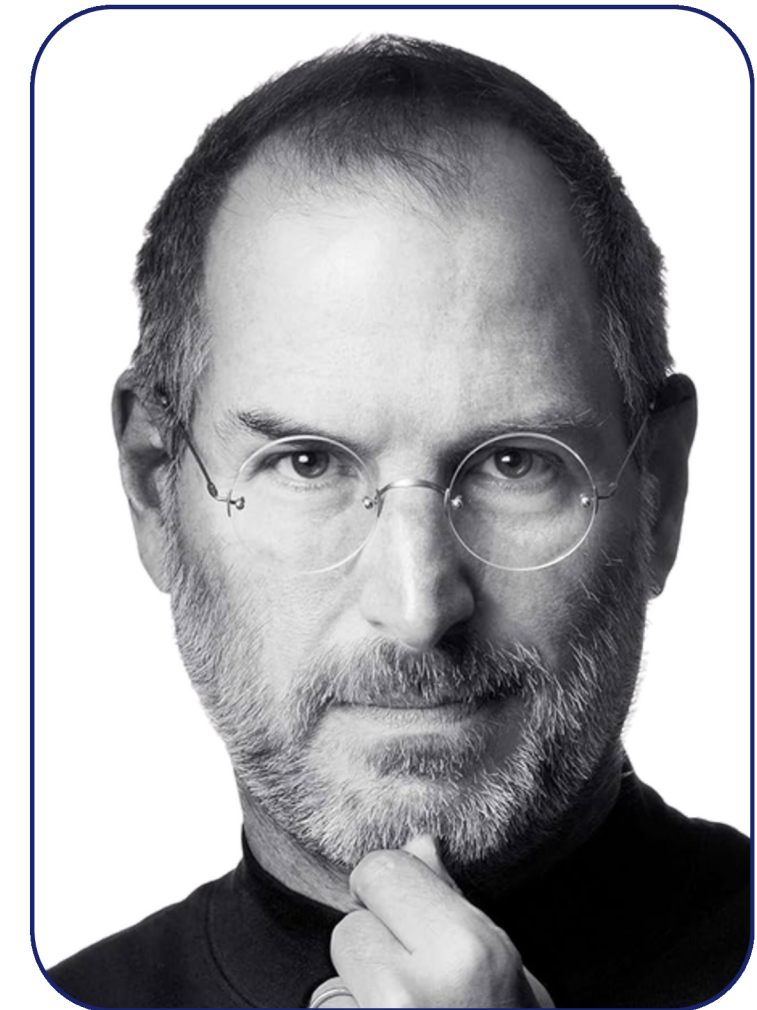
Portage Ventures
American Family Ventures
TenOneTen

The E&S Challenge - Uniqueness

AI is valuable if it solves problems for people

“Technology is nothing.

What's important is that you have faith in people, that they're basically good and smart — and if you give them tools, they'll do wonderful things with them.”



Steve Jobs

**FOUNDER & CEO
APPLE INC.**

"The question isn't whether AI will transform E&S, but whether your organization will **lead or follow** this transformation."

OCR vs. AI: What AI Technology Actually Does

Technical Comparison — Document Intelligence Stack

CAPABILITY	TRADITIONAL OCR	LARGE LANGUAGE MODEL (AI)
Document Reading	Character-level pixel recognition (letter-by-letter)	Semantic understanding of entire document context & meaning
Manuscript Policies	Fails on non-standard fonts, handwriting, varied layouts	Reads and interprets any layout; understands novel clause wording
Coverage Interpretation	Cannot infer; outputs raw text only — no judgment	Analyzes coverage intent, flags exclusions, identifies gaps
Accuracy on E&S Docs	~70–80% accuracy on complex or low-quality documents	85–95%+ with SME vector embeddings and fine-tuning
Multi-doc Cross-Reference	Not possible — single document at a time	Cross-references policy, SOV, loss runs & supplements together
Setup / Maintenance	Template-driven: must be programmed per form type	Adapts to new form types without re-training

Key takeaway: OCR is a viable, low-cost solution for standard, structured forms — but E&S documents are non-standard by design. AI's contextual reasoning is not a luxury; it is a structural requirement for accurate E&S analysis.

