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# Advanced Technology Advisory

A Complete, Advanced Technology Advisory for Executive Management

**Make Better Decisions.**<sup>(TM)</sup>

Salvatore Magnone  
Senior Advisor  
[sal@machine61.net](mailto:sal@machine61.net)  
+1 848 245-6204



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Introduction

**Make Better Decisions.**

# Advanced Technology Advisory

A Complete Advanced Technology Advisory for Executive Management

## Complete Set of Advanced Technology Capabilities

Data, Machine Learning, Predictive Analytics, AI, RPA, IoT, Robotics, and Quantum

## Global Availability

Our globally deployed team is available remotely and on prem

100% referral based

## Complete Set of Advanced Data Capabilities

Data Strategy, Governance, Architecture, Integration, and Management, Database Design, Development, and Deployment

## Subject Matter Expert Led

Every advisor has been in senior positions in industry + advisory, and is regarded as an expert in their field, by experts in that field

## Strategy Design & Delivery Workshops

Organizational, IT, AI, Data Strategy CoDesign and CoDelivery

## Strategic Technology Partnerships

Amazon, Microsoft, Google, Oracle, Databricks, Snowflake  
D-Wave, Quantinuum, Pasqal

## Research & Development

“Lab on Demand” with short and long-term commitments



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Capabilities

# DATA.

The Advisory focuses on the most difficult data challenges businesses face every day.



## Strategy & Governance

- Building Data Strategies
- Conducting Assessments
- Designing Governance
- Integration Strategy, Design

01

## Data Quality

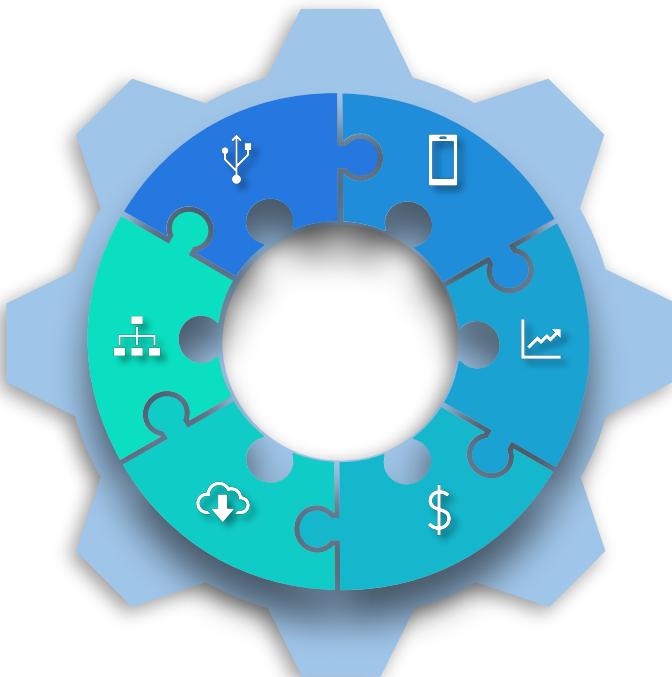
- Data Quality Assessments
- Data Quality Remediation
- Data Assurance Programs
- Data Integration at Scale

03

## Protection

- Privacy Requirements
- Cybersecurity-by-Design
- Access Management
- Data Recovery

05



## Cataloguing

- Data Inventory, Lineage
- Metadata Catalogue
- Models, Modelling,
- Ontologies

## Reference, Master Data

- Taxonomy Design, Mgmt
- Reference Data Management
- Master Data Management
- 3rd Party Data Integration

## Consolidation

- Consolidation Initiatives
- Utilization Metrics
- Utilization Cost Computations
- Cost Optimization

**Improve Data Quality. Break Down Silos. Make Better Decisions.**

# ANALYTICS.

Deliver real-time, decision quality reporting and predictive analytics.



## Strategy & Governance

01

Designing Data Strategies  
Conducting Assessments  
Design Policies, Procedures

## Data Quality

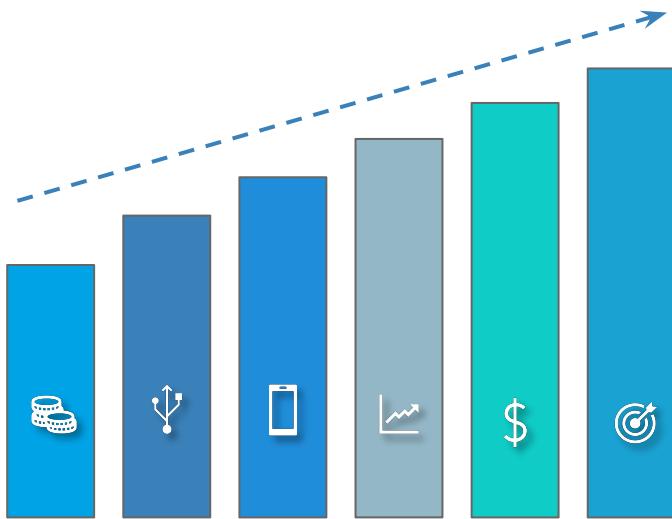
03

Data Quality Assessments  
Data Quality Remediation  
Data Assurance Programs

## Protection

05

Build with Access  
Controlled  
Distribution Management  
Cybersecurity by Design  
HIPAA & ISO-Compliant



## UI/UX

Award Winning UX/UI Team  
Usability Tested  
Client branded Look and Feel

## Clear Visualizations

Clear and Accurate Renderings  
Concise Summarization  
Consistent Look and Feel

## Integration Ready

Integrate Disparate Data Sources with Disparate Structures

**Improve ops. Enhance customer experience. Make Better Decisions.**

Take the risk and uncertainty out of organizational and product based AI.



## Strategy & Governance

- Building AI Strategies
- Conduct AI Assessments
- Policies & Procedures
- Design Ethical Guidelines

01



## Data Quality

- Data Quality Assessments
- Data Quality Remediation

03

## Protection

- Ethical Framework
- Explainable, Defensible AI
- Cybersecurity by Design
- Model Protection

05

## Risk Management

- Risk Managed Approach
- Cost Control Options
- Change Management
- Verification Controls Utilized

## Workflow Integration

- Use Case Specific Solutions
- Drop In Current Workflow or Build Redesigned Workflows
- Utilize Own or 3rd Party Data

## Change Management

- Structured Change & Adoption Approach
- Training & Documentation

**Solve Automation, Complex Decision, and Natural Language Problems**

# QUANTUM.

Tackle some of the world's most difficult computational problems.



## Strategy & Governance

Building Strategies  
Conduct Assessments  
Policies & Procedures

01

## Data Quality

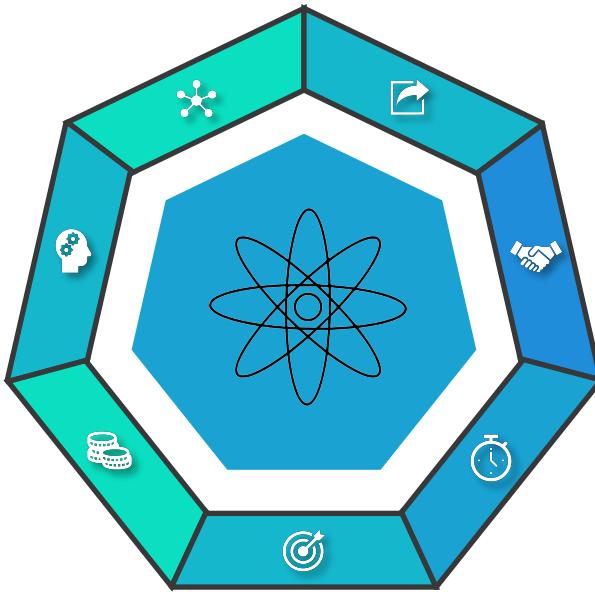
Roundtrip Error Correction  
Advanced Data Encoding  
Dimensionality Reduction  
QCVV\*

03

## Protection

Secure, Tested Toolsets  
Secure Data Transport  
Cybersecurity by Design

05



## Risk Management

Risk-Managed Approach  
Cost-Controlled Methods  
Change Management  
Verification at all Points

## Balanced Approach

Hybrid Classic/Quantum Solutions  
Simulator development  
Strategic Partner Teaming

## Change Management

Structured Change  
Training & Documentation  
Co-Designed and Co-Built

**Solve Real-World Optimization Problems. Make Better Decisions.**

\* Quantum Computing Verification and Validation

# IoT.

Deploy connected smart devices like cameras, wearables, textiles, and ingestibles.



