



TIO

The Intelligent Organization

Executive AI & Automation Vocabulary

The terms senior leaders need to understand, question, and explain.

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Executive Brief

Why this vocabulary belongs in the TIO Library

Bottom line

Senior leaders do not need to become AI engineers. They do need language that is precise enough to support accountable decisions about strategy, work, data, technology, risk, people, and value.

This version deliberately strengthens the definitions. Each entry now reads less like a thin glossary line and more like an executive dictionary entry: what the term means, how to use it, why it matters, how it is commonly misused, and what a leader should ask before accepting the term in a proposal.

TIO point of view

Vocabulary should reduce noise. Every term in this guide is included because it affects executive judgment, accountability, value, trust, or the organization’s ability to turn AI and automation into better work.

Lexicographic influence

This guide was informed by the discipline of dictionary writing: clear headwords, concise definitions, sense distinctions, usage notes, related words, and examples of practical use. It does not reproduce dictionary definitions. It adapts the discipline of dictionary structure to the needs of senior leaders.

TIO domain crosswalk

Vocabulary lens	Primary TIO connection
Models and AI capability	Technology, supported by Leadership and Data
Data and knowledge	Data
Assistants, agents, and automation	Factory and Technology
Risk, trust, and governance	Leadership, applied across every domain
Value, adoption, and transformation	Factory, People, and Leadership

The vocabulary lenses are teaching groupings. They are not a replacement for the five TIO Capability Domains: Leadership, Data, Technology, Factory, and People.

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How to Use This Guide

A dictionary for executive decisions, not technical memorization

- Use each definition to clarify what a proposal, vendor, platform, or internal team actually means.
- Use the leader question to test whether the term is being used with enough precision for a decision.
- Use the “Do not confuse” line to surface hidden assumptions before they become design or governance defects.
- Use related language to move from one term to the adjacent concepts leaders must understand.
- Use the Vocabulary in AI Fluency sessions, governance reviews, AI Use Case selection, vendor reviews, policy development, and Evidence Gates.

The aim is shared executive meaning. When leaders, technology teams, risk teams, vendors, and business owners use the same term differently, the organization may look aligned while making incompatible decisions.

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The Essential Vocabulary

Dictionary-inspired definitions with TIO decision value

Each term is written in a consistent executive-entry format: kind, TIO definition, executive sense, why it matters, common misuse, leader question, and related language.

01. Basic technology

This group of terms supports a common executive decision area. The purpose is not technical vocabulary for its own sake. The purpose is better judgment.

Artificial Intelligence

Kind	noun; broad field and class of systems
TIO definition	Computer systems, methods, and applications that perform work normally requiring human-like perception, language, pattern recognition, prediction, generation, planning, or decision support. In TIO, AI is not treated as a magic category of technology. It is a capability ingredient that must be connected to strategy, data, work, controls, people, and value.
Executive sense	Use this term for the broad field or for systems that imitate, augment, or automate parts of intelligent work. Do not use it as a blanket label for every software feature, rule, report, or automation.
Why it matters	The term is often used too loosely. If leaders cannot say what kind of AI is involved and what work it affects, they cannot judge value, risk, ownership, or evidence.
Do not confuse	Assuming that all AI is generative AI, all AI is high risk, or all AI is equally capable.
Leader question	What task is the system being asked to perform, and where does human judgment remain required?
Related language	Generative AI; Machine Learning; AI Application; AI Use Case

Machine Learning

Kind	noun; AI method
TIO definition	A way of building AI systems by training them on examples so they can detect patterns, classify information, make predictions, or recommend actions without being explicitly programmed for every possible case.
Executive sense	Use this term when the system learns from data rather than only following fixed human-written rules.
Why it matters	Machine learning quality depends on the data, task fit, training process, operating context, and monitoring after deployment. A model can perform well in development and drift or fail in real operation.
Do not confuse	Treating machine learning as self-correcting or assuming it understands the business problem because it learned statistical patterns.
Leader question	What data was used, what pattern is being learned, and how do we know it works in our context?
Related language	Training; Model; Evaluation; Data Quality

Generative AI

Kind	noun; AI system type
TIO definition	AI that produces new content or structured output in response to instructions, examples, data, or prompts. The output may include text, code, images, audio, video, summaries, plans, analysis, or synthetic records.
Executive sense	Use this term when the system is creating or transforming content rather than only classifying, searching, or calculating.
Why it matters	Generative output can be useful, fluent, and fast, but it can also be unsupported, incomplete, biased, confidential, or wrong. Its value depends on grounding, review, workflow design, and controls.
Do not confuse	Assuming confident language is evidence, or treating a generated draft as a verified answer.
Leader question	Where must the output be reviewed, verified, cited, or grounded before use?
Related language	Large Language Model; Hallucination; Grounding; Human Oversight

Large Language Model

Kind	noun; model class
TIO definition	A model trained on very large collections of text, code, and related material so it can predict, generate, summarize, translate, classify, reason over, or transform language-based inputs and outputs.
Executive sense	Use this term for the model engine behind many chatbots, assistants, copilots, coding tools, and knowledge applications.
Why it matters	An LLM can produce useful work, but it does not hold accountability, understand consequences, or know what is appropriate for the organization unless the surrounding system provides context, data, controls, and review.
Do not confuse	Confusing the model with the whole application, or assuming a larger model is automatically better for every task.
Leader question	Which model is being used, for which task, with what data, controls, and evaluation?
Related language	Foundation Model; Context Window; Token; Inference

Foundation Model

Kind	noun; general-purpose model
TIO definition	A large, general model trained to support many downstream uses and then adapted, prompted, connected, or embedded into applications for specific tasks.
Executive sense	Use this term when a model is not built for one narrow process but can be reused across many tasks.
Why it matters	The same foundation model can support low-risk drafting, regulated decision support, customer-facing service, coding, search, or automation. Risk belongs to the use case, not only the model.
Do not confuse	Assuming that because the model is general-purpose, it is appropriate for every business purpose.
Leader question	What application, data, workflow, and decision context sits on top of the foundation model?
Related language	Frontier Model; AI Application; Model Provider; Risk Tier

Frontier Model

Kind	noun; market category
TIO definition	One of the most capable current AI models at the leading edge of general performance, often strong in reasoning-like tasks, coding, multimodal work, long context, tool use, and complex instruction following.
Executive sense	Use this term for high-end models that define the current performance frontier, not for every new or heavily marketed model.
Why it matters	Frontier capability can be valuable, but it is not automatically necessary, affordable, secure, explainable, or proportionate to the use case.
Do not confuse	Treating frontier as a procurement requirement instead of asking what capability the work actually needs.
Leader question	Do we need frontier capability, or would a smaller, cheaper, more controllable model be sufficient?
Related language	Small Language Model; Model Routing; Cost per Token; Evaluation

Open-Weight Model

Kind	noun; model access model
TIO definition	A model whose learned weights are made available for others to download, run, adapt, or deploy under a license. Open weights do not necessarily mean open training data, open code, open safety methods, or unlimited commercial rights.
Executive sense	Use this term when the organization can obtain the model weights and run or adapt them in a chosen environment.
Why it matters	Open-weight models can improve control, portability, sovereignty, cost management, and private deployment, but they still require licensing review, security controls, evaluation, and operating capability.
Do not confuse	Calling a model open source when only the weights are available.
Leader question	What exactly is open, what does the license permit, and can we operate it safely?
Related language	Open Model; Proprietary Model; Data Sovereignty; On-Premises AI