AI in Wholesale Broker Workflows: Where Value Is Created

Three High-Impact Use Cases — Today vs. Near-Term

01

Submission Intelligence

NOW

- Auto-ingest ACORD forms, SOVs & supplements
- Extract 50+ structured data fields in seconds
- Flag incomplete or inconsistent submissions before market

NEAR-TERM

Agentic pre-underwriting: AI autonomously gathers missing data, enriches with third-party sources, scores completeness

02

Carrier Appetite Matching

NOW

- Rank carriers by appetite alignment score
- Surface declination patterns across the portfolio
- Real-time comparison of coverage terms

NEAR-TERM

Dynamic capacity routing: AI selects optimal carrier combinations for layered towers without broker intervention

03

Placement Copilot

NOW

- AI drafts cover notes & renewal narratives
- Highlights year-on-year exposure changes
- Surfaces cross-sell / account rounding opportunities

NEAR-TERM

End-to-end renewal automation for simple, clean risks — broker focuses exclusively on complex and new business

For Wholesale Brokers

- Expedited Assessment: AI analysis of historical claims and customer data improves placement and coverage recommendations
- Client Consultation: Data-driven insights for risk management recommendations
- Market Intelligence: Understanding claims trends across E&S market segments
- Democratized Expertise: Relationships and trust become differentiators as expertise is commoditized

For Retail Brokers and Agents

- Client Option Review: Faster evaluation of coverage options matched to individual risk profiles
- Submission Efficiency: Compressed timelines from submission to bind
- Coverage Comparison: Side-by-side analysis of carrier terms and conditions
- Market Intelligence: Claims trend visibility across E&S market segments
- Relationship Value: Advisory depth that strengthens client retention at renewal

For MGAs and Program Administrators

- Portfolio Oversight: AI enables review of 100% of delegated claims vs. traditional sampling
- Compliance Monitoring: Automated tracking of state-specific requirements across jurisdictions
- Performance Analytics: Real-time insights into TPA performance and claim development



For Specialty Underwriters

- Pricing Intelligence: Claims analysis informs more accurate pricing for non-standard risks
- Portfolio Management: Early identification of deteriorating segments or emerging risks
- Reinsurance Optimization: Better data for treaty negotiations and retention decisions



Claims and Compliance Opportunities

MANUSCRIPTED/NON STANDARD POLICIES

→ *More consistent decisions*

COVERAGE COMPLEXITY

→ *Error reduction*

CLAIM COMPLEXITY

→ *JIT eserving allowing for dynamic pricing*

DOCUMENT INTENSIVE

→ *Speed & accuracy demands*

RISING EXPECTATIONS

→ *Labor intensive*

UNIQUE REGULATORY NEEDS

→ *Reduces Compliance burdens*

Questions Every Broker & Carrier Should Be Asking

Due Diligence Framework Before Adopting AI in E&S

DATA & ACCURACY

- What is the model's false-positive rate on E&S-specific documents?
- How does accuracy degrade on manuscripted vs. standard policies?
- Is there an independent benchmark — or only vendor-provided metrics?

COST & ROI

- What is the per-document inference cost at our projected volume?
- Have we modelled the full human-in-the-loop overhead, not just automation savings?
- What's the break-even volume vs. expanding OCR + rules-based automation?

COMPLIANCE & LIABILITY

- Who bears liability when AI-assisted coverage analysis produces an error?
- Does the model provide an explainable audit trail for regulatory review?
- How does the vendor handle state-specific bad-faith claims implications?

STRATEGY & MOAT

- Does AI sharpen our SME advantage — or commoditize it for competitors?
- Are we building proprietary training data, or renting a generic model?
- What happens to our competitive position if this tool is available to everyone?