## Strategy & Governance

Building Device Strategies  
Conducting Assessments  
Design Policies/Procedures

01

## Advanced Data

Real-time Data Collection  
End-to-End Validation  
Real-time Processing  
Edge and Hub Processing

03

## Protection

Secure Devices, Protocols  
Secure Data Collection  
Cybersecurity by Design

05

## Custom Device Design

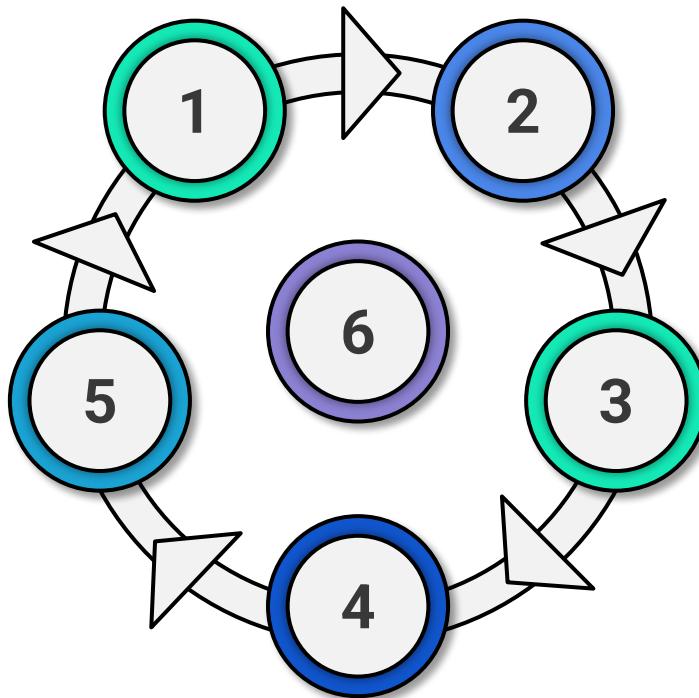
Select from existing devices  
Build new features into -  
existing devices  
Design new devices

## Field Ready & Supported

Design/Equip devices for  
rugged use  
Installation and support team  
Fleet management services

## Administrative Control

Award winning UX/UI  
Management dashboards  
Remote upgrades



**Lower Cost and Risk in Everyday Operations. Make Better Decisions.**

# ROBOTICS.

Deploy, maintain advanced robotic solutions in healthcare, logistics, and inspection work.



## Strategy & Governance

Building Strategies  
Conducting Assessments  
Policies & Procedures

01

## Advanced Data

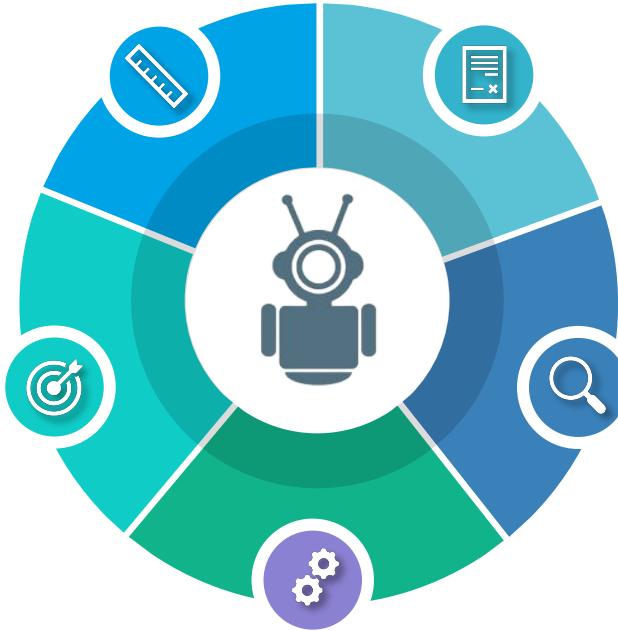
Real-time Data Collection  
End-to-End Validation  
Real-time Processing  
Edge and Hub Processing

03

## Protection

Secure Devices, Protocols  
Secure Data Collection  
Cybersecurity by Design

05



## Custom Device Design

Select from existing devices  
Build new features into devices  
Design new devices

## Field Ready & Supported

Design devices for rugged use  
Installation and support team  
Remote support  
Fleet management services

## Administrative Control

Award winning UX/UI  
Management dashboards  
Remote upgrades

**Reduce human risk, costs and errors. Make Better Decisions.**



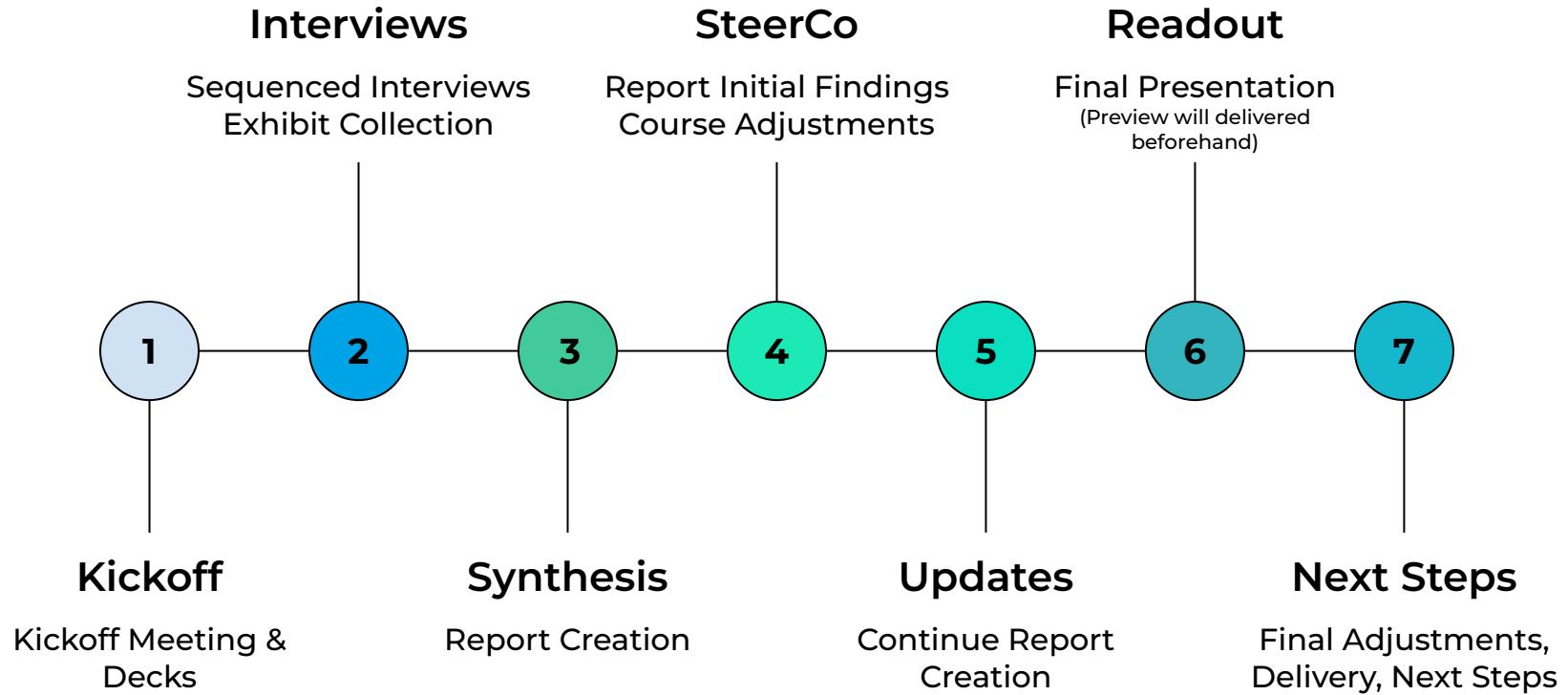
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# Combined Assessment Playbook

**Make Better Decisions.**

# COMBINED DATA & AI ASSESSMENT

ASSESSMENT METHODOLOGY - SEQUENCE of EVENTS



# COMBINED DATA & AI ASSESSMENT

## ASSESSMENT METHODOLOGY (Meeting Series)

Business Positioning - CEO, CFO, Strategy Director

01

### Critical Observations:

*Understand where the company stands today in its market and performance*

- **Market position** - Market share, competitive ranking, differentiation vs competitors
- **Financial health** - Revenue trends, profitability, cash flow, growth trajectory
- **Customer base** - Key segments, retention rates, concentration risk
- **Value proposition** - What customers pay for, pricing power, competitive advantages
- **SWOT elements** - Internal capabilities vs gaps, market opportunities vs threats

Strategy - CEO, Strategy Director, CFO, Business Unit Leaders

02

### Critical Observations:

*Understand where the company is headed and how it plans to get there*

- **Strategic objectives** - 3-5 year goals, growth targets, transformation ambitions
- **Key initiatives** - Top 5-7 programs/projects driving strategy execution
- **Investment priorities** - Where capital and resources are being allocated
- **Success metrics** - How strategy execution is measured and tracked
- **Strategic risks** - What could derail the plan, contingencies



# COMBINED DATA & AI ASSESSMENT

## ASSESSMENT METHODOLOGY (Meeting Series)



**People & Process Architecture** - COO, Functional VPs (Sales, Operations, Supply Chain, Customer Service), Process Excellence Lead, HR Director

### 03 Critical Observations:

*Understanding how work gets done and who does it*

- **Core processes** - Order-to-cash, procure-to-pay, product development, customer service (map 4-6 critical ones only)
- **Process maturity** - Documented vs tribal knowledge, standardized vs fragmented, automated vs manual
- **Decision rights** - Who approves what, escalation paths, bottlenecks
- **Organizational structure** - Spans of control, shared services, centralized vs decentralized
- **Capability gaps** - Skills shortages, succession risks, process pain points

**Data Architecture** - Chief Data Officer/Data Lead, CTO/CIO, Enterprise Architect, Finance Director (for financial data)

### 04 Critical Observations:

*Understanding what data exists, where it lives, and how it flows*

- **Core data domains** - Customer, product, financial, operational, employee (identify master data)
- **Data sources** - Systems of record for each domain, data duplication, conflicting sources
- **Data quality** - Known accuracy issues, reconciliation requirements, trust level
- **Data flows** - How data moves between systems, batch vs real-time, integration patterns
- **Governance model** - Data ownership, stewardship, access controls, compliance requirements

