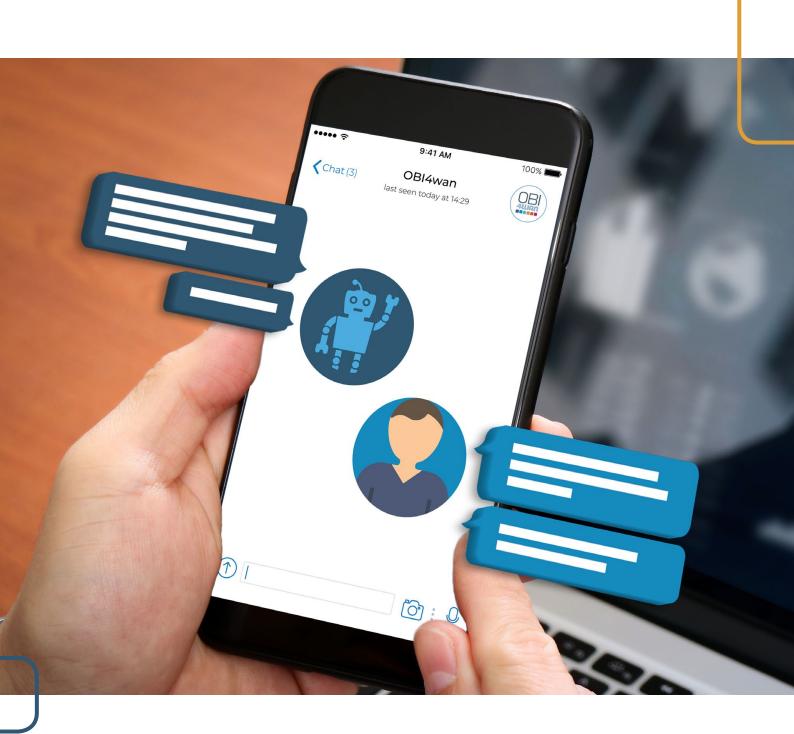
FROM DATA-DRIVEN CHATBOTS TO FUTUREPROOF CUSTOMER CONTACT





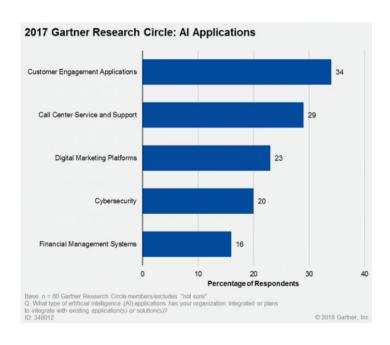
The last few years have proven that chatbots can easily be well integrated into existing customer service processes. Some of these virtual helpers can already independently handle entire cases themselves. But not all chatbot applications from previous years have been successful, which has caused some doubt regarding the capabilities of these hyped-about 'helpers'. Still, the predictions for the future are overall quite positive.

We can expect that the application of chatbots will continue to increase as the number of organisations adopting this new technology over the coming years also increases. The graph below depicts the top AI-use cases for AI applications that the organisations surveyed have already implemented or are planning to implement.

Chatbots are not only proving their value in service but also in marketing and sales. Moreover, with the evolution of easy-to-use chatbot platforms, organisations

can now take on more ownership for chatbots themselves. Looking at these predictions, along with our learnings from the chatbot hype in 2016, it is very important to know what it takes to develop and implement a future-proof chatbot that truly understands the user.

In this Whitepaper, we will look at current trends and developments in the field of chatbots, and highlight the best practices for organisations that want to know how to implement a chatbot most successfully.







Customer service — largest chatbot domain

Chatbots are taking off, especially in customer service where organisations are many times challenged to provide fast, personal, high quality and around-the-clock service via multiple digital channels. For some time now we have seen a shift from customer contact via public social media channels to customer contact via live chat and messaging channels, such as WhatsApp and Facebook Messenger. This shift in communication to more closed channels has lead to an increase in messages and has therefore put more pressure on the

customer service departments who deal with these. Chatbots are an important means for automating customer contact. As virtual assistants that work hand in hand with customer service agents, chatbots make customer service more efficient, while increasing both customer and employee satisfaction.

Al taking over customer service interactions Gartner predicts that by 2021, 15% of all customer service interactions will be handled entirely by Al, which would be a 400% increase from 2017.