The Winning Formula



RIGHT TOOL

OCR for structured
AI for complex
Humans for judgment



RIGHT DATA

Proprietary training
data creates durable
competitive moat



RIGHT PARTNER

Vendor with E&S
domain depth, not
a generic AI tool

**AI has its advantages,
but it also has its drawbacks**

Gaps in Implementing AI: The Efficiency Trap

Enhancing efficiency does **not** automatically yield quality or save money - the models are expensive



What To Do

- Define success beyond speed
- Create quality guardrails/pick the best partners
- Use Design Thinking
- Pick the right use case

The Real Costs of AI — A Balanced View

Cost Categories & Mitigation Strategies

IMPLEMENTATION

- Model selection & evaluation: \$50K–\$250K+
- Integration with existing TMS/CMS
- Data preparation & cleansing
- Custom fine-tuning / RAG pipeline
- Staff training & change management

ONGOING OPERATIONS

- API / inference costs per document
- Human-in-the-loop review overhead
- Model drift monitoring & re-validation
- Compliance & explainability audits
- Security / data residency requirements

HIDDEN RISKS

- Hallucinations
- Bias in fraud flagging algorithms
- Over-reliance reducing adjuster skill
- Regulatory scrutiny of AI decisions
- Vendor lock-in & model deprecation

When is OCR sufficient? Structured, standard-form submissions (ACORD, IVANS) with high print quality → OCR delivers 90%+ accuracy at <10% of the cost. Reserve AI for manuscript wording, complex multi-line accounts, and cross-document analysis.

Gaps in Implementing AI: AI isn't always right

CRITICAL THINKING & JUDGMENT

- Complex scenarios requiring discernment
- Weighing factors beyond algorithms
- Making exceptions when warranted

RELATIONSHIP MANAGEMENT

- Building trust through human interaction
- Managing expectations & difficult conversations
- Creating custom solutions

CREATIVE PROBLEM-SOLVING

- Thinking outside AI's pattern-driven box
- Negotiation in complex settlements
- Adapting to unprecedented scenarios

Gaps in Implementing AI cont.

Contextual Understanding Limitations

- Complex circumstances require human judgment
- Ambiguous policy language require interpretation
- Struggles to "read between the lines"
- Has to be built for large context
- Can be burdensome to check accuracy



Gaps in Implementing AI cont.

Emotional Intelligence Deficit

- Inability to empathize with claimants
- Missing the human element in sensitive situations
- Importance of compassionate communication



Gaps in Implementing AI cont.

