

BUILDING AGENTIC PROCUREMENT: THE 7-PILLAR GUIDE

This document is a comprehensive guide and diagnostic framework for assessing and designing AI-enabled procurement, structured as a Procurement AI Maturity Tool with detailed pillars, levels, and architectural guidance. It explains how a procurement function can evolve from ad-hoc, manual processes to an autonomous, agentic, "AI-first" operating model.

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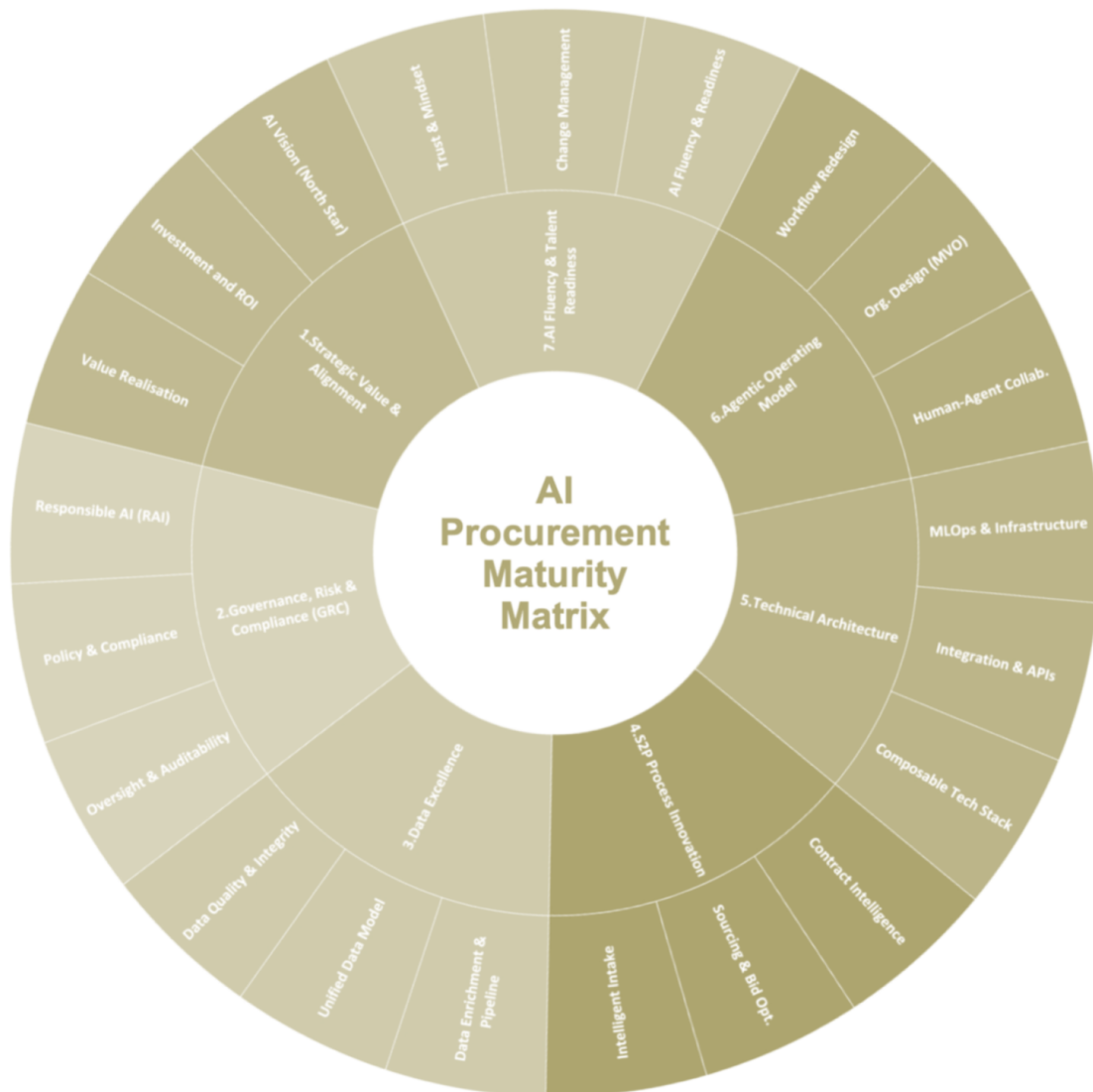
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THE PROCUREMENT AI MATURITY TOOL (PAIMT)

The document is a comprehensive guide and diagnostic framework for assessing and designing AI-enabled procurement, structured around the Procurement AI Maturity Tool (PAIMT), combining detailed pillars, maturity levels, practical examples, and architectural considerations. It explains how a procurement function can evolve from ad-hoc, manual, siloed practices toward a more integrated, governed, data-driven, and AI-enabled operating model.

Overall purpose

The report introduces the Procurement AI Maturity Tool (PAIMT), a maturity model with five levels: Reactive, Active, Operational, Predictive, and Transformational / Autonomous.

It is designed to help CPOs and procurement teams assess their current maturity, identify capability gaps, and define a practical roadmap for AI-enabled procurement. The model supports progression toward a leaner and more accountable operating model, where agentic capabilities are used within defined governance, risk, data, technical, and human oversight guardrails.

Structure and pillars

The core of the document is a 7-Pillar Procurement AI Maturity Matrix. Each pillar broken down into sub-pillars and five maturity levels, with concrete characteristics, examples and guidance.

The seven pillars are: Strategic Value & Alignment, Governance, Risk & Compliance, Data Excellence, S2P Process Innovation, Technical Architecture, Agentic Operating Model, and Talent & Culture.



Key content by pillar

Strategic Value & Alignment covers AI vision (“North Star”), investment and ROI and Value Realization. It includes concepts such as Spend Under Management, balanced value tracking, Impact Per Head and inference economics, while emphasizing that quantified benchmarks should be validated against each organization’s baseline.

Governance, Risk & Compliance defines Responsible AI, policy and compliance controls, and oversight and auditability. It shows how organizations can move from unmanaged “shadow AI” and unassessed model risk toward clearer accountability, human oversight, audit evidence, risk ownership, and supplier-impacting decision controls.

Data Excellence describes the journey from siloed and manually cleaned data toward a governed procurement data layer. It covers data quality, unified data models, enrichment, anomaly detection, lineage, and agent-ready data foundations, with safeguards for validation, confidence thresholds, and controlled correction.

S2P Process Innovation shows how intake, sourcing, bid optimization and contract intelligence can evolve from email, spreadsheets, PDF-based processes toward guided buying, AI-supported decision support, and agentic workflow assistance. Consequential decisions, such as supplier awards, exclusions, payment holds, or contract amendments, remain subject to documented criteria and authorized human review.

Technical Architecture details the transition from legacy ERP environments to composable, API-first, secure, and monitored AI architecture. It covers integration, MLOps, model routing, audit logging, permission boundaries, cost controls, resilience, and recoverability for AI and agentic systems.

Agentic Operating Model defines how human roles, organizational design, and workflows shift as AI maturity increases. It positions procurement as accountable governors of human-agent workflows, responsible for setting objectives, guardrails, approval triggers, exception handling, escalation paths and continuous improvement.

Talent & Culture focuses on AI fluency, change management, trust and mindset. It maps the evolution from fear, skepticism, and low data literacy toward role-based AI capability, responsible use, output validation, calibrated trust, and AI-enabled procurement professionals who can orchestrate human-agent collaboration.



Level-by-level detail

For each pillar and sub-pillar, the report gives detailed descriptions, problems, architectural goals, maturity indicators, metrics and practical examples across levels 1–5. This makes the maturity model operational and usable for diagnostic workshops, roadmaps design, governance discussions, and procurement transformation planning.

The model emphasizes outcome-based design, including margin protection, risk avoidance, Spend Under Management (SUM), adoption, audit readiness, supplier-impacting decision controls, and Impact per Head. It also connects technical choices, such as APIs, MLOps, data models, Explainable AI, and security controls to business value, governance requirements, and responsible procurement outcomes.

Level	Maturity Stage	Characteristics
Level 1	Reactive	<i>Maturity is low across the seven pillars. Procurement remains largely transactional, siloed, and manual, with limited AI vision, governance, data quality, process standardization, technical readiness, operating-model alignment, or AI fluency.</i>
Level 2	Active	<i>Early AI pilots and fragmented Shadow AI use appear across selected areas, but maturity remains uneven. Governance, data integration, value tracking, process adoption, architecture, role design, and change management are still limited or inconsistent.</i>
Level 3	Operational	<i>Core AI maturity capabilities are formalized across the seven pillars: roadmap, governance, data foundations, standardized S2P workflows, integrated technology, defined human-AI roles, and role-based training.</i>
Level 4	Predictive	<i>AI maturity is embedded across most pillars. Predictive insights, explainability, unified data, scalable architecture, human-in-the-loop decision models, and adoption practices support proactive procurement performance and risk management.</i>
Level 5	Transformational/ Autonomous	<i>The seven pillars operate as a coherent AI-enabled procurement model. Bounded agentic workflows execute routine activities within approved guardrails, while humans govern strategy, exceptions, supplier-impacting decisions, risk, accountability, and continuous improvement.</i>

Practical Value

The tool provides tables, detailed breakdowns, and outcome-focused metrics to help procurement leaders design a practical roadmap from transactional procurement to strategic value contribution, while integrating Responsible AI, governance, scalability, and measurable business impact.



