Elliott

The Nexialist's Translator

From unstructured data to architecture maps — with AI

Why This Matters Right Now

Every major EA vendor — QualiWare, Ardoq, LeanIX, Bizzdesign — has added AI in the past year. It sounds great in the marketing. But look under the surface and it's essentially the same thing everywhere: **a general-purpose language model connected via Azure**. It can write polished sentences about architecture, but it doesn't *understand* ArchiMate classification.

And everything is sent to the cloud. For a municipality handling citizen data, that's not trivial.

This means two things:

- **The AI is guessing**. A general model without domain training does not classify ArchiMate reliably. Good enough for a demo, not for production.
- **Your organizational data leaves the building** — your capability maps, process flows, and org structures are processed on Microsoft Azure.

> **Elliott takes a different path. A custom AI model trained on architecture, running locally on hardware you control.**

Market Comparison

I'll be honest about where Elliott stands compared to the big players:

	QualiWare / Ardoq / Bizzdesign	Elliott
Diagram tool	30 years of development, hundreds of features	Early stage — honestly not in the same class
AI approach	General-purpose cloud model via Azure	Custom fine-tuned model, domain-specific
Document import	Requires structured CSV	PDF, Word, Excel, BPMN → ArchiMate automatically
Data sovereignty	Azure-dependent	100% local
Relation detection	No automatic detection	RFT-based with transitive derivation
Price point	€50–500K+/year	A fraction of that

Elliott isn't competing to be the best diagram tool. Elliott is competing to be **the smartest path from unstructured data to architecture map** — with an AI that actually understands the domain, on hardware you control.

AI and Unstructured Data

AI is fundamentally trained on language, which makes it exceptionally well suited for sorting **unstructured data** — free text, documents, meeting notes, minutes, and other content that lacks a fixed structure.

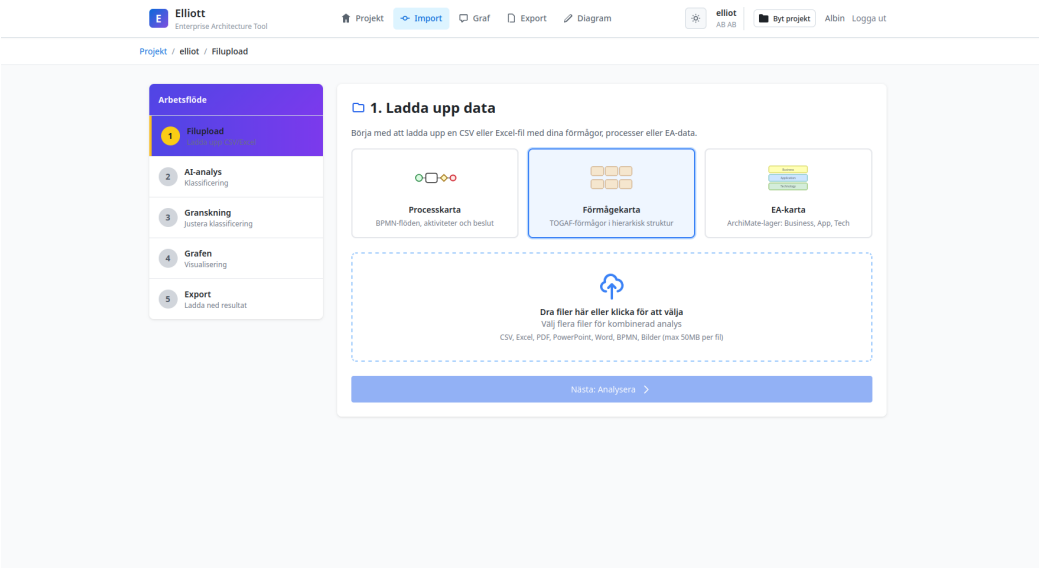
Up to **80% of an organization's data is unstructured** and rarely used. It sits in file systems, intranets, and mailboxes without contributing to decision-making or planning.

At the same time, many public sector organizations lack the very thing this data could produce: **maps**. Capability maps, value stream maps, and process maps that serve as:

- **A foundation for systems planning** — which systems support which processes, where the gaps are, and what needs to change
- **A basis for strategic planning** — what capabilities the organization has, where to invest, and how everything connects

This is especially relevant in organizations that lack a dedicated IT architect or enterprise architect. Architecture work needs to become accessible to more people — not just specialists.

> **Every organization has data. Every organization needs maps. Elliott turns one into the other.**



Elliott's import workflow: choose a map type and upload files.

Background — Why Elliott?

A Common Language for Architecture

The architecture community's frameworks are built on the idea of a **shared way of viewing and expressing digitalization** — supported by common principles, methods, and structures, so that what is produced can be understood and used by everyone.