# COMBINED DATA & AI ASSESSMENT

## ASSESSMENT METHODOLOGY (Meeting Series)



**Systems Architecture** - COO, Functional VPs (Sales, Operations, Supply Chain, Customer Service), Process Excellence Lead, HR Director

05

### Critical Observations:

*Understand the technology that enables the business*

- **Core systems** - ERP, CRM, HCM, supply chain, ecommerce (identify 10-15 critical applications)
- **System age/health** - Technical debt, end-of-life risks, upgrade needs
- **Integration landscape** - Point-to-point vs middleware, API strategy, data synchronization approaches
- **Cloud strategy** - SaaS vs on-premise mix, cloud migration plans, hosting model
- **Technical constraints** - Scalability limits, performance issues, security vulnerabilities

**External Vendors** - Procurement Director, Vendor Mgmt Lead, CTO/CIO, COO

06

### Critical Observations:

*Understand critical external dependencies and relationships*

- **Critical vendors** - Top 10-20 by spend or business criticality (SaaS, manufacturing, logistics, etc.)
- **Dependency risk** - Single-source suppliers, exit costs, contractual lock-ins
- **Contract terms** - Renewal dates, pricing models, SLAs, termination clauses
- **Vendor performance** - Delivery issues, quality problems, relationship health
- **Strategic partnerships** - Co-development relationships, ecosystem dependencies, channel partners

# COMBINED ASSESSMENT PLAYBOOK

## DELIVERABLES

### Readout

#### Current State Business Architecture

Organizational Structure,  
Organizational Strategy,  
Key Production Processes,  
Key Data Flow,  
Supporting Systems

### Scorecards

Standardized Scorecards and methodology

### Roadmap

Prioritized Key Initiatives  
Prioritised PoC / Pilot Candidates  
ROI Calculations

### Narrative

Incl. Gaps & Remediations



#### Data & AI Assessment Scorecard

##### Scoring Guide

- 1 - FAIL: Critical gaps, non-functional
- 2 - FAIL, Deficiencies Repairable: Improvements needed
- 3 - PASS, Not Optimal: Function
- 4 - OPTIMAL: Best-in-class, fully

##### Strategy

###### Organizational Strategy

Score: \_\_\_\_/4

Description: Overall business strategy sponsorship, and strategic roadmap.

###### Investigation Items:

- Business strategy documents reviewed
- Executive sponsor identification
- Data initiative budget allocation
- Strategic roadmap with data/AI
- Board/executive meeting minutes
- ROI targets and success metrics

###### Scoring Criteria:

- 1: No clear data strategy, leadership disengaged
- 2: Basic awareness, limited executive buy-in, ad-hoc
- 3: Defined strategy with some leadership support, ad-hoc
- 4: Fully integrated data-driven strategy, strong C-level buy-in

##### Policies & Procedures

Score: \_\_\_\_/4

Description: Formal governance framework including data handling policies, AI ethics guidelines, and operational procedures.

###### Investigation Items:

- Data governance
- AI ethics and bias
- Data handling
- Policy review and update
- Employee training
- Incident response

###### Scoring Criteria:

- 1: Not defined
- 2: Basic
- 3: Valid
- 4: Comprehensive

###### Data Inventory

Score: \_\_\_\_

###### Description:

Management

###### Investigation Items:

- Data catalog
- Business rules
- Metadata
- Data lineage
- Data quality
- Documentation

###### Scoring Criteria:

- 1: Not defined
- 2: Basic
- 3: A
- 4: Comprehensive

#### Business Process AI Adoption Scorecard

##### Scoring Scale: 1-4

(1 = Poor/High Risk, 4 = Excellent/Low Risk)

Process: \_\_\_\_\_

##### Component

###### Process Steps

Clarity, documentation, process workflow

###### Data Quality

Completeness, accuracy, incoming and outgoing

###### Resources, Training

Availability skilled professionals, programs

###### Business Risk

Potential impact of process on business

###### Legal, Reg, Compliance Risk

Regulatory requirements, obligations affecting process

###### Error Rates

Frequency, severity of errors in process execution

###### User Frustration

Level of employee satisfaction with process

###### Customer Frustration

Potential for process issues to negatively impact customer experience

###### Cost Savings

Opportunity for cost reduction

Total Score: \_\_\_\_/40

Average Score: \_\_\_\_/4

##### Scoring Guidelines:

Score 4 (Excellent): Well-defined, low risk, high opportunity Score 3 (Good): Generally solid with minor issues Score 2 (Needs Work): Significant gaps or moderate risk Score 1 (Poor): Major problems, high risk, or low opportunity

##### Instructions for Use:

#### Business Process Documentation Template

##### Process Overview

Process Name: \_\_\_\_\_

Process Purpose: \_\_\_\_\_

Start Trigger: \_\_\_\_\_

End Point/Outcome: \_\_\_\_\_

Process Owner: \_\_\_\_\_

Key Stakeholders: \_\_\_\_\_

Frequency: Daily □ Weekly □ Monthly □ Quarterly □ As Needed □ Other: \_\_\_\_\_

##### Step-by-Step Workflow

Step #	Activity/Task	Performed By	Est. Time	Notes
1				
2				
3				
4				

# COMBINED ASSESSMENT PLAYBOOK

## ASSESSMENT METHODOLOGY (Meeting Sequencing)

### Recommended Meeting Sequence

*Meeting groups are best in the shown sequence.*

*All team members in a group may be scheduled together or separately. If scheduled separately, the ordering shown is the best option where possible.*

*Book meetings prior to kickoff. Use equivalent positions where they exist. Ignore positions that do not exist.*

**Group 1:** CEO → CFO → Strategy Director (establish context)

**Group 2:** COO → Functional VPs → HR Director (understand operations)

**Group 3:** CTO/CIO → Data Lead → Enterprise Architect (understand technology)

**Group 4 (optional):** Procurement Director → wrap-up sessions as needed

# COMBINED ASSESSMENT PLAYBOOK

## ASSESSMENT METHODOLOGY (Document Requests)



### Recommended Documents

*Materials the client can forward before meetings when available*

#### Strategy Decks:

- Organizational Strategy,
- AI/Data/Technology Strategy
- Governance & Compliance Documentation

#### Data Architecture Documents:

- Data Flow Diagrams (DFD)
- Data Catalogues

#### Process Documents:

- List of Key Processes,
- Process flow diagrams (with resourcing specified)

#### Systems Architecture Documents:

- Supporting Systems if not shown on DFDs
- Cloud / Hosting Architecture



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Data and AI Readiness Assessment

**Make Better Decisions.**

# DATA & AI READINESS ASSESSMENT.

The Data & AI Assessment scores capabilities, strategic alignment, and readiness



## Assess

### Strategy\*

- Organizational Strategy
- Data & AI Strategy
- Quantum Strategy
- Policies & Procedures
- Regulation & Compliance

### Data and AI

- Databases, Feeds & Storage
- Data Inventory & Glossaries
- Data Quality Management
- Data Flow, Lineage
- Applications (as data sources)
- Analytics, Reporting
- Cyber & Data Security

### Resources

- People, Skill Sets
- Training & Audit Plans
- Strategic Partners

## Score

### Strategy

- Completeness
- Articulation

### Data Architecture

- Completeness
- Documentation
- Data Quality Scores
- Security Evaluation
- Alignment to Strategy

### Resources

- Gap Identification
- (People, Skills, Capabilities and Training)

## Report

### Format

PDF Slidedeck

### Scoring

*(Each Group and Item)*  
Numeric Scores: 1 - 4  
Explanatory Narrative

### Supporting Materials

Meeting Notes  
Relevant Discovery Items

### Remediation Steps

Remediation  
Recommendations Provided

### Final Presentation

Remote or Onsite  
Walkthrough

\* Focus is on Data, AI, and Quantum.  
Robotics and IoT beyond data sources is additional scope.

# DATA & AI READINESS ASSESSMENT.

Assessment Delivery: Duration, Format, and Engagement Model



## Duration

### Run Length

~8 Working Weeks over  
~10 Calendar Weeks

### Team Size

1x Senior Advisor (Director+)  
1x Senior Analyst  
1x Junior Analyst/Admin  
SME(s) as Required

### Client Requirements

~30 hours

### Engagement Options

Time & Materials  
Fixed Time, Flexible Cost  
Flexible Time, Fixed Cost

## Format

### Meetings

Remote Meetings  
(Onsite at Additional Cost)

### Document Analysis

Remote  
We'll provide a delivery endpoint

### Final Delivery

All materials delivered electronically and securely

### Archive

We'll maintain a full archival copy unless directed not to

## Engagement Model

### Initial Meeting

Introductions  
Scope Determination  
Stakeholders  
Org Chart  
Success Criterion  
Admin/Legal Coordination

### Kickoff Meeting

Full team Introductions  
Scheduling  
Status Reporting

### Initial Document Request

### Onboarding

### Assessment + Readout

# DATA & AI READINESS ASSESSMENT.

## Assessment Scoring

### Scoring

#### Scorecards

Standardized Scorecards and methodology

#### Scoring Criteria

Scoring criterion are listed for each category and item

#### Data Requirements

Materials to be examined listed  
Inventory of items received will be provided

#### Scores

Each group and item is scored

#### Remediation Recommendations

Narratives and Remediation are provided where ever relevant

## Data & AI Assessment Scorecard

### Scoring Guide

- **1 - FAIL:** Critical gaps, non-functional
- **2 - FAIL, Deficiencies Repairable:** improvements needed
- **3 - PASS, Not Optimal:** Function
- **4 - OPTIMAL:** Best-in-class, fully

### Strategy

#### Organizational Strategy

Score: \_\_\_/4

Description: Overall business strategy and sponsorship, and strategic roadmap.