THE 7-PILLAR PROCUREMENT AI MATURITY MATRIX



Pillar	Level 1: Reactive	Level 2: Active	Level 3: Operational	Level 4: Predictive	Level 5: Transformational / Autonomous
1. Strategic Value & Alignment	<i>Measured mainly on realized savings; no formal AI vision or value framework.</i>	<i>Small AI pilots focus on efficiency; ad-hoc AI funding and local value tracking.</i>	<i>Formal AI roadmap, dedicated budget, and value-tracking framework across the procurement function.</i>	<i>AI-supported predictive margin protection, risk avoidance; and board-level reporting on business impact.</i>	<i>Procurement as innovation catalyst; AI-enabled growth model, using enabled growth within defined value, risk and governance guardrails.</i>
2. Governance, Risk & Compliance	<i>Very limited oversight; unmanaged shadow AI and unassessed bias or compliance risk.</i>	<i>Reactive reviews of vendor tools; basic AI risk screening and risk indicators.</i>	<i>Cross-functional AI Council; Responsible AI governance and ethical sourcing guidelines.</i>	<i>Explainable AI (XAI) in production; fairness, drift and bias monitoring for supplier-impacting decisions.</i>	<i>Governance rules, accountability, human oversight, and escalation paths embedded across AI-enabled procurement.</i>
3. Data Excellence	<i>Siloed procurement data; manual cleaning for RFPs, reporting, or audits.</i>	<i>Basic digitization; fragmented visibility of tail spend and supplier records.</i>	<i>Unified data layer with controlled visibility across key spend categories and supplier records.</i>	<i>Real-time anomaly detection, data enrichment and Tier-2/3 risk monitoring.</i>	<i>Self-healing procurement data layer with governed correction, lineage, and agent-ready data quality.</i>
4. S2P Process Innovation	<i>Email, spreadsheet and PDF-based processes; manual intake, sourcing, PO and contract handling.</i>	<i>Basic portals and RPA bots automate repetitive tasks but workflows remain fragmented.</i>	<i>Integrated S2 workflows with guided intake; ML-assisted classification and structured routing.</i>	<i>Intelligent intake; AI-driven bid scoring and contract redlining with documented human review.</i>	<i>Agentic S2P executed routine workflows within approved thresholds, with human approval for consequential decisions.</i>
5. Technical Architecture	<i>Rigid legacy ERP; limited API capability and weak AI control layer.</i>	<i>Basic point-to-point API connections for PO/invoice flows.</i>	<i>Modern ML infrastructure with automated data pipelines, model versioning, and controlled deployment.</i>	<i>Composable AI-first architecture with secure AI modules and monitored model performance.</i>	<i>AI-native architecture with governed agent permissions, audit logging, resilience controls, and scalable orchestration.</i>
6. Agentic Operating Model	<i>Transactional roles; growth tied to headcount.</i>	<i>Tactical automation; discrete bots handle clerical work.</i>	<i>Strategic/transactional split; AI-augmented category leads.</i>	<i>Workflow roles redesigned so people focus on strategy, supplier relationships, risk and exceptions.</i>	<i>Lean, accountable operating model where humans govern agentic workflows, exceptions, and strategic supplier outcomes.</i>
7. Talent & Culture	<i>Cultural resistance and low trust; fear of job displacement limits adoption.</i>	<i>Awareness phase; Individual champions test GenAI with basic usage guidance.</i>	<i>Role specific training on ML and AI features in S2P platforms.</i>	<i>High AI fluency; teams validate AI outputs, design prompts, and apply responsible-use practices.</i>	<i>AI-fluent workforce, professionals orchestrate human-agent collaboration with calibrated trust and accountability.</i>



Pillar 1: Strategic Value & Alignment

Ensures that AI-enabled procurement is guided by a clear strategic direction, aligned with business priorities, measurable value creation, risk appetite, and governance guardrails. This pillar assesses whether the Organization has defined a credible AI "North Star", a structured investment approach, and a balanced value framework that positions procurement as a strategic contributor to resilience, performance, innovation, and responsible growth.

I. Strategic Value & Alignment: AI vision (North Star)

The AI Vision (North Star) sub-pillar acts as the strategic compass of the procurement function. It defines how an Organization moves from no AI strategy to AI-enabled procurement strategy aligned with business outcomes, risk appetite, and governance guardrails.

- 1. No formal AI strategy, executive mandate, or defined AI-related business outcomes.*
- 2. Tactical AI pilots are launched, but they remain disconnected from an enterprise procurement roadmap.*
- 3. A formal AI roadmap is documented, funded, and linked to measurable procurement value drivers.*
- 4. The AI "North Star" is aligned with CXO priorities such as margin protection, resilience, risk avoidance, and supplier innovation.*
- 5. AI-enabled procurement becomes a strategic value driver, with agentic capabilities operating within defined business, risk and governance guardrails.*

I. Strategic Value & Alignment: Investment and ROI

The Investment and ROI sub-pillar assesses how procurement funds, prioritizes, and measures AI-enabled transformation. It defines the move from ad hoc or pilot-based AI spend to structured investment linked to procurement priorities, measurable value, risk avoidance, responsible scaling, and inference economics.

- 1. No dedicated AI budget exists; AI-related spend is invisible, informal, or absorbed into general software costs.*
- 2. Pilot-based funding supports isolated AI tools or experiments, with limited scalability.*
- 3. A recurring AI budget is integrated into the procurement technology roadmap and governed through portfolio prioritization.*
- 4. AI investment decisions assessed through margin impact, productivity, cost-to-serve, and risk avoidance.*
- 5. Investment is managed through AI cost/value economics: including cost, value, and risk of each AI-assisted decision or governed agentic workflow.*

I. Strategic Value & Alignment: Value Realization

The Value Realization sub-pillar assesses how procurement measures and demonstrates the value created by AI-enabled transformation. It defines the move from narrow savings tracking to a balanced value framework covering Spend Under Management, realized savings, cycle time, risk avoidance, contract leakage avoided, adoption, audit readiness, and broader business impact.

- 1. Value is measured primarily through negotiated or realized cost savings.*
- 2. Efficiency gains and cycle-time improvements measured in selected AI pilots.*
- 3. Spend Under Management (SUM), compliance, adoption, and value leakage are tracked consistently.*
- 4. Value measurement includes Predictive EBIT impact, risk avoidance, resilience, and decision velocity.*
- 5. "Impact Per Head" measures value generated through human expertise and AI-enabled scale, without assuming proportional headcount growth.*



Sub-Pillar	Level 1: Reactive	Level 2: Active	Level 3: Operational	Level 4: Predictive	Level 5: Transformational / Autonomous
1.1 AI Vision (North Star)	No formal AI strategy, executive mandate, or defined AI-related business outcomes.	Tactical AI pilot projects are launched, but they remain disconnected from a broader, organization-wide procurement roadmap.	A formal AI roadmap is documented, funded, and linked to measurable procurement value drivers.	The AI "North Star" is aligned with CXO priorities such as margin protection, resilience, risk avoidance, and supplier innovation.	AI-enabled procurement becomes a strategic value driver, with agentic capabilities operating within defined business, risk and governance guardrails.
1.2 Investment & ROI	No dedicated AI budget exists; AI-related spend is invisible, informal, or absorbed into general software costs.	Pilot-based funding supports isolated AI tools or experiments, with limited scalability.	A recurring AI budget is integrated into the procurement technology roadmap and governed through portfolio prioritization.	AI investment decisions are assessed through margin impact, productivity, cost-to-serve, and risk avoidance.	Investment is managed through AI cost/value economics: including cost, value, and risk of each AI-assisted decision or governed agentic workflow.
1.3 Value Realization	Value is measured primarily through negotiated or realized cost savings.	Efficiency gains and cycle-time improvements measured in selected AI pilots.	Spend Under Management (SUM), compliance, adoption, and value leakage are tracked consistently.	Value measurement includes Predictive EBIT impact, risk avoidance, resilience, and decision velocity.	"Impact Per Head" measures value generated through human expertise and AI-enabled scale, without assuming proportional headcount growth.



Pillar 2: Governance, Risk & Compliance (GRC)

Ensures that AI-enabled procurement operates within clear governance rules, Responsible AI principles, compliance obligations, human oversight, audit evidence requirements, and accountable procurement guardrails. This pillar assesses whether the organization can identify, control, monitor, and evidence AI-related risks across procurement decisions, especially where supplier contracts, compliance, or business continuity may be affected

II. Governance, Risk & Compliance (GRC): Responsible AI (RAI)

The Responsible AI (RAI) sub-pillar assesses how procurement prevents bias, supports fairness, ensures explainability, and defines accountability for AI-supported supplier-impacting decisions. Supplier-impacting decisions may include supplier selection, exclusion, bid scoring, risk classification, contract recommendations, payment holds, or other decisions that materially affect supplier access, treatment or outcomes.

- 1. AI use is unmanaged, with limited awareness of algorithmic bias or supplier-impacting AI risk.*
- 2. Ad-hoc reviews of vendor tool fairness are performed, but Responsible AI practices remain inconsistent.*
- 3. A cross-functional AI Council defines Responsible AI rules, fairness criteria, and review requirements.*
- 4. Fairness, drift, explainability, and outcome monitoring embedded for supplier-impacting decisions.*
- 5. Responsible AI controls embedded across the AI lifecycle, with risk ownership, fairness thresholds, approval gates, monitoring, and escalation rules.*

II. Governance, Risk & Compliance (GRC): Policy & Compliance

The Policy & Compliance sub-pillar assesses how procurement embeds policies, regulatory obligations, data-protection requirements, and AI-specific compliance controls into AI-enabled procurement workflows. It defines how the organization moves from manual or checklist-based compliance toward embedded controls, evidence requirements, exception handling, regulatory mapping, and governed human override.

- 1. Policy checks are performed manually or on a sample basis.*
- 2. Basic digital compliance checklists are used, but compliance still depends heavily on user discipline.*
- 3. Procurement policies are embedded into S2P workflows with ownership, evidence fields, approval rules, and exception handling.*
- 4. Compliance controls designed into AI use cases, including data protection, DPIA triggers, regulatory mapping, and vendor compliance requirements.*
- 5. Governance defines automated policy-enforcement rules, approval thresholds, escalation routes, audit evidence, review frequency, incident ownership, and human override.*

II. Governance, Risk & Compliance (GRC): Oversight & Auditability

The Oversight & Auditability sub-pillar assesses how procurement ensures that AI-supported decisions are traceable, explainable, reviewable, and auditable, with clear human oversight and accountability. It defines how the organization moves from limited decision evidence toward structured audit trails, explainability, documented rationale, retention rules, independent review, and supplier challenge support.

- 1. No logs exists for AI inputs, outputs, decision logic, or human overrides.*
- 2. Static audit trails exist in legacy systems, but they provide limited context for AI-supported decisions.*
- 3. Digital audit trail records AI-human interactions, model versions, source data, prompts/outputs, approvals, overrides, and rationale.*
- 4. Explainable AI (XAI) dashboards support review of supplier-impacting decisions, documented rationale, and escalation routes.*
- 5. AI-assisted and agentic decisions are traceable, explainable, reviewable, and auditable, with audit-evidence ownership, retention rules, independent review, and supplier challenge support.*



Sub-Pillar	Level 1: Reactive	Level 2: Active	Level 3: Operational	Level 4: Predictive	Level 5: Transformational / Autonomous
2.1 Responsible AI (RAI)	AI use is unmanaged, with limited awareness of algorithmic bias or supplier-impacting AI risk.	Ad-hoc reviews of vendor tool fairness are performed, but Responsible AI practices remain inconsistent.	A cross-functional AI Council defines Responsible AI rules, fairness criteria, and review requirements.	Fairness, drift, explainability, and outcome monitoring embedded for supplier-impacting decisions.	Responsible AI controls embedded across the AI lifecycle, with risk ownership, fairness thresholds, approval gates, monitoring, and escalation rules.
2.2 Policy & Compliance	Policy checks are performed manually or on a sample basis.	Basic digital compliance checklists are used, but compliance still depends heavily on user discipline.	Procurement policies are embedded into S2P workflows with ownership, evidence fields, approval rules, and exception handling.	Compliance controls designed into AI use cases, including data protection, DPIA triggers, regulatory mapping, and vendor compliance requirements.	Governance defines automated policy-enforcement rules, approval thresholds, escalation routes, audit evidence, review frequency, incident ownership, and human override.
2.3 Oversight & Auditability	No logs exists for AI inputs, outputs, decision logic, or human overrides.	Static audit trails exist in legacy systems, but they provide limited context for AI-supported decisions.	Digital audit trail records AI-human interactions, model versions, source data, prompts/outputs, approvals, overrides, and rationale.	Explainable AI (XAI) dashboards support review of supplier-impacting decisions, documented rationale, and escalation routes.	AI-assisted and agentic decisions are traceable, explainable, reviewable, and auditable, with audit-evidence ownership, retention rules, independent review, and supplier challenge support.