Proprietary Model

Kind	noun; model access model
TIO definition	A model controlled by a vendor or provider, usually accessed through an application, cloud service, or API rather than released as downloadable model weights.
Executive sense	Use this term when the organization depends on a provider for access, updates, pricing, service levels, and operating controls.
Why it matters	Proprietary models can be powerful and convenient, but they raise questions about data handling, transparency, continuity, cost, jurisdiction, and exit options.
Do not confuse	Assuming a proprietary model is safer because it comes from a large provider, or riskier simply because it is closed.
Leader question	What are the data, contract, cost, resilience, and exit implications?
Related language	Model Provider; Model Lock-In; Private AI; API

Multimodal Model

Kind	noun; model capability
TIO definition	A model that can process or generate more than one kind of input or output, such as text, images, documents, audio, video, code, charts, screenshots, or sensor-like data.
Executive sense	Use this term when the model can work across formats rather than text alone.
Why it matters	Multimodal capability expands both value and exposure. A model that can read screenshots, forms, voice, video, or documents may also process sensitive information people did not realize was present.
Do not confuse	Assuming multimodal means the system understands every modality equally well or safely.
Leader question	What input types are allowed, and which ones may contain sensitive or regulated information?
Related language	Data Classification; Privacy Risk; Prompt Injection; Human Oversight

Parameter

Kind	noun; model component
TIO definition	A learned numerical value inside a model that helps determine how the model transforms input into output. Parameters are part of the model's learned machinery. They are not individual facts, files, or memories.
Executive sense	Use this term when discussing model scale or architecture, especially when vendors reference billions or trillions of parameters.
Why it matters	Parameter count can suggest capacity, but it does not prove quality, reliability, reasoning, safety, or fit for the organization's task.
Do not confuse	Treating more parameters as automatically better intelligence.
Leader question	How does this model perform on our use case, not just how large is it?
Related language	Mixture of Experts; Training; Inference; Evaluation

Token

Kind	noun; unit of model processing
TIO definition	A unit of text or content that a model uses to measure input, output, context, and often cost. A token may be a word, part of a word, punctuation mark, code fragment, or other model-specific unit.
Executive sense	Use this term when discussing model limits, context windows, pricing, latency, and throughput.
Why it matters	Token usage affects cost, speed, context design, retrieval, prompt length, output length, and production economics.
Do not confuse	Assuming one token always equals one word.
Leader question	How many tokens will typical, peak, and worst-case use consume?
Related language	Context Window; Cost per Token; Throughput; Prompt

Context Window

Kind	noun; model working limit
TIO definition	The maximum amount of instructions, conversation history, retrieved material, input, and generated output that a model can process within one active interaction. It is the model's working space, not its permanent memory.
Executive sense	Use this term when deciding how much material the model can consider at once.
Why it matters	A large context window can help with long documents and broad analysis, but it does not guarantee perfect recall, equal attention to every detail, or correct reasoning across all material.
Do not confuse	Treating context as memory or assuming the model will use every included document reliably.
Leader question	How much information can the model use reliably, not merely accept technically?
Related language	Retrieval; Enterprise Memory; Grounding; Token

Training

Kind	noun; model development process
TIO definition	The process of adjusting model parameters using data so the model develops patterns, capabilities, behaviors, and response tendencies. Training may happen at large scale before release or at smaller scale for adaptation.
Executive sense	Use this term when a model is being created or materially changed, not when a user simply sends a prompt.
Why it matters	Training is expensive, specialized, difficult to audit, and carries data, IP, evaluation, and governance obligations.
Do not confuse	Saying the model is being trained whenever users interact with it.
Leader question	Are we training a model, fine-tuning one, or simply using one?
Related language	Pre-training; Fine-tuning; Synthetic Data; Model Risk

Inference

Kind	noun; model use process
TIO definition	The act of using a trained model to produce an output from a prompt, input, document, image, tool result, or other request. Inference is what happens when the model is called in operation.
Executive sense	Use this term when discussing where and how a model generates responses during actual use.
Why it matters	Inference has cost, latency, data handling, security, residency, logging, quality, and reliability implications.
Do not confuse	Confusing inference with training or assuming inference does not involve sensitive data movement.
Leader question	Where does inference occur, and what data is sent there?
Related language	Model Endpoint; API; Data Residency; Cost per Token

02. Capability and reliability

This group of terms supports a common executive decision area. The purpose is not technical vocabulary for its own sake. The purpose is better judgment.

Prediction

Kind	noun; model behavior
TIO definition	A model's estimate of a likely, useful, or probable output based on its training, the input, and the surrounding system design. In AI, many outputs that look like answers are still forms of prediction.
Executive sense	Use this term to remind leaders that outputs are generated by statistical and learned patterns, not guaranteed truth.
Why it matters	Prediction can support decisions, but it must be tested, monitored, and interpreted in the right business context.
Do not confuse	Treating prediction as fact, judgment, or accountability.
Leader question	How will we verify outputs where correctness matters?
Related language	Reasoning; Accuracy; Reliability; Evaluation

Reasoning

Kind	noun; model capability claim
TIO definition	The apparent ability of a model to work through multi-step problems, compare information, follow constraints, draw inferences, and produce a coherent answer. In TIO language, AI reasoning is not the same as human judgment or accountable decision-making.
Executive sense	Use this term carefully when a model can handle complex tasks that require structured thinking.
Why it matters	Reasoning-like output can be impressive and still wrong, incomplete, or based on weak assumptions.
Do not confuse	Assuming the model understands consequences, intent, accountability, or organizational priorities.
Leader question	What evidence shows the model can reason reliably in our use case?
Related language	Evaluation; Human Oversight; Explainability; Model Benchmark

Hallucination

Kind	noun; failure mode
TIO definition	A plausible, fluent, or confident AI output that is incorrect, fabricated, unsupported, misleading, or not grounded in the sources or facts required for the task.