Ethical Decision-Making Challenges

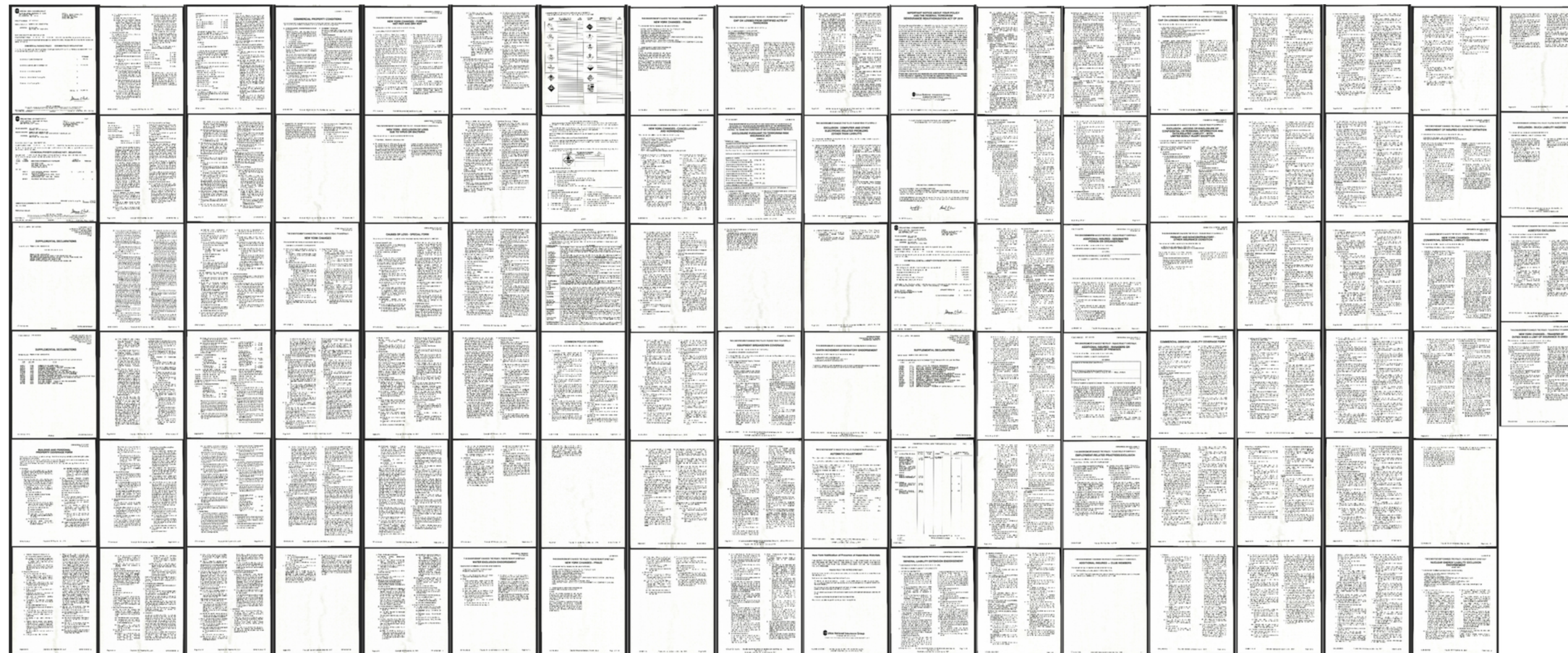
- AI struggles with nuanced ethical considerations
- Potential for algorithmic bias in selecting weighting
- Need for human oversight in unique scenarios