Pillar 3: Data Excellence

Ensures that procurement has reliable, governed, and AI-ready data foundations to support trustworthy analysis, automation, supplier decisions, risk monitoring, and value tracking. This pillar assesses whether your organization can move from fragmented, manually corrected data toward trusted, connected, enriched and agent-ready procurement data foundations with clear ownership, validation, lineage, and control mechanisms.

III. Data Excellence: Data Quality & Integrity

The Data Quality & Integrity sub-pillar assesses how procurement prevents, detects, and corrects data issues across critical procurement records. It defines how an Organization moves from manual data clean-up and inconsistent records toward governed validation, anomaly detection, lineage, confidence thresholds, and controlled data correction.

1. *Data is cleaned manually when needed for RFPs, reports, or audits.*
2. *Batch data cleaning is performed periodically, such as quarterly or annually.*
3. *System-enforced validation controls key procurement fields, including supplier identity, category codes, contract references, payment terms, and risk status.*
4. *Real-time validation and anomaly detection flag data-quality issues, with review triggers for supplier-impacting or high-risk records.*
5. *Self-healing data agents correct or enrich records within governed rules, confidence thresholds, lineage, exception review, and rollback controls.*

III. Data Excellence: Unified Data Model

The Unified Data Model sub-pillar assesses how procurement connects spend, supplier, contract, risk, finance, and process data into a trusted procurement data foundation. It defines how an Organization moves from fragmented data silos toward shared taxonomy, ownership rules, data lineage, and agent-ready visibility across procurement workflows.

1. *Procurement Data is siloed data across ERP, CLM, S2P, finance, and supplier-risk systems.*
2. *A data lake or reporting layer is used mainly for retrospective reporting.*
3. *A unified procurement data layer connects key categories, supplier records, contracts, and spend data using common taxonomy and ownership rules.*
4. *Unified visibility connects intake, sourcing, contracts, supplier performance, and risk data for predictive analysis.*
5. *A governed procurement intelligence layer provides trusted, lineage-based, agent-ready data for cross-functional workflows.*

III. Data Excellence: Data Enrichment & Pipelines

The Data Enrichment & Pipelines sub-pillar assesses how procurement refreshes, validates, enriches, and versions internal and external data for AI-enabled use cases. It defines how an Organization moves from manually updated supplier records toward governed enrichment pipelines, source validation, confidence scoring, and real-time external signals for risk and decision support.

1. *Supplier records are enriched manually, often on request or for specific sourcing, reporting, or risk activities.*
2. *Basic external data feeds are connected, with initial checks on source reliability and permitted data use.*
3. *Data refresh, versioning, lineage, and enrichment pipelines are standardized for priority procurement AI use cases.*
4. *AI-supported imputation and enrichment include confidence scores, source evidence, and review triggers for consequential supplier data.*
5. *Real-time external signals are validated, governed, and integrated into agent-ready data pipelines with proportional controls for supplier-impacting decisions.*



Sub-Pillar	Level 1: Reactive	Level 2: Active	Level 3: Operational	Level 4: Predictive	Level 5: Transformational/ Autonomous
3.1 Data Quality & Integrity	Data is cleaned manually when needed for RFPs, reports, or audits.	Batch data cleaning is performed periodically, such as quarterly or annually.	System-enforced validation controls key procurement fields, including supplier identity, category codes, contract references, payment terms, and risk status.	Real-time validation and anomaly detection flag data-quality issues, with review triggers for supplier-impacting or high-risk records.	Self-healing data agents correct or enrich records within governed rules, confidence thresholds, lineage, exception review, and rollback controls.
3.2 Unified Data Model	Procurement data is siloed across ERP, CLM, S2P, and supplier-risk systems.	A data lake or reporting layer is used mainly for retrospective reporting.	A unified procurement data layer connects key categories, supplier records, contracts, and spend data using common taxonomy and ownership rules.	Unified visibility connects intake, sourcing, contracts, supplier performance, and risk data for predictive analysis	A governed procurement intelligence layer provides trusted, lineage-based, agent-ready data for cross-functional workflows.
3.3 Data Enrichment & Pipelines	Supplier records are enriched manually, often on request or for specific sourcing, reporting, or risk activities.	Basic external data feeds are connected, with initial checks on source reliability and permitted data use.	Data refresh, versioning, lineage, and enrichment pipelines are standardized for priority procurement AI use cases.	AI-supported imputation and enrichment include confidence scores, source evidence, and review triggers for consequential supplier data.	Real-time external signals are validated, governed, and integrated into agent-ready data pipelines with proportional controls for supplier-impacting decisions.



Pillar 4: S2P Process Innovation

Ensures that AI-enabled procurement improves the end-to-end Source-to-Pay process through better intake, sourcing, bid support, contract intelligence, workflow redesign, and controlled automation of routine activities. This pillar assesses whether the organization can move from fragmented, manual and document-based processes toward guided, AI-supported, and governed agentic workflows, while keeping human accountability for consequential decisions.

IV. S2P Process Innovation: Intelligent Intake

The Intelligent Intake sub-pillar assesses how procurement captures, routes, and validates stakeholder requests. It defines how an Organization moves from unstructured email or spreadsheet-based requests toward guided buying, conversational intake, policy validation, budget checks, supplier eligibility rules, and controlled automation for standard purchases.

- 1. Requests are submitted through email, Slack or spreadsheets, with limited structure and manual triage.*
- 2. Web-based forms or portals are used, but routing logic remains rigid and often requires manual correction.*
- 3. Guided buying portals route requests to preferred channels and eligible suppliers, while capturing required category, budget, and compliance data.*
- 4. Conversational intake interprets user needs, validates policy and budget context, and recommends the appropriate sourcing route.*
- 5. Agentic intake executes standard purchases within approved thresholds, supplier-eligibility rules, budget controls, and escalation triggers for exceptions.*

IV. S2P Process Innovation: Sourcing & Bid Opt.

The Sourcing & Bid Optimization sub-pillar assesses how procurement uses AI to support supplier analysis, RFP preparation, bid evaluation, and routine sourcing workflows. It defines how an Organization moves from manual bid comparison toward AI-supported sourcing decisions based on documented criteria, explainability, human review, and approved negotiation parameters.

- 1. RFP and bid analysis are paper-, PDF-, or spreadsheet-based, with manual comparison and scoring.*
- 2. E-sourcing tools are used for bid collection, but supplier analysis and evaluation remain mostly manual.*
- 3. AI/ML supports spend classification, supplier baselining, and sourcing analysis, while humans retain accountability for selection decisions.*
- 4. AI supports RFP drafting and bid scoring using documented criteria, explainability, and reviewer sign-off for supplier-impacting recommendations.*
- 5. Agentic sourcing manages routine, low-risk sourcing cycles within approved negotiation parameters, with human approval for awards, exclusions, exceptions, or policy deviations.*

IV. S2P Process Innovation: Contract Intelligence

The Contract Intelligence sub-pillar assesses how procurement uses AI to extract, analyze, monitor, and act on contract information. It defines how an Organization moves from static PDF repositories toward structured contract data, validated obligation tracking, AI-supported redlining, risk-based routing, and authorized review of amendments.

- 1. Contracts are stored as physical files, PDFs, or shared-folder documents, with high reliance on tribal knowledge.*
- 2. A searchable digital repository is used, with basic alerts for key dates such as expiry or renewal.*
- 3. NLP extracts key contract metadata and obligations, with validation for critical fields such as expiry, payment terms, liability, renewal, and compliance clauses.*



4. AI identifies risky clauses and suggests redlines using approved legal playbooks, with risk-based routing and authorized reviewer sign-off.
5. Living contracts are monitored against regulatory, performance, and risk changes; agents flag, draft, and route amendments for authorized legal and procurement approval.

Sub-Pillar	Level 1: Reactive	Level 2: Active	Level 3: Operational	Level 4: Predictive	Level 5: Transformational / Autonomous
4.1 Intelligent Intake	Requests are submitted through email, Slack or spreadsheets, with limited structure and manual triage.	Web-based forms or portals are used, but routing logic remains rigid and often requires manual correction.	Guided buying portals route requests to preferred channels and eligible suppliers, while capturing required category, budget, and compliance data.	Conversational intake interprets user needs, validates policy and budget context, and recommends the appropriate sourcing route.	Agentic intake executes standard purchases within approved thresholds, supplier-eligibility rules, budget controls, and escalation triggers for exceptions.
4.2 Sourcing & Bid Opt.	RFP and bid analysis are paper-, PDF-, or spreadsheet-based, with manual comparison and scoring.	E-sourcing tools are used for bid collection, but supplier analysis and evaluation remain mostly manual.	AI/ML supports spend classification, supplier baselining, and sourcing analysis, while humans retain accountability for selection decisions.	AI supports RFP drafting and bid scoring using documented criteria, explainability, and reviewer sign-off for supplier-impacting recommendations.	Agentic sourcing manages routine, low-risk sourcing cycles within approved negotiation parameters, with human approval for awards, exclusions, exceptions, or policy deviations..
4.3 Contract Intelligence	Contracts are stored as physical files, PDFs, or shared-folder documents, with high reliance on tribal knowledge.	A searchable digital repository is used, with basic alerts for key dates such as expiry or renewal.	NLP extracts key contract metadata and obligations, with validation for critical fields such as expiry, payment terms, liability, renewal, and compliance clauses.	AI identifies risky clauses and suggests redlines using approved legal playbooks, with risk-based routing and authorized reviewer sign-off	Living contracts are monitored against regulatory, performance, and risk changes; agents flag, draft, and route amendments for authorized legal and procurement approval.



Pillar 5: Technical Architecture

Ensures that AI-enabled procurement is supported by secure, connected and reliable technology systems. This pillar assesses whether the organization has the technical foundations needed to integrate data, deploy AI tools safely, monitor performance, control costs, manage technology risks, and recover effectively when issues occur.

