From SaaS to Agentic Execution: How AI agents reliably scale customs and logistics processes

UMT AG WHITE PAPER 2026

FOCUS: **CUSTOMS AUTOPILOT** AND **UMS AGENTIC VISION AI**
FROM
UMT UNITED MOBILITY TECHNOLOGY AG

NOTE

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SUMMARY

Foreign trade is becoming more complex. New obligations, sanctions and security requirements are being added. For many companies, customs clearance is therefore an operational risk. Documents come in different formats, data is missing or does not match. Small errors lead to queries, delays or stops at the border.

This white paper shows how UMT AG automates customs processes and related logistics workflows with **UMS AGENTIC VISION AI** and the **CUSTOMS AUTOPILOT** based on it. The focus is on recurring tasks related to invoices, packing lists, freight documents and master data, as well as the preparation of customs declarations. Routine tasks are to be automated, while humans take care of exceptions and decisions.

UMT is aimed at medium-sized companies and service providers in logistics, transport and customs. Many solutions are designed for large corporations or require lengthy ERP projects. UMT integrates AI as a digital clerk into existing processes. The company's logic is quickly mapped without completely restructuring processes. The goals are shorter throughput times, fewer errors and better traceability.

In the technical section, we explain how actionable AI complements classic software. It can understand documents, make suggestions and initiate work steps. In customs, however, it must not be allowed to "guess" unchecked. Customs Autopilot therefore combines AI with fixed rules and validation: only what complies with the rules is allowed to proceed. Every decision remains verifiable.

The most important points in brief:

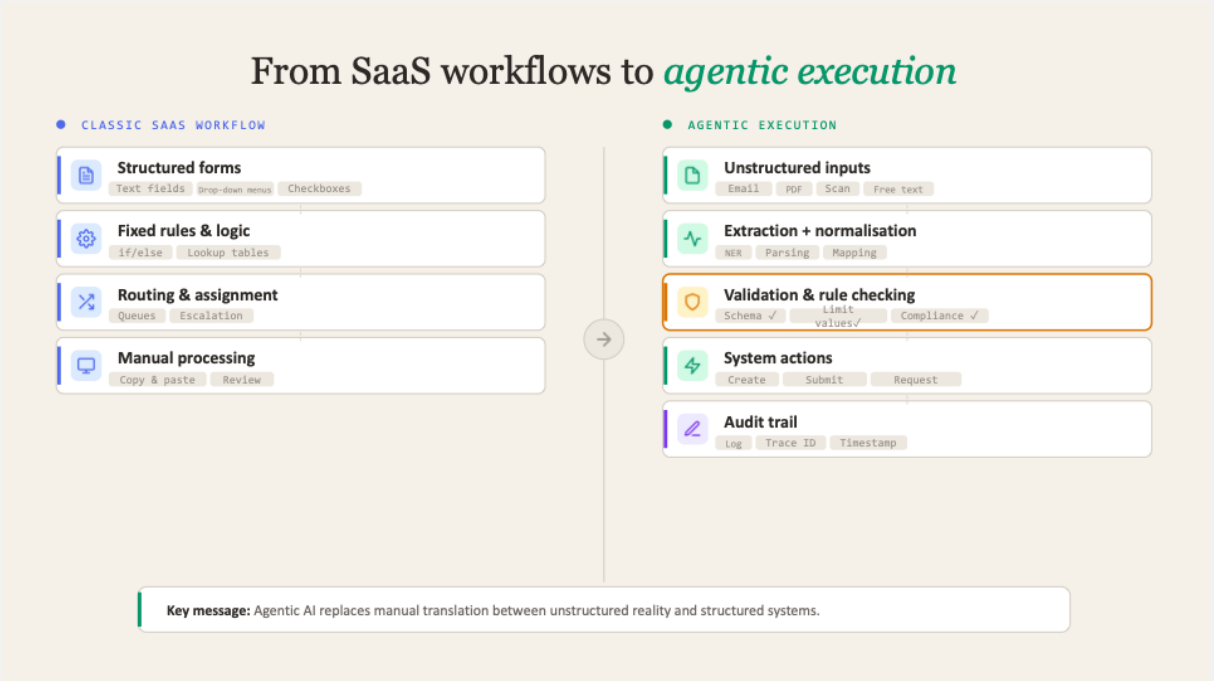
- Customs and border processes are becoming more complex due to political fragmentation, new IT systems and increased controls.
- **UMS AGENTIC VISION AI** automates document-based processes and integrates with existing systems.
- Customs Autopilot reduces manual data entry and directs work towards exceptions and quality assurance.
- "Evidence-first": every figure remains traceable with its source, verification steps and versions.
- UMT AG is listed on the stock exchange; the white paper is aimed at decision-makers, partners and the capital market.

FROM TOOL TO EXECUTION: SAAS AND AGENTIC AI COMPARED

SaaS software has significantly improved many business processes over the last twenty years. Where processes are stable and can be neatly divided into fields, rules and steps, SaaS is often still the best solution today: data is recorded in a structured manner, work steps are standardised and progress becomes measurable. This pays off in practice – through lower process costs, fewer errors and greater transparency.

In customs and logistics processes in particular, however, this advantage often ends where the actual work begins: before anyone even enters anything into a form. Documents have to be read, content has to be understood and compared, contradictory information has to be clarified and missing information has to be requested. As a result, a large part of the work ends up in emails, files and Excel lists – and ultimately remains with humans because there are too many variables. This is exactly where AI agents come into play: not as "autonomous machines", but as controlled digital clerks. They break tasks down into steps, use existing systems and data sources, check results and prepare processes so that they can continue in a structured manner. This creates an additional layer that translates unstructured data (documents, free text, special cases) into clear, verifiable process steps.

This means disruption. Traditional competitive advantages will disappear. Formerly high barriers to market entry for software providers will become lower. Specific industry know-how, years of learning specific operating instructions, or high development costs, which previously prevented new competitors from entering the market, will play a lesser role. At the same time, agent-driven AI solutions will use existing systems more efficiently and increase their productivity.

