

Case Study: AI-Driven Process Optimization in Customer Service

# **Reduce Costs OR Improve Quality? Our solution does both.**

How a Custom AI Performance System Transformed Operational  
Efficiency in a Support-Intensive Company  
— Focused on a Single Service Area

**Savings: €772,000**

**Return on Investment: 560%**

# The Starting Point: A Tension Between Cost and Quality



Our partner is one of **Europe's leading service providers**, managing customer support with hundreds of agents for **one of Germany's largest telecommunications companies**.

Their success depends on two critical factors:

- **Maximum Efficiency:** Operational costs must be kept low to remain competitive.
- **Top-Tier Quality:** Service quality for the end customer must be excellent to ensure long-term partnership stability.

This **tension between cost pressure and quality demands** posed significant challenges for the company.

# THE PROBLEM: Hidden Costs & a Performance Gap

The daily operations of our partner were marked by systemic inefficiencies that hindered growth and directly impacted profitability. Although the company possessed the necessary expertise, the problems manifested in three costly core areas:



## Inefficient Onboarding & Costly Training

With hundreds of new hires per year for this service area, the onboarding process became a constant and costly cycle. Individual technical setup issues slowed down entire training groups and extended paid training time by an average of two additional days. The high turnover rate further intensified the problem, leading to a time- and resource-heavy process every month — resulting in **additional costs of over €190,000 annually**.



## Costly Errors in Live Operations

Expensive errors during live operations were part of the daily routine. A wrong process step by just one employee — such as incorrect ticket categorization — had far-reaching consequences. On average, over **1,100 faulty service calls per month** occurred in this service area, each requiring costly follow-up. The result: **over €230,000 in annual costs**, significantly reduced service quality, and jeopardized the partnership with the end customer.



## High Supervision Effort

A constant flood of recurring questions blocked valuable resources. Whether organizational details, incorrect feedback in live operations, or the same uncertainties in every new training — this high level of supervision led to chronic bottlenecks, with the cost of **two full-time employees** on both sides: the responsible managers (productivity loss) and the responding experts (tied-up resources). This redundancy alone **cost the company over €300,000 per year**.

# The Solution: A Tailored AI Performance Assistant

## An Assistant for Learning and Everyday Work

We developed a **customized, AI-powered assistant** for our partner that supports employees (agents/talent) across all phases of their work — from day one onboarding to ongoing training and real-time support in daily operations.

Instead of relying on existing, often unstructured knowledge bases, the system is built on a proprietary logic algorithm. This algorithm optimally leverages specially curated knowledge and delivers it in a highly contextual manner.

*The system acts as a personal mentor that boosts each individual's performance while simultaneously automating operational processes.*





# The Solution: The Assistant's Four Core Functions

Envision the assistant as an experienced team lead overseeing a team of four specialized units. Upon receiving a user request, the central assistant analyzes the input and intelligently routes it to the most suitable sub-assistant—ensuring accurate, efficient, and context-driven support.

## Onboarding Assistant



Guides new employees autonomously through technical setup and onboarding preparation. The assistant walks users through each step of the process and can answer context-specific questions at any time. This enables fully autonomous and scalable onboarding that can run in parallel for an unlimited number of employees—without tying up a single trainer.

## Process Assistant



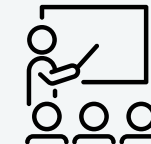
Enables guided problem-solving in real time. When an employee is uncertain about a customer issue, the assistant asks targeted follow-up questions to narrow down the situation. Through this logic-based dialogue alone, the assistant identifies the precise solution for the specific case—without requiring risky integrations into customer systems.

## Q&A Assistant



Serves as a central 24/7 knowledge base for all non-process-related questions. Whether it's about organizational topics, internal policies, tool usage, technical issues, or effective sales techniques—the assistant provides instant, consistent, and reliable answers. This significantly reduces the burden on team leads and internal support departments.

## Learning Assistant



Revolutionizes training through interactive learning paths. The assistant guides employees through the content, answers individual questions about the material at any time, and simulates realistic customer scenarios for hands-on practice. With immediate, automated feedback, it ensures a highly efficient and sustainable learning process.

