

VELAR PLATFORM

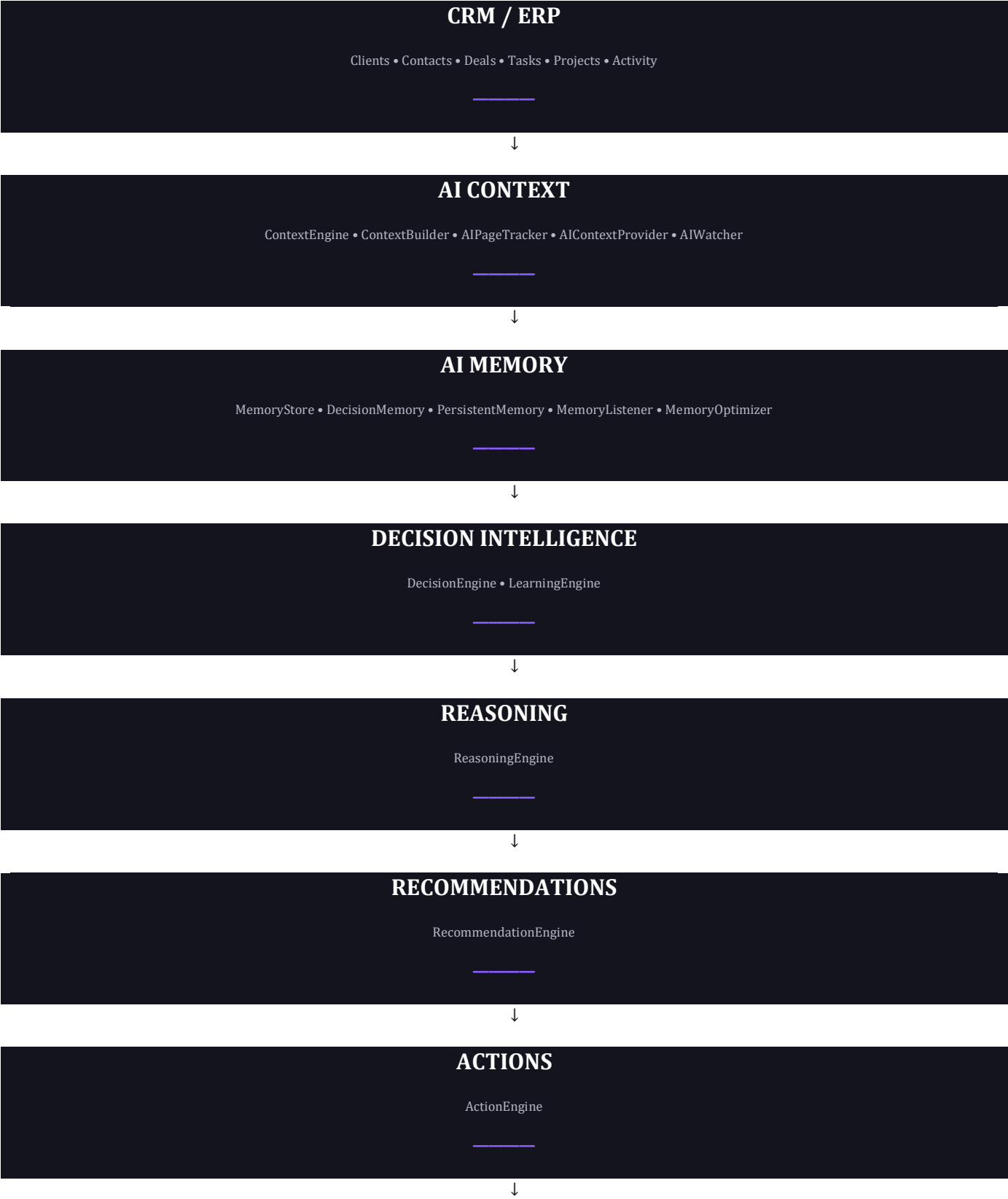
AI ARCHITECTURE MAP

Architecture poster • Modular AI Core • August 2026

DATA Business information	INTELLIGENCE AI-oriented processing	EXECUTION Actions & workflows
-------------------------------------	---	---

01 System-Level Flow

The map describes how business information can move through the VELAR modular AI architecture toward decisions, recommendations and executable workflows, with outcomes feeding back into memory and future context.



AUTOMATION

AutomationEngine • AutomationRules • AutomationExecutor



WORKFLOW

WorkflowEngine • Runner • Registry • Conditions • Actions • Scheduler



BUSINESS RESULT

Operational outcome • client follow-up • workflow completion



MEMORY / FEEDBACK

Outcome signals • history • decision feedback



↪ Feedback returns to the context / memory layers

02 Architecture Layers

Context Layer Collects and structures relevant application state for AI-facing components.	Event System AIEvent / AIEventBus provide an event-oriented communication boundary.
Memory Layer Separates storage, decision memory, persistence, observation and optimization.	Decision Layer DecisionEngine and LearningEngine provide decision-oriented processing.
Reasoning Layer ReasoningEngine represents the reasoning boundary.	Recommendation Layer RecommendationEngine turns intelligence outputs into suggested next steps.
Knowledge Layer KnowledgeGraph and entities provide structured knowledge representation.	Action Layer ActionEngine provides the boundary to executable operations.
Automation Layer Rules, engine and executor organize repeatable automation.	Workflow Layer WorkflowEngine and related components coordinate multi-step processes.