V. Technical Architecture: Composable Tech Stack

The Composable Tech Stack sub-pillar assesses how procurement technology evolves from rigid legacy systems toward modular, API-first, and AI-ready architecture. It defines how an Organization moves from fragmented or inflexible tools toward approved AI modules, controlled deployment, governed permissions, audit logging, rollback options, and resilience controls.

1. *Rigid monolith ERP; "Rip and Replace" is the only realistic transformation option.*
2. *Fragmented "best of breed" applications with limited synchronization between systems.*
3. *Integrated S2P suite with stable data interfaces, core modules, and controlled integration of AI-enabled features.*
4. *Composable, API-first architecture supports secure deployment of approved AI modules across procurement workflows.*
5. *AI-native modular architecture supports task-specific agents with governed permissions, audit logging, rollback mechanisms, and resilience controls.*

V. Technical Architecture: Integration & APIs

The Integration & APIs sub-pillar assesses how procurement systems exchange data across ERP, S2P, CLM, finance, supplier-risk, and external data sources. It defines how an Organization moves from manual data transfer toward governed APIs, secure integration, event validation, monitoring, exception handling, and recoverable real-time orchestration.

1. *Manual data entry is required between disconnected systems.*
2. *Batch CSV uploads are used to transfer data between systems.*
3. *REST API connectivity supports critical PO, invoice, supplier, contract, and sourcing data flows with basic API governance.*
4. *Unified API layer connects ERP, S2P, CLM, finance, supplier-risk, and external data sources with access control and monitoring.*
5. *Event-driven integration enables real-time orchestration, with event validation, permission checks, exception queues, and recovery procedures.*

V. Technical Architecture: MLOps & Infrastructure

The MLOps & Infrastructure sub-pillar assesses how procurement AI models are deployed, monitored, versioned, secured, and scaled in production. It defines how an Organization moves from unmanaged AI use toward controlled model access, model registries, validation gates, drift monitoring, infrastructure optimization, rollback procedures, cost controls, and human approval for material model changes.

1. *No structured internal capability exists to host, deploy, or manage AI models.*
2. *Controlled access is provided to approved cloud LLMs or secure GenAI wrappers for limited, low-risk use cases.*
3. *Dedicated ML engineering practices are established, including model registry, versioning, monitoring, validation, and rollback controls.*
4. *Hybrid infrastructure and model routing optimize latency, cost, data sensitivity, and risk across AI workloads.*
5. *Advanced MLOps supports monitored retraining and optimization through validation gates, drift testing, rollback procedures, cost controls, and human approval for material model changes.*



Sub-Pillar	Level 1: Reactive	Level 2: Active	Level 3: Operational	Level 4: Predictive	Level 5: Transformational / Autonomous
5.1 Composable Tech Stack	<i>Rigid monolith ERP; "Rip and Replace" is the only realistic transformation option.</i>	<i>Fragmented "best of breed" applications with limited synchronization between systems.</i>	<i>Integrated S2P suite with stable data interfaces, core modules, and controlled integration of AI-enabled features.</i>	<i>Composable, API-first architecture supports secure deployment of approved AI modules across procurement workflows.</i>	<i>AI-native modular architecture supports task-specific agents with governed permissions, audit logging, rollback mechanisms, and resilience controls.</i>
5.2 Integration & APIs	<i>Manual data entry is required between disconnected systems.</i>	<i>Batch CSV uploads are used to transfer data between systems.</i>	<i>(REST) API connectivity supports critical PO, invoice, supplier, contract, and sourcing data flows, with basic API governance in place.</i>	<i>Unified API layer connects ERP, S2P, CLM, finance, supplier-risk, and external data sources with access control and monitoring.</i>	<i>Event-driven integration enables real-time orchestration, with event validation, permission checks, exception queues, and recovery procedures.</i>
5.3 MLOps & Infrastructure	<i>No structured internal capability exists to host, deploy, or manage AI models .</i>	<i>Controlled access is provided to approved cloud LLMs or secure GenAI wrappers for limited, low-risk use cases.</i>	<i>Dedicated ML engineering practices are established, including model registry, versioning, monitoring, validation, and rollback controls.</i>	<i>Hybrid infrastructure and model routing optimize latency, cost, data sensitivity, and risk across AI workloads.</i>	<i>Advanced MLOps support monitored retraining and optimization through validation gates, drift testing, rollback procedures, cost controls, and human approval for material model changes.</i>



Pillar 6: Agentic Operating Model

Ensures that procurement roles, workflows, and decision rights are redesigned so humans and AI agents work together within clear accountability, escalation, exception-handling, and oversight rules. This pillar assesses whether the organization can move from isolated AI assistance toward governed human-agent collaboration, with clear role ownership, decision accountability, approval triggers, monitoring routines, and sage intervention mechanisms.

VI. Agentic Operating Model: Human-Agent Collaboration

The Human-Agent Collaboration sub-pillar assesses how procurement professionals interact with AI tools, co-pilots, and agents. It defines how an Organization moves from manual AI use toward shared work-in-progress visibility, human validation, decision accountability, approval triggers, monitoring routines, escalation paths, and off-switch authority.

1. *AI viewed as a tool to be “used” manually.*
2. *AI provides basic assistance, such as email drafts, summaries or document preparation.*
3. *Co-pilots assist with data processing, classification, extraction, and recommendation tasks, while humans validate outputs and retain decision accountability.*
4. *Agents plan and execute multi-step workflows within defined guardrails; humans review consequential decisions based on risk, value, and policy exceptions.*
5. *Humans govern agentic workflows by setting objectives, guardrails, approval triggers, monitoring routines, escalation paths, and off-switch authority.*

VI. Agentic Operating Model: Organizational Design (MVO)

The Organizational Design / MVO sub-pillar assesses how procurement roles and structures evolve as AI maturity increases. It defines how an Organization moves from hierarchy-based, headcount-dependent operations toward a lean, accountable operating model with clear role ownership, segregation of duties, workforce transition planning, and governed agentic workflows.

1. *Hierarchy-based operating model where procurement capacity scales mainly through additional headcount.*
2. *A digital or AI Centre of Excellence supports pilots, with emerging business ownership and cross-functional sponsorship.*
3. *Procurement roles begin to shift toward strategic advisory, supplier relationships, risk coordination, and exception management.*
4. *Role design, decision rights, and governance structures are redesigned to support human-agent collaboration across priority procurement workflows.*
5. *A lean, accountable operating model governs agentic workflows, with clear role ownership, segregation of duties, escalation paths, and workforce transition planning.*

VI. Agentic Operating Model: Workflow Redesign

The Workflow Redesign sub-pillar assesses how procurement processes are redesigned for AI-supported and agentic execution. It defines how an Organization moves from digitized manual processes toward standardized workflows, decision-criticality gates, exception handling, auditability, recoverability, and bounded agentic orchestration.

1. *Paper-based processes are digitized without significant process redesign.*
2. *Discrete tasks are automated with RPA bots, but end-to-end process redesign remains limited.*
3. *Workflows are standardized and optimized for AI-supported processing, with clear decision points, handoffs, and human validation steps.*



4. *End-to-end workflows are redesigned for AI-supported orchestration, with exception handling and decision-criticality gates.*
5. *Processes are designed natively for bounded agentic orchestration, with auditability, recoverability, escalation, and human accountability embedded.*

Sub-Pillar	Level 1: Reactive	Level 2: Active	Level 3: Operational	Level 4: Predictive	Level 5: Transformational / Autonomous
6.1 Human-Agent Collaboration	<i>AI viewed as a tool to be "used" manually.</i>	<i>AI provides basic assistance, such as email drafts, summaries or document preparation.</i>	<i>Co-pilots assist with data processing, classification, extraction, and recommendation tasks, while humans validate outputs and retain decision accountability.</i>	<i>Agents plan and execute multi-step workflows within defined guardrails; humans review consequential decisions based on risk, value, and policy exceptions.</i>	<i>Humans govern agentic workflows by setting objectives, guardrails, approval triggers, monitoring routines, escalation paths, and off-switch authority.</i>
6.2 Org. Design (MVO)	<i>Hierarchy-based operating model where procurement capacity scales mainly through additional headcount.</i>	<i>A digital or AI Centre of Excellence supports pilots, with emerging business ownership and cross-functional sponsorship.</i>	<i>Procurement roles begin to shift toward strategic advisory, supplier relationships, risk coordination, and exception management.</i>	<i>Role design, decision rights, and governance structures are redesigned to support human-agent collaboration across priority procurement workflows.</i>	<i>A lean, accountable operating model governs agentic workflows, with clear role ownership, segregation of duties, escalation paths, and workforce transition planning.</i>
6.3 Workflow Redesign	<i>Paper-based processes are digitized without significant process redesign.</i>	<i>Discrete tasks are automated with RPA bots, but end-to-end process redesign remains limited.</i>	<i>Workflows are standardized and optimized for ML, with clear decision points, handoffs, and human validation steps.</i>	<i>End-to-end workflows are redesigned for AI-supported orchestration, with exception handling and decision-criticality gates.</i>	<i>Processes are designed natively for bounded agentic orchestration, with auditability, recoverability, escalation, and human accountability embedded.</i>



Pillar 7: Talent & Culture

Ensures that procurement teams have the AI fluency, change readiness, trust, responsible-use mindset, and human judgment required to adopt AI-enabled procurement safely and effectively. This pillar assesses whether the organization can build the skills, behavior, confidence, and cultural conditions needed for responsible AI adoption, calibrated trust, and effective human-agent collaboration.

VII. Talent & Culture: AI Fluency & Skills

The AI Fluency & Skills sub-pillar assesses how procurement professionals develop the knowledge and capabilities needed to use AI effectively and responsibly. It defines how an Organization moves from low AI awareness toward role-based training, safe-use practices, output validation, explainability checks, scenario testing, and human-agent workflow supervision.

1. *AI awareness and data literacy is low across procurement.*
2. *Teams understand basic AI concepts and experiment cautiously with low-risk use cases.*
3. *Staff receive role-specific training on AI and ML features in S2P platforms.*
4. *Teams are proficient in prompt design, scenario testing, output validation, explainability checks, and responsible use.*
5. *Procurement professionals act as AI-enabled strategists who design, monitor, and improve human-agent workflows.*

VII. Talent & Culture: Change Management

The Change Management sub-pillar assesses how procurement prepares, supports, and engages teams through AI-enabled transformation. It defines how an Organization moves from limited communication and fear of role impact toward structured change plans, role-impact assessment, training, adoption metrics, feedback channels, employee voice, and continuous learning.