Elliott shares that ambition. The modeling languages used in the public sector have much in common:

Domain	Modeling Language
Capability maps	The architecture community's TOGAF variant
Value stream maps	ArchiMate 3.2
Process maps	ICOM model, BPMN 2.0

Elliott's goal is to create a **translation system** that can:

- **Translate between languages** — convert a BPMN process into an ArchiMate view, or vice versa
- **Translate from free text to notation** — take a text description and generate a correct map
- **Translate from tables to maps** — turn Excel and CSV files into visual models

The result is a **visual map** that everyone in the organization can open, understand, and share.

The Nexialist

The project takes its name from **Elliot Grosvenor** in A.E. van Vogt's science fiction novel *"The Voyage of the Space Beagle"* (1950). Grosvenor is the crew's sole **Nexialist** — a practitioner of the science of integrating and synthesizing all other sciences. Where specialists see their own domains, the Nexialist sees the patterns that unite them.

> *"The science of Nexialism was a method of thinking that could combine all the disciplines and turn their knowledge to the solution of a single problem."*

Elliott operates the same way — as a bridge between modeling languages that are often kept separate in practice, despite describing the same organization.

The Product — How Elliott Works

The Challenge with Rule-Based Tools

Traditional architecture modeling tools rely on large rule sets: *"if element A is of type X and element B is of type Y, create relation Z"*. This works for known cases but fails with new combinations not covered by the rule base — a common situation with real organizational data.

Relational Frame Theory (RFT)

Elliott uses an approach inspired by **Relational Frame Theory (RFT)** — an established theory of how relational associations are learned. Instead of memorizing hundreds of explicit rules, the model learns **five relational frames** that can generate a large number of relations:

Frame	Relations	Description
Hierarchy	realizes, enables, serves	Realization across architecture layers
Part-whole	part of, contains, composed of	Composition within the same layer
Causal	influences, creates, contributes to	Drivers and influence between elements
Assignment	performs, owns, accesses	Actor/role performs behavior
Measurement	measures	Metrics linked to capabilities

Transitive derivation provides generalization: if the model knows that A realizes B and B realizes C, it can derive that A indirectly realizes C — even if it has never seen that specific combination before. In evaluation, the RFT frames produce **62% correct answers on entirely new, unseen relations** — where a pure rule base scores 0%.

GraphRAG — Knowledge Graph and AI Working Together

Elliott combines a **knowledge graph** (Neo4j) with **RAG** (Retrieval-Augmented Generation) for context-aware classification:

- **The knowledge graph** stores all TOGAF/ArchiMate concepts along with their relations and context-dependent mappings. The same capability can map to different ArchiMate elements depending on whether the context is strategic, operational, or organizational.
- **RAG classification** retrieves relevant definitions from the knowledge graph and provides them as context to the AI model. The model sees not just column names but the full semantic context.

An AI Model Trained on the Architecture Domain

General-purpose AI models are capable, but they lack deep knowledge of TOGAF, ArchiMate, and the modeling languages used in the public sector. Elliott solves this with a **custom-trained model** — a LoRA adapter (Low-Rank Adaptation) on top of an open base model.

Training data — 4,826 domain-specific examples

Category	Count	Content
Classification	1,705	26 ArchiMate element types across all three map types
Relations	1,290	Rule-based + RFT frames (transitive derivation)
Mappings	1,831	Process maps (banking, manufacturing, municipalities, healthcare)

Training examples are generated programmatically from Elliott's own glossaries, relation rules, and knowledge graph — not synthetic data but **patterns derived from real architecture frameworks**.

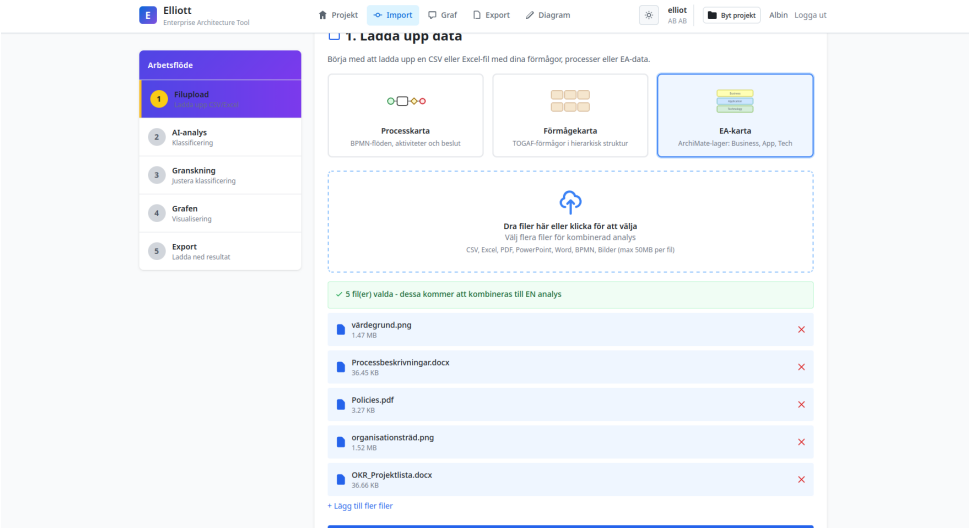
Measurable results

Evaluation with 50 examples per category:

Task	General AI	Elliott's Model	Improvement
Element classification	70%	**~90%**	+20%
Relation detection	15%	**52%**	+37%
Cross-framework mapping	0%	**90%**	+90%

The general AI model cannot map between frameworks at all (BIZBOK→ArchiMate) — it completely lacks that knowledge. Elliott's model reaches 90% by having been trained on the actual mappings and contexts.

The model runs locally — no data is sent to external cloud services. This means full control over organizational information and no dependencies on third-party providers.



Real organizational files ready for AI analysis.

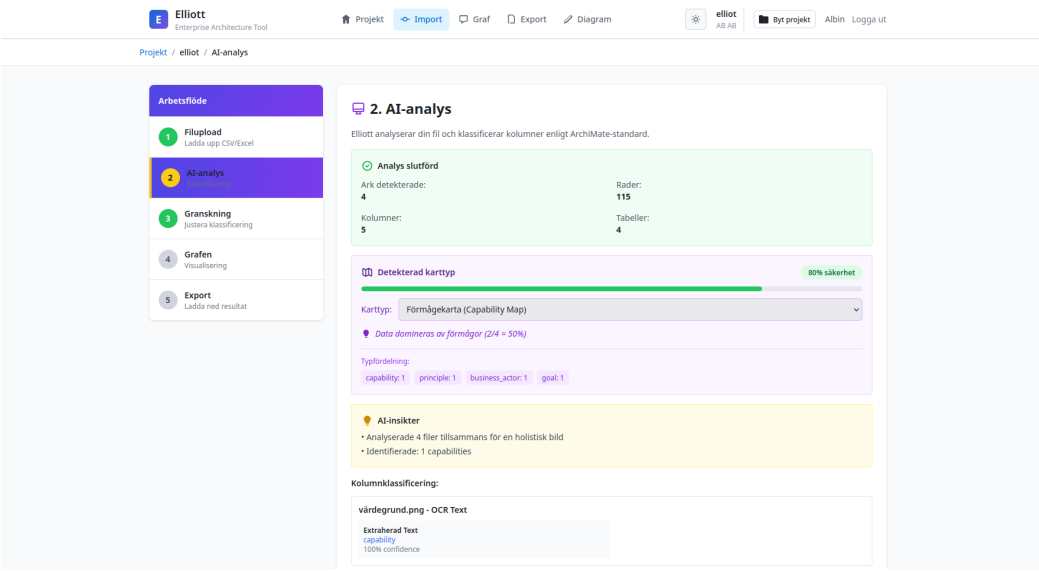
From Data to Map

Organizational Data	→	Elliott Pipeline	→	Result
Excel, PDF, Word		1. Parsing		ArchiMate view
BPMN diagrams		2. AI classification		BPMN diagram
Free text, CSV		3. GraphRAG mapping		Capability map
		4. RFT relations		Visio export
		5. Quality assurance		

Trust Through Transparency

Results only become useful when the people working with them can trust them. Elliott builds confidence by always showing **how** the AI has reasoned:

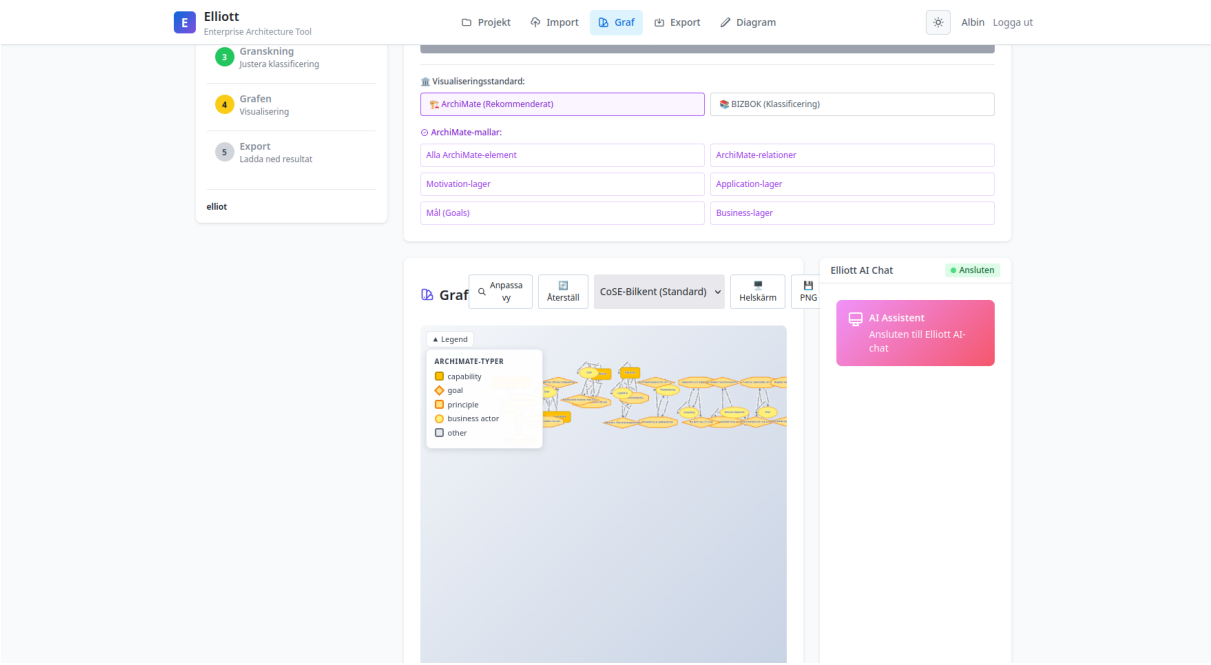
- **Confidence score** — every classification has a confidence rating (0–100%)
- **Rationale** — reasoning in plain language for every decision
- **Alternative suggestions** — the user always makes the final call when uncertainty exists
- **Traceability** — every element carries metadata about its source, classification, and who approved it



AI analysis with confidence scores and element types.

Visualization and AI Assistant

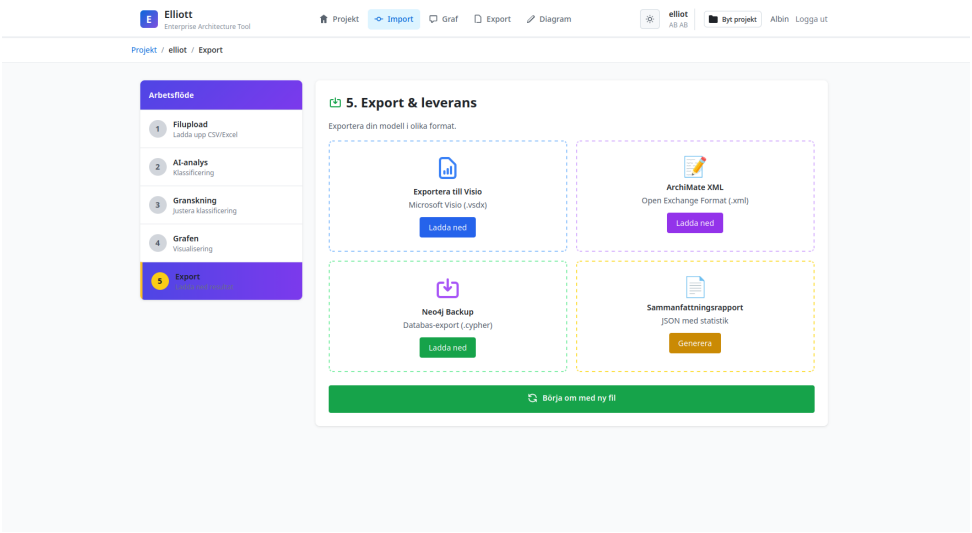
Elliott generates interactive graphs with ArchiMate colors and shapes. The built-in AI chat lets users ask questions about their architecture directly in the tool.



Interactive graph with ArchiMate visualization and Elliott AI Chat.

Export in All Formats

Results can be exported to Visio (.vsdx), ArchiMate XML, Neo4j Cypher, BPMN 2.0, PDF report, and more.



Export options: Visio, ArchiMate XML, Neo4j, summary.

Summary — What Changes?

	Without Elliott	With Elliott
Starting point	Manual modeling by specialists	Existing organizational data (Excel, documents, free text)
Expertise	Requires TOGAF/ArchiMate expertise	Guides staff with AI support
Relations	Manual or rule-based	Relational framing that generalizes
Translation	Manual conversion between notations	Context-aware automatic mapping
Data handling	Cloud service (Azure, AWS)	Local — your data stays with you
Output	Dependent on tools and licenses	Visio, ArchiMate XML, BPMN, PDF
Transparency	Difficult to follow the AI's reasoning	Rationale and confidence scores in plain language
Cost	€50–500K+/year	Accessible for a municipality

Elliott makes architecture work accessible to more people — by combining relational framing, knowledge graphs, and a custom-trained AI model that understands the modeling languages and frameworks used by municipalities and regions.

Elliott — The Nexialist's Translator

Enterprise Architecture Tool

TOGAF | ArchiMate 3.2 | BPMN 2.0 | ICOM

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