03 AI Context

COMPONENT	ROLE	STATUS
ContextEngine	Context orchestration boundary.	Existing / Current
ContextBuilder	Builds structured context.	Existing / Current
AIPageTracker	Tracks application/page context.	Existing / Current
AIContextProvider	Provides context to AI-facing components.	Existing / Current
AIWatcher	Observes relevant changes/events.	Existing / Current

04 Memory & Feedback Loop

VELAR's memory architecture is represented as modular responsibilities rather than a claim of a mature autonomous long-term memory system. PersistentMemory describes a persistence abstraction; it should not be interpreted as proof of a production database or cloud memory service.

MemoryStore Primary memory storage abstraction.	DecisionMemory Stores decision-oriented memory signals.
PersistentMemory Persistence-oriented memory layer / abstraction.	MemoryListener Observes memory changes.

MemoryOptimizer	Feedback
Improves organization or relevance of memory records.	Business outcomes can act as signals for later decision-oriented processing.

05 Decision → Reasoning → Recommendation

DECISION	LEARNING	REASONING	RECOMMENDATION	ACTION
DecisionEngine	LearningEngine	ReasoningEngine	RecommendationEngine	ActionEngine

These components define an extensible intelligence pipeline. They do not, by themselves, establish the presence of a proprietary trained LLM, autonomous agent, or production-scale model serving infrastructure.

06 Automation & Workflow

AutomationEngine	AutomationRules
Coordinates automation logic.	Defines rule-oriented conditions/triggers.
AutomationExecutor	WorkflowEngine
Executes defined automation actions.	Core workflow orchestration.
WorkflowRunner	WorkflowRegistry
Runs workflow instances.	Registers workflow definitions.
WorkflowContext	WorkflowCondition
Carries contextual data during execution.	Represents conditional logic.
WorkflowAction	WorkflowHistory
Represents executable workflow steps.	Records execution history.
WorkflowScheduler	WorkflowLoader
Scheduling boundary; production-grade scheduling can be expanded.	Loads workflow definitions.
ClientFollowUpWorkflow	
Concrete client follow-up workflow surface.	

07 AI Dashboard as the Observability Surface

The AI Dashboard provides a product-facing layer for presenting AI activity, health-oriented indicators, learning-oriented scores, history and insights.

SURFACE	PURPOSE
---------	---------

AIActivity	Top-level AI dashboard container.
AIClientTable	AI activity presentation.
AICoreHero	Client-oriented AI information surface.
AIHealth	Primary AI Core visual/entry surface.
AIStatCard	AI/system health indicator surface.
LearningScore	Compact metric component.
AIHistory	Learning-oriented score presentation.
AIInsightPanel	Historical AI activity/decision view.
AIPanel	Insight presentation panel.
	General AI interaction/information panel.

08 Current Architectural Status

DIMENSION	CURRENT POSITION
Product architecture	Modular desktop CRM/ERP platform with an AI Core architecture.
AI model	No claim of a proprietary trained LLM; model integration remains an extension point.
Learning	Feedback-oriented learning / decision outcome tracking architecture.
Database	No claim of a fully implemented production database.
Cloud SaaS	No claim of complete production cloud SaaS infrastructure.
Automation	Application-level automation architecture is present; production-scale orchestration is an extension area.
Workflow	Workflow components are part of the architecture; broader enterprise scheduling can be developed.
Desktop	Electron-based Windows application with IPC, preload, window management and packaging.

09 Architectural Value

VELAR's architectural value lies in separation of concerns. Context, memory, intelligence, knowledge, actions, automation and workflows are represented as distinct modules that can evolve independently. This makes the platform suitable as a technology foundation for further productization without requiring the current system to be presented as a finished autonomous AI SaaS.

Acquisition perspective A buyer receives a structured product foundation and a clear extension path: connect production data infrastructure, integrate selected AI models, strengthen evaluation and observability, harden security/deployment, and evolve workflow/automation toward broader SaaS and enterprise use cases.

10 Architecture Boundary

This document is an architectural map, not a claim that every depicted layer is production-hardened. Components marked as current represent the documented product/source architecture. Future development is required for production-grade cloud scale, database infrastructure, advanced model integration, autonomous execution, enterprise security hardening and commercial SaaS operations.

VELAR PLATFORM • AI ARCHITECTURE MAP • DOCX №05 • AUGUST 2026