Kind	noun; failure mode
Executive sense	Use this term when the system produces an answer that sounds right but cannot be trusted as stated.
Why it matters	Hallucination risk is highest when users mistake fluency for truth or when outputs enter decisions without verification.
Do not confuse	Using hallucination only for bizarre errors. Many hallucinations are subtle and business-relevant.
Leader question	What must be grounded, cited, checked, or reviewed before use?
Related language	Grounding; Retrieval; Source Citation; Human Oversight

Grounding

Kind	noun; system design pattern
TIO definition	Providing the model with relevant, approved, and current source material so its response is tied to known information rather than only to general training patterns.
Executive sense	Use this term when the model should answer from enterprise documents, policies, databases, or trusted references.
Why it matters	Grounding can reduce error, improve relevance, and support auditability, but it does not eliminate mistakes or replace review.
Do not confuse	Assuming that a grounded answer is automatically correct.
Leader question	Which sources is the model grounded in, and are they authoritative, current, and permission-appropriate?
Related language	Retrieval-Augmented Generation; Knowledge Base; Data Access; Source Note

Retrieval-Augmented Generation

Kind	noun; RAG; architecture pattern
TIO definition	A system pattern in which relevant information is retrieved from approved documents, databases, or knowledge stores and then supplied to a model to help generate a response.
Executive sense	Use this term when the model is connected to organization-specific or current information rather than relying only on its training.
Why it matters	RAG quality depends on document quality, chunking, search relevance, permissions, metadata, answer discipline, and monitoring.
Do not confuse	Assuming RAG means the system has full enterprise knowledge.
Leader question	Can the system show which sources it used and when retrieval failed?
Related language	Embedding; Vector Database; Enterprise Search; Grounding

Evaluation

Kind	noun; evidence process
TIO definition	The structured testing of whether an AI system performs well enough for its intended use, under realistic

Kind	noun; evidence process
	conditions, with appropriate attention to accuracy, reliability, risk, cost, user behavior, and failure modes.
Executive sense	Use this term when moving from a demo, pilot, or vendor claim to an evidence-based decision.
Why it matters	Evaluation is the bridge between possibility and accountable use. Without it, leaders scale opinions rather than evidence.
Do not confuse	Treating a public benchmark or impressive demonstration as sufficient evaluation.
Leader question	What must be true before this use case passes its Evidence Gate?
Related language	Benchmark; Accuracy; Reliability; Evidence Gate

Accuracy

Kind	noun; performance measure
TIO definition	How often the system produces a correct output for a defined task, data set, condition, and measurement method.
Executive sense	Use this term when correctness can be measured against known answers or accepted judgments.
Why it matters	Average accuracy can hide severe errors in important cases. Accuracy must be tied to the errors that matter in the work.
Do not confuse	Using one accuracy number as proof of readiness.
Leader question	What errors matter most, and how are they measured?
Related language	Reliability; Evaluation Set; Acceptance Threshold; Monitoring

Reliability

Kind	noun; operating quality
TIO definition	The degree to which an AI or automation system performs dependably across users, data, conditions, edge cases, time, workload, and real operating situations.
Executive sense	Use this term when asking whether the organization can rely on the system after launch.
Why it matters	A system can be accurate in a test and unreliable in real work because of changing data, user behavior, system dependencies, or exceptions.
Do not confuse	Equating reliability with one successful pilot.
Leader question	How will performance be monitored after launch?
Related language	Production; Monitoring; Model Drift; Incident Response

Explainability

Kind	noun; transparency quality
TIO definition	The ability to explain, in terms useful to the relevant human audience, why a system produced a particular

Kind	noun; transparency quality
	output, recommendation, action, or decision support result.
Executive sense	Use this term when people need to challenge, audit, approve, or trust an AI-supported output.
Why it matters	The required level of explanation depends on the impact, risk, regulation, user need, and reversibility of the decision.
Do not confuse	Demanding full technical explainability where practical business explanation is sufficient, or accepting no explanation where people are affected.
Leader question	What level of explanation is required for this decision or process?
Related language	Audit Trail; Human Oversight; Model Risk; Traceability

03. Assistants, agents, and automation

This group of terms supports a common executive decision area. The purpose is not technical vocabulary for its own sake. The purpose is better judgment.

AI Assistant

Kind	noun; user-facing system
TIO definition	An AI system that helps a person draft, summarize, search, analyze, plan, translate, classify, or perform other tasks through interaction. The assistant supports the user; the user normally remains responsible for the work.
Executive sense	Use this term for systems that help people work better but do not independently carry out material actions without approval.
Why it matters	Assistant outputs still require judgment, especially when the work involves customers, employees, money, operations, legal obligations, safety, or reputation.
Do not confuse	Calling an assistant an agent because it feels conversational or powerful.
Leader question	What tasks is the assistant approved to support, and what data can it use?
Related language	Copilot; AI Agent; Human-in-the-Loop; Data Access

AI Agent

Kind	noun; action-oriented AI system
TIO definition	An AI system that can pursue an objective by planning steps, using tools, taking actions, checking results, and adapting its path within defined boundaries.
Executive sense	Use this term when the system can do more than answer, such as calling tools, changing records, initiating workflows, sending messages, or coordinating tasks.
Why it matters	Agency increases value and risk because the system may affect real data, systems, customers, employees, vendors, or operations.
Do not confuse	Using agent as a marketing label for a chatbot or simple workflow.
Leader question	What actions can the agent take, and what approvals or stop conditions apply?
Related language	Agentic AI; Tool Use; Autonomous System; Stop Condition

Agentic AI

Kind	noun; design pattern and market term
TIO definition	AI designed to work in goal-directed sequences, often using planning, tools, memory, retrieval, feedback,

Kind	noun; design pattern and market term
	and monitoring to move from answering questions toward completing work.
Executive sense	Use this term for systems that operate through multi-step action rather than one response at a time.
Why it matters	The governance question changes when AI can act. Leaders must understand what the system can access, decide, trigger, and change.
Do not confuse	Treating agentic as synonymous with advanced, autonomous, or safe.
Leader question	Where does the system require human approval before acting?
Related language	AI Agent; Orchestration; Human-on-the-Loop; Escalation

Workflow Automation

Kind	noun; automation type
TIO definition	Technology that moves work through predefined steps, rules, notifications, handoffs, approvals, checks, or system actions so a known process runs more consistently.
Executive sense	Use this term when the process is sufficiently understood and can be executed through defined logic.
Why it matters	Workflow automation can improve speed and consistency, but automating poor work can spread defects faster and make them harder to see.
Do not confuse	Automating before redesigning the work.
Leader question	Has the work been redesigned before automation?
Related language	Work Redesign; RPA; Orchestration; Automation Debt

Robotic Process Automation

Kind	noun; RPA; automation type
TIO definition	Software automation that imitates user actions across existing systems, often to move data, complete repetitive steps, or bridge systems that are not well integrated.
Executive sense	Use this term when automation operates through screens, forms, and user-like interactions rather than clean system integration.
Why it matters	RPA can be useful as a bridge, but it can become fragile if it sits on top of unstable screens, poor data, exceptions, or workarounds.
Do not confuse	Using RPA to avoid fixing a broken process or integration problem.
Leader question	Is RPA a bridge, or are we avoiding a deeper system or process fix?
Related language	Workflow Automation; Integration; Automation Debt; Data Flow

Tool Use

Kind	noun; model capability
TIO definition	A model's ability to call external tools, functions, or systems such as search, databases, calculators, email, calendars, code execution, workflow applications, or APIs.
Executive sense	Use this term when the model can reach beyond text generation into information retrieval or action.
Why it matters	Tool access changes risk because the model may see sensitive data or affect real systems. Permissions, logging, approvals, and testing become essential.
Do not confuse	Allowing broad tool access because the model is only supposed to help.
Leader question	Which tools can the model use, with what permissions, logs, and limits?
Related language	Function Calling; API; AI Agent; Prompt Injection