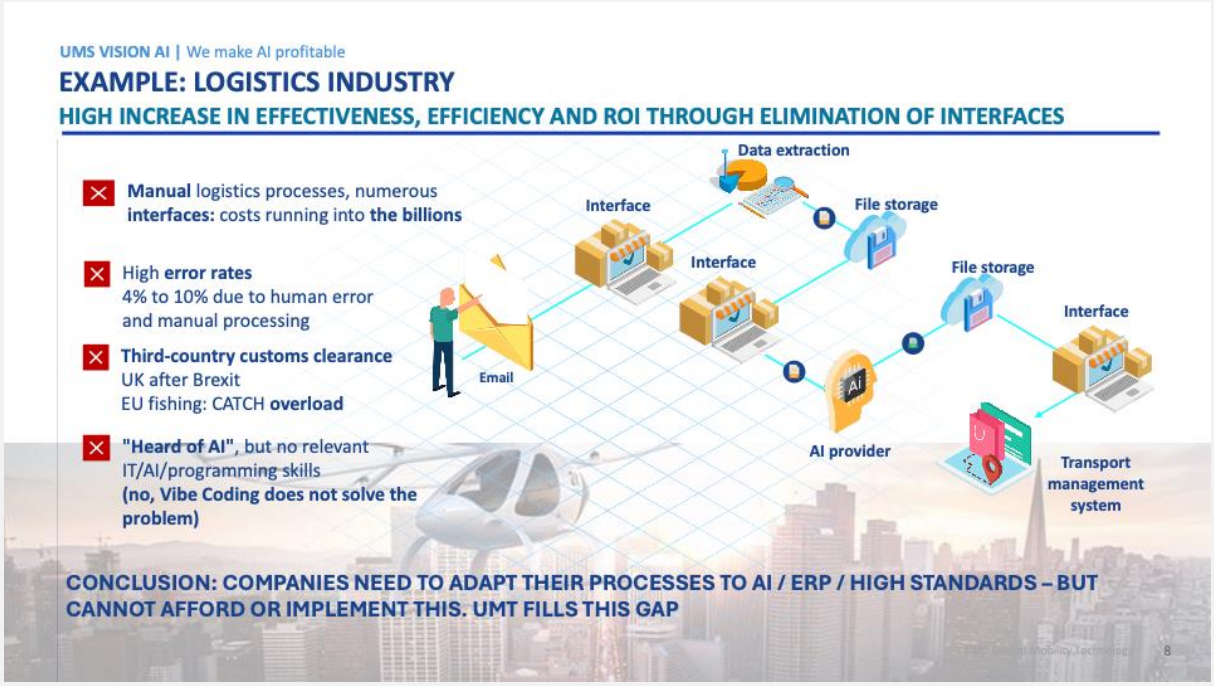


UMT AG AND THE SOLUTION AT A GLANCE

WHAT UMT AG DOES

UMT AG develops AI-supported software for document-intensive business processes – with a focus on logistics, transport and customs. At its core is the **UMS AGENTIC VISION AI** platform: it reads documents, extracts relevant data, checks it and transfers it to customer systems.

UMT does not supply isolated tools, but embedded workflows. **UMS AGENTIC VISION AI** sits between the input channel (e-mail, upload, interface) and the backend (e.g. TMS/ERP/CRM). The end result is structured, system-ready data – not just text.



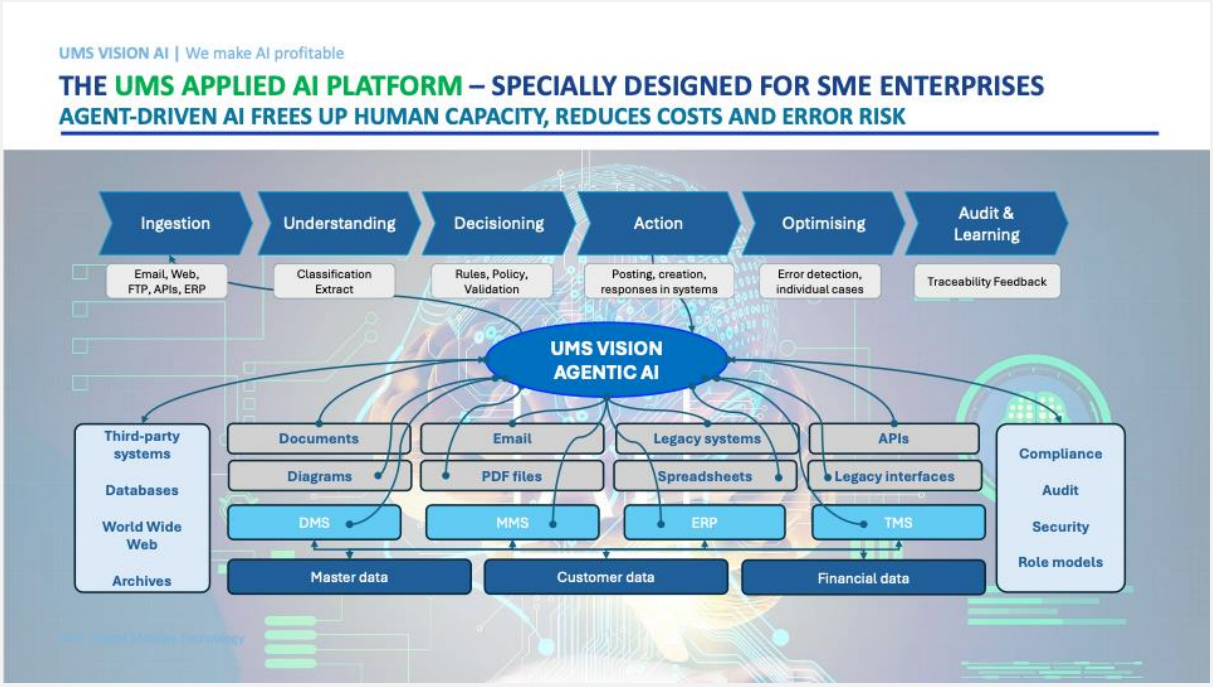
UMS AGENTIC VISION AI – BUILDING BLOCKS THAT CAN BE COMBINED

UMS AGENTIC VISION AI is a modular system. Companies start with a clear process and expand step by step. This includes document processing, workflow automation, validation/comparison and a platform layer for customisation and traceability.

Typical functional building blocks are:

- Collecting data from external and internal sources as well as documents (e-mail, upload, interfaces) and processing formats (PDF, Office, images).
- Extracting data and outputting it in a structured format (e.g. JSON).
- Multi-level checking and reconciliation: documents, master data, business rules.
- Output to customer systems (API, XML/EDI, CSV; TMS/ERP/backends).
- Transparency: logs, key figures, audit trails, versions.

UMS AGENTIC VISION AI sits like a spider in a web, tapping into all internal and external data sources, processing them using agent-driven (agentic) AI and feeding the results back into customer systems.

