



# Business case Customer Service Automation

Net Profit: €1.5M | IRR: 267% | Payback: 7 months

## Executive Summary

This business case analyzes implementing AI-powered customer service automation for an enterprise handling 500,000+ customer inquiries annually. The system deflects 60-80% of routine inquiries, reducing call center costs while improving customer satisfaction through 24/7 availability.

## Problem Statement

Customer service centers are overwhelmed with high inquiry volumes, 70%+ of which are repetitive questions that could be answered through self-service. This creates long wait times, high operational costs, and employee burnout. Customers wait hours or days for simple answers that should be instant.

## Current State Analysis

Metric	Value
Annual customer inquiries	500,000
Repetitive inquiries (automatable)	70% (350,000)
Average handling time	8 minutes
Annual hours on repetitive inquiries	46,667 hours
Agent cost (fully loaded)	€45/hour
Annual cost	€2,100,000
Customer satisfaction (CSAT)	72%
First contact resolution	65%

## Proposed Solution

Deploy AI-powered customer service assistant that handles routine inquiries automatically via web, mobile, email, and chat, deflecting 60-80% of inquiries while improving customer satisfaction.

### Key capabilities:

- Multi-channel support (web chat, WhatsApp, email, mobile app)
- 24/7 availability (no waiting for business hours)
- Multi-language support (Dutch, French, English, German)
- Smart routing (escalates complex issues to human agents)
- CRM integration (access customer history, update records)
- Self-service actions (track orders, update info, process returns)
- Sentiment analysis (detects frustrated customers, escalates)
- Analytics dashboard (track deflection, satisfaction, common issues)

# Financial Analysis

## Investment breakdown

Component	Cost (€)	Notes
Discovery & Design	15,000	Journey mapping, CRM integration design
AI Development	45,000	Multi-channel bot, NLP training
System Integration	18,000	CRM, order management, knowledge base
Testing & Training	7,000	UAT, agent training, launch campaign
<b>Total Implementation</b>	<b>85,000</b>	<b>One-time investment</b>
Annual Hosting	60,000	€5,000/month (cloud, multi-channel)
Annual Support & Optimization	18,000	Continuous improvement, new features
<b>Total Annual Operating</b>	<b>78,000</b>	<b>Recurring cost</b>

## Savings Calculation

Metric	Current	With AI	Improvement
Annual inquiries	500,000	500,000	-
Repetitive inquiries (70%)	350,000	350,000	-
AI deflection rate	-	70%	245,000 automated
Remaining to agents	350,000	105,000	245,000 fewer
Hours saved (245K × 8 min)	-	32,667 hours	-
Annual labor cost saved	-	€1,470,000	@ €45/hour
Annual operating cost	-	€78,000	-
Net annual savings	-	€1,392,000	-

## 3-Year Financial Projection

Year	Investment	Operating	Savings	Net Benefit	Cumulative
Year 1	€85,000	€78,000	€1,114,000	€951,000	€951,000
Year 2	€0	€78,000	€1,392,000	€1,314,000	€2,265,000
Year 3	€0	€78,000	€1,392,000	€1,314,000	€3,579,000
<b>Total</b>	<b>€85,000</b>	<b>€234,000</b>	<b>€3,898,000</b>	<b>€3,579,000</b>	

Note: Year 1 savings reflect 80% of full impact during rollout and adoption period.

## Return on Investment Metrics

Metric	Value	Benchmark
Payback Period	6.8 months	Excellent (<12 months)
3-Year NPV (10% discount)	€2,957,000	Highly Positive
Internal Rate of Return (IRR)	267%	Far exceeds hurdle rate
Return on Investment (ROI)	1,222%	Over 3-year period

## Additional Benefits (Not Quantified)

- Improved customer satisfaction: Instant answers 24/7 vs long wait times
- Better brand perception: Modern, responsive service
- Increased sales: Satisfied customers buy more
- Reduced agent burnout: Focus on complex, rewarding cases
- Better data insights: Track customer pain points systematically
- Scalability: Handle seasonal spikes without temporary hires
- Competitive advantage: Stand out with superior service

## Implementation Timeline

Phase	Duration	Activities
Discovery	Week 1-2	Map customer journeys, collect FAQs, analyze tickets
Development	Week 3-5	Train AI, build multi-channel bot, integrate CRM
Pilot	Week 6-7	Deploy to 10% of traffic, measure deflection
Rollout	Week 8	Full launch, promote to customers, train agents
Optimize	Week 9-12	Improve answers, add features, scale

## Success Metrics

Metric	Target	Measurement
Deflection rate	>70% in 90 days	% of inquiries resolved without agent
Customer satisfaction	>85% (from 72%)	Post-interaction CSAT surveys
Response accuracy	>95%	Quality assurance reviews
First contact resolution	>90%	% resolved in first interaction
Cost per inquiry	<€3 (from €4.20)	Total cost / total inquiries

## Recommendation

We strongly recommend proceeding with customer service automation based on exceptional financial returns and transformational customer experience improvements.

Key decision factors:

- Exceptional ROI: 267% IRR far exceeds hurdle rate
- Fast payback: <7 months to recover investment
- Dramatic CSAT improvement: 72% → 85%+
- Massive cost savings: €1.4M/year ongoing
- Competitive advantage through superior service
- Quick implementation: 8 weeks to full deployment

## Let's talk.

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For questions about this business case or to schedule a discovery call, please contact us directly.