Function Calling

Kind	noun; technical integration pattern
TIO definition	A controlled pattern where a model requests a predefined function or tool to return information or perform an action, often using structured inputs and outputs.
Executive sense	Use this term when developers connect a model to approved capabilities in a bounded way.
Why it matters	Function design determines what the model can do. Poorly designed functions can expose data, permit unwanted actions, or hide accountability.
Do not confuse	Assuming function calling is safe because functions are predefined.
Leader question	What functions exist, who approved them, and what can they read, change, or trigger?
Related language	Tool Use; Structured Output; API; Guardrail

Autonomous System

Kind	noun; operating model
TIO definition	A system that can operate with limited or delayed human intervention within defined objectives, boundaries, controls, and monitoring.
Executive sense	Use this term when the system does not require human approval for every step.
Why it matters	Autonomy may be acceptable for low-risk, reversible, well-bounded tasks, but not for every decision or customer, employee, financial, safety, or regulatory impact.
Do not confuse	Assuming autonomy is the goal of every AI use case.
Leader question	What decisions or actions are autonomous, and what are the limits?
Related language	AI Agent; Human-on-the-Loop; Risk Tier; Stop Condition

Human-in-the-Loop

Kind	noun; control design
TIO definition	A design in which a human must review, approve, correct, or decide before the system completes a material action or outcome.
Executive sense	Use this term when the person is inside the action path and the system cannot proceed without human involvement.
Why it matters	This control works only if the human has the time, skill, evidence, authority, and incentive to intervene.
Do not confuse	Adding a nominal reviewer who cannot realistically detect or stop errors.
Leader question	Can the human realistically catch and correct errors before harm occurs?
Related language	Human Oversight; Human-on-the-Loop; Exception Handling; Escalation

Stop Condition

Kind	noun; governance control
TIO definition	A predefined condition that requires pausing, escalating, disabling, redesigning, rolling back, or retiring an AI or automation use case.
Executive sense	Use this term when defining what evidence or incident would interrupt momentum.
Why it matters	Without stop conditions, weak systems continue because nobody knows when the evidence is bad enough to intervene.
Do not confuse	Defining success criteria without defining failure criteria.
Leader question	What evidence would make us stop, roll back, or redesign this use case?
Related language	Evidence Gate; Guardrail; Incident Response; Residual Risk

04. Data, knowledge, and memory

This group of terms supports a common executive decision area. The purpose is not technical vocabulary for its own sake. The purpose is better judgment.

Data Quality

Kind	noun; data capability attribute
TIO definition	The degree to which data is accurate, complete, current, consistent, accessible, traceable, and fit for the specific purpose, decision, workflow, automation, or AI Use Case in question.
Executive sense	Use this term when assessing whether data can support the work safely and productively.
Why it matters	Data can be good enough for one purpose and unsafe for another. AI may hide data quality problems by producing fluent outputs from weak inputs.
Do not confuse	Assuming data is high quality because it exists in an official system.
Leader question	Is this data fit for this decision, workflow, or AI Use Case?
Related language	Data Ownership; Data Access; Data Flow; Evaluation

Data Lineage

Kind	noun; data traceability
TIO definition	A view of where data comes from, how it moves, how it changes, who touches it, and where it is used in reports, workflows, automations, and AI Use Cases.
Executive sense	Use this term when leaders need to trace an important number, output, recommendation, or action back to its source.
Why it matters	Without lineage, errors are hard to find, controls are hard to prove, and trust becomes fragile.
Do not confuse	Treating lineage as only a technical diagram rather than evidence leaders may need.
Leader question	Can we trace the output back to source data and transformations?
Related language	Data Flow; Audit Trail; Metadata; Traceability

Data Classification

Kind	noun; governance method
TIO definition	A practical way to label data by sensitivity, permitted use, audience, access rules, protection needs, and AI-use restrictions.
Executive sense	Use this term when deciding what information can be used where, by whom, and under what controls.
Why it matters	Classification should make safe use easier and unsafe use harder. If it is too complex, people ignore it; if it is too loose, trust is exposed.
Do not confuse	Creating classification labels that do not change real access, tool, or use-case decisions.
Leader question	Which data classes are allowed in which tools and AI Use Cases?
Related language	Data Access; Privacy Risk; Data Leakage; Acceptable Use

Embedding

Kind	noun; technical representation
TIO definition	A numerical representation of text, images, or other content that captures meaning in a form software can compare, search, cluster, or retrieve.
Executive sense	Use this term when systems find material by similarity of meaning rather than exact keywords.
Why it matters	Embeddings make semantic search and RAG possible, but they also create storage, access, deletion, privacy, and retrieval-quality questions.
Do not confuse	Assuming embeddings are harmless because they are numbers rather than readable text.
Leader question	What content is embedded, where is it stored, and who can search it?
Related language	Vector Database; Semantic Search; RAG; Data Sovereignty

Vector Database

Kind	noun; data store
TIO definition	A database designed to store and search embeddings so systems can retrieve content with similar meaning, related context, or semantic relevance.
Executive sense	Use this term when building enterprise search, RAG, or knowledge applications that rely on meaning-based retrieval.
Why it matters	A vector database can expose sensitive knowledge if indexing, permissions, retention, deletion, and retrieval testing are weak.
Do not confuse	Treating the vector database as a neutral technical component with no governance implications.
Leader question	What information is indexed, how is access controlled, and how is retrieval evaluated?
Related language	Embedding; Semantic Search; Knowledge Base; Data Access

Data Sovereignty

Kind	noun; control concept
TIO definition	The organization's practical ability to control where data is stored, processed, accessed, moved, retained, deleted, backed up, exposed to law, and carried if providers change.
Executive sense	Use this term when data control matters for trust, regulation, strategy, contracts, public confidence, or national and institutional interests.
Why it matters	Sovereignty is about control, not only geography. A local data center does not automatically solve access, vendor, legal, or operational risk.
Do not confuse	Equating data residency with data sovereignty.
Leader question	Can we control where data goes and what happens if we change providers?
Related language	Data Residency; Private AI; Model Sovereignty; Vendor Lock-In

Enterprise Memory

Kind	noun; working TIO term
TIO definition	The organization's retained, governed, searchable, and usable knowledge across documents, systems, decisions, interactions, lessons learned, operating data, and approved AI memories.
Executive sense	Use this term carefully as a working concept for how an organization remembers and reuses what it knows.
Why it matters	Enterprise memory can improve continuity and intelligence, but it also raises questions about permission, retention, deletion, accuracy, bias, and who can see what.
Do not confuse	Using memory as a vague label for stored chats, indexed documents, databases, or profiles without controls.
Leader question	What memory is retained, for whom, for how long, and under whose control?
Related language	Knowledge Base; Context Window; Data Access; Retention

05. Deployment, cost, and platforms

This group of terms supports a common executive decision area. The purpose is not technical vocabulary for its own sake. The purpose is better judgment.

AI Application

Kind	noun; usable solution
TIO definition	A usable product, workflow, or service that applies one or more models and supporting technology to help complete work. The application includes user experience, permissions, prompts, data connections, controls, logging, and workflow design.
Executive sense	Use this term for what users actually experience and rely on.
Why it matters	The application is often the real unit of governance. A strong model inside a weak application can still create poor outcomes.