"Chatbot technology is easily accessible, even for small and medium-sized businesses. If we believe Gartner's forecast, then we can expect to see many more successful chatbot applications in practice in the coming years."

- ALEXANDER DE RUITER, CEO AT OBI4WAN

"Although bots are becoming more intelligent, we believe that the human workforce will continue to be necessary. Robots will not be able to replace humans. However, the content of the work will change and new positions will emerge."

- ALEXANDER DE RUITER, CEO AT OBI4WAN

This however doesn't mean that humans will be entirely replaced by chatbots. Routine and predictable tasks can easily be automated, however, for complex and ambiguous tasks, human-to-human interaction is still important — because in order to truly understand customers and respond to their individual needs, we need human empathy, creativity and sensitivity. The best results are achieved through a collaboration between people and bots. By automating a part of the service, customer service employees have more time to solve complex tasks, which makes their work more meaningful, and less mundane.

Imagine, for example, a chatbot that does all the prep work for the service employee's part of the job. E-commerce organisations receive a lot of questions regarding orders. Often customers don't provide their order number and/or email address in their initial message, which means that a customer service agent needs to request this information in order to fully be able to help the customer. So, the time normally spent on a simple case like this increases, which may cause frustration for both the customer and the employee. A chatbot is an excellent solution in this case because it can aid the customer service agent by automatically requesting the missing information from the customer. The service agent that picks up the question afterwards will have been provided with all the necessary information

in order to help the customer quickly, and can therefore spend the time that had been saved on more complex cases.

The emergence of user-friendly platforms enables organisations to become more involved in the development and maintenance of chatbots. Here too, the role of customer service employees is crucial.

Ideally, there should be a direct line of communication between the customer service staff and the product owner or technical team that is directly responsible for the chatbot. Customer service employees who work hand in hand with the chatbot are usually the first to notice if a chatbot is not behaving as it should. It is important that this be reported directly.

Preparing for voice

Next to chatbots, smart speakers are currently the fastest growing tech trend. The popularity of voice assistants like Google Home and Alexa, make it very likely that voice will become an integral part of service over the coming years. The first applications are already in place, for instance within the supermarket sector, where voice assistants help answer questions about delivery times and offers. Or in the energy sector, where a voice assistant communicates with the smart thermostat or answers questions about solar panels.

"Perhaps everyone will have a Google Home in the future. Wouldn't it be great if, instead of sending a message to a customer service department, you could just ask Google Home to deliver your package at a certain time? Voice is a very interesting development in this respect, which we are currently coming up with new ideas on, and also doing tests with."

- FRANK SMIT, CIO AT OBI4WAN



It is now clear that chatbots are here to stay and that sooner or later most customer facing organisations will look into the possibilities of chatbots. However, we have already been at a similar point before, the so-called chatbot hype that peaked in 2016 when Facebook opened its Messenger platform for chatbots. At that time, many organisations started experimenting with their first chatbot applications. But many times the expected success never came. and organisations were left with frustrated users. What can we learn from these past experiences, and what can organisations do to help make sure their chatbots are a success?

It all starts with the approach. Instead of building a chatbot to innovate and to see what technology can do, the approach should be goal-oriented and data driven. To ensure the success of a chatbot, the first step in the development process should therefore always be the definition of tasks and goals, as well as an analysis of the expected results. Should the chatbot result in faster service and better response times? Be accessible outside of office hours? Or create efficiency for service employees by having chatbots prepare some of the work ahead of time for them?

There are different types of bots available, depending on the tasks Three common applications for a customer service bot are:

- As support for a service agent, in which a service agent approves or disapproves suggestions.
- As a work preparer, whereby the chatbot automatically asks the client for important information such as an email address and/or a customer number beforehand
- As a chatbot that can independently take care of service questions.



"By doing an analysis, you can choose a chatbot based on hard figures, instead of relying on intuition or a fascination with the technology. An analysis of webcare conversations shows what a chatbot delivers in terms of cost savings or reduction in response times for an organisation, but also provides insight into areas where a chatbot should not be used."

- KOEN HALLMANN, DATA ANALYST AT OBI4WAN

Along with these applications, there are also standard bots available that can help you tag messages with specific topics (tag bot), route incoming messages to the right employee (router bot), provide standard answers for customers after office hours (after office hours bot) and mark messages as complete if no further action is required (complete bot).

