

Smart Call Assistance

Conversational IVR for Client Contact Centres



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empowering humans

Inhoudsopgave

Introduction

The majority of organizations now use Customer Contact Centres (CCCs) to respond to customer enquiries. While this is how they aim to achieve a positive customer experience, not all customers experience this as positively as expected. Long waiting times, undertrained staff and lengthy menu options are among the top frustrations. These CCCs also face challenges of their own, such as staffing shortages, employee turnover, high workload, and rising absenteeism.

To tackle these challenges, new-generation CCCs are adopting technologies such as natural language processing and understanding, artificial intelligence and computational linguistics to improve customer interactions. These conversational IVR technologies can support organizations in omnichannel customer contact, whether through digital or live assistance or a combination of these. This enables customers to interact with organizations through their personally preferred channels. They can even switch channels without losing the context or continuity of their question or problem.

This newly emerging technology not only ensures an excellent customer experience, but also greatly improves employee support in CCCs. Conversational IVR can, for example, take over customer identification, route incoming calls to the appropriate department or employee, assist employees in answering questions and administering contacts, and even handle entire phone calls. With these features, technology contributes to reducing the problems faced by CCCs. All the while helping to improve customer service.

This whitepaper outlines the urgency of the challenge and provides insight into a sustainable AI-based solution: Smart Call Assistance. An innovative new solution that greatly improves both customer experience and employee satisfaction - while also offering simple integration into the architecture of existing CCCs.

An innovative new solution to complement Y.Digital's ambition:
Empowering Humans.

Challenges in CCCs

A customer passes through various stages during the customer journey, which is why various contact channels are important at various times. At the beginning of the customer journey, customers are often oriented towards the website. What happens, though, when the customer decides to speak with an employee?

Unfortunately, the overall customer view of CCCs is not consistently positive. It is therefore a demanding work environment currently characterized by workforce shortages, high employee turnover, overtime, and burnout. At the same time, the organization does want to support its staff, as they are the ones assisting customers quickly and professionally when they need support. We will elaborate on three key challenges.



Staffing shortages

The entire European Union faced rising staff shortages between 2013 and 2019, particularly in Healthcare and ICT. The corona pandemic compounded these shortages within almost all sectors, and this led to a tremendous increase in open vacancies in recent years that appear to be unfilled or virtually unfillable.

Specifically in the Netherlands, more than 60% of employers are experiencing staff shortages and this number is rapidly increasing. Organizations suffering from this cannot produce the same quantity of products and/or services, let alone keep up with increasing demand. The result: declining satisfaction of both customers and employees. Employers attempt to tackle this problem by, for instance, offering employees more authority or growth opportunities. This alone will not suffice, however; technological solutions are also necessary to counter this situation.



High employee turnover

One of the main problems in CCCs is high employee turnover. This is an expensive issue, as it means that knowledge leaves the organization and, in addition, the organization has to invest in acquiring and training new employees. Each organization has specific reasons for turnover, of course, but skewed expectations, few opportunities for advancement and monotonous responsibilities are considered the main factors. The latter factor, monotonous work, has to do with the fact that employees are often required to rigidly adhere to a script.

Agnes Akkerman, professor of Labour Market Institutes and Labour Relations at Radboud University Nijmegen, comments: "Having only remote contact with customers makes the job less attractive. People are often less friendly in digital contact than in real life. It's a job that demands a lot from people."



Stress and burn-out

Research shows that burnout is more common among employees in CCCs than those performing less repetitive jobs. As many as 87% of employees in CCCs report suffering from high levels of stress at work. There are several factors in CCCs that play a role in this, including:

- Excessive call volumes
- Frustrated or aggressive customers
- Too few colleagues
- Excessively high demands (such as number of calls answered per hour, average call time)
- A busy and loud environment
- Outdated tools
- Little recognition or promotions

Employees experiencing stress are more likely to resign or perform worse, but customers are also affected by the negative impact of stressed employees.