Kind	noun; usable solution
Do not confuse	Confusing the AI application with the underlying model.
Leader question	What application controls govern input, output, permissions, logging, review, and support?
Related language	Model; Model Provider; Workflow Automation; Governance

Model Provider

Kind	noun; supplier role
TIO definition	The organization that develops, hosts, licenses, supplies, or maintains an AI model or model service. The provider may be different from the application vendor, cloud provider, implementation partner, or reseller.
Executive sense	Use this term when mapping who sits behind a solution.
Why it matters	Data, responsibility, pricing, continuity, and contractual exposure may pass through multiple parties.
Do not confuse	Assuming the visible vendor is the only provider involved.
Leader question	Who are all providers involved in this solution?
Related language	Application Vendor; Model Endpoint; Proprietary Model; Vendor Risk

Private AI

Kind	noun; deployment concept
TIO definition	An AI deployment designed to keep data, access, processing, and operating controls within stronger organizational, contractual, network, tenancy, or controlled-provider boundaries.
Executive sense	Use this term when the organization is pursuing more control than a general public AI service provides.
Why it matters	Private AI can reduce some risks, but it does not automatically create sovereignty, compliance, good governance, or good data.
Do not confuse	Treating private as risk-free.
Leader question	What is private about it: data, model, infrastructure, network, tenancy, contract, or access path?
Related language	On-Premises AI; Data Sovereignty; Model Endpoint; Access Control

On-Premises AI

Kind	noun; deployment model
TIO definition	AI running on infrastructure controlled in the organization's own environment, facility, data center, or dedicated operating boundary, rather than as a general external cloud service.
Executive sense	Use this term when physical or operational control over infrastructure is central to the design.

Kind	noun; deployment model
Why it matters	On-premises deployment can increase control for sensitive use cases, but it can also increase cost, complexity, talent needs, resilience burden, and upgrade responsibility.
Do not confuse	Assuming on-premises automatically means better security or lower cost.
Leader question	What control do we gain, and what capability must we operate ourselves?
Related language	Private AI; Compute; GPU; Data Residency

Model Routing

Kind	noun; operating pattern
TIO definition	Sending different requests to different models based on task type, data class, risk tier, cost, speed, performance, availability, or capability needs.
Executive sense	Use this term when the organization does not want one model to handle every request.
Why it matters	Routing can improve cost and fit, but it complicates evaluation, governance, monitoring, and explainability.
Do not confuse	Routing work across models without clear rules for data sensitivity and evidence.
Leader question	Who decides which model handles which task and data class?
Related language	Small Language Model; Frontier Model; Cost per Token; Risk Tier

Model Lock-In

Kind	noun; strategic dependency
TIO definition	Dependence on one model, provider, platform, prompt design, fine-tuning approach, data format, integration, or proprietary feature that becomes difficult, costly, or risky to replace.
Executive sense	Use this term when assessing long-term flexibility and exit options.
Why it matters	Lock-in may appear slowly through workflows, integrations, evaluations, knowledge bases, user habits, and vendor economics.
Do not confuse	Thinking lock-in is only a contract issue.
Leader question	What would it take to switch models or providers?
Related language	Vendor Lock-In; Portability; Model Routing; Exit Plan

Small Language Model

Kind	noun; model class
TIO definition	A smaller language model designed for narrower tasks, lower cost, faster response, local deployment, specialized domains, or more controlled operation.
Executive sense	Use this term when a focused model may be enough for the work.
Why it matters	Using the largest model for every task can waste money, increase latency, and introduce unnecessary risk.

Kind	noun; model class
Do not confuse	Assuming smaller means inferior.
Leader question	Can a smaller model do this job with acceptable performance?
Related language	Model Routing; Frontier Model; Evaluation; Cost per Token

Mixture of Experts

Kind	noun; model architecture
TIO definition	A model architecture with many specialist components, often called experts, where only some are activated for a given input or task. Total parameters may be much larger than the active parameters used per response.
Executive sense	Use this term when vendors reference very large parameter counts that do not all run at once.
Why it matters	MoE can increase model capacity without activating the entire model each time, but performance still depends on architecture, training, routing, and evaluation.
Do not confuse	Comparing total parameter counts without asking how many are active and how the model performs.
Leader question	How many parameters are active during inference, and what does performance evidence show?
Related language	Parameter; Inference; Compute; Evaluation

Compute

Kind	noun; infrastructure resource
TIO definition	The processing power, chips, memory, networking, storage, and supporting infrastructure required to train, tune, run, or serve AI systems.
Executive sense	Use this term when discussing capacity, cost, speed, scalability, availability, and sovereignty.
Why it matters	Compute is a strategic constraint. It affects who can build, operate, host, scale, and control AI capability.
Do not confuse	Treating compute as a background technical concern rather than an operating and strategic dependency.
Leader question	What compute is required, where is it located, and who controls it?
Related language	GPU; Latency; Throughput; Cost per Token

Cost per Token

Kind	noun; unit economics measure
TIO definition	The usage cost charged or estimated for the tokens a model processes as input and produces as output. It is one part of AI operating cost, not the whole cost.
Executive sense	Use this term when estimating production economics.
Why it matters	Small design choices in prompts, retrieval, context size, model choice, and output length can create large

Kind	noun; unit economics measure
	recurring costs at scale.
Do not confuse	Judging cost only from pilot usage.
Leader question	What is the cost at expected scale, including prompts, retrieval, output, support, and monitoring?
Related language	Token; Model Routing; Throughput; AI FinOps

06. Risk, trust, and governance

This group of terms supports a common executive decision area. The purpose is not technical vocabulary for its own sake. The purpose is better judgment.

Responsible AI

Kind	noun; umbrella discipline
TIO definition	The discipline of designing, deploying, operating, and improving AI in ways that are lawful, safe, fair, secure, accountable, explainable enough for the use, and worthy of trust.
Executive sense	Use this term as an umbrella for responsible practice, not as a substitute for specific controls.
Why it matters	Responsible AI must show up in decisions, evidence, risk tiers, controls, monitoring, escalation, and accountability, not only principles.
Do not confuse	Publishing principles without changing how AI is approved and operated.
Leader question	What controls prove this use is responsible for its risk level?
Related language	AI Governance; Risk Tier; Impact Assessment; Trust

AI Governance

Kind	noun; decision system
TIO definition	The decision rights, roles, policies, rules, evidence, controls, monitoring, escalation paths, and accountability mechanisms that determine what AI can be used, by whom, for what purpose, with what data, and under what conditions.
Executive sense	Use this term when describing how the organization makes and enforces AI decisions.
Why it matters	Governance should enable safe movement. It should make low-risk use practical and high-risk use properly reviewed.
Do not confuse	Equating governance with a policy document.
Leader question	Who can approve this use case, and what evidence is required?
Related language	AI Policy; Risk Tier; Decision Rights; Residual Risk

Risk Tier

Kind	noun; governance category
TIO definition	A category that assigns different levels of review, evidence, approval, controls, monitoring, and escalation based on impact, data sensitivity, autonomy, reversibility, affected parties, and exposure.

