

# WORDPULSE

Service for analyzing speech and text interactions with customers based on modern ML-models



Products



Cases

Opportunities

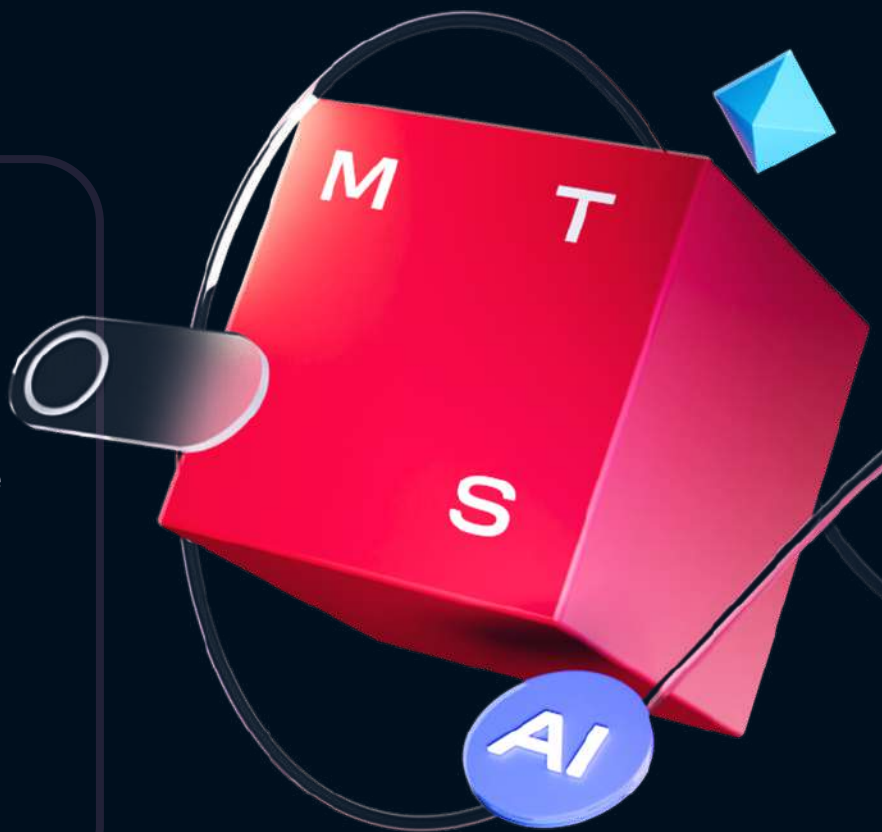
Solutions



# MTS AI ONE OF THE LEADING RUSSIAN COMPANIES IN AI DEVELOPMENT

20+ projects implemented

- Introduced chat bot to automate MTS customer service
- Using AI to predict profitability of investment in telecom infrastructure
- Taught KION to skip credits and locate commercials



Developing AI solutions and products

Based on CV, NLP and Edge Computing

Developing DeepTech and AI market

Investing in promising projects, helping start ups turn their ideas into profitable business

R&D center

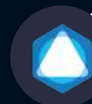
More than 200 experts and technological infrastructure: the most powerful supercomputer in telecommunications

MTS AI ASSETS



VisionLabs

INFOMOTIKO



Just AI



Kneron



Primo RPA

# WORDPULSE

ML model-based service for analyzing voice and text interactions with clients, and user generated content

## FUNCTIONALITY

% Processes 100% of interactions in any channel

Builds communication flow in a contact center without human input

## TARGET AUDIENCE

Banks and insurance companies

Telecom

Retail

Medical organizations

Delivery services

## EFFICIENCY

### Business effects

from employing speech analytics services

**35-43%**

Decrease in target lead price

**17-30%**

Increase in sales

**20%**

Increase in customer satisfaction

### Additional advantages

**80%**

Productivity gain for service quality control

**36%**

Increase in subscriptions to self-service

**14%**

Decrease in secondary load on operators

# WORDPULSE

ML model-based service for analyzing voice and text interactions with clients, and user generated content