AI-powered voice assistants

In recent years, the use of voice assistants in CCCs has increased. Considering the above, this is not surprising. Technology has also significantly advanced. Due to these advancements, consumers are contacting a voice assistant more often (Figure 1). Research shows that consumers have contacted several organizations in this way: mainly in the telecoms sector (14%) and energy sector (11%).

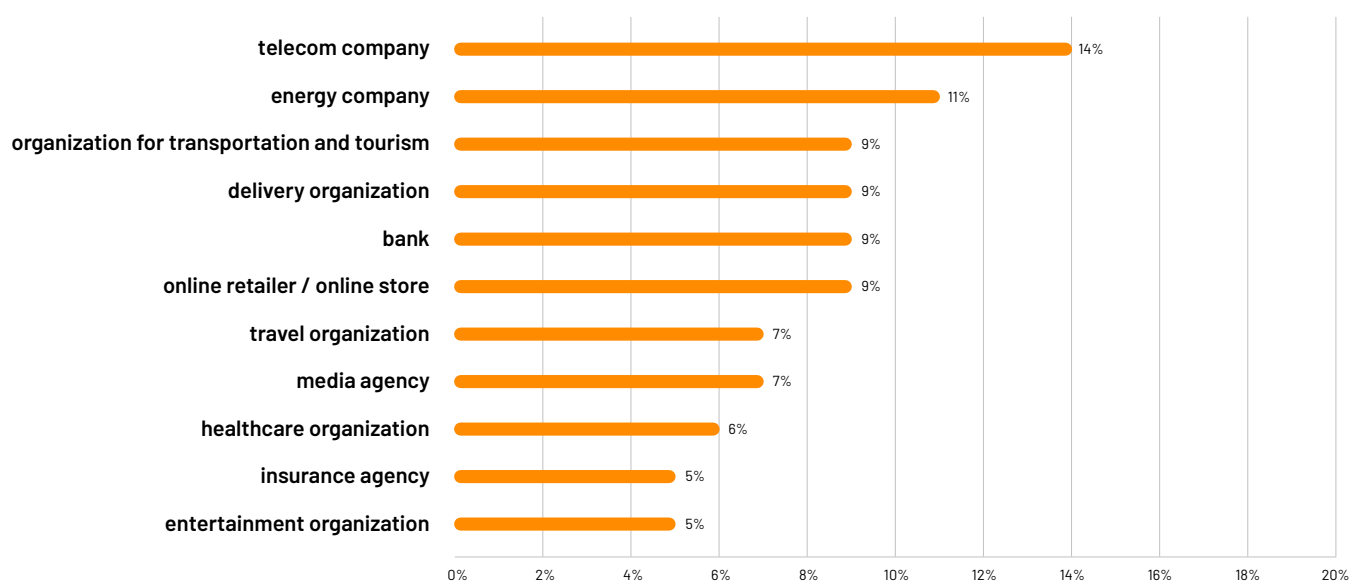


Figure 1: The use of voice assistants to contact organizations

At the same time, consumers also expect an increase in the frequency of their contact with voice assistants (Figure 2): research shows that when consumers contact a company by phone, 13% of customer contact is already (partially) performed by a voice assistant. More specifically, 9% of this is performed by a voice assistant and an employee, and 4% is handled entirely by a voice assistant.