# Why Our Approach Outperforms Other AI Solutions

Standard Chatbots vs. Tailored Performance Assistant

## Key Differentiator:

### ✓ Process Intelligence Instead of Database Search

While other solutions simply search existing information, our system ensures the qualitative execution of processes.

### ✓ Proprietary Logic Algorithm

Tailored Process Logic: We don't just adapt a tool — we engineer the core logic specifically for your workflows.

### ✓ Four Specialized Assistants

Onboarding, Process Support, Q&A, and Training operate in perfect sync, delivering targeted, coordinated support at every stage.

### ✓ Maximum Data Protection

100% compliant with GDPR and the EU AI Act, hosted in German data centers, with no access to sensitive customer data.

### ✓ Practice-Oriented

Rooted in real-world experience: Developed with a deep understanding of your operational challenges—not just the underlying technology.

Standard  
Chatbots

VS

Our  
Approach

### The Result:

Greater adoption, improved performance, and measurable ROI gains — instead of just “nice-to-have” features.

# How is such a Performance Assistant Implemented?

We combine customized solutions with proven methodologies. Each solution is **100% tailored to your processes**, based on our tried-and-tested and agile implementation framework. This guarantees maximum quality and **a fast time-to-value**.

1

## Analysis & Conception

Collaborative workshops to define KPIs, target architecture, and project framework.

2

## Development & Data Preparation

Programming of the core logic, setting up the infrastructure, and initial knowledge base preparation.

3

## Alpha & Beta Testing Phases

Rigorous internal tests with subject matter experts, followed by guided live operations with end users.

4

## Final Launch & Scaling

Official roll-out for all user groups and continuous optimization in live operation.

# Why This Solution is So Popular with Employees & Management

## Relieves Experts & Managers

Frees your most valuable employees from repetitive questions, allowing them to focus on strategic tasks.

## Instantly Usable & Intuitive

No training required, resulting in exceptionally high adoption and usage rates from day one.

## Practical Training

Reduces onboarding time and boosts performance from the very first day.



## 24/7 Individual Support

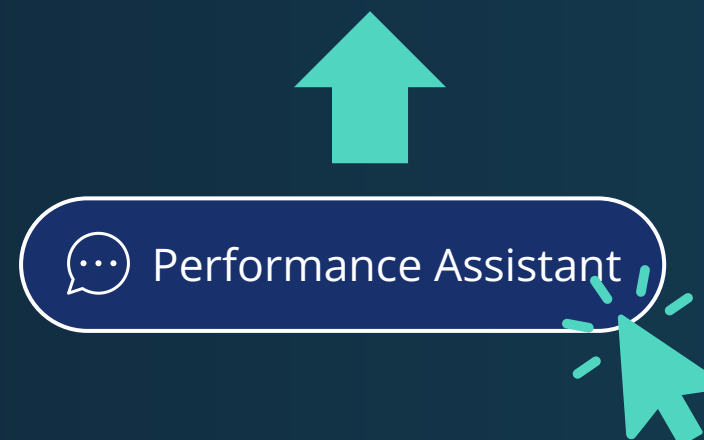
Increases employee satisfaction by eliminating wait times and frustration — available anytime and highly intuitive.

## Maximum Precision

Leads to significantly higher service quality and greatly reduces the workload of your subject matter experts.

## Future-Proof

Ensures innovation leadership and positions you as an attractive employer.





# Measurable Results: The Numbers

The numbers for implementing this AI-powered assistant in a single service area:

< 3,5

Payback period

772.000 €

Annual Savings

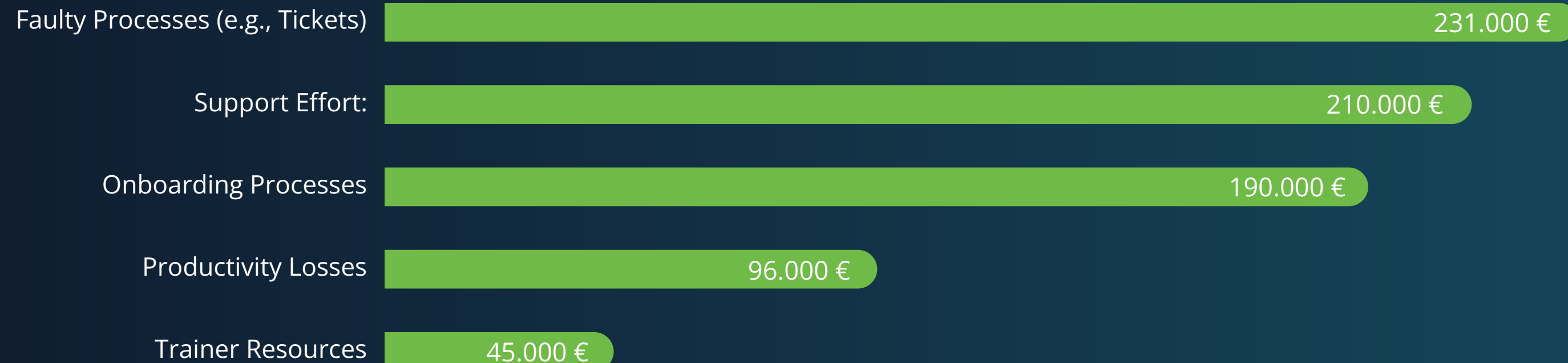
+256 %

Return on Invest (in the 1st year)

+560 %

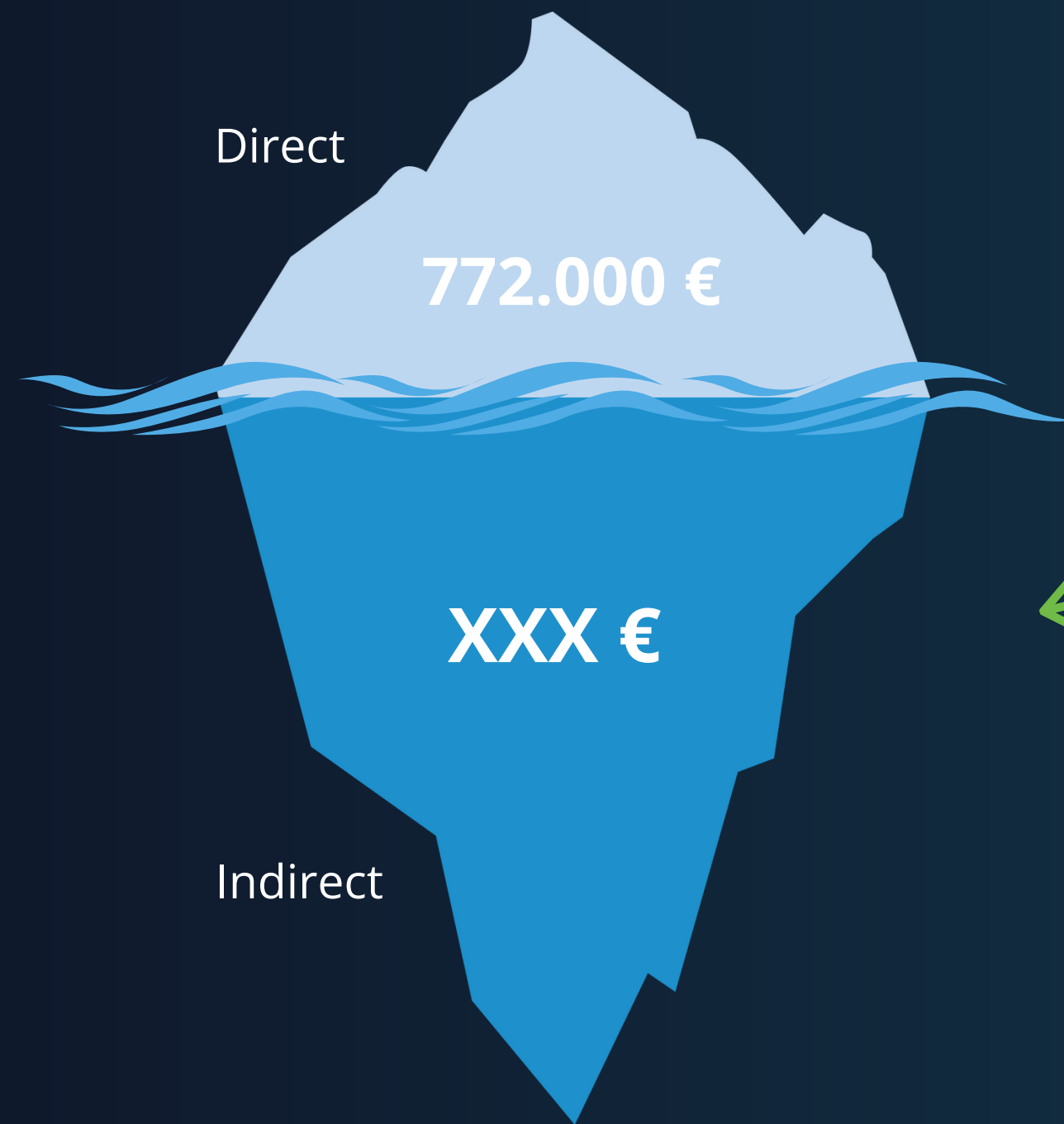
Return on Invest (subsequent years)

