



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
Total Implementation	85,000	One-time investment
Annual Hosting	60,000	€5,000/month (cloud, multi-channel)
Annual Support & Optimization	18,000	Continuous improvement, new features
Total Annual Operating	78,000	Recurring cost

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
Total	€85,000	€234,000	€3,898,000	€3,579,000	

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.