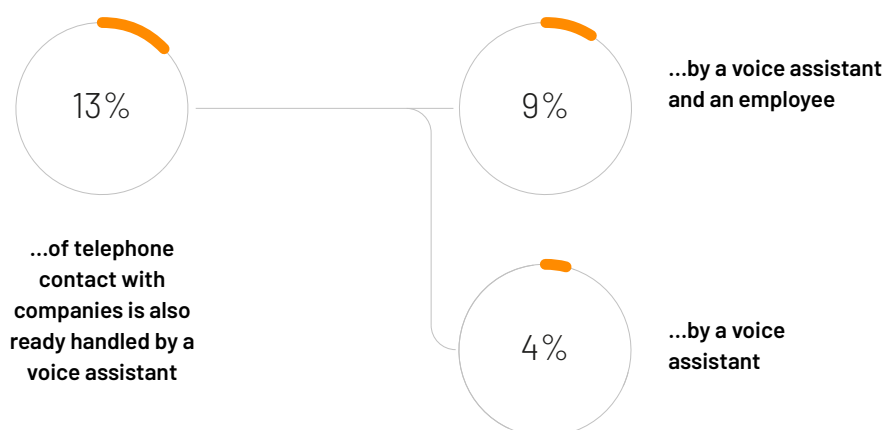


Figure 2: Current use of voice assistants in CCCs

Technological advances are not only reflected in organizations, but also in customers: they are becoming increasingly accustomed to voice assistants (Figure 3). One in four consumers expect to interact with organizations via voice assistants in the future.

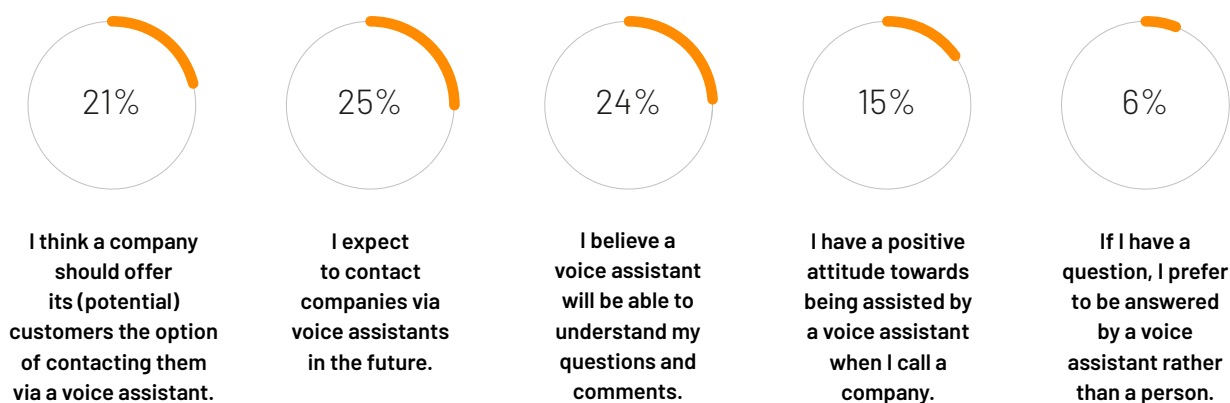
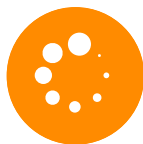


Figure 3: Consumers' expectations regarding the use of voice assistants in contact centres in the future

The value of voice assistants in CCCs

Research shows that customers experience multiple points of frustration when contacting organizations (Figure 4). A recent survey with 1,500 respondents identifies the following main sources of irritation in telephone contact with organizations:



Long waiting times



No support outside opening hours



Employees with insufficient expertise



Excessively long menus

To improve customer experience with CCCs, avoid irritations like these and also improve employee satisfaction, AI-powered voice assistants offer great opportunities.