## Breakdown of Measurable Savings



# Tip of the Iceberg: The Strategic Added Value

The direct savings are only a part of the story. The greatest strategic value lies in the less quantifiable, but highly impactful benefits that lie beneath the surface:



- ✓ **Reduced Employee Turnover & Customer Attrition:** Motivated employees and higher service quality lead to long-term retention of both staff and customers.
- ✓ **Stronger Negotiation Position & Image:** Demonstrating higher efficiency and quality strengthens the company's position with clients, helping to secure and attract new customers.
- ✓ **More Attractive Employer Branding:** The use of modern AI technologies makes the company a more appealing employer for qualified professionals.
- ✓ **Automated Training:** The assistant lays the foundation for fully automated training without sacrificing quality, ensuring continuous performance improvements.
- ✓ **Enhanced Sales Performance:** Confident and well-informed employees identify more cross-sell and up-sell opportunities, leading to better conversion rates and directly increasing revenue per agent.

# The Scaling Potential: A Multiplier for Success

The true strength of the system lies in its unlimited scalability. The proven successes are based on just one service area, but the approach is universally transferable.

## Whether 100 or 10,000 Users

The architecture is built to grow alongside your business. Whether you add new service areas, expand existing ones, or enter new markets, the system scales effortlessly.

- **For Companies with Multiple Service Areas:**  
The savings potential grows with each additional service area added.
- **For Growing Businesses:**  
The assistant enables teams to scale rapidly and efficiently, without overwhelming support costs.

With the expansion to just **3-4 additional service areas**, the annual savings potential is in the range of

**2 - 3 Million €**

a conservative and realistic estimate, **with virtually unlimited growth potential upwards.**

# Maximum Security: Uncompromising Data Protection

- ✔ **Technically Secure Architecture:**  
The solution is designed to function without access to your sensitive customer data systems.  
The intelligence lies in the process logic, not in the data analysis.
- ✔ **Secure Authentication & Transmission:**  
Access is provided through secure methods like SSO with anonymized JWT tokens.  
All communication between the user and assistant is fully encrypted (End-to-End).
- ✔ **Certified Enterprise Infrastructure:**  
We exclusively use leading global cloud platforms (Azure, Google Cloud) that meet the highest security certifications (e.g., C5, ISO 27001, SOC 2).
- ✔ **100% GDPR & AVV Compliant:**  
Developed according to "Privacy by Design" principles with strict data minimization.  
A legally secure data processing agreement (AVV) is an integral part of our partnership.
- ✔ **EU AI Act Compliant & Future-Proof:**  
The AI system is classified as low risk and continuously adjusted to comply with new regulations and security standards for the future.
- ✔ **Guaranteed Data Residency:**  
All data is processed and stored exclusively in data centers in Germany (Frankfurt), ensuring full data sovereignty. (If needed, also in other European countries).