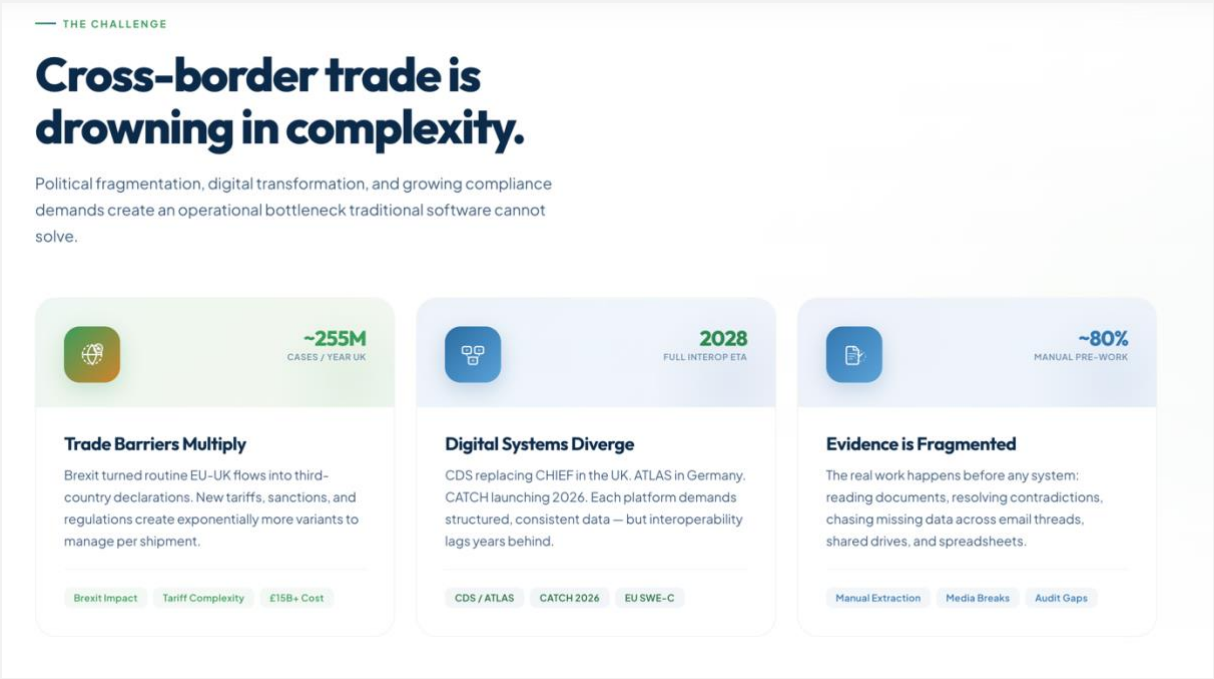


CUSTOMS AUTOPILOT – SPECIALISING IN CUSTOMS CLEARANCE

Customs Autopilot (customsautopilot.com) is the specialisation for customs clearance based on **UMS AGENTIC VISION AI**. It is designed for everyday operations: high volumes, high compliance requirements. A typical use case is the movement of goods between the United Kingdom and Europe after Brexit or CATCH applications, in which complex documents are understood, standardised and processed by AI.

Key benefits: less typing, more exception and quality management. The system generates suggestions from documents, checks them automatically and only allows cases that comply with the rules to proceed. Unclear cases are marked as exceptions and forwarded to humans for decision-making.

As an orchestration layer, Customs Autopilot connects data from ERP/WMS/TMS with documents (invoice, origin, packing list, freight documents). This results in a declarable data set. Connections to national systems (e.g. CDS in the United Kingdom or ATLAS in Germany) are provided for submission.



WHY CUSTOMS CLEARANCE IS BECOMING INCREASINGLY COMPLEX

FRAGMENTATION IS THE NEW NORMAL

Supply chains are not only disrupted by events, but increasingly by politics and regulation. These include:

- Tariffs and trade restrictions
- Rules of origin and preference
- Sanctions lists and security notifications
- Industry-specific certifications and new IT systems

Trade flows are thus becoming increasingly fragmented and complex: more barriers mean more risk in IT, procurement and processing – especially for export-oriented SMEs.

TAKE BREXIT, FOR EXAMPLE: MORE DECLARATIONS, MORE COSTS, MORE SOURCES OF ERROR

In many cases, Brexit has turned internal market processes into classic third-country trade. Companies must go through third-country customs clearance for exports and imports to and from the EU. The complexity is very high, as are the penalties for incorrect customs clearance.

Additional obligations apply to each shipment:

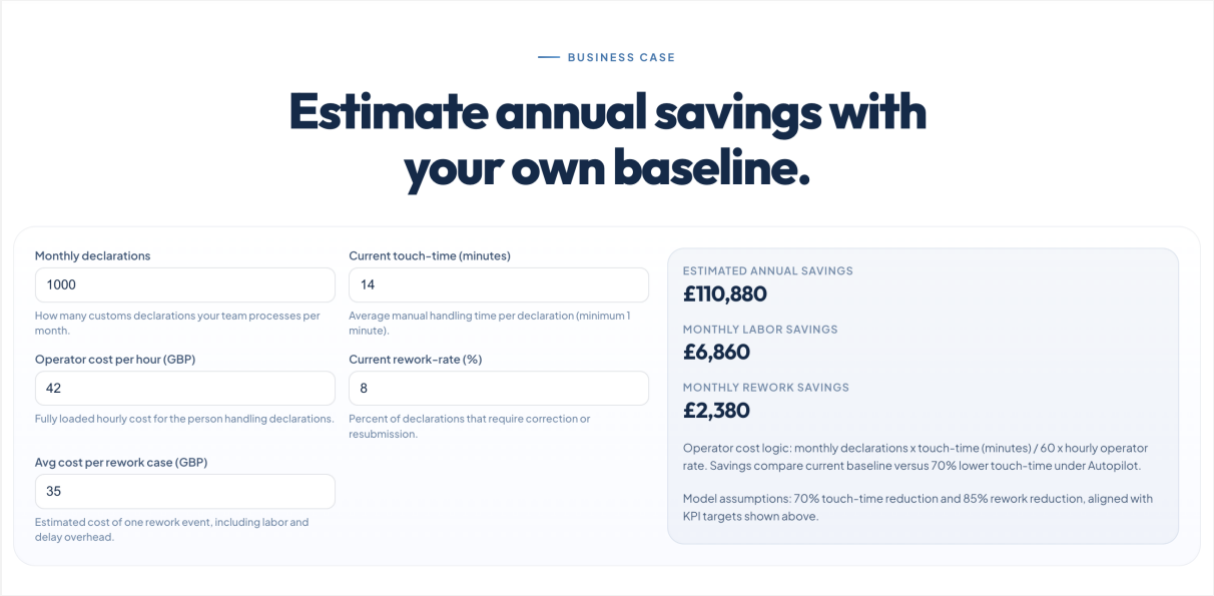
- Customs declarations and security notifications
- Proofs of origin and preference calculations
- Product-specific rules and data requirements
- Cooperation with service providers who technically submit declarations

The British customs authority HMRC estimates that there will be almost 255 million import and export customs declarations in trade with the EU in 2025.