Opportunities voice assistants in customer contact

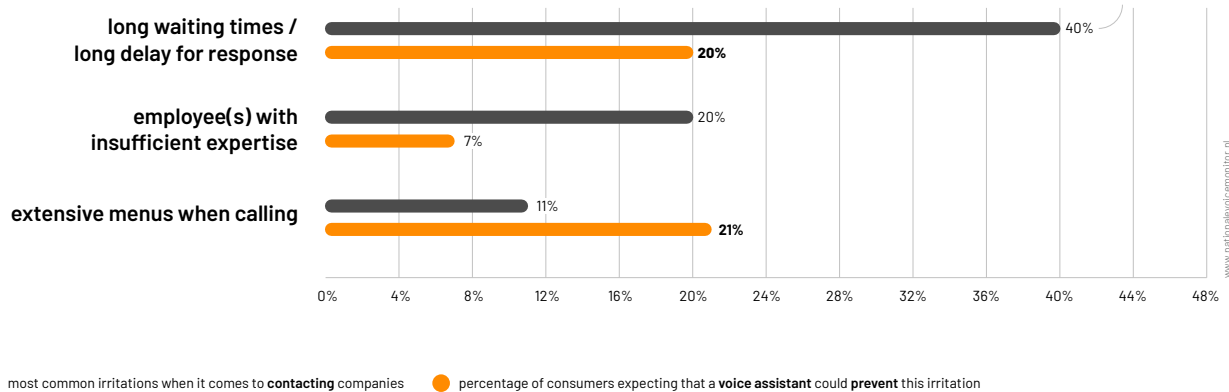


Figure 4: Opportunities for voice assistants in customer contact

The implementation of a voice assistant can prevent many of these irritations. It also helps achieve other main KPIs (Figure 5).

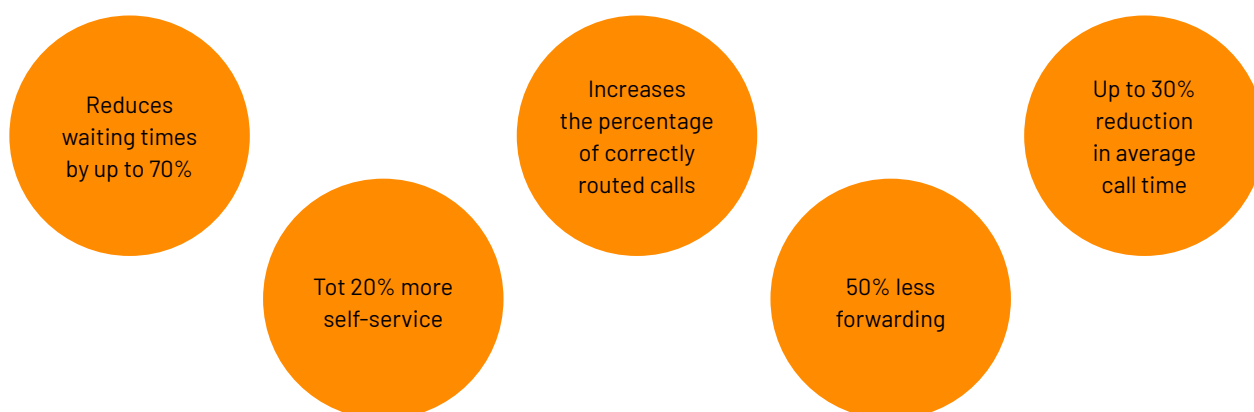


Figure 5: Key Performance Indicators for Smart Call Assistance

One of the many advantages is the reduction in customer waiting time. Implementing a voice assistant in the contact centre can reduce waiting time by up to 70% and increase the self-service rate by 20%. Organizations can also reduce handling time per call by 45 seconds, thereby lowering the cost to serve, without compromising customer satisfaction.

Voice assistants can take on a portion of a task – such as customer identification – and then transfer the customer to a member of staff. The assistant, however, can often also handle the entire call autonomously. This greatly reduces Average Handling Time (AHT). The percentage of correctly routed calls can simultaneously be increased, reducing the need for call transfers by up to 50%.

Another advantage of this technology is that repetitive, often boring tasks are automated. This leaves the employee with more time for complex and more interesting tasks. This increases motivation and satisfaction which ultimately contributes to employee retention.

Lastly, voice assistants provide a higher first-time-right (FTR) rate, an indicator that demonstrates how well the CCC responds to customer queries during the initial customer contact. An important factor for FTR is that no further action (or escalation) is required. Voice assistants can increase the FTR rate by answering customer questions completely and correctly in terms of content, without having to transfer the call to a member of staff.