#### Investigation Items:

- Business strategy documents reflect AI integration
- Executive sponsor identification
- Data initiative budget allocation
- Strategic roadmap with data/AI integration
- Board/executive meeting minutes
- ROI targets and success metrics

#### Scoring Criteria:

- **1:** No clear data strategy, leadership disengaged
- **2:** Basic awareness, limited executive buy-in, ad-hoc
- **3:** Defined strategy with some leadership support, moderate targets
- **4:** Fully integrated data-driven strategy, strong C-level targets

### Policies & Procedures

Score: \_\_\_/4

Description: Formal governance framework including data handling policies, AI ethics guidelines, and operational procedures.

#### Investigation Items:

- Data governance policy documents
- AI ethics and bias guidelines
- Data handling and privacy procedures
- Policy review and update schedules
- Enforcement mechanisms
- Incident response plan

### Data Inventory & Glossaries

Score: \_\_\_/4

Description: Cataloging of data assets, business glossaries, and metadata management for data discovery and understanding.

#### Investigation Items:

- Data catalog tools and coverage metrics
- Business glossary completeness and usage statistics
- Metadata management processes and standards
- Data asset discovery and search capabilities
- Data stewardship roles and responsibilities
- Documentation quality and currency assessments

#### Scoring Criteria:

- **1:** No data catalog, unknown data assets
- **2:** Basic inventory, limited metadata, manual processes
- **3:** Automated data catalog with good coverage, standardized glossaries
- **4:** Comprehensive, AI-enhanced data catalog with rich metadata and business context





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AI Adoption Assessment

**Make Better Decisions.**

# AI ADOPTION ASSESSMENT.

The AI Adoption Assessment discovers and roadmaps high-value use cases for AI adoption



## Discover

### Strategic Vision

### Department Heads

Operational Pain Point  
Work Inefficiencies

### IT Leadership

Infrastructure Capabilities  
Team Capabilities  
Security Requirements  
Data Landscape & Quality

### End Users

Daily Challenges  
Manual Processes  
Frustrations

### Customers (optional)

Service Gaps, Pain Points

## Assess

### Process Flows

Document core business  
processes including:

#### Process Steps

#### *Input, Output Data Quality*

#### *Resources & Training*

#### *Business Risk*

#### *Legal, Reg, Compliance Risk*

#### *Error Rates*

#### *User Frustration*

#### *Customer Frustration*

#### *Potential Cost Savings*

## Report

### Format

PDF Slidedeck

### Scoring

*(Each Group and Item)*

Numeric Scores: 1 - 4

Explanatory Narrative

### Supporting Materials

Meeting Notes  
Relevant Discovery Items

### Roadmapping

Adoption Roadmap  
PoC Selection

### Final Presentation

Remote or Onsite  
Walkthrough

# AI ADOPTION ASSESSMENT.

Assessment Delivery: Duration, Format, and Engagement Model



## Duration\*

### Run Length

~8 Working Weeks over  
~10 Calendar Weeks  
(8-12 Key Processes)

### Team Size

1x Senior Advisor (Director+)  
1x Senior Analyst  
1x Junior Analyst/Admin  
SME(s) as Required

### Client Requirements

~30 hours

### Engagement Options

Time & Materials  
Fixed Time, Flexible Cost  
Flexible Time, Fixed Cost

## Format

### Meetings

Remote Meetings  
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## Engagement Model

### Initial Meeting

Introductions  
Scope Determination  
Stakeholders  
Org Chart  
Budget  
Success Criterion  
Admin/Legal Coordination

### Kickoff Meeting

Full team Introductions  
Scheduling & Status Reporting

### Initial Document Request

### Onboarding

### Assessment + Readout

\* Scoped for a typical SME firms, 51-500 employees, 8-12 key processes.  
Enquire for a customized estimate.

# AI ADOPTION ASSESSMENT.

## Assessment Scoring

### Scoring

#### Scorecards

Standardized Scorecards and methodology

#### Scoring Criteria

Scoring criterion are listed for each category and item

#### Data Requirements

Materials to be examined listed  
Inventory of items received will be provided

#### Scores

Each item is scored

#### Remediation Recommendations

Narratives and Remediation are provided where ever relevant

### Business Process AI Adoption Scorecard

#### Scoring Scale: 1-4

(1 = Poor/High Risk, 4 = Excellent/Low Risk)

Process: \_\_\_\_\_

#### Component

<b>Process Steps</b>	Clarity, documentation, process workflow
<b>Data Quality</b>	Completeness, accuracy, incoming and outgoing data
<b>Resources, Training</b>	Availability skilled personnel, training programs
<b>Business Risk</b>	Potential impact of business operations
<b>Legal, Reg, Compliance Risk</b>	Regulatory requirements, obligations affecting process
<b>Error Rates</b>	Frequency, severity of errors in process execution
<b>User Frustration</b>	Level of employee dissatisfaction with current process
<b>Customer Frustration</b>	Potential for process issues to negatively impact customer experience
<b>Cost Savings</b>	Opportunity for cost reduction

Total Score: \_\_\_/40

Average Score: \_\_\_/4

#### Scoring Guidelines:

**Score 4 (Excellent):** Well-defined, low risk, high opportunity **Score 3 (Good):** Generally solid with minor issues **Score 2 (Needs Work):** Significant gaps or moderate risk **Score 1 (Poor):** Major problems, high risk, or low opportunity

#### Instructions for Use:

### Business Process Documentation Template

#### Process Overview

Process Name: \_\_\_\_\_

Process Purpose: \_\_\_\_\_

Start Trigger: \_\_\_\_\_

End Point/Outcome: \_\_\_\_\_

Process Owner: \_\_\_\_\_

Key Stakeholders: \_\_\_\_\_

Frequency:  Daily  Weekly  Monthly  Quarterly  As Needed  Other: \_\_\_\_\_

#### Step-by-Step Workflow

Step #	Activity/Task	Performed By	Est. Time	Notes
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2				
3				
4				





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# AI Agent Assessment

**Make Better Decisions.**

# AI AGENT ASSESSMENT

## ASSESSMENT COMPONENTS



### MULTI-STAGE TEST RUNNER

01

**Stage 1:** Responsible for staging and initiating tests. Pulls test information from a datastore which specifies target and configurations. Initiates the *Validator*.

**Stage 2:** Responsible for running the actual tests provided by the Validator on the target specified by Stage 1. Stores the data and starts the *Evaluator*.

**Stage 3:** Collects test output and produces the report, and then stores it. Kicks off the *Publisher*.

**Stage 4:** Collects the point-in-time and any time series reporting data and publishes it to other outputs. Sends notifications if required.

### VALIDATOR, EVALUATOR, PUBLISHER

02

**Validator:** Responsible for generating test data, usually these are “prompts” which will be sent to the agent. The Validator is also responsible for data conversion where required.

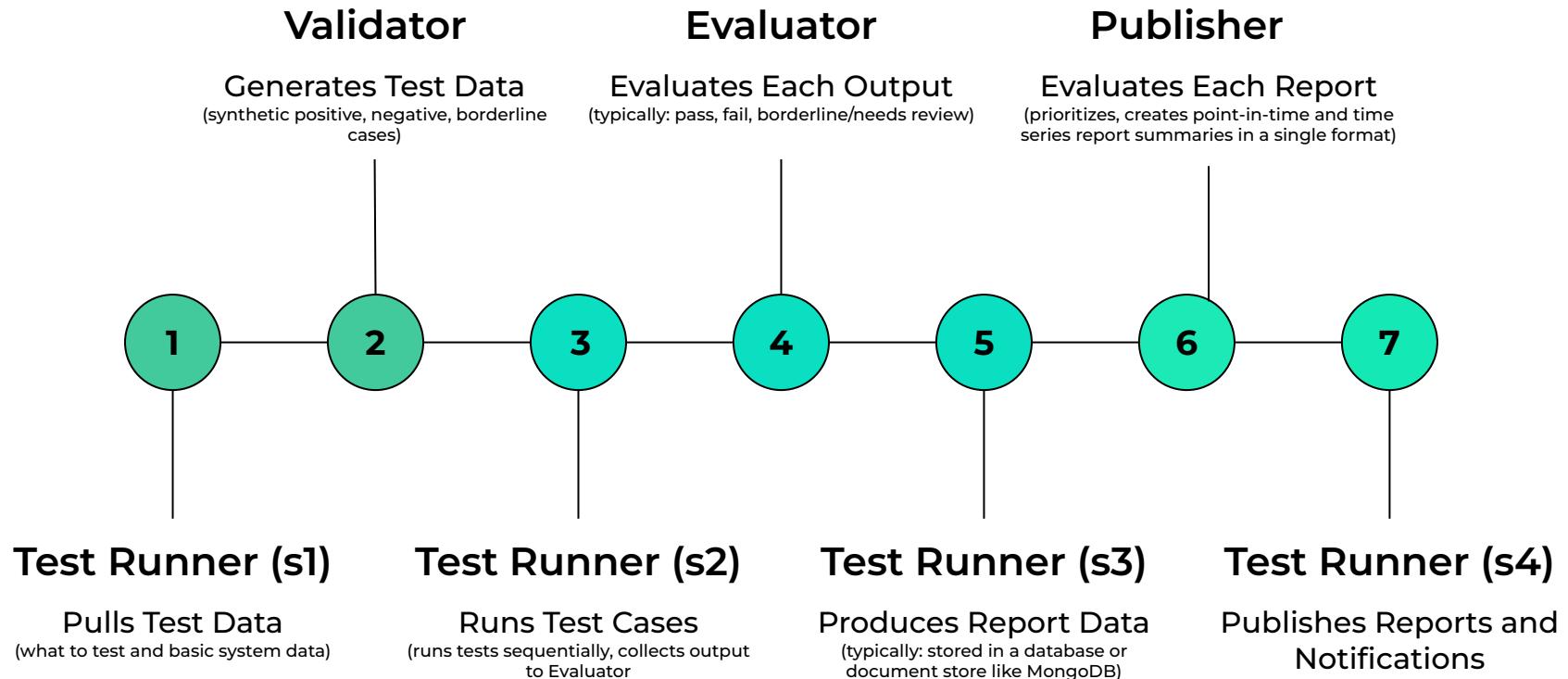
**Evaluator:** Responsible for evaluating the agent’s responses, storing the results, and maintaining the data for long-term evaluation and for human review of the details. The Evaluator scores each response [Pass, Fail, Borderline, Need Review] and then scores the entire test. The final output is a complete test in a standard format.