Data can predict what the success of a chatbot will be for certain tasks. Based on historical interactions with customers, a chatbot feasibility report can provide the necessary insights in order for your own organisation to make the right decisions regarding the development of a chatbot.



Data-driven chatbots: 4 tips

1.

Develop your chatbot based on datadriven research and make sure your chatbot is problem-oriented.

2.

Make a problem or opportunity demonstrable in advance by insights from data instead of your own intuition

3.

Stay realistic: does a chatbot most likely not deliver what you want? Then stop early or send the process to another, better application of technology.

4

Always keep in mind that a chatbot must contribute to the customer experience. Avoid irritation and make sure that a chatbot connects seamlessly with your customer, but also that your chatbot does not get in the way of the customer and pass the baton on to the employee if that is good for the conversation.

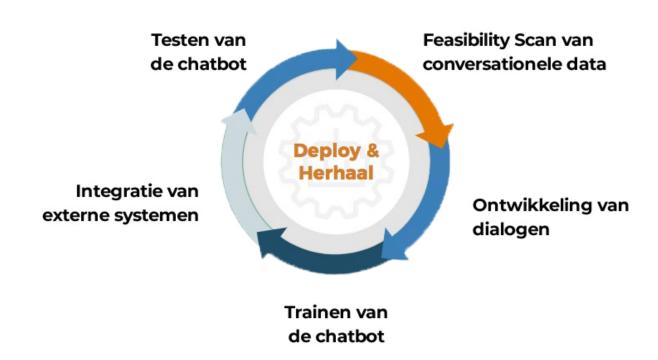
It is important to acknowledge that a chatbot is not a solution for every task. For example, if a question is very specific, such as a package that has gone missing but shows up as delivered in the system or if a customer is complaining, a chatbot might not be the best solution. If an analysis shows that a chatbot is not suitable for a particular task, do not continue with using one for that purpose.

Data does not only predict the success of a chatbot, it also supports the development of dialogue, which is the next step once goals have been defined and there has been a feasibility analysis. Before a chatbot can be introduced to customers, it must learn to generate appropriate responses that meet the right tone of voice criteria when communicating with customers. A bot can best 'learn' the language of the customer, based on customer service conversations from the past and by giving it this input.

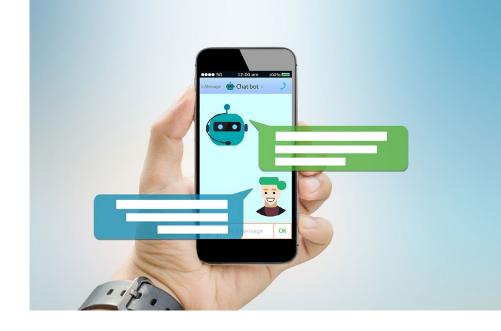
After having defined the required dialogue, the bot needs to be trained in the next step so that it understands what the customer means (intention recognition), is able to extract relevant data from the message (entity recognition) and forms the correct response accordingly. While in the past chatbots were mainly controlled by a script, nowadays bots can be made even smarter by using Artificial Intelligence and technology that enables them to understand the customer better.

Also think about external systems you might want to connect the chatbot to. For example, a connection to your CRM tool can provide a 360-degree view of the customer and can therefore help the chatbot to perform certain actions better.

The final step before a chatbot can go live involves extensive testing. Does it work consistently well? And if not, why is that? Can you feed it with more examples to improve its service? Take time for this step, because the success of your chatbot has a direct impact on customer satisfaction.



3. CHATBOTS LIFELONG LEARNING



The importance of regular maintenance

When introducing a chatbot, it is important to realise that this is not just a one-time thing. A chatbot needs regular maintenance to make it better - by providing it with new input, correcting its mistakes and adjusting its answers. Especially in the beginning, a chatbot should be monitored continuously and it should never be let out of sight. It is therefore a good idea to involve customer service employees from the start, since they are the ones who will be dealing with chatbots on a daily basis. Only when they know exactly how the chatbot works, which tasks it should solve and what it is allowed and not allowed to do, can they be able to report on it and help it become better. They can also optimise its answers and/or add new questions to its repertoire, as well as point out its mistakes.

In order to be able to monitor a chatbot better and improve it, it is recommended to first start with one specific task or specific question that the chatbot can solve and then increase the amount of tasks over time. As customer needs can also change over time, new products may need to be introduced or the nature of the frequently asked questions may need to be changed, so a chatbot should be kept flexible and able to adapt to changing environments.