AI's Transformative Potential for E&S Claims Analysis

Policy Length and Complexity - Commercial Package Policy

Initial Review is Difficult, and Quality review even more so



106 pages
49,481 words

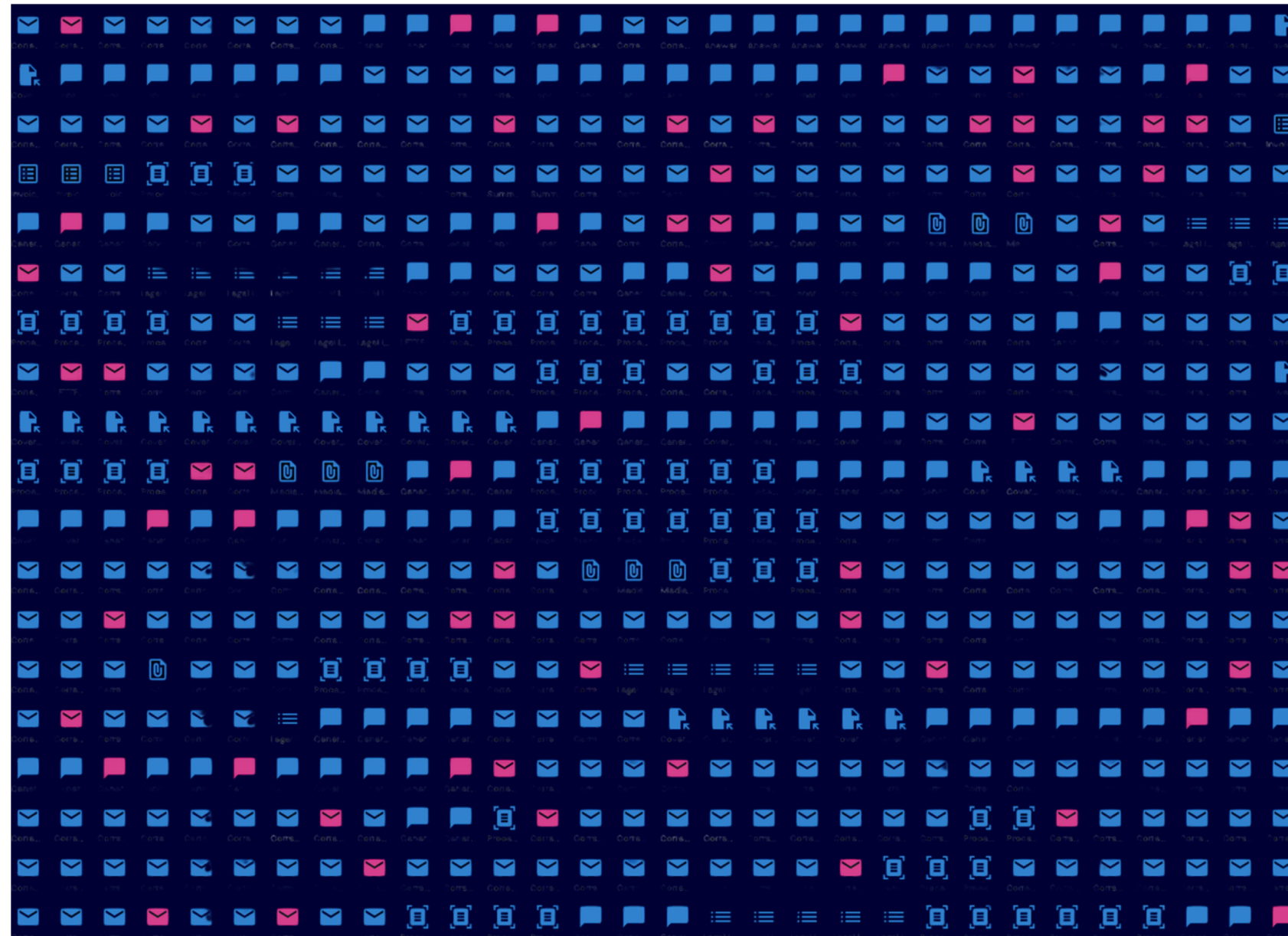
Document Volume & Contextualization

Human Capital Dependent

Files from a **routine**, 18-month slip and fall claim (litigated)