**Publisher:** Evaluates the entire test output. Where required, produces point-in-time and time series data suitable for publishing in different formats. Maintains time series data for long-term analysis.

**Stay in Compliance. Make Better Decisions.**

# AI AGENT ASSESSMENT

## ASSESSMENT METHODOLOGY





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## Insurance Industry Focus

**Make Better Decisions.**

# INSURANCE. AI.

Apply AI to the most difficult, costly business challenges insurance firms face every day.

## UNDERWRITING & RISK ASSESSMENT

01

**Automated underwriting decisioning:** Assess risk and make underwriting decisions for standard policies in seconds instead of days. Auto-approve ~60-80% of standard applications, reducing underwriting costs by ~50-70% and improving quote-to-bind conversion by ~15-25%.

**Risk pricing optimization:** Analyze loss history, external data, and risk factors to develop accurate pricing models. Improve loss ratio by ~3-6 points (worth ~\$3-6M per ~\$100M in premium) and reduce adverse selection by identifying underpriced risks.

**Renewal risk prediction:** Predict likelihood of policy non-renewal ~60-90 days in advance based on claim frequency, premium changes, and customer behavior. Reduce lapse rates by ~10-15% through proactive retention efforts, worth ~\$5-15M annually for mid-size carrier.

## DOCUMENT INTELLIGENCE & PROCESSING

02

**Policy document generation:** Auto-generate policy documents, endorsements, and renewal notices from structured data with compliance-checked language. Reduce document preparation time by ~80-90%, from ~30-45 minutes to ~3-5 minutes per policy, and eliminate compliance errors that cost ~\$50-200K per violation.

**Medical record review:** Extract relevant information from hundreds of pages of medical records for disability, life, and workers' comp claims. Reduce review time from ~8-12 hours to ~1-2 hours per file, cutting costs by ~\$500-800 per complex claim.

**Contract & reinsurance analysis:** Extract terms, conditions, and exclusions from reinsurance treaties and commercial contracts. Reduce contract review time from ~4-6 hours to ~30-45 minutes, ensuring accurate cession and reducing reinsurance disputes by ~40-60%.

**Cut Losses. Speed Processing. Make Better Decisions.**

# INSURANCE. AI.

Apply AI to the most difficult, costly business challenges insurance firms face every day.

## CLAIMS PROCESSING & AUTOMATION

03

**Automated claims triage & routing:** Analyze claim submissions (text, images, documents) to automatically assess severity, assign to appropriate adjuster, and flag urgent cases. Reduce initial triage time from ~2-4 hours to ~5-10 minutes per claim, improving cycle time by ~40-60% and customer satisfaction scores by ~25-35 points.

**Claims document extraction:** Automatically extract data from police and medical records, repair estimates, and invoices to populate claims. Reduce entry time ~75-85%, cutting processing costs from ~\$150-250 / claim to \$30-50 / claim.

**Damage assessment automation:** Analyze photos/videos of property / vehicle damage using computer vision to estimate repair costs and detect prior damage. Reduce assessment from ~3-5 days to ~2-4 hours, cut adjuster site visits ~60-70% (saving ~\$200-400 per avoided visit), and improve estimate accuracy by ~15-20%.

## FRAUD DETECTION & PREVENTION

04

**Claims fraud detection:** Analyze claim patterns, claimant history, medical codes, and network relationships; flag suspicious claims in real-time. Detect ~50-70% more fraudulent claims, saving ~\$2-5M annually per ~100K claims (industry avg fraud rate: ~5-10% of claims value).

**Application fraud screening:** Identify misrepresentation in applications by cross-referencing public records, credit data, social media, and past applications. Reduce fraudulent policies by ~40-60%, preventing ~\$500K-2M in future fraudulent claims, improve loss ratios by ~4 points.

**Provider network fraud detection:** Analyze billing patterns, procedure codes, and referral networks to identify fraudulent providers, staged accidents, and mills. Identify suspicious providers 6-12 months earlier than traditional methods, preventing \$1-3M in fraudulent billings per identified network.



## Detect Fraud. Accelerate Claims. Make Better Decisions.

# INSURANCE. AI.

Apply AI to the most difficult, costly business challenges insurance firms face every day.

## CUSTOMER EXPERIENCE & SERVICE

05

**Chatbot & virtual assistant:** Handle routine inquiries (policy status, coverage questions, payment issues, document requests) ~24/7 without human intervention. Resolve ~60-75% of inquiries automatically, reducing call center costs by ~\$3-8 per interaction and improving response time from hours to seconds.

**Personalized policy recommendations:** Analyze customer life events, assets, and risk profile to recommend coverage gaps and cross-sell opportunities. Increase policies per household by ~0.3-0.5 products, worth ~\$150-300 in additional annual premium per personal customer.

**Proactive customer outreach:** Identify customers at risk of non-renewal based on satisfaction signals, claim experience, and engagement patterns. Enable targeted retention campaigns that reduce churn by ~8-12%, worth ~\$2-5M annually per ~100K policyholders.

## REGULATORY COMPLIANCE & REPORTING

06

**Regulatory reporting automation:** Auto-generate required regulatory filings (state insurance department reports, NAIC data calls, financial statements) from core systems. Reduce report preparation time by ~70-85%, from ~200-400 hours per quarter to ~40-80 hours, and eliminate errors that trigger ~\$100K-500K fines.

**Policy compliance checking:** Validate policy terms, rates, and forms against state regulations and filing approvals before issuance. Catch ~95%+ of compliance issues before policies are issued, preventing ~\$2-5M annually in fines, corrective actions, and policyholder refunds.

**TCPA & comms compliance:** Monitor customer comms preferences, consent status, and contact history to ensure compliant outreach. Reduce TCPA violations by ~90%+ (avg settlement: \$500-1,500 per violation) and improve customer communication response rates by ~20-30%.

**Retain Customers. Stay in Compliance. Make Better Decisions.**

# INSURANCE. AI.

DO THE MATH. HYPOTHETICAL SCENARIOS.

## 01 Automated Claims Processing

**ROI: 60-70% reduction in claims processing costs, 80% faster settlement**

AI processes routine claims (auto, property damage) in minutes vs days, with zero human touch for straightforward cases. Insurer processing 100K claims/year at \$150/claim (\$15M cost) automates 60% = **\$5.4M/year savings on \$800K investment. 2-month payback.**

**Competitive Edge:** Same-day settlement on simple claims, 24/7 processing, customer satisfaction jumps 40%, undercut competitors on pricing due to lower expense ratio.

## 02 Fraud Detection

**ROI: 3-5x improvement in fraud detection, \$3-6 saved per \$1 invested**

AI analyzes patterns across millions of claims to identify fraud that humans miss. Insurer with \$500M in claims and 3% fraud rate (\$15M loss) catches 60% more fraud = **\$9M/year recovery on \$1.2M investment. Plus reduces future fraud through deterrence.**

**Competitive Edge:** Lower loss ratios enable aggressive pricing, protect profitable customer segments, regulatory compliance advantage, reputation as "too smart to defraud."

**Reduce Fraud. Reduce Loss Ratios. Make Better Decisions.**

# INSURANCE. AI.

DO THE MATH. HYPOTHETICAL SCENARIOS.

## 03 Intelligent Underwriting & Risk Pricing

**ROI: ~15-25% improvement in loss ratio, ~50% faster quote turnaround**

AI analyzes hundreds of risk factors (traditional + alternative data) for accurate pricing. Eliminates adverse selection and identifies profitable micro-segments. Commercial lines insurer with \$200M premium and 75% loss ratio improves to 68% = **\$14M/year additional underwriting profit on \$1.5M investment.**

**Competitive Edge:** Win profitable risks competitors misprice, instant quotes (vs 2-3 days), expand into complex risks others avoid, data-driven pricing vs gut feel.