1. *No structured change plan exists; communication on role impact is limited, creating fear, resistance, or bypass behavior.*
2. *Individual champions lead informal pilots and share local lessons.*
3. *A formal change plan defines communications, role-impact assessment, training, adoption metrics, and feedback channels.*
4. *Incentives and performance goals reward responsible AI adoption, value creation, collaboration, and quality of use.*
5. *Continuous learning, role redesign, feedback loops, and employee voice are embedded into the AI-enabled operating model.*

VII. Talent & Culture: Trust & Mindset

The Trust & Mindset sub-pillar assesses how procurement teams build calibrated trust in AI-enabled tools, insights, and agentic workflows. It defines how an Organization moves from skepticism and black-box concerns toward evidence-based reliance, explainability, risk-based validation, responsible use, and documented human accountability.

1. *Strong skepticism exists; AI is seen as a threat, unreliable or black box.*
2. *Teams are curious and cautiously test AI in low-risk areas.*
3. *Teams see AI as a productivity enabler and routinely validate outputs before use.*



4. Teams rely on explainable AI insights for decision support, with risk-based validation and human judgment.
5. Trust is calibrated by risk, evidence, explainability, and documented human accountability for autonomous workflows.

Sub-Pillar	Level 1: Reactive	Level 2: Active	Level 3: Operational	Level 4: Predictive	Level 5: Transformational / Autonomous
7.1 AI Fluency & Skills	AI awareness and data literacy are low across procurement.	Teams understand basic AI concepts and experiment cautiously with low-risk use cases.	Staff receive role-specific training on AI and ML features in S2P platforms.	Teams are proficient in prompt design, scenario testing, output validation, explainability checks, and responsible use.	Procurement professionals act as AI-enabled strategists who design, monitor, and improve human-agent workflows.
7.2 Change Management	No structured change plan exists; communication on role impact is limited, creating fear, resistance, or bypass behavior.	Individual champions lead informal pilots and share local lessons.	A formal change plan defines communications, role-impact assessment, training, adoption metrics, and feedback channels.	Incentives and performance goals reward responsible AI adoption, value creation, collaboration, and quality of use.	Continuous learning, role redesign, feedback loops, and employee voice are embedded into the AI-enabled operating model.
7.3 Trust & Mindset	Strong skepticism exists; AI is seen as a threat, unreliable or black box.	Teams are curious and cautiously test AI in low-risk areas.	Teams see AI as a productivity enabler and routinely validate outputs before use.	Teams rely on explainable AI insights for decision support, with risk-based validation and human judgment.	Trust is calibrated by risk, evidence, explainability, and documented human accountability for autonomous workflows.



DETAILED BREAKDOWN OF EACH MATURITY LEVEL GUIDE



This section supports the maturity self-assessment by helping users select the level that best reflects their Organization's current practices.

For each pillar and sub-pillar, the five maturity levels are presented as guided assessment descriptions. Users should select the level that most closely reflects their current reality, based on observable practices, evidence, and consistent behavior rather than ambition.

When maturity varies across business units, regions, categories, or systems, users should select the level that represent the most consistently applied practice.

Pillar 1: Strategic Value & Alignment

Sub-Pillar	Level 1: Reactive	Level 2: Active	Level 3: Operational	Level 4: Predictive	Level 5: Transformational / Autonomous
1.1 AI Vision (North Star)	No formal AI strategy, executive mandate, or defined AI-related business outcomes.	Tactical AI pilots are launched, but they remain disconnected from an enterprise procurement roadmap.	A formal AI roadmap is documented, funded, and linked to measurable procurement value drivers.	The AI "North Star" is aligned with CXO priorities such as margin protection, resilience, risk avoidance, and supplier innovation.	AI-enabled procurement becomes a strategic value driver, with agentic capabilities operating within defined business, risk and governance guardrails.
1.2 Investment & ROI	No dedicated AI budget; AI-related spend is invisible, informal, or absorbed into general software costs.	Pilot-based funding supports isolated AI tools or experiments, with limited scalability.	A recurring AI budget is integrated into the procurement technology roadmap and governed through portfolio prioritization.	AI investment decisions are assessed through margin impact, productivity, cost-to-serve, and risk avoidance.	Investment is managed through inference economics: the cost, value, and risk of each AI-assisted decision or autonomous workflow.
1.3 Value Realization	Value is measured primarily through negotiated or realized cost savings.	Efficiency gains and cycle-time improvements measured in selected AI pilots.	Spend Under Management (SUM), compliance, adoption, and value leakage are tracked consistently.	Value measurement includes Predictive EBIT impact, risk avoidance, resilience, and decision velocity.	"Impact Per Head" measures value generated through human expertise and AI-enabled scale, without assuming proportional headcount growth.



I. Strategic Value & Alignment : AI vision (North Star)

Level	Select this level if	Evidence may include	Not yet at the next level if
Level 1: Reactive	Procurement has no formal AI strategy and AI is not linked to business objectives.	No AI roadmap, no executive mandate, ad hoc initiatives, manual purchasing priorities.	AI discussions exist, but no pilots, ownership, or documented priorities are in place.
Level 2: Active	AI pilots exist, but they are local, tactical, and disconnected from a procurement-wide roadmap.	Isolated GenAI or automation pilots, individual champions, informal use cases.	Pilots are not prioritized, governed, funded, or connected to business outcomes.
Level 3: Operational	Procurement has a documented AI roadmap, agreed priorities, and clear ownership.	AI roadmap, named owners, approved use cases, budget or resources, steering forum.	The roadmap does not yet cover the full procurement function or link clearly to enterprise outcomes.
Level 4: Predictive	AI strategy is aligned with business priorities such as margin protection, resilience, risk, and supplier value.	CXO alignment, outcome-based KPIs, predictive use cases, regular leadership reporting.	AI is still mainly seen as process improvement rather than strategic decision support.
Level 5: Transformational / Autonomous	AI-enabled procurement is part of the operating model, with agentic capabilities governed by business, risk, and accountability guardrails.	AI-enabled business model, approved autonomy principles, governance guardrails, executive-level value tracking.	Agentic capabilities exist but are not yet governed, scaled, or linked to enterprise value.



I. Strategic Value & Alignment : Investment and ROI

Level	Select this level if	Evidence may include	Not yet at the next level if
Level 1: Reactive	There is no dedicated AI budget and AI-related costs are informal or invisible.	No AI budget line, personal tool use, untracked software spend.	AI costs are not visible, owned, or linked to value.
Level 2: Active	Funding exists for isolated pilots, but investment is temporary or project-based.	Pilot funding, innovation grants, short-term tool trials, local business cases.	Funding is not recurring, prioritized, or connected to a portfolio view.
Level 3: Operational	AI investment is included in the procurement technology roadmap and linked to selected use cases.	Recurring budget, prioritized AI portfolio, investment governance, business-case templates.	ROI is measured inconsistently or only at pilot level.
Level 4: Predictive	AI investment decisions are assessed through business impact, productivity, risk avoidance, and cost-to-serve.	ROI model, risk-avoidance estimates, productivity metrics, cost-benefit reviews.	Investment decisions still focus mainly on tool cost or usage rather than outcomes.
Level 5: Transformational / Autonomous	AI investment is managed through inference economics and value-per-workflow thinking.	Cost-per-decision tracking, model-routing logic, AI usage monitoring, cost/value dashboards.	AI costs scale without clear controls, optimization, or value attribution.



I. Strategic Value & Alignment : Value Realization

Level	Select this level if	Evidence may include	Not yet at the next level if
Level 1: Reactive	Procurement value is measured mainly through negotiated or realized savings.	Savings reports, price variance tracking, limited operational metrics.	Value does not yet include speed, risk, compliance, adoption, or business impact.
Level 2: Active	AI value is measured through local efficiency gains or pilot-level improvements.	Cycle-time reductions, manual effort saved, pilot usage metrics.	Benefits remain isolated and are not integrated into broader performance management.
Level 3: Operational	Procurement tracks value more consistently across spend, compliance, adoption, and leakage.	Spend Under Management, adoption dashboards, leakage analysis, compliance metrics.	Value tracking does not yet include predictive risk, resilience, or business impact.
Level 4: Predictive	Value measurement includes risk avoidance, margin protection, resilience, and decision support.	Risk avoided, EBIT contribution estimates, supplier-risk prevention, predictive dashboards.	Predictive value is not yet validated or regularly reviewed with business stakeholders.
Level 5: Transformational / Autonomous	Value is assessed through human expertise combined with AI-enabled scale and productivity.	Impact Per Head, value-per-workflow, autonomous workflow value tracking, balanced scorecard.	Value is not yet linked to governed AI scale, adoption, and enterprise outcomes.



Pillar 2: Governance, Risk & Compliance (GRC)

Sub-Pillar	Level 1: Reactive	Level 2: Active	Level 3: Operational	Level 4: Predictive	Level 5: Transformational / Autonomous
2.1 Responsible AI (RAI)	Unmanaged; no awareness of algorithmic bias or supplier-impacting AI risk.	Ad-hoc reviews of vendor tool fairness.	Cross-functional AI Council defines Responsible AI rules, fairness criteria, and review requirements.	Fairness, drift, explainability, and outcome monitoring embedded for supplier-impacting decisions.	Responsible AI controls embedded across the AI lifecycle, with risk ownership, fairness thresholds, approval gates, monitoring, and escalation rules.
2.2 Policy & Compliance	Manual policy checks on a sample basis.	Basic digital compliance checklists.	Procurement policies embedded into S2P workflows with ownership, evidence fields, approval rules, and exception handling.	Compliance controls designed into AI use cases, including data protection, DPIA triggers, regulatory mapping, and vendor compliance requirements.	Governance defines automated policy-enforcement rules, approval thresholds, escalation routes, audit evidence, review frequency, incident ownership, and human override.
2.3 Oversight & Auditability	No logs of decision logic or AI inputs.	Static audit trails in legacy systems.	Digital audit trail records AI-human interactions, model versions, source data, prompts/outputs, approvals, overrides, and rationale.	Explainable AI (XAI) dashboards support review of supplier-impacting decisions, documented rationale, and escalation routes.	AI-assisted and agentic decisions are traceable, explainable, reviewable, and auditable, with audit-evidence ownership, retention rules, independent review, and supplier challenge support.



II. Governance, Risk & Compliance (GRC): Responsible AI (RAI)

Level	Select this level if	Evidence may include	Not yet at the next level if
Level 1: Reactive	AI use is unmanaged and bias or fairness risks are not assessed.	No Responsible AI policy, no bias review, unmanaged Shadow AI.	AI tools are used without visibility, ownership, or risk screening.
Level 2: Active	Some vendor or tool reviews occur, but Responsible AI practices are inconsistent.	Vendor questionnaires, ad hoc ethics reviews, basic risk indicators.	Reviews are not standardized or applied across procurement use cases.
Level 3: Operational	A cross-functional group defines Responsible AI expectations and fairness requirements.	AI Council, ethical sourcing guidelines, fairness checks, model/vendor register.	Responsible AI controls are not yet monitored in production.
Level 4: Predictive	AI outputs are monitored for fairness, drift, explainability, and supplier-impacting effects.	XAI dashboards, bias monitoring, drift alerts, documented review processes.	Monitoring does not yet trigger structured escalation or corrective action.
Level 5: Transformational / Autonomous	Responsible AI controls are embedded across the AI lifecycle with ownership, thresholds, approvals, and escalation.	Fairness thresholds, approval gates, lifecycle controls, audit evidence, incident ownership.	Controls exist but are not consistently embedded across agentic or autonomous workflows.