57 Hour(s) Reading

38 Hour(s) Writing

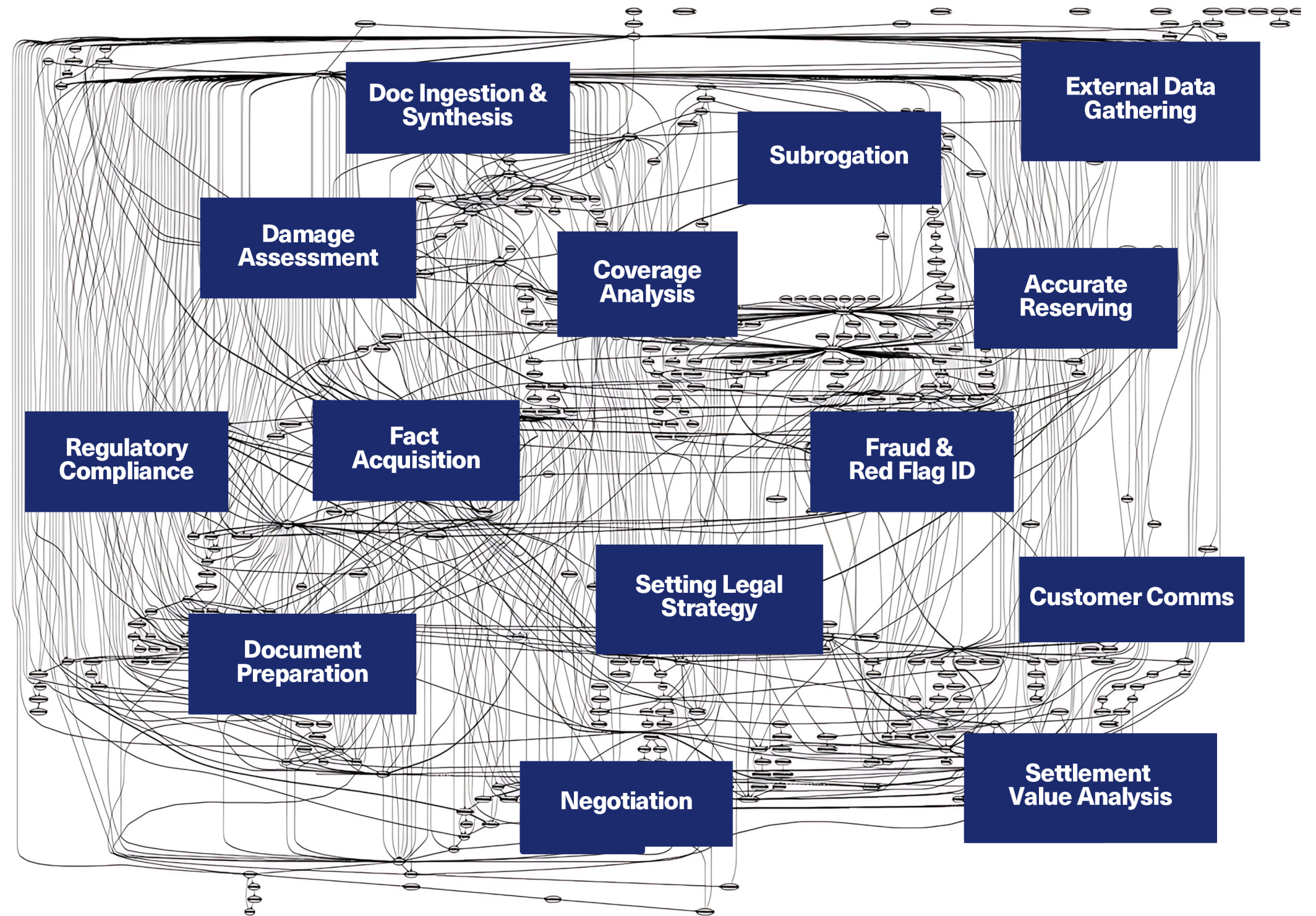


■ = Incoming documents

■ = Produced by adjuster

Specialty Claims with Nondeterministic Workflows

Messy middle →



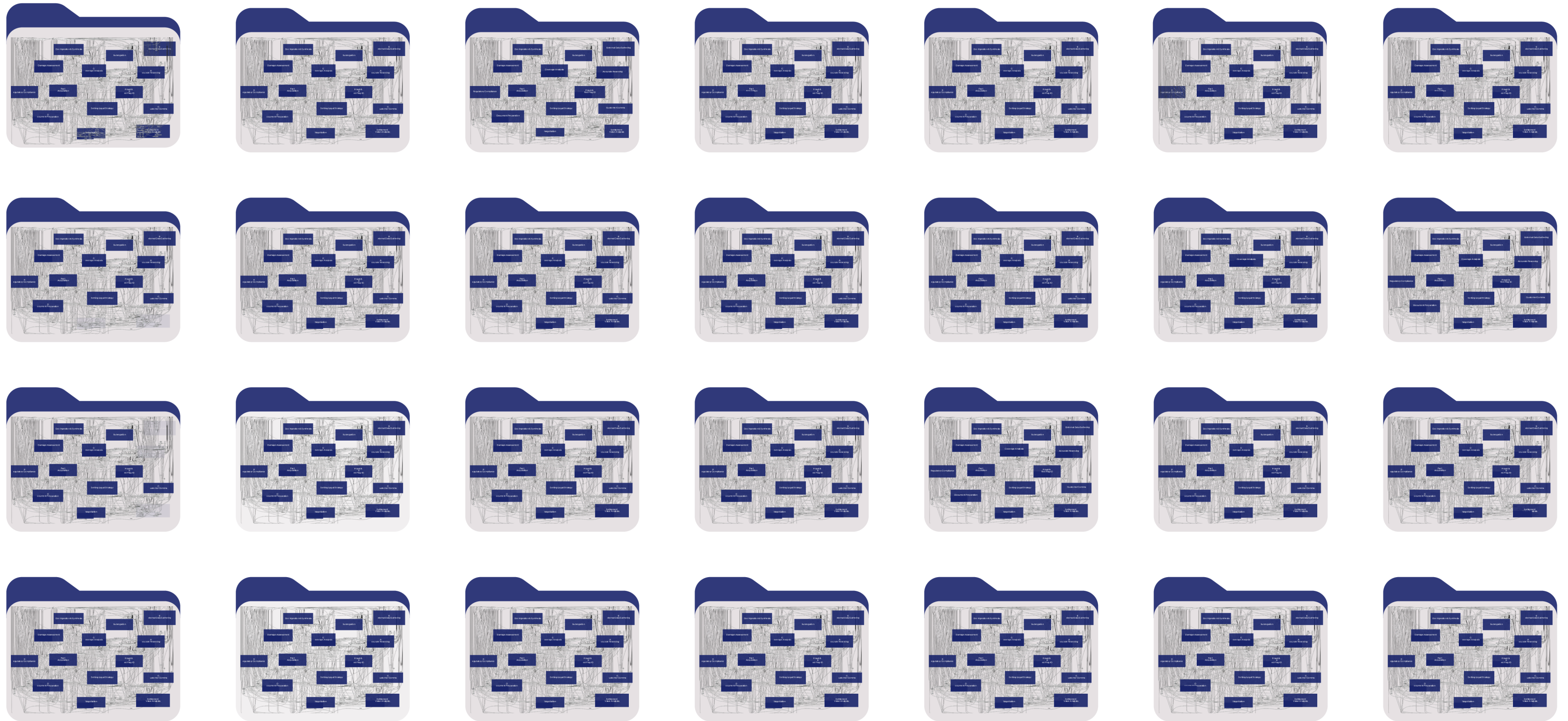
SME knowledge is critical to best outcomes, impeding standard automation

Jurisdiction
specific

Claim-type specific

Loss specific

Making it challenging to review/handle files en mass



Redundant Due Diligence = Layers of Cost

TPA/CLAIMS

- Periodic management or peer review (if that)
- Limited sample (2-5 a month) per adjuster
- Human calibration of standards

MGA (TPA OVERSIGHT)

- For compliance & authority purposes
- Annual
- Small sample set (<50)

FRONTING CARRIER/REINSURER

- At Renewal/Periodic
- Often Outsourced
- Small Data set (<100)