## Deep analysis of communications



Discovering subtle connection between customer and support rep behavior by combining ML-models and rules within the analytic device

## Managing customer interactions



Automatic analysis of all non-structured dialogs with clients and development of an optimal script for further interactions

## A set of ready-made metrics for business



Recording and drafting indicators depending on the company size, its business area, client base or its specific parts

## Predicting business metrics



Predicting indicators and tendencies based on analysis output

## Convenient reports



Transparent metrics system, dashboards and reports available 24/7, exporting data to any external service

## No need to hire a team of analysts



You will not need a whole team of qualified specialists to work with this service and fine tune ML-models

# WORDPULSE

## FEATURES FOR CLIENTS



### Omnichannel approach

Automatic analysis of 100% of interactions with clients performed by reps and chatbots in any channel: by phone, on the website, in a mobile app, on social network and in messengers

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### Complex solution

You can order a complex solution that features Audiogram, which is a platform for speech synthesis and recognition, NLP platform for bot creation, and WordPulse

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### Quick and easy implementation

Implementing WordPulse with a specific set of rules for a particular case takes 2 months, integration with fine-tuning of ML-model takes 1-2 weeks

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## PROGRAM COMPONENTS



### Module for default statistical metrics

Measures the length of a session, amount of dialogues and users etc.

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### Module for analyzing the tone

Recognizes certain aspects in customer's phrasing, for example: "Your rates are great, but connection is terrible". This lets you know which grievances your customers have, be it price, quality or something else

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### ML tools

Modular micro-services for analyzing tone of speech, topics, difficult points in communication, for example, when a bot fails to recognize a request, when a client becomes aggressive or resorts to profanities

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### Analyzing scripts and scenarios

An additional service to help your company set and control the rules of communication: the greeting, the offers, social etiquette etc.

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# APPLYING WORDPULSE IN VARIOUS SPHERES

## TELECOM



- Customer service quality control, adherence to scripts and other parameters
- Discovering effective interaction scenarios
- Analyzing support reps' work
- Preventing sidetracking and divulging company secrets;

## BANKS AND FINANCIAL INSTITUTIONS



- Analyzing pre-collection calls
- Discovering customers' needs
- Evaluating interactions with operators and managers in sales offices
- Flagging profanities
- Flagging stop-words and crises

## RETAIL AND DELIVERY SERVICES



- Supervising customer support representatives
- Gathering data on customers' needs
- Evaluating delivery personnel's punctuality and politeness
- Gathering data to plan ad campaigns

## MEDICAL ORGANIZATIONS

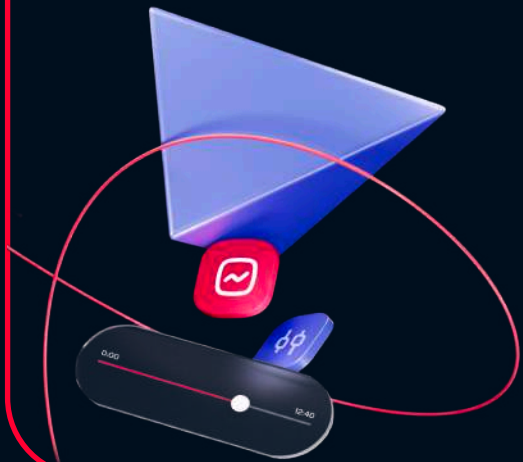


- Analyzing call center employees' work:
  - evaluating politeness
  - following scripts
  - verifying bookings and reminding customers of those
- Studying customers' need for new services