II. Governance, Risk & Compliance (GRC): Policy & Compliance

Level	Select this level if	Evidence may include	Not yet at the next level if
Level 1: Reactive	Compliance checks are manual, occasional, or performed after decisions are made.	Sample-based checks, spreadsheet controls, late audit findings.	Policies are not embedded into procurement workflows.
Level 2: Active	Basic digital checklists exist, but compliance still depends heavily on user discipline.	Digital forms, policy checklists, manual confirmations.	Systems do not verify evidence or block non-compliant workflows.
Level 3: Operational	Procurement policies are embedded into S2P workflows with required fields and approval rules.	Mandatory fields, workflow controls, preferred-supplier logic, approval routing.	Exceptions are not consistently monitored, evidenced, or reviewed.
Level 4: Predictive	Compliance controls are designed into AI use cases from the start.	DPIA triggers, data-protection checks, regulatory mapping, vendor compliance reviews.	Compliance is still reactive or not linked to AI use-case risk.
Level 5: Transformational / Autonomous	Governance defines automated enforcement rules, escalation, human override, incident ownership, and audit evidence.	Enforcement rules, approval thresholds, exception logs, incident workflows, human override process.	Technical enforcement exists without clear accountability or review rules.



II. Governance, Risk & Compliance (GRC): Oversight & Auditability

Level	Select this level if	Evidence may include	Not yet at the next level if
Level 1: Reactive	AI-related decisions are not logged or cannot be explained.	No logs, no model records, limited decision rationale.	Stakeholders cannot reconstruct why an AI-supported decision occurred.
Level 2: Active	Basic timestamps or system logs exist, but they lack context and decision rationale.	Static audit trails, approval timestamps, basic system records.	Logs do not capture AI inputs, outputs, versions, or human overrides.
Level 3: Operational	AI-human interactions and decisions are recorded with sufficient context.	Prompt/output logs, model versions, source data, approvals, overrides.	Audit evidence is not yet easily reviewable or linked to decision rationale.
Level 4: Predictive	Explainability supports review of supplier-impacting decisions and escalation.	XAI dashboards, documented rationale, counterfactual explanations, review routes.	Explainability is available but not embedded into governance routines.
Level 5: Transformational / Autonomous	AI-assisted and agentic decisions are traceable, explainable, reviewable, and auditable.	Evidence ownership, retention rules, independent review, supplier challenge support, audit-ready logs.	Auditability exists technically but not yet as a governed assurance process.



Pillar 3: Data Excellence

Sub-Pillar	Level 1: Reactive	Level 2: Active	Level 3: Operational	Level 4: Predictive	Level 5: Transformational/ Autonomous
3.1 Data Quality & Integrity	Manual cleanup for RFPs or audits.	Batch cleaning once per quarter/year.	System-enforced validation controls key procurement fields, including supplier identity, category codes, contract references, payment terms, and risk status.	Real-time validation and anomaly detection flag data-quality issues, with review triggers for supplier-impacting or high-risk records.	Self-healing data agents correct or enrich records within governed rules, confidence thresholds, lineage, exception review, and rollback controls.
3.2 Unified Data Model	Siloed data across ERP, CLM, and S2P.	Data lake used for retrospective reporting.	A unified procurement data layer connects key categories, supplier records, contracts, and spend data using common taxonomy and ownership rules.	Unified visibility connects intake, sourcing, contracts, supplier performance, and risk data for predictive analysis	A governed procurement intelligence layer provides trusted, lineage-based, agent-ready data for cross-functional workflows.
3.3 Data Enrichment & Pipelines	Manually enriched supplier records.	Basic external data feeds are connected, with initial checks on source reliability and permitted data use.	Data refresh, versioning, lineage, and enrichment pipelines are standardized for priority procurement AI use cases.	AI-supported imputation and enrichment include confidence scores, source evidence, and review triggers for consequential supplier data.	Real-time external signals are validated, governed, and integrated into agent-ready data pipelines with proportional controls for supplier-impacting decisions.



III. Data Excellence: Data Quality & Integrity

Level	Select this level if	Evidence may include	Not yet at the next level if
Level 1: Reactive	Data is cleaned manually only when needed for an RFP, report, or audit.	Manual Excel corrections, duplicate suppliers, missing fields.	Data issues are not prevented at source.
Level 2: Active	Periodic cleaning occurs, but data quality declines between refresh cycles.	Quarterly cleansing, IT scripts, basic deduplication rules.	Data standards are not enforced consistently in workflows.
Level 3: Operational	Key procurement fields are validated at the point of entry.	Mandatory category codes, supplier identity checks, controlled payment terms, risk-status fields.	Validation does not yet detect anomalies in real time.
Level 4: Predictive	Real-time checks detect anomalies and trigger review for high-risk records.	Anomaly alerts, data-quality dashboards, supplier-risk data checks.	Issues are flagged but not yet corrected through governed automation.
Level 5: Transformational / Autonomous	Trusted, lineage-based, and agent-ready procurement data supports cross-functional workflows and autonomous or semi-autonomous decision-making.	Governed procurement intelligence layer, data lineage, agent-ready datasets, cross-functional workflow integration.	Data is not yet fully trusted, traceable, or ready to support agent-enabled workflows across functions.



III. Data Excellence: Unified Data Model

Level	Select this level if	Evidence may include	Not yet at the next level if
Level 1: Reactive	Procurement, finance, legal, and supplier data sit in disconnected systems.	Multiple ERPs, spreadsheets, separate contract folders, manual reconciliation.	No common taxonomy or shared data ownership exists.
Level 2: Active	A data lake or reporting layer exists, but it is mainly used retrospectively.	Historical dashboards, periodic reports, limited integration.	Data is not used for live procurement decisions.
Level 3: Operational	A unified procurement data layer connects key spend, supplier, contract, and category data.	Common taxonomy, linked ERP/S2P/CLM data, ownership rules.	Visibility is not yet extended across risk and performance signals.
Level 4: Predictive	Data connects intake, sourcing, contracts, supplier performance, and risk for predictive analysis.	Cross-process dashboards, external risk feeds, supplier-performance integration.	Predictive insights are not yet based on trusted, agent-ready data.
Level 5: Transformational / Autonomous	Trusted and governed procurement data supports autonomous or semi-autonomous decisions across procurement processes.	Real-time integrated data, agent-ready datasets, automated recommendations, auditable decision rules.	Data still requires manual validation, or automation is not yet trusted and embedded across procurement operations.



III. Data Excellence: Data Enrichment & Pipelines

Level	Select this level if	Evidence may include	Not yet at the next level if
Level 1: Reactive	Procurement, finance, legal, and supplier data sit in disconnected systems.	Multiple ERPs, spreadsheets, separate contract folders, manual reconciliation.	No common taxonomy or shared data ownership exists.
Level 2: Active	A data lake or reporting layer exists, but it is mainly used retrospectively.	Historical dashboards, periodic reports, limited integration.	Data is not used for live procurement decisions.
Level 3: Operational	A unified procurement data layer connects key spend, supplier, contract, and category data.	Common taxonomy, linked ERP/S2P/CLM data, ownership rules.	Visibility is not yet extended across risk and performance signals.
Level 4: Predictive	Data connects intake, sourcing, contracts, supplier performance, and risk for predictive analysis.	Cross-process dashboards, external risk feeds, supplier-performance integration.	Predictive insights are not yet based on trusted, agent-ready data.
Level 5: Transformational / Autonomous	A governed procurement intelligence layer provides trusted, lineage-based data for agentic workflows.	Agent-ready data layer, lineage, access rules, common semantics, trusted data products.	Data supports visibility but not yet controlled autonomous workflows.



Pillar 4: S2P Process Innovation

Sub-Pillar	Level 1: Reactive	Level 2: Active	Level 3: Operational	Level 4: Predictive	Level 5: Transformational / Autonomous
4.1 Intelligent Intake	Email/Slack based; unstructured requests.	Web-based forms; rigid routing logic.	Guided buying portals route requests to preferred channels and eligible suppliers, while capturing required category, budget, and compliance data.	Conversational intake interprets user needs, validates policy and budget context, and recommends the appropriate sourcing route	Agentic intake executes standard purchases within approved thresholds, supplier-eligibility rules, budget controls, and escalation triggers for exceptions
4.2 Sourcing & Bid Opt.	Paper/PDF RFPs; manual bid analysis.	E-sourcing tools for bid collection.	ML supports spend classification, supplier baselining, and sourcing analysis, while humans retain accountability for selection decisions	AI supports RFP drafting and bid scoring using documented criteria, explainability, and reviewer sign-off for supplier-impacting recommendations.	Agentic sourcing manages routine, low-risk sourcing cycles within approved negotiation parameters, with human approval for awards, exclusions, exceptions, or policy deviations..
4.3 Contract Intelligence	Physical PDF storage; tribal knowledge.	Searchable digital repository with alerts.	NLP extracts key contract metadata and obligations, with validation for critical fields such as expiry, payment terms, liability, renewal, and compliance clauses	AI identifies risky clauses and suggests redlines using approved legal playbooks, with risk-based routing and authorized reviewer sign-off.	Living contracts are monitored against regulatory, performance, and risk changes; agents flag, draft, and route amendments for authorized legal and procurement approval.



IV. S2P Process Innovation: Intelligent Intake

Level	Select this level if	Evidence may include	Not yet at the next level if
Level 1: Reactive	Procurement requests arrive through unstructured emails, messages, or spreadsheets.	Email requests, missing requirements, manual triage, inconsistent routing.	No structured front door exists.
Level 2: Active	Digital forms or portals exist, but they are rigid and often bypassed.	Web forms, ticketing tools, manual routing, stakeholder complaints.	Users still struggle to select the right buying route.
Level 3: Operational	Guided buying routes requests to preferred channels and captures required data.	Preferred-supplier routing, category fields, budget checks, compliance data capture.	Intake does not yet interpret user intent or policy context dynamically.
Level 4: Predictive	Conversational intake interprets user needs and recommends the appropriate sourcing route.	AI intake assistant, policy validation, budget/category checks, route recommendations.	The system recommends but does not execute standard requests.
Level 5: Transformational / Autonomous	Agentic intake executes standard purchases within approved thresholds and exception rules.	Automated PO creation, supplier eligibility checks, budget controls, escalation triggers.	Autonomous execution is not yet bounded by clear approval and risk rules.



