GRAAP

Case Study: Automating High Volume Quote Processing

How a Leading European Technical Distributor Cut Quote Preparation Time by 80–90% with AI-Powered Document Processing



Client:

Leading European technical distributor

Industry:

Technical Distribution

Solution:

Intelligent Document Processing + SAP CPQ

The Challenge

As the company scaled its quoting operations across regions, the manual front end of its SAP CPQ process became an increasingly costly bottleneck.

01.

Unstructured inbound requests

Customers submitted product requests in whatever format suited them, ranging from email bodies to Excel attachments, with no standardized intake process in place.

02.

Time-consuming manual entry

Sales representatives had to manually extract product IDs, descriptions, and quantities and input them into SAP CPQ line by line. For requests containing 1,000+ items, a single quote could consume an entire working day.

03.

Inconsistent material number formats

Operating across multiple regions and industries, the company encountered varying product identifier conventions depending on the customer segment. Sales teams had no systematic way to match these formats to the correct entries in the product master, leading to frequent mismatches.

04.

No exception handling workflow

When a product could not be found in the master data, there was no structured process to resolve it, leaving sales teams without a clear path forward and deals stalled in limbo.

The Solution

Graip.AI was deployed as the intelligent front end to the company's SAP CPQ environment, automating the entire journey from document ingestion to quote population with built-in validation and exception handling.

Key capabilities:

01.

Intelligent document ingestion

Users upload customer request files, whether Excel spreadsheets or email content, directly into the Graip.AI. The platform automatically extracts product IDs, descriptions, quantities, quote IDs, and business partner information, identifying customer segments at the header level to drive downstream matching logic.

02.

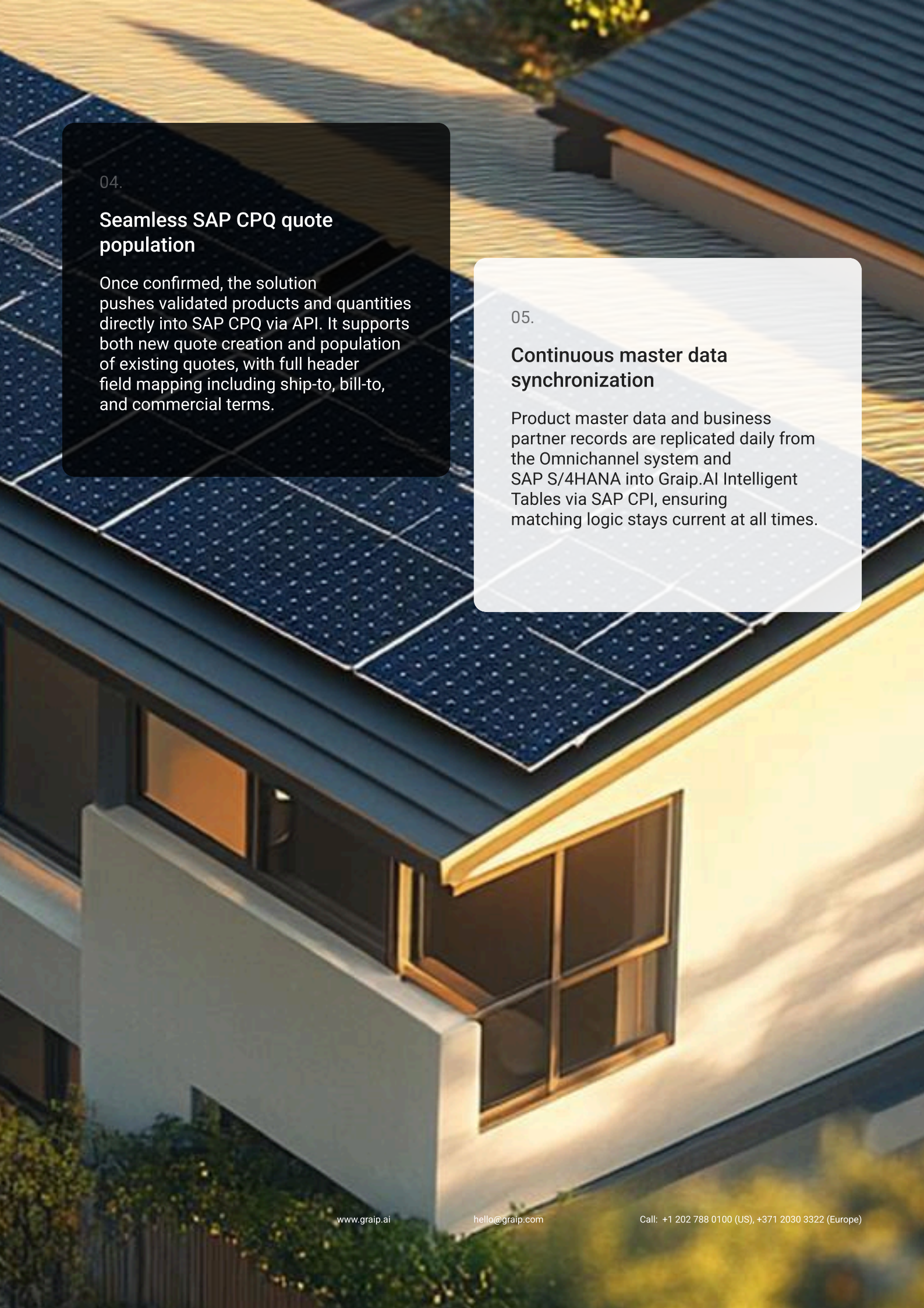
Automated product recognition and validation