Kind	noun; governance category
Executive sense	Use this term when deciding how much governance a use case requires.
Why it matters	Risk tiering prevents low-risk uses from being over-governed and high-risk uses from being under-governed.
Do not confuse	Treating every AI use as high risk or letting teams self-declare low risk without evidence.
Leader question	What factors move this use case into a higher or lower tier?
Related language	Impact Assessment; AI Governance; Data Classification; Human Oversight

Impact Assessment

Kind	noun; review process
TIO definition	A structured review of the expected value, affected parties, data use, risks, controls, accountability, evidence, and operating conditions before an AI Use Case goes live or scales.
Executive sense	Use this term when a use case could affect people, decisions, rights, services, finances, operations, compliance, or trust.
Why it matters	Impact assessment should be proportional to risk and specific to the use case.
Do not confuse	Using a generic checklist that does not change the decision.
Leader question	Who may be affected, what could go wrong, and what evidence supports approval?
Related language	Risk Tier; Evidence Gate; Residual Risk; Accountable Owner

Model Risk

Kind	noun; risk category
TIO definition	The possibility that a model produces wrong, biased, unstable, insecure, misleading, or inappropriate outputs that affect decisions, workflows, customers, employees, controls, or value.
Executive sense	Use this term when model behavior could create business, regulatory, financial, operational, ethical, or trust exposure.
Why it matters	Model risk is only part of system risk. The workflow, data, user behavior, controls, and operating context also matter.
Do not confuse	Asking whether the model is safe without assessing the AI-enabled workflow.
Leader question	How is model performance monitored over time?
Related language	System Risk; Evaluation; Drift; Monitoring

Privacy Risk

Kind	noun; risk category
TIO definition	The risk that personal, customer, employee, client, resident, or sensitive information is collected, exposed, inferred, processed, retained, shared, or used improperly through AI or automation.

Kind	noun; risk category
Executive sense	Use this term when personal or sensitive information appears in prompts, documents, logs, embeddings, tools, vendors, outputs, or workflows.
Why it matters	AI can make privacy risk less visible because data may move through many technical layers.
Do not confuse	Reviewing only the input form and ignoring logs, embeddings, vendors, and outputs.
Leader question	What personal information is used, where does it go, and how long is it retained?
Related language	Data Leakage; Data Classification; Data Residency; Consent

Prompt Injection

Kind	noun; security failure mode
TIO definition	An attack or failure mode in which instructions hidden in user input, documents, websites, emails, or other content manipulate the model's behavior or override intended controls.
Executive sense	Use this term when AI systems read untrusted content or use tools.
Why it matters	Prompt injection becomes more serious when the model can access sensitive information, call tools, or take actions.
Do not confuse	Treating prompt injection as only a chatbot annoyance rather than a security issue.
Leader question	What untrusted content can the model read, and what damage could it cause?
Related language	Tool Use; Guardrail; Data Leakage; Security Control

Guardrail

Kind	noun; control mechanism
TIO definition	A technical, procedural, or operating control that guides, limits, blocks, logs, filters, redirects, or escalates AI behavior.
Executive sense	Use this term for controls that shape what the system or user can do.
Why it matters	Guardrails can reduce risk, but they can fail, be bypassed, create friction, or create false confidence if not tested and monitored.
Do not confuse	Treating guardrails as a substitute for governance or accountability.
Leader question	What does the guardrail actually prevent, and how has it been tested?
Related language	AI Governance; Stop Condition; Monitoring; Audit Trail

Residual Risk

Kind	noun; decision accountability concept
TIO definition	The risk that remains after controls, reviews, guardrails, training, monitoring, and mitigations have been applied.

Kind	noun; decision accountability concept
Executive sense	Use this term when deciding whether a use case can proceed despite known remaining risk.
Why it matters	Residual risk must be accepted by an accountable human leader with evidence and specialist advice as needed. AI cannot accept risk for the organization.
Do not confuse	Letting risk remain implicit because no one objected.
Leader question	Who is authorized to accept the remaining risk?
Related language	Accountable Owner; Risk Tier; Impact Assessment; Governance

Accountable Owner

Kind	noun; role
TIO definition	The named person responsible for the AI Use Case, business outcome, decision path, controls, adoption, monitoring, escalation, and post-launch operation.
Executive sense	Use this term when moving from idea, pilot, or project to real accountability.
Why it matters	AI can assist work, but accountability stays with people. Unowned AI use is unmanaged risk.
Do not confuse	Saying Technology owns the tool when no business leader owns the outcome.
Leader question	Who owns this AI Use Case after launch?
Related language	Business Owner; Decision Rights; Residual Risk; Production

07. Value, adoption, and transformation

This group of terms supports a common executive decision area. The purpose is not technical vocabulary for its own sake. The purpose is better judgment.

AI Use Case

Kind	noun; unit of practical change
TIO definition	A specific application of AI to improve a real business process, decision, service, experience, control, product, or outcome, with a clear owner, workflow, data view, risk view, baseline, value hypothesis, and evidence path.
Executive sense	Use this term for a bounded piece of work that can be assessed, built, tested, governed, measured, and scaled or stopped.
Why it matters	AI becomes enterprise value through use cases, not through general enthusiasm.
Do not confuse	Calling a vague idea, tool demo, or technology feature a use case.
Leader question	What work changes, who owns it, and what value should be proven?
Related language	Value Hypothesis; Baseline; Evidence Gate; Business Owner

Use-Case Portfolio

Kind	noun; management system
TIO definition	A managed set of AI, automation, data, and work redesign opportunities being identified, assessed, funded, designed, delivered, measured, scaled, redesigned, paused, retired, or stopped.
Executive sense	Use this term when leaders need to see and manage the whole set of AI-related work.
Why it matters	A portfolio prevents scattered pilots, duplicative effort, capacity overload, vendor-driven activity, and weak evidence.
Do not confuse	Managing AI ideas as a list rather than a governed portfolio.
Leader question	Which use cases deserve resources this quarter?
Related language	Factory; Portfolio Discipline; Evidence Gate; Capacity

Value Hypothesis

Kind	noun; evidence statement
TIO definition	A clear, testable statement of what improvement is expected from a use case, why that improvement matters, and how it will be measured against a baseline.

Kind	noun; evidence statement
Executive sense	Use this term before building or piloting so success is defined in advance.
Why it matters	Without a value hypothesis, teams can declare success based on activity, enthusiasm, or technical completion.
Do not confuse	Writing a vague benefit statement instead of a measurable claim.
Leader question	What should improve, by how much, and compared with what baseline?
Related language	Baseline; Measurement; Evidence Gate; Productivity

Baseline

Kind	noun; measurement reference
TIO definition	The current level of performance, cost, time, quality, risk, volume, experience, capacity, or error before a change is made.
Executive sense	Use this term when leaders need to know whether a use case actually improved anything.
Why it matters	No baseline means weak evidence. It becomes difficult to prove value, learn from failure, or defend scale decisions.
Do not confuse	Starting a pilot without measuring the current state.
Leader question	What is the current cost, time, quality, risk, volume, or experience level?
Related language	Value Hypothesis; Measurement; Productivity; Evidence Gate

Productivity

Kind	noun; business outcome
TIO definition	The ability to produce more output, better output, faster output, safer output, or the same output with less effort, cost, rework, delay, or friction.
Executive sense	Use this term when AI or automation changes the relationship between effort and value.
Why it matters	Productivity gains must be captured, reinvested, translated into service improvement, or intentionally returned as capacity. Otherwise they disappear into workload.
Do not confuse	Equating productivity with saved minutes only.
Leader question	What will we do with the capacity created?
Related language	Capacity; Value; Adoption; Work Redesign

Capacity

Kind	noun; organizational constraint
TIO definition	The available time, attention, skill, budget, decision space, emotional bandwidth, and operating room required to absorb change while continuing to run the organization.