Introduction Smart Call Assistance

At Y.digital, we specialize in AI for the processing of written and spoken language, based on fundamental knowledge of how the human brain processes language. We work with experts in both neurolinguistics and artificial intelligence in the development of our services. This has resulted in AI platform 'Ally' and a specific solution for CCCs: Smart Call Assistance.

One of Ally's unique features is that she can accommodate a very high level of complexity, making the comprehension of the voice assistant (but also chatbots, for example) many times higher than commonly used in the market. It is also no longer necessary to manually script all dialogues, as we construct the underlying 'brain' in the form of a knowledge model or knowledge graph. Based on this development, the voice assistant can autonomously generate texts to best help the customer. This enables each organization to assist its customers and employees with 'human-like' AI, both in the pre-transactional and transactional phases of the customer journey.

The Ally platform operates omnichannel, but we developed Smart Call Assistance specifically for integration in CCCs. This allows the organization to reduce its waiting times, offer out-of-hours service, eliminate selection menus, and consistently deliver high-quality service. Smart Call Assistance can also be easily integrated into existing CCC systems, such as Avaya and Genesys.

Figure 6 illustrates an overview of the technology behind Smart Call Assistance.

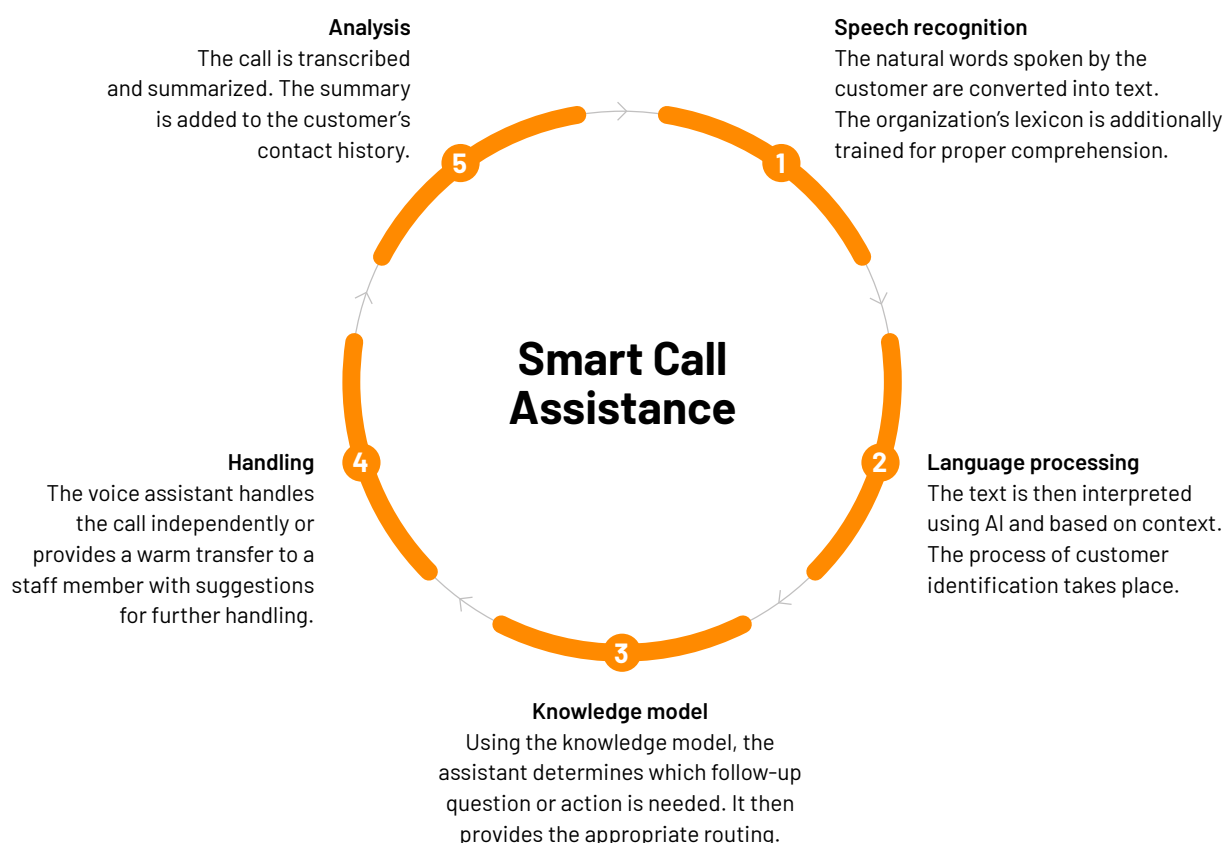


Figure 6: Technology behind Smart Call Assistance

Smart Call Assistance offers several features, we will discuss them in more detail below.





Customer identification

Customer identification is the process of verifying the identity of the caller and establishing the level of authorization. This serves the purpose of preparing the call for the employee or authorizing the customer for self-service. A person contacting a CCC is, in many cases, already a customer of the organization. Ally can verify the caller's identity, for example by using the phone number and personal data such as date of birth or postcode and house number.

In the example below, the customer wishes to make a change of address. Previously, an employee would identify the customer manually, such as by postcode, house number and date of birth. After this manual process of identification, the employee can change the address. Using Smart Call Assistance, technology can take over the process of identification and transfer this information to the employee's screen. This eliminates the need for the employee to spend time on these repetitive questions, reducing Average Handling Time.

Old method

May I have your postcode and house number? Thank you. And what is your date of birth? That's perfect. You have a question about a move. I will also need the details of your new home for that. Do you have a postcode and house number for me?