# FLOW CHART OF WORDPULSE

Upload speech and text data to the interface

and receive business insights in a manner of minutes



Recording service interactions at front offices



Recording service interactions in call centers



Chats and messenger apps



Gathering data on the server



Automated employee evaluation



Discovering areas for improvement in speech analytics



Reports and data analysis



Developing and implementing the course of action



Control

# DISTRIBUTION OF WORDPULSE



## ON PREMISE

You will receive an installation kit and a license to install it to your server



## CLOUD

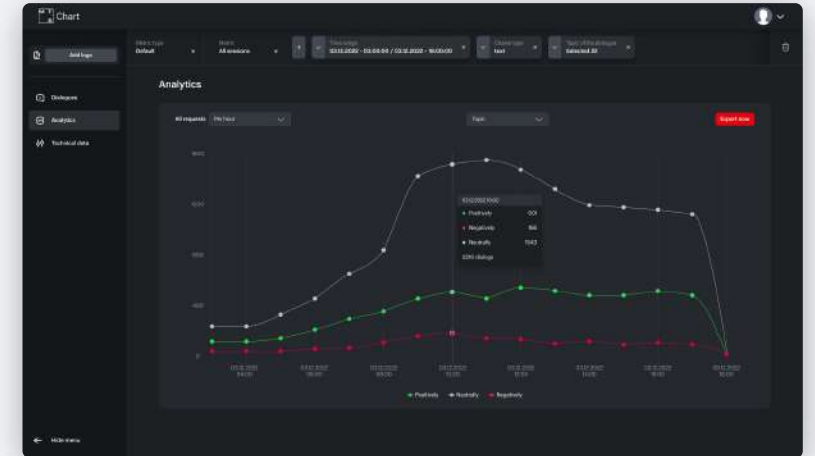
AI speech analytics will be hosted in the cloud, and you will get access to API and a link to your company dashboard



# WORDPULSE INTERFACE

Interacting with the service is convenient and straightforward

The screenshot displays the Wordpulse interface with a dark theme. At the top, there are filters for Keywords ("Internet problems"), Surface ("MY\_MTS - LK"), and Groups by NPS ("Promoter"). The main area shows a list of dialogues. The first dialogue is from a client with ID 0337258717, dated 03.12.2022, with a complaint about "Balance and charges". The bot's response is: "My name is Smarty robot, I am a smart bot and I'll help you. Ask a question or ...". The second dialogue is from a client with ID 0337258717, dated 03.12.2022, with a complaint about "Balance and charges". The bot's response is: "Looking for a free operator". The third dialogue is from a client with ID 0337258717, dated 03.12.2022, with a complaint about "Balance and charges". The bot's response is: "I need internet". To the right of the dialogues, there is a "Net sentiment" section showing a score of 50 and a breakdown: Positively (56.7%), Neutrally (36.7%), and Negatively (6.7%). Below this is an "Export" section with a button labeled "dialogs 09.02.2023" and an "Export now" button. At the bottom, there are pagination controls showing 20, 50, 100 items per page, and a page number of 1004 out of 1203.



# ANALYZING ONLINE RETAIL COMMUNICATIONS

## TASK

Monitor adherence to pitch scripts in 100% of recorded interactions between reps and customers.

### Subtasks:

- transcribing speech data into text format,
- identify presence or absence of keywords in these data and form a report.

Processing capacity:  
2500 records.

## SOLUTION

MTS AI offered to implement WordPulse and Audiogram, a platform for speech synthesis and recognition.

### What will be done for the client?

1. Linking Audiogram to ATC or to call recording file system.
2. Installing and setting up WordPulse, fine tuning of ML models.
3. Transcribing speech files into text with Audiogram.
4. Tracking keywords and intonation.
5. Monitoring adherence to scripts and leading non-typical dialogues, like customer complaints.
6. Identifying leaks of sensitive data, like company's inside processes, divulging personal data of other people.
7. Measuring rep's speech tempo and their level of friendliness.
8. Flagging rude and offensive behavior, as well as use of profanity from employees.
9. Setting up reports in accordance with company's needs.

## EXPECTED RESULT

Integration of customized WordPulse and Audiogram.

### Expected business effect:

- adherence to scripts increasing by 15%;
- call center personnel efficiency increasing by 20%;
- frequency of profanity use decreased by 100%;
- efficiency of outgoing sales going up to 30%, cross sales up to 20%.

# ANALYZING TEXT INTERACTIONS OF TELECOM OPERATOR

## TASK

Automated analysis of 100% of chat messages from customers when interacting with your reps and chatbots, in order to identify shortcomings in fulfilling customer requests.

## SOLUTION

MTS AI developer team made an offer to a telecom operator to implement WordPulse.