Kind	noun; organizational constraint
Executive sense	Use this term when deciding how much transformation the organization can realistically carry.
Why it matters	AI can create capacity, but transformation also consumes capacity. Ignoring this creates overload and weak adoption.
Do not confuse	Assuming people can adopt AI on top of all existing work.
Leader question	What will stop, pause, or simplify so people can absorb the change?
Related language	Adoption; Change Capacity; Manager Enablement; Portfolio

Adoption

Kind	noun; change outcome
TIO definition	The degree to which people actually understand, accept, and use the new way of working correctly, consistently, safely, and productively in real operations.
Executive sense	Use this term after launch to test whether the change has become real.
Why it matters	Launch is not adoption. Value depends on behavior change, manager support, workflow fit, incentives, and trust.
Do not confuse	Counting access or training completion as adoption.
Leader question	Who must change behavior, and how will we know they have?
Related language	People; AI Fluency; Change Management; Work Redesign

Work Redesign

Kind	noun; transformation practice
TIO definition	Changing how work is performed, owned, sequenced, measured, supported, governed, and improved before or while technology is introduced.
Executive sense	Use this term when AI or automation changes what people, systems, and teams should do.
Why it matters	Automating poor work can make the wrong process faster. Redesign asks what the work should become now that AI and automation are available.
Do not confuse	Treating AI deployment as tool installation rather than work change.
Leader question	How should the work change before we build?
Related language	Factory Design; Workflow Automation; Adoption; People

Evidence Gate

Kind	noun; TIO decision point
TIO definition	A decision point where leaders use agreed evidence to decide whether a use case should scale, continue, redesign, pause, retire, or stop.

Kind	noun; TIO decision point
Executive sense	Use this term when moving from idea to design, pilot to production, or production to scale.
Why it matters	Evidence Gates protect value, trust, and capacity. They prevent work from scaling because people like it rather than because it works.
Do not confuse	Treating the gate as a meeting instead of a decision based on evidence.
Leader question	What evidence is required to pass the next gate?
Related language	Factory; Evaluation; Stop Condition; Scale

Production

Kind	noun; operating state
TIO definition	A solution operating in real work with real users, data, controls, support, monitoring, funding, incident paths, and accountable ownership.
Executive sense	Use this term when the organization relies on the solution in normal operations.
Why it matters	Production requires more discipline than experimentation because failure now affects real work and real stakeholders.
Do not confuse	Calling a pilot production because people are using it.
Leader question	Who supports, monitors, funds, and owns it after launch?
Related language	Pilot; Scale; Monitoring; Accountable Owner

Scale

Kind	verb or noun; evidence-based expansion
TIO definition	Expanding, adapting, repeating, institutionalizing, or sometimes stopping a use case based on evidence about value, risk, adoption, cost, resilience, and operating fit.
Executive sense	Use this term after a use case has passed meaningful evidence gates.
Why it matters	Scale does not always mean broad rollout. It may mean adapt, limit, redesign, retire, or stop.
Do not confuse	Scaling because the pilot team likes the tool.
Leader question	What evidence shows this should expand?
Related language	Evidence Gate; Production; Adoption; Portfolio

Technical Debt

Kind	noun; future burden
TIO definition	Future cost, constraint, fragility, or risk created by shortcuts, poor documentation, weak architecture, temporary integrations, unsupported code, or deferred fixes.
Executive sense	Use this term when speed today may create operating burden later.

Kind	noun; future burden
Why it matters	AI can add technical debt quickly through prototypes, unmanaged prompts, custom integrations, hidden dependencies, and brittle workflows.
Do not confuse	Ignoring debt because the pilot works.
Leader question	What shortcuts are we taking, and when will they be addressed?
Related language	Automation Debt; Resilience; Platform; Lifecycle

Automation Debt

Kind	noun; operating burden
TIO definition	Accumulated fragility created by automating bad processes, exceptions, manual workarounds, unstable data movement, undocumented rules, or poorly governed workflows.
Executive sense	Use this term when automation adds layers instead of simplifying work.
Why it matters	Automation debt often hides until systems, policies, processes, volumes, or people change. Then the organization discovers that the automation has made change harder.
Do not confuse	Treating automation volume as proof of modernization.
Leader question	Are we simplifying work or adding another layer of workaround?
Related language	Work Redesign; RPA; Data Flow; Technical Debt

AI Fluency

Kind	noun; capability of people and leaders
TIO definition	The practical understanding leaders, managers, and employees need to use, challenge, govern, explain, and benefit from AI responsibly in the context of their work.
Executive sense	Use this term when the goal is judgment and useful practice, not technical mastery.
Why it matters	Training is weak if people cannot apply it to real decisions, workflows, risks, vendors, and value.
Do not confuse	Counting completion of generic AI training as fluency.
Leader question	Can leaders explain the tool, the risk, the value, and the decision?
Related language	Leadership Fluency; Workforce Fluency; Adoption; Governance

Capability

Kind	noun; TIO core concept
TIO definition	An organizational ability that must exist, mature, and work reliably if the organization wants to thrive in the age of AI and AI and automation. A capability is something the organization can do repeatedly, not a one-time artifact.

Kind	noun; TIO core concept
Executive sense	Use this term when discussing enduring organizational ability, not a project, workshop, document, department, or tool.
Why it matters	Tools can be bought. Capabilities must be built across people, process, data, technology, governance, and management.
Do not confuse	Calling a document, tool, or workshop a capability.
Leader question	What must the organization be able to do again and again?
Related language	Maturity; TIO Domain; Operating Rhythm; Evidence

Maturity

Kind	noun; capability condition
TIO definition	How well a capability exists, is owned, is used, is evidenced, is measured, is governed, is improved, and can be relied on over time.
Executive sense	Use this term when assessing whether the organization can depend on a capability.
Why it matters	A document or policy does not prove maturity. Maturity requires evidence that the capability works in real operation.
Do not confuse	Claiming maturity because a policy exists or a tool has been deployed.
Leader question	What evidence shows the capability works in real operation?
Related language	Capability; Evidence; Assessment; Continuous Improvement

02A TIO System and Architecture Terms

The distinctions that protect executive judgment

Term	Executive meaning	Leader question
Intelligence	The effective reasoning, creativity, synthesis, learning, and decision capacity available to people, teams, agents, and the enterprise.	Whose reasoning or decision capacity improves, using which approved sources, and how will the organization know?
Intelligence Expansion	A leader-first, role-based pattern for expanding approved AI use from direct leadership experience to personal, collective, and enterprise intelligence.	Which leadership or role group should be enabled next, for what work, with what support and data boundaries?
Enterprise Autonomy	The freedom, control, capability, and resilience the organization retains to protect what is uniquely its own and change direction.	Can we understand, govern, stop, recover, replace, and change direction without losing the business capability?
Delegated Autonomy	Authority granted to a system, agent, automation, or bounded unit of work without a person approving every instance. It is limited, evidence-gated, reviewable, revocable, and recoverable.	What exact unit of work is being delegated, within which limits, evidence, monitoring, stop, and recovery conditions?