"About 10% of page visitors use the bot and about 80% of everyone who uses the bot also finish the conversation completely. The bot is quite complicated, it contains many questions and some questions are difficult. No less than 90% of the users are satisfied, which means that we are well above our KPI!"

- CHRISTA VAN DER KRUK, MARKETING & COMMUNICATION ADVISOR FROM THE DEPARTMENT OF EDUCATION & STUDENT AFFAIRS

Measuring KPI's

It is also important to measure the effectiveness of a chatbot over time. In order to regularly check if the bot is on target and able to fulfill its goals, specific KPIs should be closely monitored. The number of conversations it has been involved with and the percentage of conversations successfully completed by the chatbot without hand-over to a human employee are important factors to consider. And in order to determine how good the chatbot is in recognising customer intentions, the number of correctly classified requests and statistics in the Natural Language Processing (NPL) should be looked at closely.

In addition to these indicators, which reflect the performance of the chatbot, the effect it has on customers and employees should also be examined. Has the NPS score, or any other measure of customer satisfaction, changed positively? Have waiting times become shorter? Do customer service representatives have more time to deal with complex customer cases?

The Erasmus University in Rotterdam recently launched a chatbot and had set a minimum user-satisfaction of 60% to determine the bot's success — monitoring showed that this KPI was more than achieved.



4. TAKING OWNERSHIP OF YOUR CHATBOT

Chatbot development therefore doesn't stop once the bot is launched. It's best to look at a chatbot as an ongoing project that requires a dedicated team in order for it to be successful. Organisations have already started seeing the need for setting up chatbot teams and have taken chatbot maintenance into their own hands. But what does an ideal chatbot team and platform look like?

An important factor for long-term success is the scalability of a chatbot. Maybe you want to start with a simple FAQ chatbot but want to gradually expand its tasks or have several bots working alongside each other in the future. This is an important consideration when choosing a chatbot platform. As you might not have specific programming knowledge, the chatbot should be easy to assemble via a user-friendly interface but also offer the flexibility for programming more advanced features.

When it comes to the team, an interdisciplinary mix of people that all contribute specific skills to the chatbot's maintenance and development is crucial.



OBI Bots platform

THE FOLLOWING ROLES ARE IMPORTANT TO CONSIDER WHEN SETTING UP A TEAM

Business Analyst

- Knows everything about the processes within an organisation.
- Provides valuable input for chatbot development.

Product Owner

- Oversees the implementation and continued development of the bot
- Represents the interests of the custome and the features of the chatbot that go with this
- responsible for the road-mapping and coordinating of what needs to be done and who will carry out these tasks.

Conversational Copywriter

- Writes text for the chatbot
- Needs to know the target audience and brand values inside and out.
- Is capable of translating the tone of your organisation's 'voice' into the conversations that the chatbot will have with customers
- Can be outsourced to specialised companies such as Robocopy and Entopic.

Front-end Developer

- Creates a tailor-made front-end view of the chatbot for your website.
- Outsourcing is possible. Companies like
 Conversationals are specialised in
 building UI elements for chatbots.

Developer

- Necessary for chatbot development when a more technical platform is chosen to work with
- Can develop advanced features





CHATBOTS TO

When you start looking into the various possibilities chatbots can offer for your organisation, keep in mind that the right approach to bot development will result in fundamental changes for marketing, service and sales. A goal-oriented and datadriven approach enables you to make the right decisions along the way and helps to ensure that your expectations regarding the bot are met. With the right team that regularly maintains and trains the chatbot to become better, you can help to make sure your chatbot develops along with your organisation and adapts to changing environments. If you're thinking of introducing a chatbot into your organisation you shouldn't start too big, but divide the work into small steps, says Frank Smit:

OBI4wan helps organisations develop intelligent chatbots that truly understand the customer. By being directly integrated into the same environment, our chatbots are able to work hand in hand with customer service agents, which enables a warm handover from chatbot to agent, any time human interaction is necessary.

Our unique chatbot platform also provides the option to build, test and optimise your own chatbot.

"You can, for example, start using an outside opening hours bot, which is very accessible. So my advice is; don't tackle this rigorously by suddenly changing your entire customer service in one go. Divide it into small, manageable steps and measure the results carefully. This way you can take more efficient steps and then continue to grow from there."

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