The solution performs real-time validation of every product ID against master data replicated from the Omnichannel system and SAP S/4HANA via SAP CPI. Customer-segment-aware matching logic accommodates varying material number formats across business units. Unrecognized products are flagged immediately, with the three closest alternatives surfaced based on description similarity.

03.

User review and confirmation

Before any data is pushed forward, sales representatives review a clear summary of matched items, flagged exceptions, and suggested alternatives, retaining full control over every line.



04.

Seamless SAP CPQ quote population

Once confirmed, the solution pushes validated products and quantities directly into SAP CPQ via API. It supports both new quote creation and population of existing quotes, with full header field mapping including ship-to, bill-to, and commercial terms.

05.

Continuous master data synchronization

Product master data and business partner records are replicated daily from the Omnichannel system and SAP S/4HANA into Graip.AI Intelligent Tables via SAP CPI, ensuring matching logic stays current at all times.

The Implementation

The implementation followed Graip.AI’s signature 3-stage AI transformation framework. This ideological approach ensures that AI agents are scalable business assets.

01.

Align (Discover & Blueprint)

Graip.AI worked with the client to map the existing quoting workflow, identify the highest-impact friction points, and define the rollout scope, prioritising the most complex, high-volume quoting scenarios first.

02.

Prove (Build, Validate & Launch)

The solution was built and validated against real customer request data, with particular focus on multi-format document handling and segment-aware product matching. The team mapped material number conventions across customer segments and configured exception handling logic before moving to production.

03.

Scale (Test, Go-Live & Expand)

Following user acceptance testing, the solution went live alongside the broader SAP CPQ implementation, immediately absorbing high-volume quote requests across the sales team. Master data synchronization pipelines were established to ensure the solution remained accurate as the product catalogue evolved.

The Results

The solution delivered a significant, measurable impact across the company's quoting operations.

What once required a full working day per large quote was reduced to a matter of minutes, fundamentally changing the capacity and focus of the sales team. With manual data entry eliminated and validation built into the process, the organization gained both speed and accuracy across the entire quoting workflow.



Metric	Before AI Agent	With AI Agent
Quote preparation time	Full working day per large quote	**80–90% reduction**
Manual data entry	Full manual extraction and input	**Eliminated**
Data accuracy	Frequent mismatches and downstream rework	**Invalid products caught before entering SAP CPQ**
Sales rep productivity	Hours lost to data entry per quote	**5–10 hours reclaimed per rep per week**
Team capacity (10 reps)	Absorbed by manual processing	**~200 labor hours per week redirected to selling**
Revenue acceleration	Long quote turnaround extending sales cycles	**1–2 day reduction per quote compounding into significant revenue acceleration across hundreds of monthly quotes**

Strategic Advantages

01. **Scaling without headcount pressure**

The organization can now absorb growing quote volumes without proportional increases in sales operations staff. The same solution handles a 1,000-item quote with the same speed and accuracy as a 50-item one.

02.

Faster response to market demand

With quote turnaround dramatically reduced, the sales team can respond to customer requests the same day rather than the next, creating a competitive advantage in time-sensitive deals.

03.

Data quality as a foundation for growth

By catching invalid or unmatched products before they enter SAP CPQ, the solution protects the integrity of downstream processes including order fulfilment, pricing, and reporting, reducing rework across the entire order lifecycle.

Conclusion

Deploying Graip.AI as the intelligent front end to SAP CPQ eliminated the single largest bottleneck in the company's quoting workflow. What once required a full working day per large quote now takes minutes, and the sales team spends its time where it matters, building customer relationships and closing deals rather than re-keying data.

80–90%

Reduction in quote preparation time

With the foundation in place, the organization is well-positioned to extend the same intelligent automation logic to adjacent workflows, further accelerating its broader digital transformation program.



GRAIP

Ready to eliminate manual bottlenecks from your quoting process?

Contact us today for a workflow audit.

Learn more

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