In everyday life, it is the sum of many small steps that counts. The burden on companies and their employees in processing customs procedures is immense:

- Time required per transaction: approx. 20–40 minutes
- Daily volume: often 150–200 procedures
- Media breaks and multiple systems
- Error rates depending on the process: several percent

CUSTOMS AUTOPILOT can reduce this effort very efficiently.

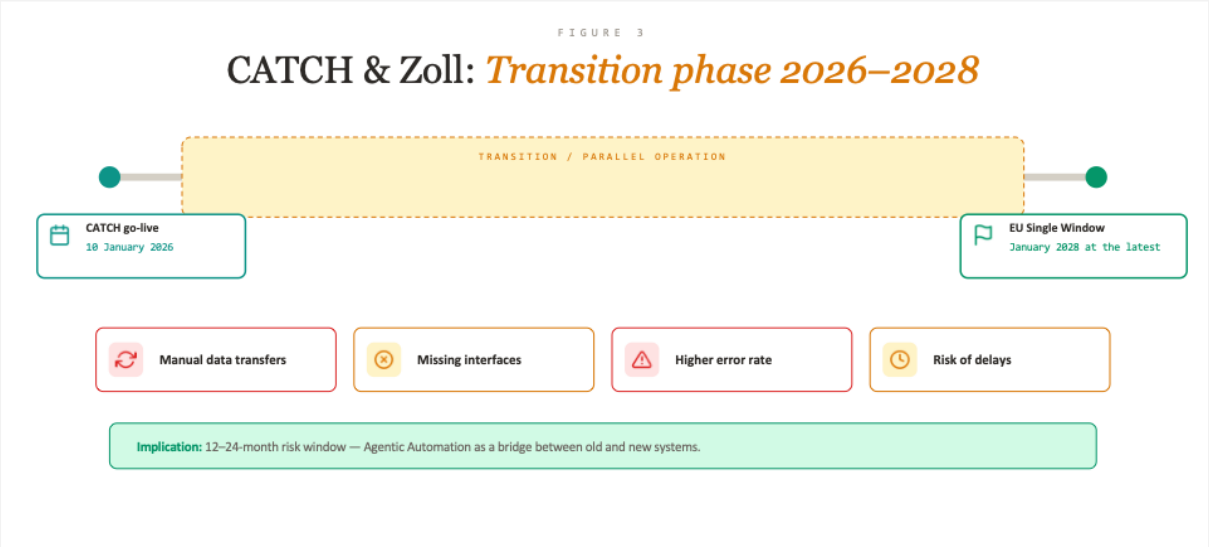


EXAMPLE CATCH: WHEN NEW IT SYSTEMS UNDERESTIMATE REALITY

CATCH is the EU system for digital catch certificates for fishery products to curb illegal fishing. It came into force on 10 January 2026 and is intended to replace paper processes, improve traceability and combat IUU fishing. However, its introduction has been a complete failure. The German Federal Ministry of Agriculture, Food and Trade has temporarily suspended the introduction of CATCH for German fishing companies.

For logistics, CATCH follows a familiar pattern: a good cause, but difficult to put into practice. Many third countries are not yet able to use CATCH because they are experiencing considerable implementation difficulties. As a result, data is being transferred manually from paper and scans uploaded, and national systems are being reintroduced. This increases errors and ties up capacity.

When it comes to perishable goods, every delay is costly. Reports in January 2026 cite system errors, missing data fields and delays in European ports, among other things.



THE DIRECTION IS CLEAR: MORE DATA, ADVANCE CHECKS AND MORE AUTOMATION

The direction is clear: more advance data, more digital risk assessment, more automation. The EU customs reform describes the EU Customs Data Hub and mentions, among other things:

- Launch of the Data Hub for e-commerce from 2028
- Additional importers from 2032, initially on a voluntary basis
- Use of AI for risk analysis and forecasting

For companies, data quality thus becomes an operational capability. Those who have documents, master data and rules under control experience less friction and can implement changes more quickly. This is where UMT comes in.

UMT AG will market and offer **CUSTOMS AUTOPILOT** throughout Europe.

CUSTOMS AUTOPILOT AND UMS AGENTIC VISION AI IN PRACTICE (CUSTOMSAUTOPILOT.COM)

FROM A STACK OF DOCUMENTS TO A CLEAN DATA RECORD

Customs is rarely just "a form". For a declaration, many details must match, for example:

- Description of goods and customs tariff number
- Value and weight of goods
- Origin and Incoterms
- Parties involved and transport information
- Accompanying documents, if applicable

This information is often scattered across various locations: in ERP, warehouse or transport management systems, in PDFs or emails and scans, in invoices and in the customs databases of the authorities. Employees collect, transfer and check the information until a declarable data record is created. With high volumes, this quickly becomes prone to errors.

