Chat automation with Conversational AI
Agenda

1. What is AlphaChat?
2. What problem does it solve?
3. How does it do it?
4. Limitations of AI
5. Best practices for building a virtual customer assistant
6. Examples from the product
What is end-to-end chat automation?
Problem

Solution

The Intelligent Enterprise features 3 Key Components:

1. Web apps
2. Backend services
3. Artificial intelligence
Best practices

1. Limit the number of topics the bot should address.
2. Use the topic rating matrix to select the topics with the highest impact.
3. Solve the highest impact topics and later expand downwards.
4. Remember that AI addresses only one part of the solution process (e.g. understanding) and ignores the rest (e.g. execution of the solution).
Limitations of AI

1. Most products and services possess unique characteristics, which make out-of-the-box solutions crude or infeasible.

2. Tailored responses and training data are helpful, but customer data is mostly scarce and large-scale supervised learning is often infeasible.

3. Unsupervised learning enables to train larger models, but they suffer from the black box problem and intuitive unpredictability.

4. Unsupervised learning exacerbates the issue of occasional catastrophic failure. The model can be right in most of its answers but it can also be very wrong, and this inconsistency can be embarrassing*.

* “..., we see that an agent could have very low universal intelligence but still perform extremely well at a few very specific and complex tasks.” Shane Legg

http://www.vetta.org/documents/Machine_Super_Intelligence.pdf
Limitations of AI

https://www.nabla.com/blog/gpt-3/
Limitations of AI

https://www.nabla.com/blog/gpt-3/
Agent app

Widget

Microservices

https://www.researchgate.net/figure/Microservices-deployment-flow FIG3_325134898
250,000+

Conversations our AI conducts for our customers each month
We differ by offering flexible and powerful end-to-end chat automation with unparalleled depth.

1. Customizable chat window.
   Pictures, videos & custom fields.
   Custom logos and CSS.
   In websites, mobile, social networks.

2. Conversational interface builder.
   Intents & multi-dialogue. Non-technical UI.
   Powerful API – write custom code to serve personalized info & offers to authenticated users.

3. Custom AI and NLU
   Single & multiple intent detection.
   Language agnostic.
   Entity extraction & slot filling.
Flexible and powerful end-to-end chat automation.

4. Intelligent routing to agents
- Prioritization by topics and URLs.
- Custom variables.
- Cloud or on premises deployment.

5. Smart live chat.
- All standard live chat features.
- Agent assist & suggested answers.
- Automated bot training.

6. Detailed analytics.
- Bot accuracy & solve rate.
- Average response times for agents.
- Workforce monitoring and planning.
We have 113 features that make our product superior to competitors, including:

1. Ability to connect virtual assistants to agents based on intent prioritization; virtual assistants monitoring agent status and adapting their behaviour to agent availability (e.g. asking to stay on hold, leaving messages, custom forms);

2. Co-pilot mode where virtual assistants help agents in answering questions; automated training of intents through suggested answers;

3. Virtual assistant with chat widget (i.e. chat window) can trigger actions on the website on behalf of the customers (e.g. trigger API calls, open dialogues, hide/show elements etc);

4. Authentication through the chat window and authenticated handover possibility to the agents;

5. Detailed statistics on virtual assistant handover performance and complete chat window modification (videos, custom forms, carousels, integration with speech-to-text and text-to-speech).

6. See our full feature list here [https://alphachat.ai/](https://alphachat.ai/)
As testament to our product strength our COVID-19 chatbot was featured live in CNN on April 6th.
<table>
<thead>
<tr>
<th>Company</th>
<th>Customers/Passengers</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Telia</td>
<td>1,000,000 customers</td>
<td>Leading telecom in Lithuania Telecommunications Our work: virtual customer assistant on the website.</td>
</tr>
<tr>
<td>monese</td>
<td>1,000,000 customers</td>
<td>UK Digital-Only Bank Banking Our work: virtual customer assistant in iOS and Android.</td>
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<tr>
<td>LHV pank</td>
<td>120,000+ customers</td>
<td>Nasdaq Tallinn: LHVTT Banking Our work: Virtual customer assistant on the website and agents’ live chat product.</td>
</tr>
<tr>
<td>TALLINK</td>
<td>9,000,000 passengers/year</td>
<td>Nasdaq OMX Nordic: TALIT Marine transport Our work: Virtual customer assistant on the website.</td>
</tr>
<tr>
<td>Telia</td>
<td>500,000+ customers</td>
<td>Leading telecom in Estonia Telecommunications Our work: Virtual customer assistant on the website and agents’ live chat product.</td>
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<tr>
<td>Lime Telecom</td>
<td>500,000+ customers</td>
<td>Leading telecom in Latvia Telecommunications</td>
</tr>
<tr>
<td>ES</td>
<td>Employing 300+ people</td>
<td>Estonian Statistics Agency Government Our work: Virtual customer assistant on the website and agents’ live chat product.</td>
</tr>
<tr>
<td>Stadtwerke Auerbach</td>
<td>100,000+ customers</td>
<td>Dynamic German energy company Energy Our work: Virtual customer service assistant in Facebook.</td>
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Telecom company advanced chat automation use case - authenticated account balance retrieval at Telia.

STEP 1. Customer asks in natural language “How much do I owe you?”

STEP 2. Virtual assistant tells customer to log in via regular authentication methods.

STEP 3. Virtual assistant checks data from Telia backend. Customer has an upcoming payment of €35.25 by the end of the month.
STEP 4.
If customer clicks that the answer was helpful, the virtual assistant triggers a sales call to action. In this case it is a suggestion to buy a gift for the upcoming Women’s Day.

STEP 5.
Upon clicking the link in chat window the user is directed to a page with personalized gift suggestions.
What we do for you – increase your staff efficiency and online sales.

Why we’re doing it - make machines smart to automate communication.


Founding team:
- Indrek Vainu, Harvard. Ex-CEO, 70+ person data science company.
Thanks!

18th May 2021 (Tuesday)

Starting from 10AM (EET)

Support us @ https://www.producthunt.com/