Kind	noun; capability condition	
Alpha	The TIO reference name for the organization's complete Sovereign Enterprise Intelligence System. Alpha is an integrated enterprise capability, not a single model, database, or product.	Which capabilities, knowledge, authority, controls, and operating responsibilities make up Alpha in this organization?
Intelligence Core	The replaceable models, agents, reasoning methods, orchestration, evaluations, tools, and human expertise used by Alpha to understand, plan, coordinate, and learn.	Which model, agent, tool, solver, or human specialist should handle this task, and can it be replaced?
Enterprise Knowledge and State	The organization's governed knowledge, definitions, intellectual property, authoritative records, events, evidence, and current operating condition.	What source establishes truth now, who owns it, how current is it, and what may be inferred or remembered?
Work and Decision Map	A shared view connecting the outcome, bounded work, decisions, people, AI and automation, information, authority, systems of record, controls, and evidence.	What outcome, work, decisions, people, information, authority, controls, and evidence must fit together?
Assurance and Operations	The lifecycle used after launch: Register, Approve, Operate, Observe, Review, Change, Recover, Retire.	Who owns the live system, what is observed, when is it reviewed, and how will it be changed, recovered, or retired?
End-State Architecture	The TIO enterprise reference architecture describing the future operating condition and the controls the organization must preserve.	What future operating condition are we building, and what control boundaries must remain explicit?
Transition Architecture	The designed route and temporary operating states used to move a bounded part of the organization from its current operation to its target operation.	Will this bounded unit evolve in place or be established beside the current operation, and how will work and authority move?
Establish the New Operation Beside It	A primary transition route in which a bounded target operation is created beside the current one, proven, given work and authority in controlled steps, and followed by an explicit legacy outcome.	Can the target operation be bounded, proven, supported, reconciled, and given authority without creating uncontrolled duplication?

03

Terms Commonly Confused

Small distinctions with large business consequences

Do not confuse	With	Practical distinction
AI model	AI application	The model produces outputs. The application packages the model into usable work with permissions, controls, workflow, user experience, logging, and support.
Assistant	Agent	An assistant supports a user. An agent can plan and take actions toward an objective.
Automation	AI	Automation executes defined steps. AI interprets, generates, predicts, classifies, or recommends.
Open source	Open weight	Open source normally implies broader access to usable code rights. Open weight may only mean the model weights are available under a license.
Context	Memory	Context is what the model can consider now. Memory is information retained for later use under defined controls.
Training	Inference	Training creates or modifies the model. Inference uses the trained model to produce outputs.
Fine-tuning	Grounding	Fine-tuning changes model behavior. Grounding supplies reference information at use time.
Pilot	Production	A pilot tests a bounded idea. Production means the organization relies on the solution in real work.
Accuracy	Reliability	Accuracy is correctness on a defined test. Reliability is dependable performance in real conditions over time.
Tool	Capability	A tool is acquired. A capability is built across people, process, data, technology, governance, and management.
Data residency	Data sovereignty	Residency is location. Sovereignty is practical control over data use, access, movement, retention, deletion, and exit.
Policy	Governance	A policy states rules. Governance applies decision rights, controls, evidence, monitoring, escalation, and accountability.

04

The Vendor Language Test

Use when the language sounds impressive but the decision is not yet clear

- What can the system actually do, and what can it not do?
- What data can it access, process, retain, expose, or infer?
- What decisions or actions can it take without approval?
- Who owns the business outcome after launch?
- What evidence proves it works for our task, our data, and our risk level?
- What risks remain after controls are applied?
- What happens when the system is wrong, uncertain, manipulated, unavailable, or too expensive?
- What would make us stop, redesign, roll back, or retire this use case?
- How much will this cost at scale, including tokens, support, monitoring, change, and remediation?
- What capability are we building, not just what tool are we buying?

Simple rule

If a proposal cannot explain what the system can access, what it can do, what evidence supports the claim, what controls apply, and who remains accountable, the proposal is not ready for approval.

05

Executive Questions Before Approval

The minimum question set before funding, launch, or scale

Decision area	Question
Purpose	What business problem are we solving, and why now?
Ownership	Who owns the outcome, not only the tool?
Data	What data will be used, where will it go, and what are the access rules?
Risk	Who could be harmed or affected if the system is wrong?
Control	Where are review, approval, logging, escalation, and stop conditions?
Evidence	What baseline and measures prove whether it worked?
Adoption	Whose work changes, and how will they be supported?
Scale	What must be true before this moves beyond pilot?
Cost	What will this cost at expected scale?
Exit	How do we change direction if the vendor, model, or economics change?

06

Source Notes and Research Base

External lexicographic influence and technical source base

This guide synthesizes public standards, official provider documentation, dictionary-style structure, and TIO source material. It is written for executive use and does not replace legal, security, privacy, procurement, architecture, or regulatory advice.

Source	Reference
Merriam-Webster Dictionary: dictionary	https://www.merriam-webster.com/dictionary/dictionary
Merriam-Webster Dictionary: vocabulary	https://www.merriam-webster.com/dictionary/vocabulary
Merriam-Webster Dictionary: artificial intelligence	https://www.merriam-webster.com/dictionary/artificial%20intelligence
Oxford Learner's Dictionaries: artificial intelligence	https://www.oxfordlearnersdictionaries.com/us/definition/english/artificial-intelligence
Oxford Learner's Dictionaries: generative AI	https://www.oxfordlearnersdictionaries.com/definition/english/generative-ai
Oxford Learner's Dictionaries: automation	https://www.oxfordlearnersdictionaries.com/us/definition/english/automation
Oxford Learner's Dictionaries: automatic	https://www.oxfordlearnersdictionaries.com/definition/english/automatic_1
NIST AI Risk Management Framework	https://www.nist.gov/itl/ai-risk-management-framework
NIST AI RMF 1.0 publication	https://www.nist.gov/publications/artificial-intelligence-risk-management-framework-ai-rmf-10
ISO/IEC 22989:2022 AI concepts and terminology	https://www.iso.org/standard/74296.html
Google Machine Learning Glossary	https://developers.google.com/machine-learning/glossary
Google Cloud Generative AI Glossary	https://docs.cloud.google.com/docs/generative-ai/glossary
OpenAI Function Calling documentation	https://developers.openai.com/api/docs/guides/function-calling
OpenAI Structured Outputs documentation	https://developers.openai.com/api/docs/guides/structured-outputs
Anthropic Tool Use documentation	https://platform.claude.com/docs/en/agents-and-tools/tool-use/overview
OWASP Top 10 for LLM Applications 2025	https://genai.owasp.org/llm-top-10/