## 04 Customer Retention & Personalization

**ROI: ~15-25% improvement in retention, ~30-40% reduction in service costs**

Predict which customers will leave and why, for targeted retention. Chatbots handle ~70-80% of routine inquiries. Insurer with 100K policies, ~15% annual churn, \$800 lifetime value per policy loses \$12M/year. Reducing churn to 11% = **\$3.2M/year retained value + \$2M service cost savings on \$600K investment.**

**Competitive Edge:** Proactive retention, personalized coverage recommendations, 24/7 instant service, customers stay ~2-3 years longer.

**Improve Pricing. Retain Customers. Make Better Decisions.**

# INSURANCE. AI.

DO THE MATH. HYPOTHETICAL SCENARIOS.

## 05 Coverage Verification & Gap Detection

**ROI: ~85-95% reduction in coverage gap E&O claims, ~\$8-12 saved per \$1 invested**

AI monitors all policies for coverage gaps, expiring coverages, and unmet client requests. Automatically flags when requested coverage wasn't bound or when gaps emerge from policy changes. SME agency with \$300M in premium and ~\$2M annual E&O costs from coverage gaps reduces claims by ~90% = **~\$1.8M/year savings on \$200K investment. ~1/2-month payback.**

**Competitive Edge:** Zero-gap guarantee to clients, automated coverage confirmations, win high-value commercial accounts requiring perfect execution, eliminate most common E&O source.

## 06 Policy Change Documentation & Notification

**ROI: ~70-80% reduction in notification E&O claims, ~\$5-8 saved per \$1 invested**

AI tracks all policy modifications, automatically generates compliant notifications, and confirms delivery/acknowledgment. Creates audit trail for every change. Agency handling 50K policies with \$1.5M annual E&O exposure from notification failures reduces to ~\$300K = **~\$1.2M/year savings on \$250K investment. 2/3-month payback.**

**Competitive Edge:** Court-admissible docs for every transaction, proactive client communication, handle ~3x policy volume, near-bulletproof E&O defense.

**Reduce Liabilities. Make Better Decisions.**

# INSURANCE. AI.

DO THE MATH. HYPOTHETICAL SCENARIOS.

## 07 Quote-to-Bind Accuracy Validation

**ROI: ~60-75% reduction in binding errors, ~\$4-6 saved per \$1 invested**

AI validates that bound policies match quoted terms, premiums, and coverages exactly. Catches discrepancies before policies issue. Agency binding 8,000 policies/year with ~2% error rate causing \$800K in E&O claims reduces errors to 0.5% = **~\$600K/year savings on \$150K investment. 3/4-month payback.**

**Competitive Edge: Competitive Edge:** Same-day binding with 99.5% accuracy, eliminate remake costs, reduce carrier chargebacks, maintain preferred agency status.

## 08 Client Communication Compliance

**ROI: ~70-80% reduction in notification E&O claims, ~\$5-8 saved per \$1 invested**

AI monitors client communications (email, chat, recorded calls) for incorrect advice, unapproved recommendations, or promises beyond authority. Flags issues in real-time for correction. Agency with \$500K annual E&O from bad advice reduces to ~\$175K = **~\$325K/year savings on \$100K investment. 4/5-month payback.**

**Competitive Edge:** Real-time producer coaching, consistent messaging across all channels, defensible communication records, expand into complex advisory without E&O fear.

**Reduce Costly Errors. Make Better Decisions.**



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Legal Industry Focus

**Make Better Decisions.**

# LEGAL. AI.

Apply AI to the most difficult, costly business challenges legal firms face every day.

01

**E-discovery & document review:** Automate the review of thousands of documents, typically reducing review time by 50-80% and cutting costs dramatically

**Contract analysis:** Extracts key terms, places, and people, flag risks, and check compliance in minutes instead of hours

**Legal research assistants:** AI surfaces relevant cases and statutes faster than traditional research methods

**Due diligence automation:** Rapid review of contracts and documents in M&A and other transactions

**Citation verification:** Automatically check citations for accuracy and validity, eliminating manual Shepardizing and reducing errors

02

**Contract lifecycle management:** Monitor obligations contract portfolio, send alerts 90/60/30 days before renewals, flags missed deliverables, and tracks compliance requirements. Prevents revenue loss from missed renewals (typically 5-10% of contract value) and reduces breach risk.

**Deposition preparation:** Analyze opposing party's prior testimony, identify inconsistencies across depositions, and suggest cross-examination lines. Reviews thousands of pages of transcripts in hours vs. days, saving 20-30 hours per deposition prep (\$4-6K)

**Predictive case analytics:** Analyze judge rulings, opposing counsel patterns, and case outcomes to inform litigation strategy and settlement decisions



**Improve Accuracy. Reduce Effort. Make Better Decisions.**

# LEGAL. AI.

Apply AI to the most difficult, costly business challenges legal firms face every day.

03

**Lease abstraction:** Extract 100+ data points from commercial leases (rent escalations, renewal options, tenant improvements, CAM charges). Reduce abstraction time from ~2-3 hours per lease to ~15-20 minutes, saving ~\$150-250 per lease in real estate transactions.

**Conflict checking:** Analyzes relationship networks across clients, opposing parties, and related entities to identify potential conflicts. Reduces conflict check time from ~2-4 hours to ~15-30 minutes per new matter, enabling faster client onboarding.

**Time entry automation:** AI suggests time entries by analyzing emails, document edits, calendar events, and system activity. Improves realization rates by ~10-15% by capturing unbilled time (typical firm loses ~10-20% of billable time to poor capture).

04

**Redaction automation:** Identify and redact PII, privileged information, and confidential data in discovery productions. Reduce redaction time by ~80-90%, cutting costs from ~\$50-100/hour manual review to ~\$5-10/hour automated review.

**Merger clearance analysis:** Analyze antitrust data, market share calculations, and regulatory precedents and predict HSR approval likelihood and timing. Inform deal structuring and reduce regulatory risk assessment time from ~weeks to ~days.

**Client intake & triage:** AI conducts initial consultation online, gathers case facts, assess case merit using historical data, and routes to appropriate attorney. Handle ~70-80% of initial inquiries without attorney time, convert ~15-20%, more qualified leads while reducing intake costs by ~60%.



**Improve Accuracy. Reduce Effort. Make Better Decisions.**

# LEGAL. AI.

DO THE MATH. HYPOTHETICAL SCENARIOS.

## 01 Automated Document Review & eDiscovery

**ROI: 70-80% reduction in review time, 90% cost savings on discovery**

AI reviews documents at ~1,000+ pages/hour with ~95%+ accuracy vs ~50 pages/hour for associates. Litigation firm spending ~\$500K/year on document review reduces to ~\$50K = **~\$450K/year savings on ~\$150K investment. ~4-month payback.**

## 02 Contract Analysis & Due Diligence

**ROI: 60-75% time reduction, 10x more contracts analyzed**

AI extracts key terms, flags risks, compares to standards in minutes. M&A due diligence reviewing 500 contracts takes associates ~200 hours (~\$60K), AI does it in~ 2 hours with attorney review = **~\$50K savings per deal. Firm doing ~20 deals/year saves ~\$1M on ~\$200K investment.**

**Competitive Edge:** Fixed-fee pricing on due diligence (competitors can't match), same-day contract analysis, handle ~3x deal volume, win PE/VC clients needing speed.

**Work Faster. Work More Accurately. Make Better Decisions.**

# LEGAL. AI.

DO THE MATH. HYPOTHETICAL SCENARIOS.

## 03 Legal Research Automation

**ROI: ~50-60% reduction in research time, better results**

AI searches case law, statutes, regulations in seconds with relevance ranking. Associates spending ~30% of billable time on research (wasted opportunity cost) become ~50% more productive = **\$800K/year in freed capacity for 20-attorney firm on \$100K investment.**

**Competitive Edge:** Lower hourly rates (less research time), faster brief turnaround, junior attorneys perform like mid-levels, win clients who can't afford BigLaw prices.

## 04 Workflow Automation & Client Communication

**ROI: ~40-50% reduction in administrative time, ~30% faster response**

AI automates intake, scheduling, status updates, basic client questions. Firm spending 40% of staff time on admin reduces to ~20% = **\$300K/year in productivity + improved client satisfaction on \$80K investment.**

**Competitive Edge:** 24/7 client portal with instant status updates, proactive case management, handle ~30% more clients with same staff, win repeat business through better service.

**Work Faster. Reduce Time and Cost. Make Better Decisions.**

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**Work Faster. Reduce Time and Cost. Make Better Decisions.**

# LEGAL. AI.

DO THE MATH. HYPOTHETICAL SCENARIOS.

## 05 Automated IP Claims Drafting

**ROI: ~60-75% reduction in initial claims drafting time, ~20-30% fewer office actions**

AI generates initial independent and dependent claim sets from invention disclosures and prior art analysis. Patent attorney spending ~10 hours drafting claims per application reduces to ~3 hours for review and refinement. Firm filing ~500 applications/year at \$400/hour = **\$1.4M/year savings on \$300K investment. 2-3 month payback.**

Improved claim consistency reduces office actions by ~25%, saving ~\$3-5K per avoided response = **additional \$375-625K/year in prosecution savings.**

**Competitive Edge:** Quote lower prosecution budgets, faster turnaround (~3-5 days vs 2-3 weeks), handle 40% more applications with same attorney headcount.