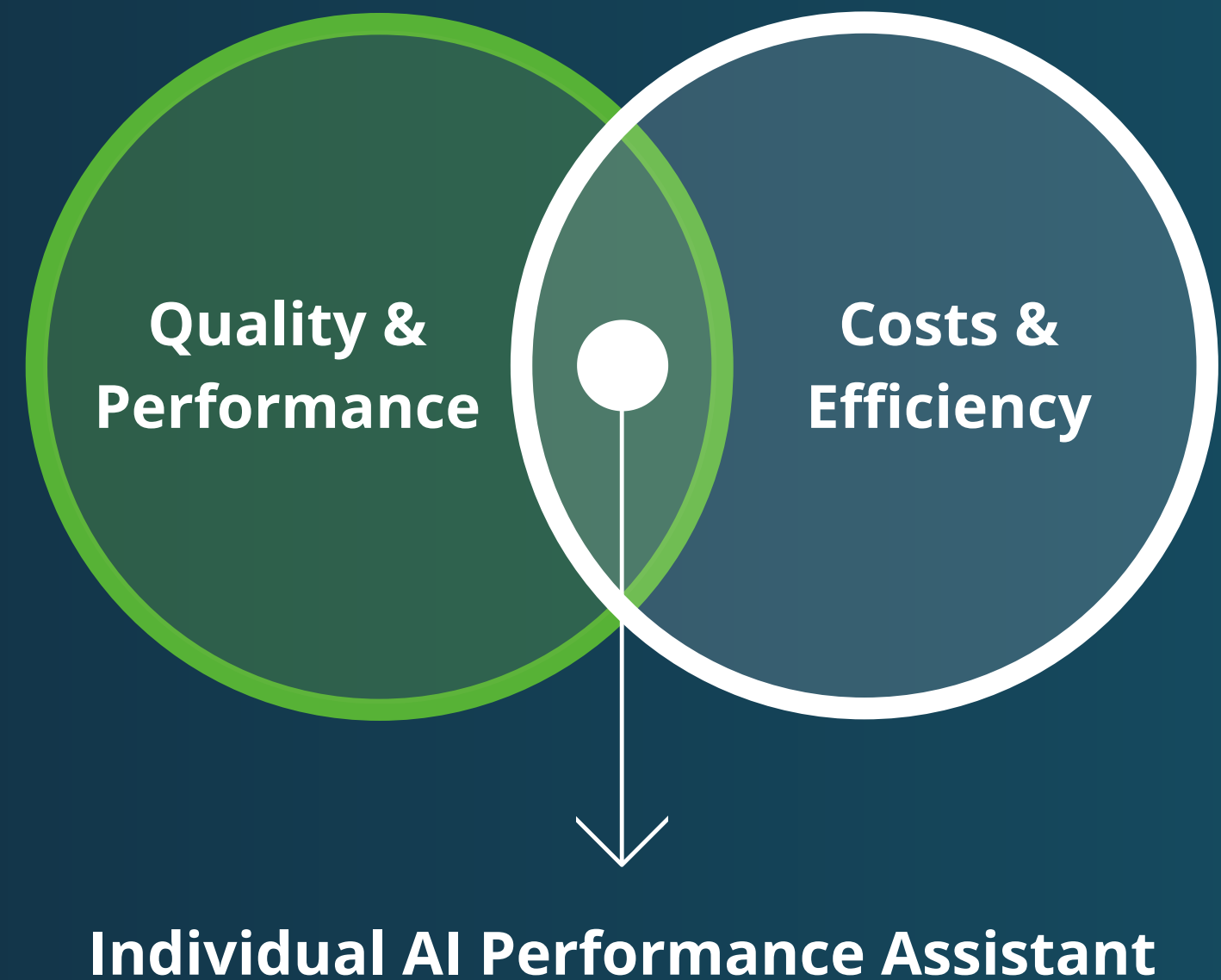


# Summary: The Unique Combination

Most solutions on the market focus either on cost reduction or quality improvement. Each of our **individually developed AI assistants** offers a rare and valuable combination of both.

**We significantly reduce process costs and resources while simultaneously improving employee performance and the quality of work.**

This is not a compromise, but rather a **strategic advantage** enabled by our customized process logic.





# From Potential to Performance

You have seen what results are possible. The best way to assess the potential for your own business is to experience the solution live. We offer you two simple and non-binding options to learn more:

## Option 1: Live-Demo

In a 30-minute personal demo, we will show you the prototype of an assistant live and answer your specific questions.

**[Book a demo appointment now](#)**

free & non-binding

## Option 2: Potential Analysis

You already know that you face similar challenges?  
In a free initial consultation, we will analyze your potential for improving efficiency and quality.

**[Book a potential analysis now](#)**

free & non-binding