WHAT UMT AUTOMATES IN EVERYDAY LIFE

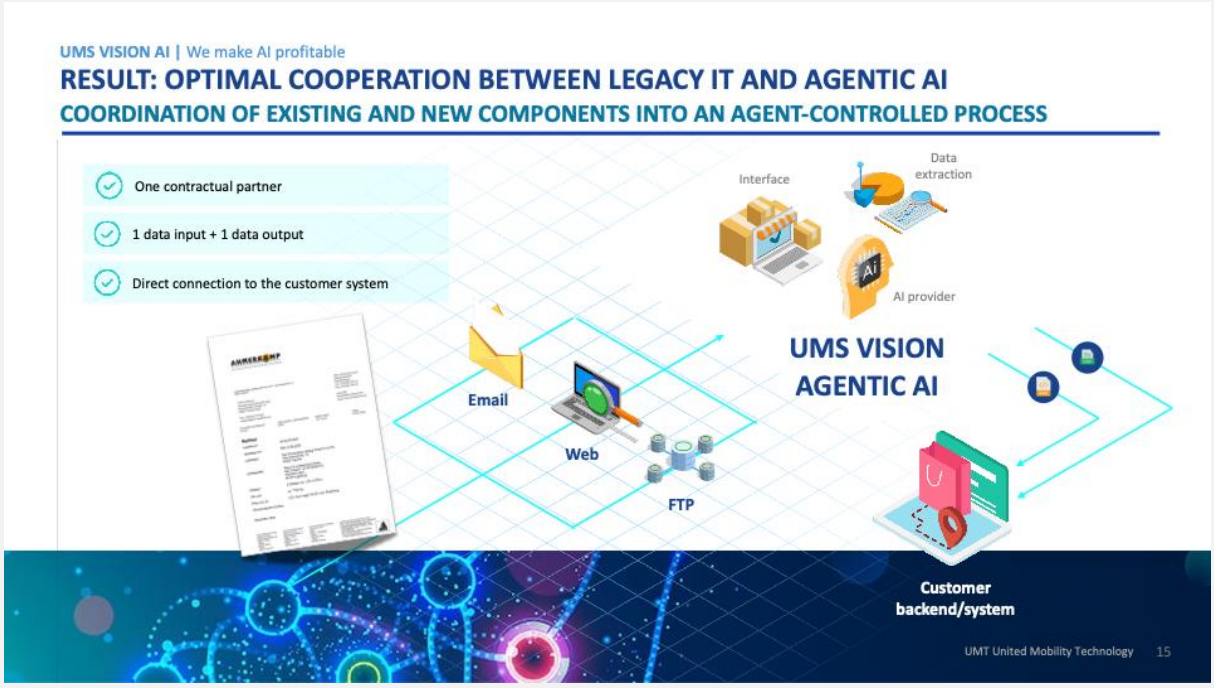
UMS AGENTIC VISION AI and **CUSTOMS AUTOPILOT** address these friction points. They automate the steps before and around customs declaration. Routine tasks run automatically, exceptions are handled cleanly.

Typical automation modules in the customs and logistics environment are:

- Collecting documents and assigning them to a process (email, upload, interfaces).
- Reading invoices, packing lists and freight documents and filing them in a structured manner.
- Checking against master data and rules (completeness, plausibility, form).
- Comparing documents and databases; marking deviations as traffic lights/exceptions.

- Preparing customs fields and – if connected – transferring them to the target system.
- Generate audit trail: source, steps, decision.

UMS AGENTIC VISION AI significantly reduces the number of interfaces that need to be operated by humans.



EXCEPTION MANAGEMENT INSTEAD OF DATA ENTRY

People should type less and decide more. Routine cases run automatically, unclear cases go into the exception track. This is the principle behind it.

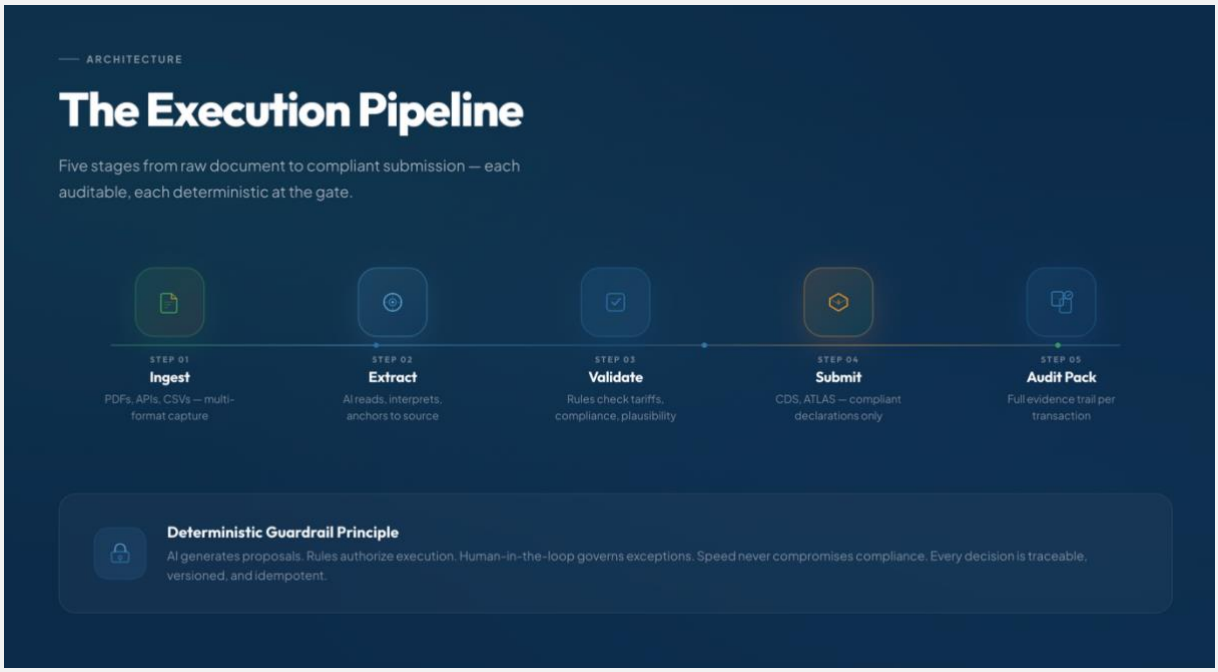
This reduces queries and rework. Our goal is to reduce 20–40 minutes per process to just a few minutes, while simultaneously reducing the error rate.

The customs process between the EU and England is a good test case: high volumes, complex rules, strict systems. Today, the process often consists of typing and subsequent correction. This does not scale with volume. The penalties for incorrect customs declarations are high and should be avoided.

In simple terms, the autopilot process looks like this:

- Shipment data comes in a structured format from ERP/warehouse (API/CSV).
- Documents are collected (e.g. PDF invoices).
- Data is extracted and linked to master data.
- Rules and schema are checked.
- If OK: a declarable data record is generated.
- If there is a deviation: exception track with clear justification.

This "human in the loop" approach is very efficient in these and many other cases.



NETWORK AND LEARNING EFFECTS: IMPROVING THROUGH REAL-WORLD PROCESSES

In addition to automation, the learning effect from real processes is also important. Logistics and customs data can provide additional signals that feed back into processes.

This makes patterns visible earlier, for example:

- typical error patterns
- Recurring deviations
- critical combinations of product, origin and rule

Important: Such effects must be implemented in compliance with data protection regulations – with clear customer separation and anonymisation/aggregation where necessary.

However, this requires people within the company to implement it. No agent can do this on its own. No AI. Not yet, anyway.

BUSINESS MODEL: KEEP THE ENTRY BARRIER LOW, MAKE THE BENEFITS VISIBLE QUICKLY

Many companies shy away from large transformation projects. That's why implementation and billing are important. We sell our solution as part of a SaaS model with fixed and usage-based fees, as well as ongoing updates and support. Yes, AI can also be sold as a SaaS/subscription model.