New method

(following intake by voice assistant)

I see that you have a question about a move. Could you give me the postcode and house number of your new home?

Figure 7: Traditional and advanced method of customer verification

Routing

The customer identification and question asked by the customer in the call are used in the routing process. Based on the customer's input, Ally switches to self-service or does a warm transfer to the appropriate person or department. This depends on several variables, such as waiting time, a preference to speak to an employee the customer has spoken to before or the specific knowledge of an employee. Whoever the call is routed to, Ally will always directly provide all the information the employee needs. Experience shows that the number of correctly routed calls increases significantly with the use of voice assistants.

Figure 8 illustrates the difference between traditional routing and intelligent routing by Ally:

Old method

Good afternoon, you are speaking to <company>. To provide you with the best possible service, we will now present you with a selection menu.

Press 1 if you have a question about malfunctions. Press 2 if you wish to inform us of a change of address. Press 3 if you have a question about your payment. For other questions, please remain on the line.



New method

Good afternoon, how may I help you?

Hello, I would like to inform you that I am moving to a new address.

Great, I will connect you to the right person now.

Figure 8: The traditional and advanced way of routing

Call Handling

Of all the features offered by Smart Call Assistance, Call Handling has perhaps the greatest direct impact on the workload of employees in CCCs. With Call Handling, customers find the answer to their question themselves, whenever they need it, including outside of business hours. Opening the conversation with 'How may I help you?' encourages customers to ask their questions naturally. Ally uses the input to consult the knowledge graph and provide the customer with the answers they need - without waiting time. This form of self-service reduces the number of conversations with employees and ensures that employees in CCCs spend much less time on simple, repetitive questions. Instead, they can focus on more complex issues. This directly benefits customer and employee satisfaction.

Transcribing and summarizing

AI can increase employee productivity and efficiency, such as by taking over tedious administrative tasks. The general use case of implementing AI within the context of a CCC can be divided into two categories: registration and agent assist.

The implementation of Smart Call Assistance in a contact centre can be used to insert call summaries into the CRM system. To do this, we generate a transcript of the call and then summarize it logically. A summary contains, for example, a description of the question and the proposed solution, with or without a follow-up action.