### What will be done for the client?

1. Implementing WordPulse on client's servers.
2. Installing and setting up WordPulse.
3. Fine tuning ML models for thematic fronting based on client's data.
4. AI service will analyze all interactions with customers, identify new topics and increase in amount of related requests, trends in customer satisfaction by interaction and representative, amount of interactions and trends in the tone.
5. Automated reports.

## EXPECTED RESULT

Integrating WordPulse will improve customer satisfaction and allow you to:

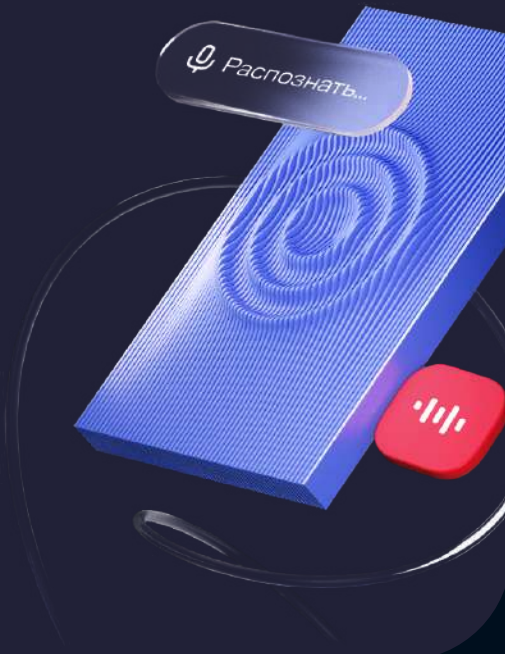
- automatically separate chats with dissatisfied customers, evaluate the effect of new scripts on customer satisfaction level;
- identify large incidents, most common requests and their tone;
- increase the amount of chat analytics to 100%, with 80% precision in indexing.

# COMPATIBILITY WITH OTHER MTS AI PRODUCTS

## Audiogram is a neural network-based speech recognition and synthesis platform

Integration with Audiogram allows WordPulse to receive more data and insights on speech interactions with customers.

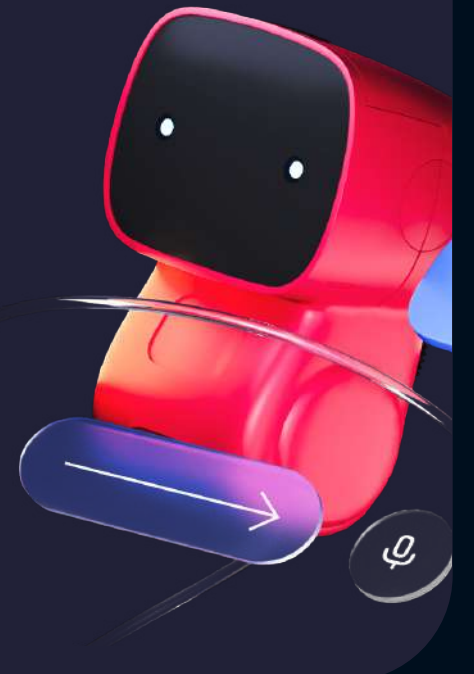
Audiogram transcribes speech into text, providing data on pauses, length and time of the call. Then, these data are uploaded to WordPulse service which outputs statistics on speech interaction with customers.



## NLP Platform is a tool for creating and managing voice and textbots

Implementing WordPulse allows you to:

- analyze 100% of interactions with bots and reps,
- evaluate and select the most efficient scripts for interacting with customers,
- make informed decisions in order to improve customer experience.



# INFRASTRUCTURE REQUIREMENTS

COMPONENT	CPU (millicore)	RAM (Gi)	GPU (core) V100	HDD (Gi)
Tone analysis module	500	3	1	3
Clustering module	1000	3	1	3
OpenSearch	8000	16		1000
Auxiliary services of the analytic module	1500	1.5		9

Can be scales horizontally by increasing the amount of POD.



# DMITRY CHERNOUS

MTS AI Business Development Manager



Scan the QR code, make an appointment and ask all your questions