This suits fluctuating volumes. The benefits should be quickly apparent, as there is no typing involved and no classic ERP implementation is necessary.

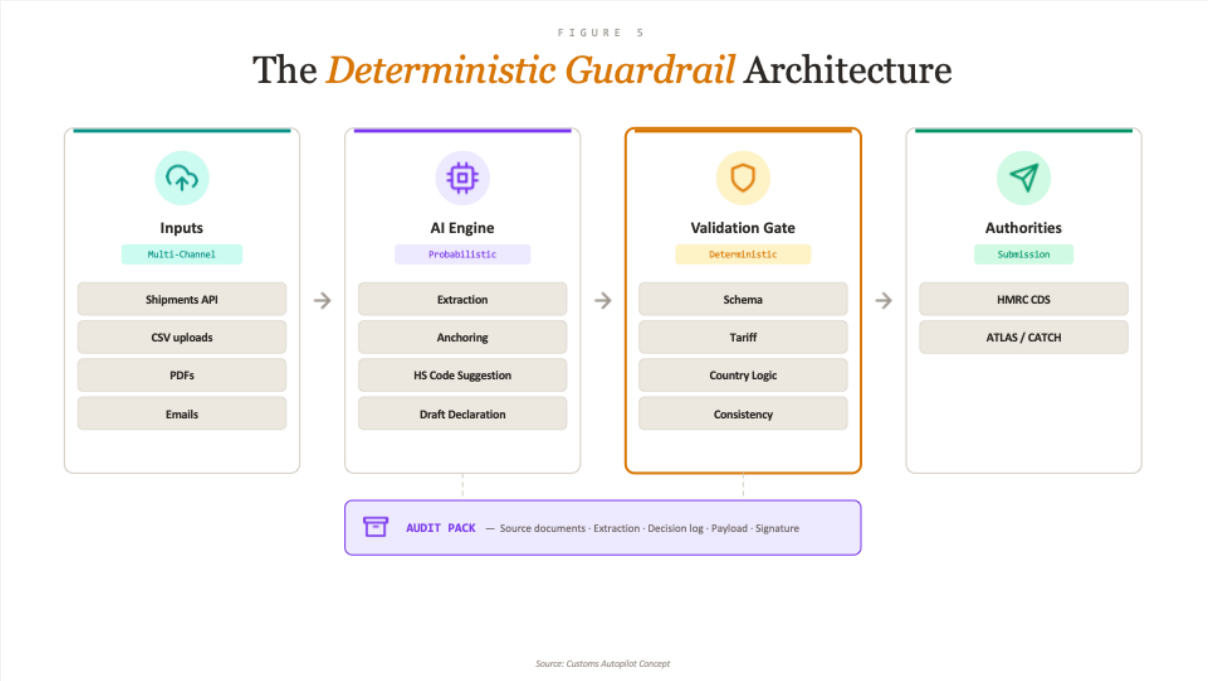
TECHNICAL BACKGROUND: FROM TRADITIONAL SOFTWARE TO ACTIONABLE AI

SAAS, ERP, RPA – AND WHY THAT ALONE IS NOT ENOUGH

Many IT landscapes consist of a core system (ERP/TMS/WMS) plus special tools. SaaS works well when inputs are neatly structured. In customs and logistics, this is often not the case: documents vary, suppliers change, and special cases are normal.

RPA can automate clicks and keyboard work. As soon as interfaces change or content needs to be interpreted, it becomes fragile.

Actionable AI can understand content, compare it and initiate steps. However, it must be controlled in regulated processes. "Mostly correct" is not enough.



WHAT ACTIONABLE AI MEANS IN PRACTICE

"AI agents" are not avatars. They are software that breaks tasks down into steps, uses tools/interfaces, checks intermediate results and, at the end, simplifies a decision by a human or triggers its own action.

In customs, for example, this means:

- Collecting documents
- Extracting data and comparing it with master data
- Finding contradictions or flagging missing information
- Forwarding exceptions to humans for decision-making
- Generating a declarable data record

Depending on the degree of integration, the data record is transferred to the customs system or made available for release.

THE CORE PROBLEM: AI IS PROBABILISTIC – CUSTOMS MUST BE DETERMINISTIC

AI models work probabilistically. This will always be the case because they do not think, but merely deliver the most probable result in each case. In this respect, AI helps with unstructured data, but its use can be risky if results flow into official reports without being checked. A model can sound convincing and still be wrong ("hallucination"). Even though the results are getting better and better, and hallucinations are becoming less and less frequent, in many areas of application it is simply unacceptable to accept anything less than a clearly predetermined result.

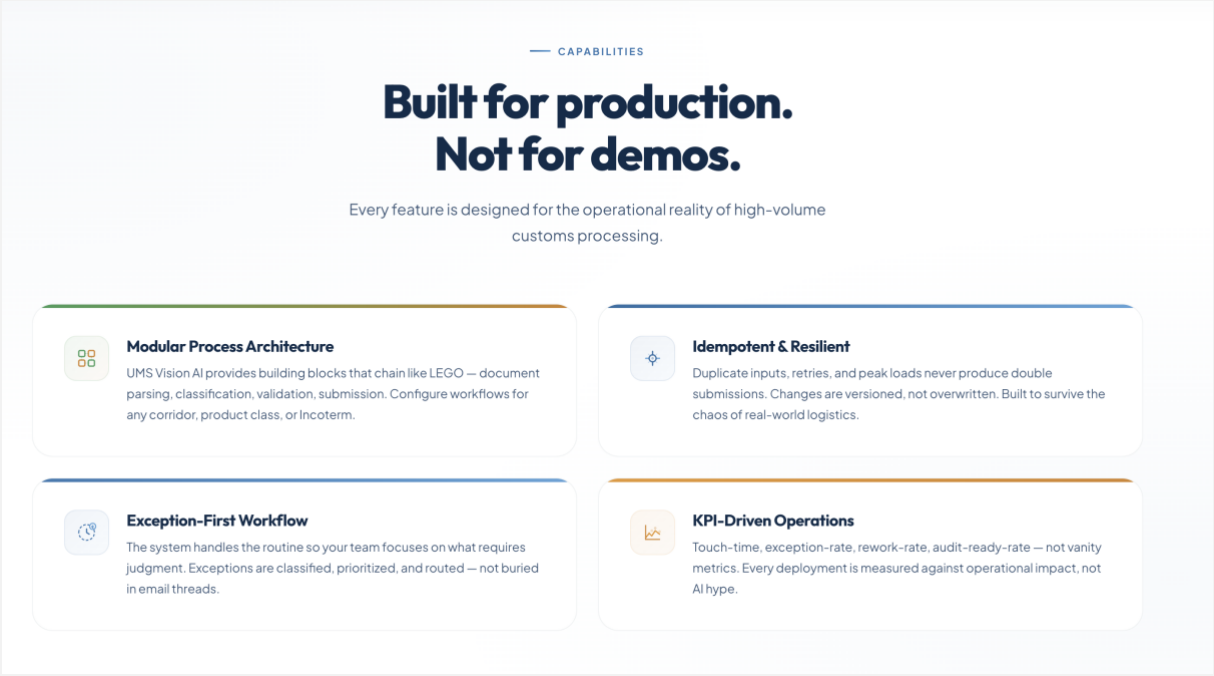
Customs Autopilot therefore relies on a hybrid approach: AI can make suggestions and extract data, but a deterministic verification step makes the final decision. Only results that comply with the rules are transferred to the customs system.