## 06 IP Specification Generation & Figure Descriptions

**ROI: ~70-80% reduction in spec writing time, eliminate ~90% of figure numbering errors**

AI generates background, summary, detailed description, and figure descriptions from technical documents. ~15 hours writing specifications reduces to ~4 hours for review. Firm filing ~500 applications/year = **~\$2.2M/year savings on \$400K investment. 2-month payback.**

Eliminates numbering inconsistencies causing ~20% of office actions = **additional ~\$300-500K/year savings.**

**Competitive Edge:** Same-week app preparation, flat-fee filing packages competitors can't match, scale to serve high-volume startup clients.

**Work Faster. File Accurately. Make Better Decisions.**

# LEGAL. AI.

DO THE MATH. HYPOTHETICAL SCENARIOS.

## 07 Prior Art Search & Analysis

**ROI: ~75-85% reduction in search time, ~40-50% improvement in reference relevance**

AI conducts comprehensive prior art searches and ranks results by claim relevance. Attorney spending ~8 hours searching reduces to ~2 hours reviewing AI-ranked results. Firm conducting 400 searches/year at \$400/hour = **~\$960K/year savings on \$250K investment. 3-month payback.**

Better up-front analysis improves prosecution success by ~20%, reducing average cost per patent from ~\$15K to ~\$12K = **\$1.2M/year in downstream savings.**

**Competitive Edge:** Same-day patentability opinions, comprehensive searches included in standard fees, expand freedom-to-operate practice without adding staff.

## 08 USPTO Filing and Compliance Automation

**ROI: ~85-90% reduction in form preparation time, eliminate ~95% of filing errors**

AI auto-populates all USPTO forms from matter management data and validates compliance before submission. Paralegal spending ~2.5 hours per filing reduces to ~20 minutes. Firm filing 600 applications/year at \$150/hour = **~\$210K/year savings on \$100K investment. 6-month payback.**

Eliminates filing corrections (~30% of filings at ~\$800 each) = **additional ~\$144K/year savings.**

**Competitive Edge:** Zero-defect reputation with USPTO, handle high-volume clients competitors avoid, eliminate malpractice risk from filing errors.

**Work Faster. File Accurately. Make Better Decisions.**



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## Manufacturing Industry Focus

**Make Better Decisions.**

# MANUFACTURING. AI.

Apply AI to the most difficult, costly business challenges manufacturing firms face every day.



## QUALITY DETECTION & PREDICTION

01

**Quality defect prediction & detection:** Analyze real-time sensor data from PLCs/SCADA and vision systems to predict defects before they occur and catch defects at earliest production stage. Reduce defect escape rate by ~60-80%, cutting warranty claims and rework costs by ~\$500K-2M annually for mid-size manufacturer.

**Real-time yield prediction:** Monitor production in real-time and predict end-of-run yield based on early process indicators. Allow corrective action mid-run, improving yield from typical ~75-85% to ~88-95%, saving ~\$200K-800K per quarter.

**Scrap & rework reduction:** Identify process parameters that correlate with scrap/rework by analyzing historical production data across shifts, machines, and operators. Reduce scrap rates from typical ~8-12% to ~3-5%, saving ~\$300K-1M annually per production line.

## ROOT CAUSE ANALYSIS & CONTINUOUS IMPROVEMENT

02

**Root cause analysis automation:** Analyze production data, maintenance logs, quality records, and operator notes to identify root causes of defects and downtime. Reduce time to identify issues from ~2-3 weeks to ~2-3 days, preventing recurring problems that cost ~\$50-200K per incident.

**Non-conformance report (NCR) analysis:** Analyze thousands of NCRs to identify patterns, common suppliers/parts with issues, and systemic problems. Reduce recurring NCRs by ~40-60% and accelerate corrective action from ~45-60 days to ~10-15 days.

**Downtime pattern analysis:** Analyze maintenance logs, production stops, and shift reports to identify patterns (time of day, operator, machine configuration). Reduce chronic downtime issues by ~30-50%, recovering ~4-8% of production capacity.

## Improve Accuracy. Reduce Downtime. Make Better Decisions.

# MANUFACTURING. AI.

Apply AI to the most difficult, costly business challenges manufacturing firms face every day.

## PREDICTIVE MAINTENANCE & EQUIPMENT OPTIMIZATION

03

**Predictive maintenance:** Monitor equipment sensor data (vibration, temperature, pressure) to predict failures ~2-4 weeks in advance. Reduce unplanned downtime by ~40-60% (typical cost: ~\$5K-20K per hour) and extend equipment life by ~15-25%.

**Process parameter optimization:** Use ML to identify optimal machine settings (speeds, feeds, temperatures, pressures) from historical data. Improve first-pass yield by ~8-15% and reduce cycle times by ~10-20% across production lines.

**Spreadsheet-to-SCADA migration:** AI extracts logic from manual spreadsheets used for process control and converts to automated SCADA rules. Eliminate manual data entry errors (typical 2-5% error rate), free ~10-20 hours per operator per week, and improve process consistency.

## PRODUCTION PLANNING & OPERATIONS

04

**Production schedule optimization:** Analyze real-time machine capacity, material availability, and order priorities to generate optimal production schedules. Increase throughput by ~12-18% and reduce lead times by ~20-30% without capital investment.

**Capacity planning optimization:** Predict realistic production capacity based on historical performance, maintenance schedules, and staffing levels. Improve on-time delivery from typical ~70-80% to ~88-95%, reducing late delivery penalties of ~\$50K-300K per quarter.

**Operator skill matching:** Analyze operator performance data (quality, speed, error rates) across different tasks to optimize assignments. Improve productivity by 10-15% and reduce training time for new operators by 30-40%, saving \$80-150K annually per line.

**Improve Reliability. Improve Planning. Make Better Decisions.**

# MANUFACTURING. AI.

Apply AI to the most difficult business challenges manufacturing firms face every day.

## COMPLIANCE & TRACEABILITY

05

**Compliance documentation automation:** Auto-generate required documentation (test reports, inspection records, material certifications, traceability documents) from ERP/MES data. Reduce documentation time by ~70-85% and eliminate compliance violations that cost ~\$100K-500K per audit finding.

**Traceability automation:** Auto-link materials, components, serial numbers, and processes from raw material to finished product using ERP/MES data. Reduce traceability research from ~8-16 hours to ~15-30 minutes per request, critical for recalls that can cost ~\$2-5M per event.

**Regulatory compliance checking:** Validate production records, test data, and documentation against industry standards (ISO, AS9100, FDA, etc.). Reduce compliance review time by ~75-85% and catch ~95%+ of issues before external audit.

## SUPPLY CHAIN & MATERIALS MANAGEMENT

06

**Supply chain disruption prediction:** Analyze supplier performance data, shipping patterns, geopolitical risks, and material availability to predict delays ~3-6 weeks in advance. Reduce expedite costs by ~50-70% (typical manufacturer spends ~5-8% of procurement on expedites) and prevent stockouts.

**Supplier quality monitoring:** Aggregate data from incoming inspection, supplier certifications, and production defects to score supplier performance and predict quality issues. Reduce supplier-caused defects by ~45-65%, avoiding ~\$200K-600K in rework and delays.

**Bill of Materials (BOM) optimization:** Identify opportunities to standardize components across product lines and flag obsolescence risks. Reduce unique part count by ~20-30%, cutting inventory carrying costs by ~\$400K-1.5M and improving negotiating leverage with suppliers.

**Stay Compliant. Optimize Supplier Costs. Make Better Decisions.**

# MANUFACTURING. AI.

DO THE MATH. HYPOTHETICAL SCENARIOS

## 01 Predictive Quality - Eliminate Defects Before They Happen

**ROI: 40-60% reduction in scrap/rework costs**

AI predicts defects before they occur by analyzing process parameters in real-time. Cable manufacturer with \$50M revenue and 4% scrap rate (\$2M loss) reduces to 1.5% = **\$1.25M/year savings on \$400K investment. 4-month payback.**

**Competitive Edge:** Quote 3-5% lower prices, win contracts requiring 99%+ yield, faster delivery (no rework delays).

## 02 Predictive Maintenance - Maximize Uptime

**ROI: 25-35% reduction in unplanned downtime**

AI predicts equipment failures 7-14 days early. Production line with 200 hours/year unplanned downtime (\$1.5M cost) reduces to 70 hours = **\$1M savings + \$650K from recovered capacity = \$1.65M benefit on \$300K investment.**

**Competitive Edge:** 98% uptime vs 85% industry average, accept rush orders competitors can't fulfill, win contracts requiring guaranteed delivery.

**Improve Quality. Reduce Downtime. Make Better Decisions.**

# MANUFACTURING. AI.

DO THE MATH. HYPOTHETICAL SCENARIOS

## 03 Dynamic Process Optimization

**ROI: 15-25% throughput improvement, 10-20% energy savings**

AI continuously optimizes hundreds of variables humans can't manage simultaneously. Cable line producing 1,000 units/day increases to 1,200 units/day = **\$3-4M/year additional revenue capacity + \$150K energy savings. 300-400% first year ROI.**

**Competitive Edge:** Avoid \$2-3M capital investment, aggressive pricing on bids, meet impossible delivery dates.

## 04 Automated Quality Inspection

**ROI: 60-80% reduction in inspection labor, 90%+ reduction in escapes**

AI vision systems inspect 100% of production at line speed vs manual sampling (5-10%). Eliminate inspection bottlenecks and catch defects immediately. Manufacturer with 4 inspectors (\$280K/year) + 12 customer escapes (\$540K/year) = **\$600K/year savings on \$200K investment. 4-month payback.**

**Competitive Edge:** Eliminate returns, qualify for zero-defect programs, faster throughput, win quality-critical contracts.