IV. S2P Process Innovation: Sourcing & Bid Optimization

Level	Select this level if	Evidence may include	Not yet at the next level if
Level 1: Reactive	RFPs and bid analysis are manual and document-based.	PDF bids, spreadsheet comparisons, subjective scoring.	Digital bid collection is not standardized.
Level 2: Active	E-sourcing tools collect bids, but evaluation remains mostly manual.	Bid portals, digital submissions, manual scoring templates.	Supplier analysis is not supported by structured data or ML.
Level 3: Operational	ML supports spend classification, supplier baselining, and sourcing analysis.	Supplier dashboards, spend classification, performance/risk inputs.	Humans lack explainable support for bid scoring or recommendations.
Level 4: Predictive	AI supports RFP drafting and bid scoring using documented criteria and reviewer sign-off.	AI-drafted RFPs, scoring models, explainability, reviewer approvals.	Supplier-impacting recommendations are not yet governed by decision criticality.
Level 5: Transformational / Autonomous	Agentic sourcing manages routine, low-risk sourcing cycles within approved negotiation parameters.	Automated negotiation parameters, supplier eligibility rules, award approval gates.	Agents cannot yet operate safely without human intervention on routine low-risk cases.



IV. S2P Process Innovation: Contract Intelligence

Level	Select this level if	Evidence may include	Not yet at the next level if
Level 1: Reactive	Contracts are stored as PDFs or files with limited searchability or term visibility.	Shared folders, scanned PDFs, manual renewal tracking.	Contract metadata is not systematically captured.
Level 2: Active	Contracts are stored in a searchable repository with basic alerts.	CLM repository, expiry alerts, searchable records.	Key clauses and obligations are not extracted into structured fields.
Level 3: Operational	NLP extracts key metadata and obligations from contracts with validation for critical fields.	Extracted expiry dates, payment terms, liability clauses, obligation tracking.	Redlining and risk assessment are not yet AI-supported.
Level 4: Predictive	AI identifies risky clauses and suggests redlines using approved playbooks and reviewer sign-off.	Clause playbooks, risk scoring, suggested redlines, legal/procurement review.	Contracts are not yet monitored against live regulatory, risk, or performance changes.
Level 5: Transformational / Autonomous	Living contracts are monitored; agents flag, draft, and route amendments for authorized approval.	Regulatory monitoring, amendment drafts, routing workflows, approval history.	Agents cannot yet support ongoing contract monitoring within approved controls.



Pillar 5: Technical Architecture

Sub-Pillar	Level 1: Reactive	Level 2: Active	Level 3: Operational	Level 4: Predictive	Level 5: Transformational / Autonomous
5.1 Composable Tech Stack	Rigid monolith ERP; "Rip and Replace" only.	Fragmented "best of breed" apps; limited synchronization.	Integrated S2P suite with stable data interfaces, core modules, and controlled integration of AI-enabled features.	Composable, API-first architecture supports secure deployment of approved AI modules across procurement workflows.	AI-native modular architecture supports task-specific agents with governed permissions, audit logging, rollback, and resilience controls.
5.2 Integration & APIs	Manual data entry between silos.	Batch CSV uploads between systems.	REST API connectivity supports critical PO, invoice, supplier, contract, and sourcing data flows with basic API governance.	Unified API layer connects ERP, S2P, CLM, finance, supplier-risk, and external data sources with access control and monitoring.	Event-driven integration mesh enables real-time orchestration with event validation, permission checks, exception queues, and recovery procedures.
5.3 MLOps & Infrastructure	No internal AI hosting or engineering.	Controlled access to approved cloud LLMs or secure GenAI wrappers for limited, low-risk use cases.	Dedicated ML engineering practices, model registry, versioning, monitoring, validation, and rollback controls are established.	Hybrid infrastructure and model routing optimize latency, cost, data sensitivity, and risk across AI workloads.	Autonomous MLOps supports monitored retraining and optimization through validation gates, drift testing, rollback, cost controls, and human approval for material model changes.



V. Technical Architecture: Composable Tech Stack

Level	Select this level if	Evidence may include	Not yet at the next level if
Level 1: Reactive	Procurement relies on rigid legacy systems with limited flexibility.	Monolithic ERP, heavy customisation, manual workarounds.	Systems cannot easily connect to new tools or data sources.
Level 2: Active	Multiple best-of-breed tools exist, but they are fragmented.	Separate sourcing, contract, risk, or analytics tools with limited sync.	Data and workflows do not move smoothly across systems.
Level 3: Operational	A core S2P suite supports standard procurement processes and controlled AI features.	Integrated modules, stable interfaces, approved AI features.	Architecture is not yet modular enough for rapid AI integration.
Level 4: Predictive	API-first architecture supports secure deployment of approved AI modules.	API catalogue, AI modules, security review, controlled deployment.	Modules are not yet orchestrated with resilience and rollback controls.
Level 5: Transformational / Autonomous	AI-native modular architecture supports task-specific agents with permissions, logging, rollback, and resilience.	Agent permissions, audit logs, rollback plans, resilience testing.	Agent capabilities exist but are not yet technically governed at scale.



V. Technical Architecture: Integration & APIs

Level	Select this level if	Evidence include	may	Not yet at the next level if
Level 1: Reactive	Data is moved manually between procurement systems.	Copy-paste, re-keying, manual uploads.		Basic system-to-system connections are not in place.
Level 2: Active	Batch integrations exist, but data is delayed or incomplete.	CSV uploads, nightly syncs, point-in-time reports.		Critical procurement flows are not connected through APIs.
Level 3: Operational	REST APIs support critical PO, invoice, supplier, contract, and sourcing flows.	API connections, integration documentation, basic monitoring.		API governance and cross-system monitoring remain limited.
Level 4: Predictive	A unified API layer connects core procurement, finance, risk, and external data sources.	API gateway, access control, integration monitoring, shared data services.		Real-time event orchestration is not yet controlled or recoverable.
Level 5: Transformational / Autonomous	Event-driven integration enables real-time orchestration with validation, permissions, exceptions, and recovery.	Event mesh, permission checks, exception queues, recovery playbooks.		Real-time orchestration exists without sufficient failure handling or auditability.



V. Technical Architecture: MLOps & Infrastructure

Level	Select this level if	Evidence may include	Not yet at the next level if
Level 1: Reactive	AI use occurs without internal hosting, engineering, or IT oversight.	Public AI tools, personal accounts, no model records.	There is no controlled environment for low-risk AI use.
Level 2: Active	Approved cloud LLMs or secure GenAI wrappers support limited low-risk use cases.	Secure chatbot, approved GenAI access, usage rules.	Models are not versioned, monitored, or validated systematically.
Level 3: Operational	Model registry, versioning, monitoring, validation, and rollback controls are established.	Model registry, monitoring dashboards, validation tests, rollback process.	Infrastructure is not yet optimised for cost, latency, risk, and scale.
Level 4: Predictive	Hybrid infrastructure and model routing optimise cost, performance, data sensitivity, and risk.	Model routing, cost dashboards, latency monitoring, data-sensitivity rules.	Retraining and optimisation are not yet governed as continuous lifecycle processes.
Level 5: Transformational / Autonomous	Autonomous MLOps supports monitored retraining and optimisation through validation gates and human approval for material changes.	Drift testing, retraining gates, rollback, cost controls, approval records.	Models can adapt technically but not yet safely or accountably at scale.



Pillar 6: Agentic Operating Model

Sub-Pillar	Level 1: Reactive	Level 2: Active	Level 3: Operational	Level 4: Predictive	Level 5: Transformational / Autonomous
6.1 Human-Agent Collaboration	AI viewed as a tool to be "used" manually.	AI provides basic assistance, such as email drafts or summaries.	Co-pilots assist with data processing, classification, extraction, and recommendation tasks, while humans validate outputs and retain decision accountability.	Agents plan and execute multi-step workflows within defined guardrails; humans review consequential decisions based on risk, value, and policy exceptions.	Humans govern agentic workflows by setting objectives, guardrails, approval triggers, monitoring routines, escalation paths, and off-switch authority.
6.2 Org. Design (MVO)	Hierarchy-based; headcount scales with spend.	A digital or AI Centre of Excellence supports pilots, with emerging business ownership and cross-functional sponsorship.	Procurement roles shift toward strategic advisory, supplier relationships, risk orchestration, and exception management.	Procurement roles shift toward strategic advisory, supplier relationships, risk orchestration, and exception management.	A lean, accountable operating model governs agentic workflows, with clear role ownership, segregation of duties, escalation paths, and workforce transition planning..
6.3 Workflow Redesign	Paper-based processes "paved over" digitally.	Discrete tasks are automated with RPA bots, but end-to-end process redesign remains limited.	Workflows are standardized and optimized for ML, with clear decision points, handoffs, and human validation steps.	End-to-end workflows are redesigned for AI-supported orchestration, with exception handling and decision-criticality gates.	Processes are designed natively for bounded agentic orchestration, with auditability, recoverability, escalation, and human accountability embedded..



VI. Agentic Operating Model: Human Collaboration

Level	Select this level if	Evidence may include	Not yet at the next level if
Level 1: Reactive	AI is used manually as a separate tool, if used at all.	Copy-paste into tools, manual checking, no workflow integration.	AI does not assist structured procurement tasks.
Level 2: Active	AI assists with simple drafting or summaries, but waits for human prompts.	Email drafting, meeting summaries, basic GenAI assistance.	AI does not yet support multi-step procurement work.
Level 3: Operational	Co-pilots assist with classification, extraction, analysis, and recommendations, while humans validate outputs.	Co-pilot features, extraction tools, review workflows.	Humans do not yet collaborate with agents in multi-step workflows.
Level 4: Predictive	Agents plan and execute multi-step workflows within guardrails, with human review for consequential decisions.	Human approval gates, exception workflows, decision-criticality rules.	Approvals are not yet meaningful, risk-based, or consistently applied.
Level 5: Transformational / Autonomous	Humans govern agentic workflows by setting objectives, guardrails, approval triggers, monitoring routines, escalation paths, and off-switch authority.	Agent governance routines, monitoring dashboards, escalation paths, off-switch owner.	Humans supervise agents informally without clear accountability or control mechanisms.