EVIDENCE-FIRST: EVERY NUMBER NEEDS A SOURCE

Evidence-first means not only storing the result, but also the evidence and steps taken. This makes it possible to trace later why a value was set.

The concept consists of three building blocks:

- Collect raw data and documents (shipment data and PDFs).
- Linking extracted values to references in the document ("anchoring").
- Generate an audit package for each process (sources, data, rules, final payload).

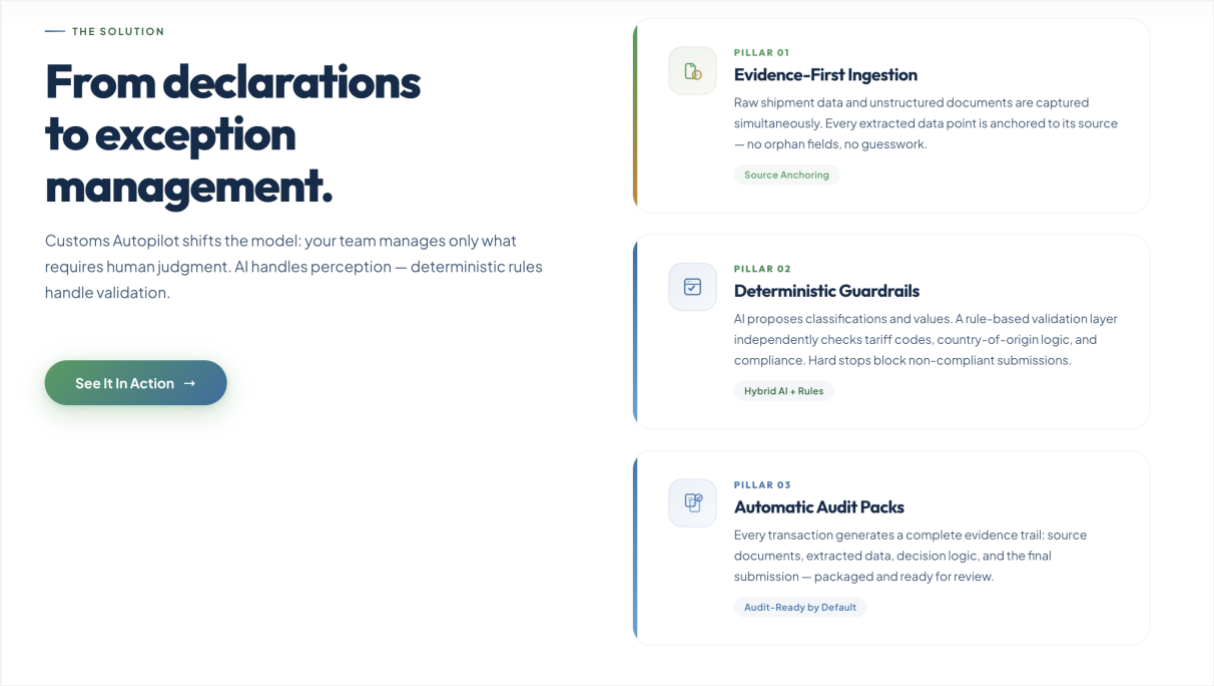


ARCHITECTURAL PRINCIPLES: STABLE, SCALABLE, TRACEABLE

An AI model alone is not enough for operation. The system architecture is crucial. The concept outlines a cloud-native, event-driven microservice architecture that also handles peak loads. What does that mean?

Some of the architectural building blocks mentioned, in everyday language:

- API-first: clear interface to ERP/warehouse.
- Event bus: decouple steps so that nothing comes to a standstill.
- Versioning: do not overwrite anything; make changes traceable.
- Repeatable: re-execution does not generate duplicate messages.
- Measurability: measure quality and runtime for each process.



DATA PROTECTION AND OPERATIONAL SECURITY

Foreign trade uses sensitive data (customers, prices, goods, routes). Operations must be technically and organisationally sound. This includes access models, logging, encryption, and storage and deletion concepts.

Learning effects across multiple customers only make sense with strict separation and anonymisation/aggregation. Often, learning within a single customer is sufficient to achieve significant quality gains.