Creating real-time summaries ensures that customers do not have to repeat the question when they are transferred to an employee. The employee has direct access to all relevant information in the summary and can continue where the voice assistant left off: this is referred to as a 'warm transfer'. Registration is also useful for recording (logging) the conversation in the CRM system. Automating this process saves the employee considerable time after completion of the call.

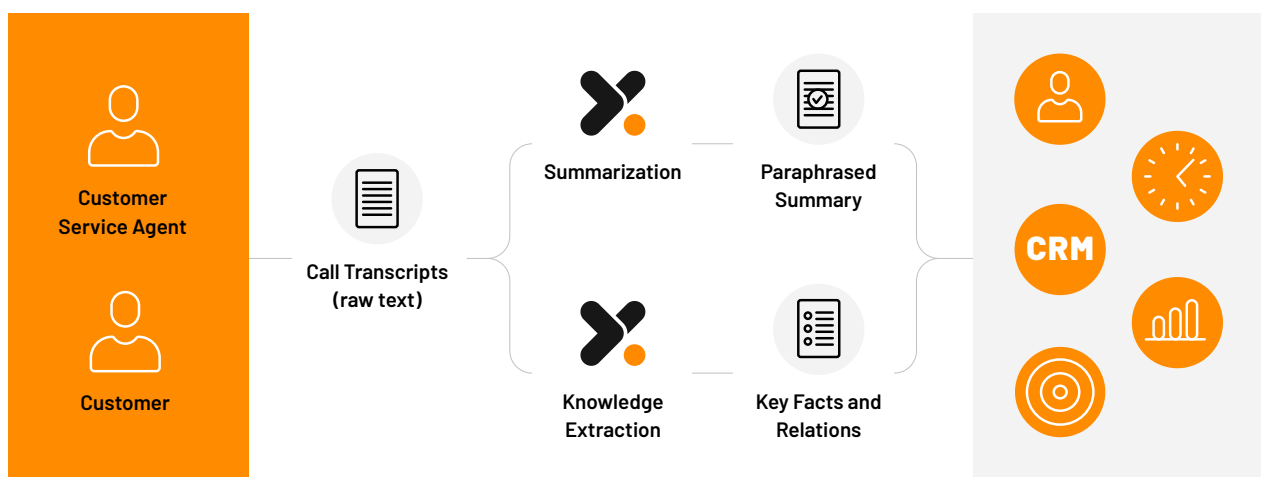


Figure 9: Call summaries within Customer Relationship Management

Agent Assist

Smart Call Assistance can also assist with employees' daily workload. When Smart Call Assistance 'listens in' on the phone call and creates real-time summaries, it can also suggest possible answers to the employee and even refer to the relevant sections of a knowledge base. In this case, the interaction takes place between the employee and the customer, while the virtual assistant supports the employee in the background. As the employee speaks with the customer, the virtual assistant retrieves the answers to their questions; after all, the assistant can search knowledge sources faster than a human. Customers and employees both benefit from this so-called 'whispering'. Employees require less training and 'search time', and the customer receives a precise answer to the question faster.

In closing

AI has a major impact on the future of CCCs. Now is the time to incorporate it into the customer contact strategy and gain experience with it as an organization.

AI offers numerous opportunities to achieve one or more of the following results:

- Higher customer satisfaction
- Increased 'brand loyalty' thanks to greatly improved customer service
- More 'first time right' solutions at lower cost
- Higher employee satisfaction
- Reduced employee turnover.

The business case is self-evident and becomes even stronger when other relevant use cases are realized within your organization. Think about it: how can Smart Call Assistance strengthen your CCC? It starts with a good strategy and business case, focused on your specific organization, objectives, and target market. We will gladly help you achieve this!

Would you like to explore the potential of AI within your organization?

Get in touch for an
introductory consultation:

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