VI. Agentic Operating Model: Organizational Design (MVO)

Level	Select this level if	Evidence may include	Not yet at the next level if
Level 1: Reactive	Procurement structure is hierarchical and growth depends mainly on headcount.	Manual workload, siloed teams, headcount-based capacity planning.	Automation is not yet organized or sponsored.
Level 2: Active	A digital or AI Center of Excellence supports pilots, but business ownership is still emerging.	Automation Center of Excellence, pilot support, early sponsorship.	AI remains a technical initiative rather than operating-model change.
Level 3: Operational	Roles are redesigned as transactional activities are increasingly automated.	Strategic/transactional split, role updates, AI-assisted decision support.	Role changes are not yet linked to supplier strategy, risk, or exceptions.
Level 4: Predictive	Procurement roles shift toward advisory work, supplier relationships, risk, and exception management.	New role profiles, risk ownership, supplier advisory routines.	Human accountability for agentic workflows is not yet clearly assigned.
Level 5: Transformational / Autonomous	A lean, accountable operating model governs agentic workflows with role ownership, segregation of duties, escalation, and workforce transition planning.	Role ownership, RACI, segregation of duties, transition plan, agent governance model.	The model is lean but not yet accountable, inclusive, or sufficiently governed.



VI. Agentic Operating Model: Workflow Redesign

Level	Select this level if	Evidence may include	Not yet at the next level if
Level 1: Reactive	Manual processes are simply digitized without redesign.	Digital forms duplicating email approvals, manual handoffs.	Tasks are not automated or simplified.
Level 2: Active	RPA automates discrete tasks, but end-to-end redesign remains limited.	Bots for data entry, invoice copying, basic routing.	Process bottlenecks remain across handoffs.
Level 3: Operational	Workflows are standardized for ML, with clear decision points, handoffs, and validation steps.	Standard workflows, ML-ready inputs, documented handoffs.	Workflows do not yet use predictive orchestration or risk-based exception handling.
Level 4: Predictive	End-to-end workflows are redesigned for AI-supported orchestration with exception handling and decision-criticality gates.	Orchestrated workflows, exception rules, risk-based routing.	Processes are not yet designed natively for bounded agentic execution.
Level 5: Transformational / Autonomous	Processes are designed for bounded agentic orchestration, with auditability, recoverability, escalation, and human accountability embedded.	Agentic workflows, audit logs, recovery plans, escalation paths.	Agentic execution lacks sufficient control, transparency, or rollback.



Pillar 7: Talent & Culture

<i>Sub-Pillar</i>	<i>Level 1: Reactive</i>	<i>Level 2: Active</i>	<i>Level 3: Operational</i>	<i>Level 4: Predictive</i>	<i>Level 5: Transformational / Autonomous</i>
7.1 AI Fluency & Skills	No awareness; data literacy is low.	Workflows are standardized and optimized for ML, with clear decision points, handoffs, and human validation steps..	Staff receive role-specific training on ML features in S2P platforms.	Teams are proficient in prompt design, scenario testing, output validation, explainability checks, and responsible use.	Procurement professionals act as AI-enabled strategists who design, monitor, and improve human-agent workflows.
7.2 Change Management	No structured change plan; limited communication on role impact, creating fear, resistance, or bypass behavior.	Individual champions lead informal pilots and share local lessons.	A formal change plan defines communications, role-impact assessment, training, adoption metrics, and feedback channels.	Incentives and performance goals reward responsible AI adoption, value creation, collaboration, and quality of use.	Continuous learning, role redesign, feedback loops, and employee voice are embedded into the AI-enabled operating model.
7.3 Trust & Mindset	Extreme skepticism; AI is seen as a threat or black box.	Curiosity; cautious testing in low-risk areas.	Teams see AI as a productivity enabler and routinely validate outputs before use.	Teams rely on explainable AI insights for decision support, with risk-based validation and human judgment.	Trust is calibrated by risk, evidence, explainability, and documented human accountability for autonomous workflows.



VII. Talent & Culture: AI Fluency & Skills

Level	Select this level if	Evidence may include	Not yet at the next level if
Level 1: Reactive	AI awareness and data literacy are low across procurement.	No AI training, low confidence, reliance on manual methods.	Teams do not understand safe or appropriate AI use.
Level 2: Active	Teams understand basic AI concepts and low-risk uses.	Awareness sessions, safe-use guidance, early champions.	Skills are not yet role-specific or embedded in workflows.
Level 3: Operational	Staff receive role-specific training on AI and ML features in procurement platforms.	Training plans, certifications, S2P AI module training.	Users cannot yet validate outputs or challenge AI recommendations effectively.
Level 4: Predictive	Teams can design prompts, test scenarios, validate outputs, and use explainability checks.	Prompt libraries, validation checklists, scenario testing, explainability use.	Skills are not yet applied to supervising agentic workflows.
Level 5: Transformational / Autonomous	Procurement professionals design, monitor, and improve human-agent workflows.	Agent supervision skills, workflow design capability, continuous improvement routines.	AI expertise is technical only and not embedded in procurement judgment.



VII. Talent & Culture: Change Management

Level	Select this level if	Evidence may include	Not yet at the next level if
Level 1: Reactive	There is no structured change plan and role-impact communication is limited.	Job-loss concerns, resistance, bypass behavior, unclear messaging.	AI adoption is not supported by communication or training.
Level 2: Active	Individual champions lead informal pilots and share local lessons.	Lunch-and-learn sessions, champion network, informal success stories.	Lessons are not scaled or integrated into a formal change plan.
Level 3: Operational	A formal change plan includes communication, role-impact assessment, training, adoption metrics, and feedback channels.	Change roadmap, adoption dashboard, FAQs, training, feedback loops.	Change activities are not yet linked to incentives or performance expectations.
Level 4: Predictive	Incentives and goals reward responsible AI adoption, value creation, collaboration, and quality of use.	Performance objectives, responsible-use criteria, adoption targets.	Adoption is encouraged but not yet supported by continuous learning and role redesign.
Level 5: Transformational / Autonomous	Continuous learning, role redesign, feedback loops, and employee voice are embedded into the AI-enabled operating model.	Learning routines, role redesign, employee feedback, continuous improvement forums.	Change is still program-led rather than embedded into everyday work.



VII. Talent & Culture: Trust & Mindset

Level	Select this level if	Evidence may include	Not yet at the next level if
Level 1: Reactive	AI is seen as a threat, black box, or unreliable tool.	Low trust, double-checking everything, resistance to AI outputs.	Teams are not yet willing to test AI in low-risk areas.
Level 2: Active	Teams are curious and test AI in low-risk tasks.	Drafting, research, summaries, cautious experimentation.	Trust remains personal and not supported by evidence or explainability.
Level 3: Operational	Teams see AI as a productivity enabler and routinely validate outputs before use.	Output checks, user adoption, productivity examples, validation routines.	AI is not yet trusted for decision support in higher-risk contexts.
Level 4: Predictive	Teams rely on explainable AI insights for decision support, with risk-based validation and human judgment.	XAI use, decision-support dashboards, review criteria.	Trust is not yet calibrated for autonomous or agentic workflows.
Level 5: Transformational / Autonomous	Trust is calibrated by risk, evidence, explainability, and documented human accountability.	Risk-based autonomy rules, accountability records, trust metrics, override logs.	Teams either over-trust or under-trust AI without risk-based calibration.



Definitions

Term	Definition for this guide
AI in procurement	Use of AI techniques within procurement and supply processes, including sourcing, contract management, spend analysis, supplier risk, purchase-to-pay automation, and decision support [1].
Generative AI	AI systems that generate text, code, images, summaries, classifications, or structured outputs from prompts and context. In procurement, typical uses include RFP drafting, contract summarization, supplier research, market synthesis, and stakeholder intake.
Agentic AI / AI agent	An AI-enabled system that can plan and execute multi-step tasks toward a goal, often using tools, APIs, memory, and workflow permissions. Autonomy should be bounded by policy, risk thresholds, and human approval rules.
Responsible AI (RAI)	A governance approach for designing, deploying, and monitoring AI so it supports human-centric values, fairness, transparency, privacy, robustness, accountability, and risk management [2][3].
AI governance	The policies, roles, decision rights, controls, evidence, and monitoring practices used to manage AI risks and opportunities across the lifecycle. ISO/IEC 42001 frames this through an AI management system [5].
Explainable AI (XAI)	Methods and artefacts that help users understand the factors, data, and logic influencing an AI output, recommendation, or decision.
Human-in-the-loop	A control model where humans review, approve, override, or escalate AI outputs before consequential actions are executed.
Model drift	Degradation or behavioral change in AI performance when input data, supplier markets, user behavior, or external conditions change over time.
Data lineage	Traceability from final output back to source records, transformations, model versions, prompts, and human interventions.
Shadow AI	Use of unapproved AI tools or accounts by employees outside organizational visibility, security review, or data-protection controls.
Inference economics	Management of the unit cost and business value of AI usage, including tokens, compute, model routing, latency, and cost per completed workflow.
Spend Under Management (SUM)	The share of Organizational spend influenced or controlled through procurement governance, preferred channels, contracts, or approved buying routes.
Impact Per Head	Total procurement value generated per procurement FTE, including savings, risk avoidance, productivity, innovation, and compliance value.
Source-to-Pay (S2P)	The end-to-end procurement process from demand/intake, sourcing, supplier selection, contracting, purchasing, receiving, invoicing, and payment.
Minimum Viable Organization (MVO)	A lean operating model where a small human team governs a larger digital workforce of automated workflows and AI agents.



External Sources

The table below links the PAIMT pillars to external references that can be used to evidence, challenge, or refine the model during client workshops, governance reviews, or roadmap design.

PAIMT pillar	External source alignment
1. Strategic Value & Alignment	McKinsey highlights AI and advanced analytics for commodity forecasting, risk assessment, performance optimization, talent sourcing, supplier negotiations, and RFP engines [7].
2. Governance, Risk & Compliance	EU AI Act uses a risk-based framework; NIST AI RMF supports AI risk management; OECD AI Principles emphasize trustworthy, human-centric AI; ISO/IEC 42001 provides an AI management-system approach [2][3][4][5].
3. Data Excellence	NIST and ISO governance concepts require traceability, reliability, monitoring, and lifecycle controls. OECD public-procurement analysis highlights supplier information analysis using NLP and external data [3][5][6].
4. S2P Process Innovation	CIPS describes AI applications across contract management, sourcing, ML, NLP, and RPA; OECD notes use cases for specifications, bid assessment, fair pricing, supplier selection, and compliance [1][6].
5. Technical Architecture	OWASP LLM guidance identifies security risks such as prompt injection, insecure output handling, training-data poisoning, model denial of service, supply-chain vulnerabilities, and excessive agency [9].
6. Agentic Operating Model	NIST AI RMF and NIST Generative AI Profile support lifecycle risk management; agentic workflows need role clarity, monitoring, and escalation [3][10].
7. Talent & Culture	OECD principles include human agency, oversight, transparency, fairness, privacy, and accountability; CIPS highlights skills development and AI applications for procurement professionals [1][2].



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