FUTURE DEVELOPMENT – DRIVEN BY DISRUPTION

AUTHORITIES ARE BECOMING MORE DATA-DRIVEN – COMPANIES MUST FOLLOW SUIT

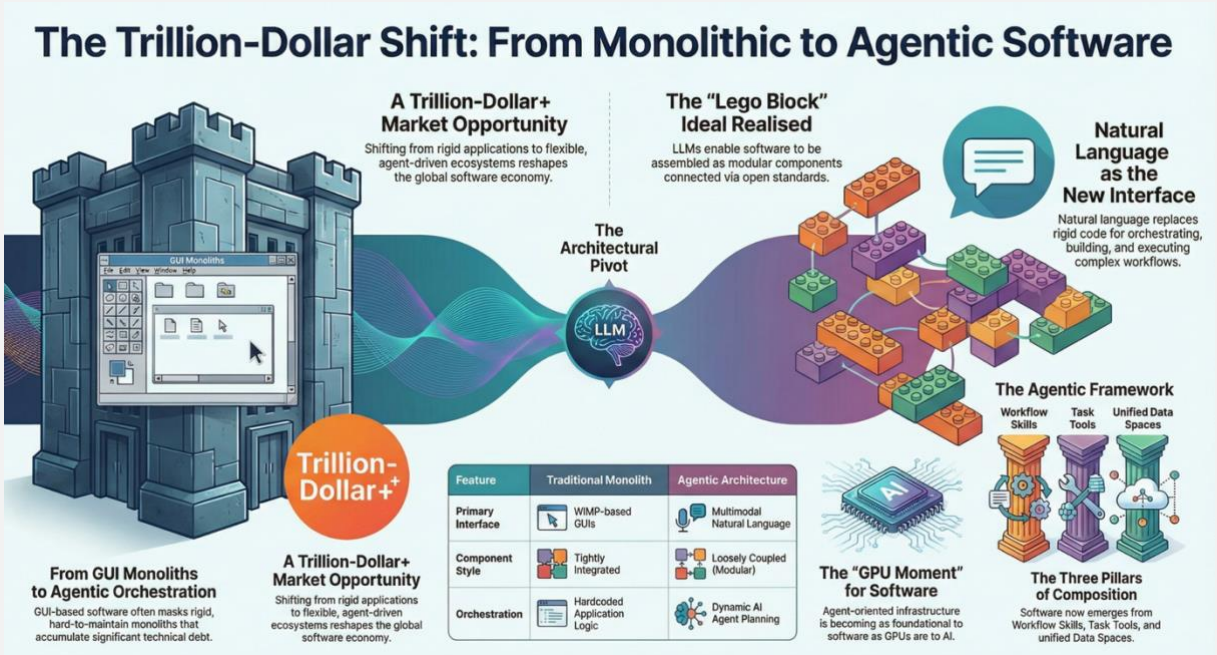
The EU Customs Data Hub shows the trend: authorities want data earlier and in a more structured form. Risks should be identified before goods arrive. The Commission also mentions AI-supported analysis.

Data quality thus becomes an operational capability. Clean documents, master data and processes mean less friction – even when rules change.

THE COMPETITIVE ADVANTAGE LIES NOT IN THE MODEL, BUT IN THE SYSTEM

Basic models are becoming increasingly available. The advantage comes from the system level and raw data, which translate knowledge into reliable processes.

Customs in particular requires integration, rules, traceability and stable operation. Those who master this remain independent of model trends.

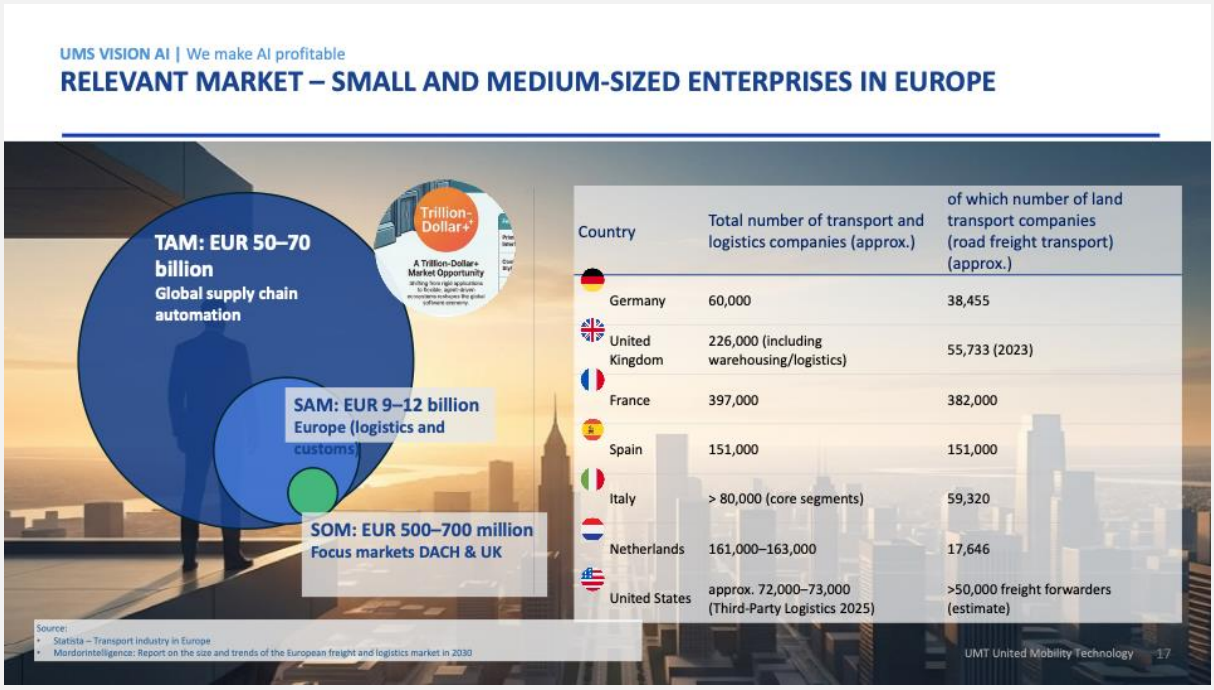


MARKET OUTLOOK

UMT sees three lines of development:

- More verification systems such as CATCH – with transition problems. [6][7]
- More advance risk assessment by authorities – structured data is becoming more important. [8]
- More pressure on SMEs to improve efficiency – due to a shortage of skilled workers and increasing complexity.

For UMT, these are good conditions for integrated process automation.



Country	Total number of transport and logistics companies (approx.)	of which number of land transport companies (road freight transport) (approx.)
Germany	60,000	38,455
United Kingdom	226,000 (including warehousing/logistics)	55,733 (2023)
France	397,000	382,000
Spain	151,000	151,000
Italy	> 80,000 (core segments)	59,320
Netherlands	161,000–163,000	17,646
United States	approx. 72,000–73,000 (Third-Party Logistics 2025)	>50,000 freight forwarders (estimate)

ABOUT UMT AG

UMT United Mobility Technology AG (UMT AG), based in Munich, develops AI software for process automation, particularly in logistics, transport and customs. At its core is **UMS AGENTIC VISION AI**, on which solutions such as **CUSTOMS AUTOPILOT** are based. [2][4]

UMT AG is listed on the stock exchange (WKN: A40ZVU, ISIN: DE000A40ZVU2). It is traded on the Basic Board of the Frankfurt Stock Exchange and on XETRA, among others. [2][9]

Further information: www.umt.ag (company website and investor relations).

Market segment	Base board
ISIN	DE000A40ZVU2
WKN	A40ZVU
Stock exchange symbol	UMD
Designated sponsor	ODDO BHF Corporates & Markets AG, FRANKFURT /M MWB FAIRTRADE, FRANKFURT
Amount of share capital	2,454,274.00
Number of shares	2,454,274 bearer shares, EUR 1.00 per share