UW Auditing for Risk Selection and Pricing

Despite the costs, there are persistent deficiencies

Random
sampling vs
segmented

Time
constraints

Inconsistent
results

Data Scarcity

Leveraging AI effectively addresses limitations

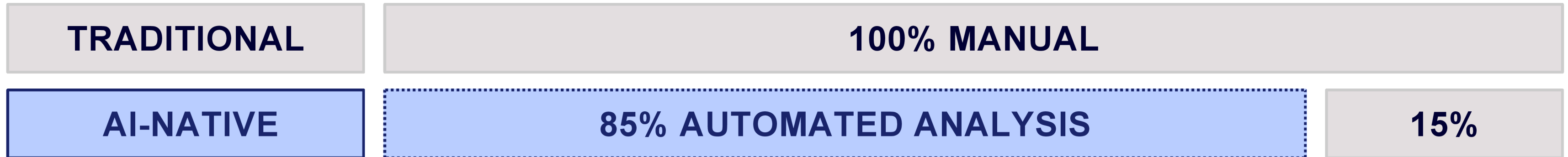
High level of
objectivity

Significant
increase in
sampling size

Speed of
auditing
results
increases

No duplication
of efforts

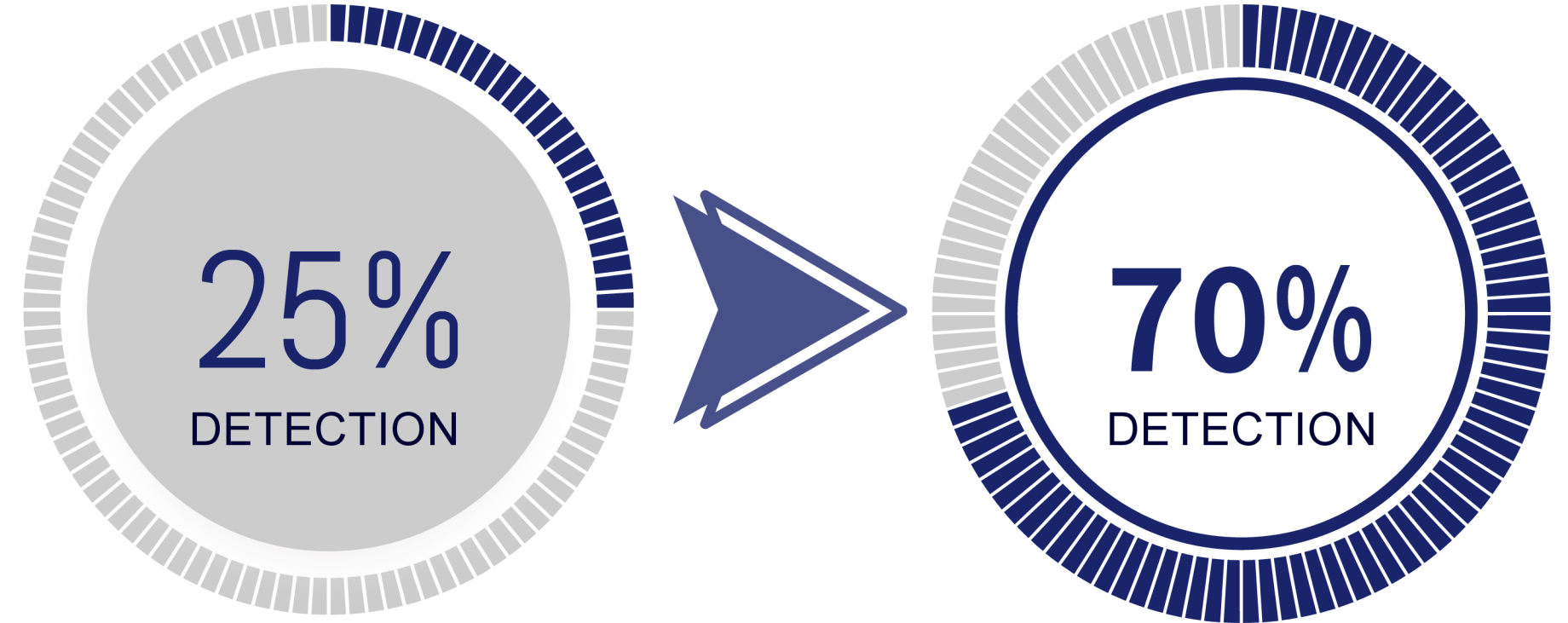
Document Contextualization and Key Data Extraction



- LVMs enable intelligent content recognition beyond OCR
- Contextual understanding of claim documentation
- Enhanced by SME vector embeddings

Pattern Recognition

- Identifies patterns at POS, wording, and across claim facts
- Extrapolates across any data point: policy language, risk assessment, fraud, etc.
- Maintains compliance while enhancing detection capabilities



This translates in AI enhanced Quality Review



AI Pre-Screening for Human Review

Performance analytics for continuous improvement

Identifying inconsistencies for targeted examination

AI-Human collaboration in claims quality review can help achieve highest standards in accuracy and efficiency

Exploring AI-Powered Analysis in the E&S Space



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