**Improve Quality. Reduce Downtime. Make Better Decisions.**



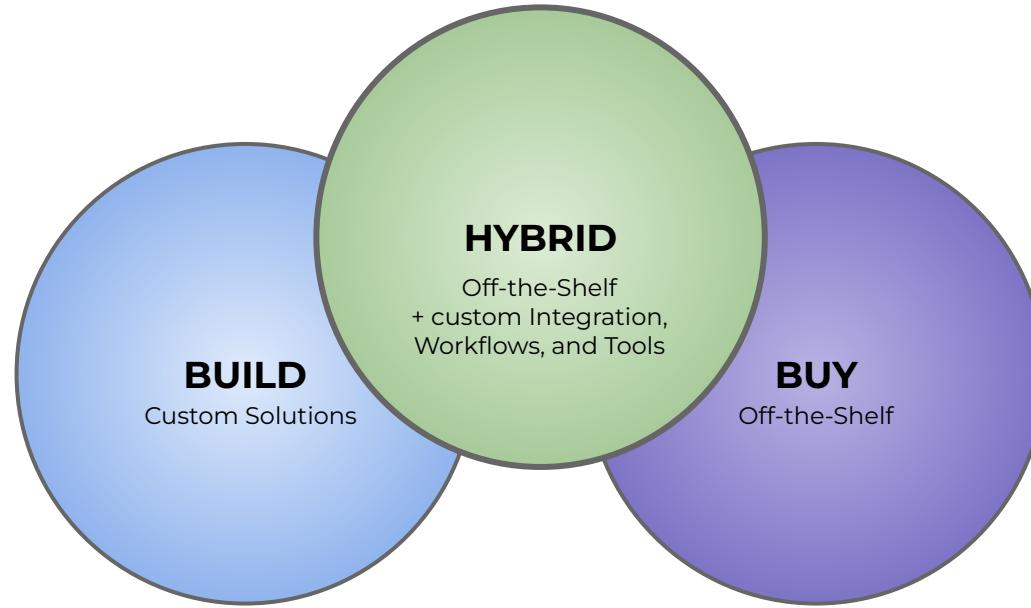
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Build vs Buy

**Make Better Decisions.**

# BUILD vs BUY

**DO THE COMPARISON.** OFF THE SHELF vs CUSTOM vs HYBRID



**Understand Your Options. Make Better Decisions.**

# BUILD vs BUY

DO THE COMPARISON. OFF-THE-SHELF (OTS) SOLUTIONS.

## 01 Off-the-Shelf (OTS) Advantages

- **Immediate deployment** - Live in weeks, not months, with minimal internal resources required
- **Pre-trained models** - Benefit from vendor's investment in training AI on large datasets
- **Proven technology** - De-risked solution with established user base and case studies
- **Vendor support** - Professional services, training, troubleshooting, and ongoing updates included
- **Continuous improvement** - New features and model improvements delivered automatically
- **Lower initial risk** - Pilot with subscription before full commitment, exit if it doesn't work

## 02 Off-the-Shelf (OTS) Challenges

- **Integration**: Standalone platforms don't connect to your existing systems - requires duplicate data entry
- **Workflow Fit**: Built for "average" company, not your specific processes and requirements
- **Cost Model**: Perpetual licensing costs tied to scale
- **Customization Limits**: Cannot fully adapt to company-specific requirements or approval workflows
- **Adoption Gap**: Industry average ~30-40% employee adoption due to workflow friction
- **Efficiency Reality**: Promised 70% gains become 20-30% due to integration overhead
- **Vendor Lock-in**: Dependency on vendor roadmap, pricing changes, feature deprecation

**Understand Your Options. Make Better Decisions.**

# BUILD vs BUY

DO THE COMPARISON. CUSTOM SOLUTIONS.



## 03 Custom Advantages

- **True Integration** - Works within existing systems, eliminates duplicate entry, preserves employee workflows
- **Perfect Fit** - Built for your exact templates, requirements, approval processes, and business rules
- **Ownership Economics** - One-time cost.
- **Higher Adoption** - 90%+ employee use when solution matches existing workflow rather than forcing change
- **Full Control** - Your infrastructure, your data, no vendor lock-in or price increases
- **Actual Efficiency** - Up to ~60-75% gains when workflow friction is eliminated, not added
- **Strategic Flexibility** - Evolves with your business
- **Competitive Differentiation** - Unique to you
- **Risk-Managed** - Phased approach proves ROI for one use case before expansion

## 04 Custom Challenges

- **Longer initial timeline** - Typically, ~4-9 months for first use cases
- **Requires upfront investment and commitment** - Unlike OTS subscriptions that can be piloted month-to-month, custom builds require committed budget (\$300K-\$1M+) and executive sponsorship before seeing results.
- **Need internal resources** - SMEs, process owners, and IT must dedicate 20-40 hours for discovery and testing phases to ensure the solution matches actual workflows.
- **Ongoing maintenance responsibility** - Custom solutions require ongoing support for bug fixes, feature enhancements, and updates from vendor
- **Initial build risk** - Ambiguous or incomplete specifications lead to expensive rebuilds and missed expectations.

**Understand Your Options. Make Better Decisions.**

# BUILD vs BUY

THE BEST OF BOTH WORLDS. HYBRID OTS-CUSTOM SOLUTIONS.



## 05 Why do Hybrid OTS-Custom Solutions with DOOR3

- **Vendor-agnostic assessment first** - We evaluate OTS options objectively without sales bias, recommending the right tool for each use case rather than pushing a proprietary platform.
- **Deep integration expertise across platforms** - Strategic partnerships with AWS, Azure, Google, Oracle, Databricks, and Snowflake give us native expertise in connecting OTS tools to enterprise systems.
- **SME-led delivery, not junior consultants** - Every advisor has held senior industry and advisory roles and is recognized as an expert by other experts. You get directors and principals designing your integration architecture, not recent graduates learning on your dime.
- **End-to-end capability from strategy to code** - Unlike pure strategy firms that hand off implementation or dev shops that skip strategy, we do both. Same team end-to-end.
- **Proven hybrid methodology** - Our Combined Assessment Playbook explicitly evaluates OTS vs. custom vs. hybrid for each use case.
- **No platform lock-in or recurring revenue bias** - We're not an OTS vendor trying to maximize your licensing fees or a staff augmentation firm incentivized to build everything custom.
- **Custom integration IP you own** - The integration layer, orchestration logic, and custom components we build become your property and competitive advantage.

**Understand Your Options. Make Better Decisions.**



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Team

**Make Better Decisions.**



## Salvatore A. Magnone

Senior Advisor

### Education

- B.S. Computer Science, Operations Research  
Saint John's University, NYC, NY, USA

### Areas of Expertise

- Financial Services, Insurance, Life Sciences, and Defense sectors
- Business and Technology Strategy, Transformation and Innovation
- Data, Analytics, Machine Learning, AI, Quantum, IoT, and Robotics
- Distributed Computing, Super-Computing, Real-time systems, Exabyte Computing
- Master Data and Reference Data Management

*Sal Magnone has over ~30 years of hands on experience in advanced technology strategy, design, management, and development across the financial services, insurance, defense, IT, and life sciences sectors in startups, mid-tier, government, and large enterprise firms.*

*Sal is a commissioned United States Army Field Artillery Officer, has served in a variety of capacities in US and overseas combat and training units; and teaches strategy and entrepreneurship at the university level and to business and military leaders*

### Voya Financial | Enterprise Data Platform (Programme Lead - Enterprise Digital Transformation)

- Led and delivered on Voya's new Enterprise Data Platform program, a project to transform Voya's retirement services data from multi mainframe-based reporting.
- Led the ground up design of the green field architecture including, the enterprise data model, enterprise ontology, canonical data messaging, data warehouses, data lake, ETL/ELT processes, validation & logging tooling, and the testing and validation process.

### Valley National Bank | Core Banking Data Transformation (Programme Lead)

- Led the design of Valley's Master Data Management and Reference Data rollout
- Responsible for mapping mainframe data to the new customer master, selection of reference data types, and mapping and creation of reference data
- Responsible for design of Valley's future cross-core reference data management strategy and technology solution that multi-maps reference data between Valley's future core, legacy core, and disparate vendor systems that utilize different standards

### Federal Reserve Bank | Fedwire Assessment (Data and Code Audit Lead) [PwC]

- Responsible for auditing the full data architecture and Java code base for Fedwire, the real-time gross settlement system of central bank money used by Fed banks to transfer funds electronically between ~10K member institutions. Fedwire performs about 150M transfers, valued at about \$800T, annually and is a "systemically important financial market utility" (SIFMU) under Title VIII of Dodd-Frank

### Large Federal Regulator | IT Department Assessment (Lead) [Sia Partners]

- Responsible for auditing the IT department at a large federal regulator. Responsible for finding over \$20M/Year in recurring saving by restructuring testing & development methodology and team.