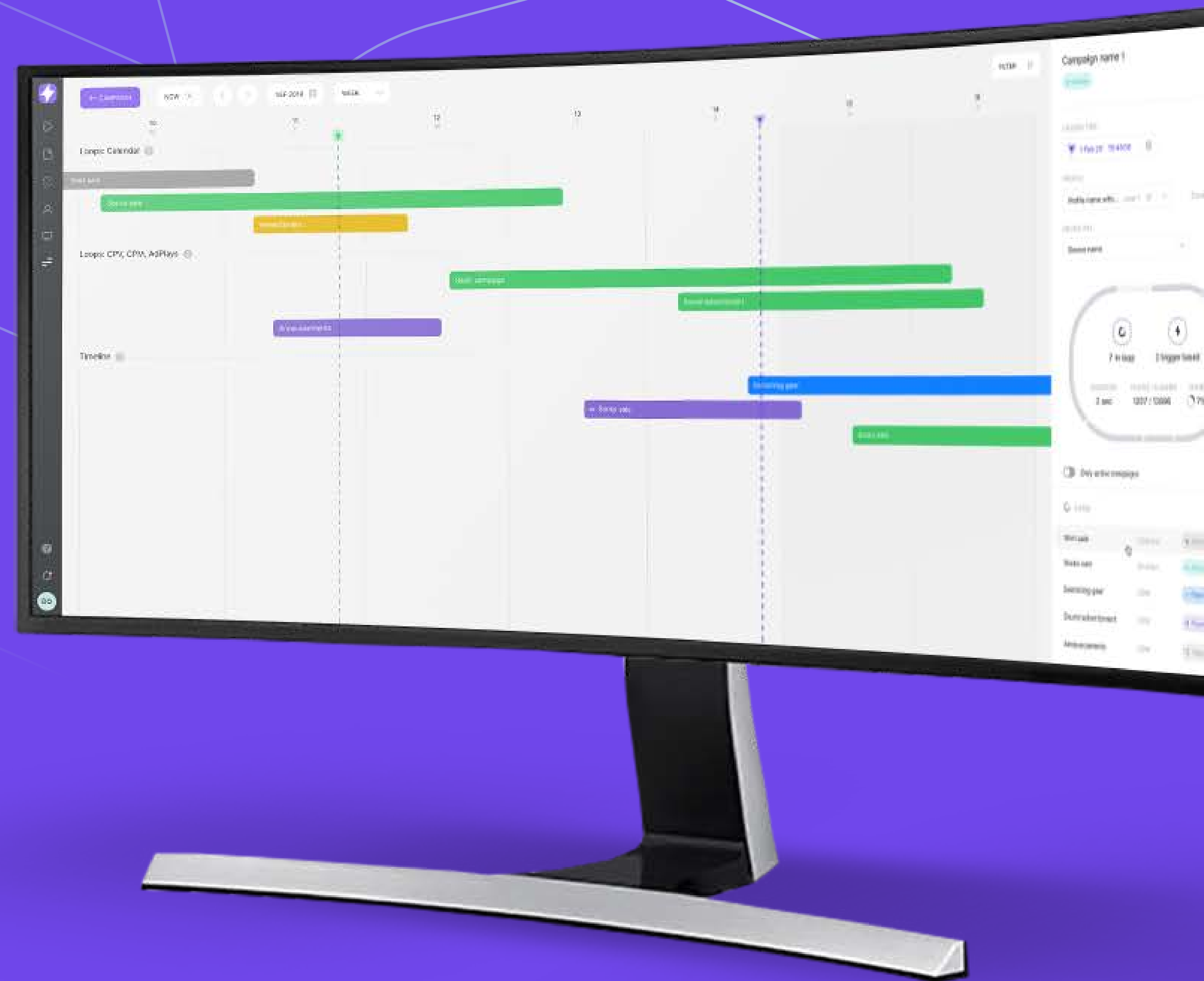




 MONETIZE

Extensions for
boosting Ads revenue
and DooH automation




Contents

01  MONETIZE

AdTech stack

All components for media networks in one platform

04  MONETIZE

Self-service portal (DSP/SSP)

Maximize ad revenue with self-service programmatic ads

07  ENGAGE

Visual template editor

Save budget with a no-code visual editor

02  MONETIZE

Fixed Direct Ads

Guaranteed ads from date to date with a fixed price

05  ENGAGE

Content Management system

Schedule and automate your own marketing (filler content)

08

Network IoT management

Control and manage your hardware network with real-time monitoring

03  MONETIZE

Programmatic Direct Ads

Utilize audience- and time- or GEO location-based selling models

06  MEASURE

Insights & data

All necessary reports for ad sales and audience analysis

09

End touchpoints

Play on any digital surface, even on self-service POS, scales, or kiosks



Full #AdTech stack for DooH media

Content Management System

Direct Ads Sales automatization

Self-service portal (DSP/SSP)

Demographic targeting

Audience-based Campagins

Programmatic ad selling

Hyper-local GEO targeting

Audience analytics

Yield management

Ad reports automation

Visual template editor

Interactive kiosks

Cross-channel inventory

Network IoT management

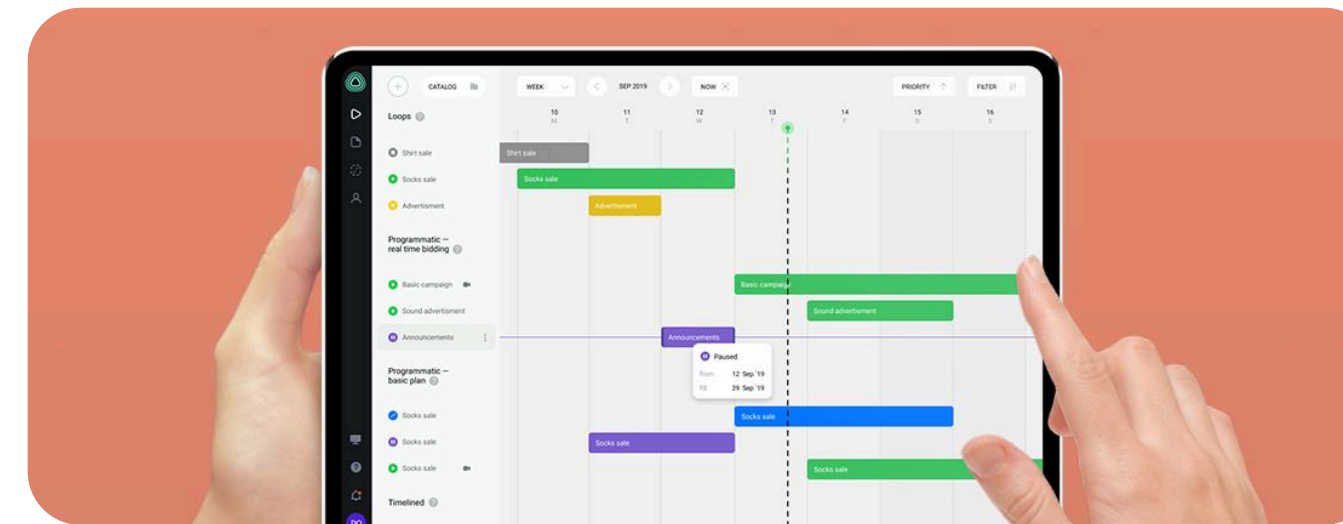
All components in one platform

The platform takes a unique approach, employing ground-breaking technological innovations to break down barriers that until now have made digital out-of-home a time-consuming medium to manage.



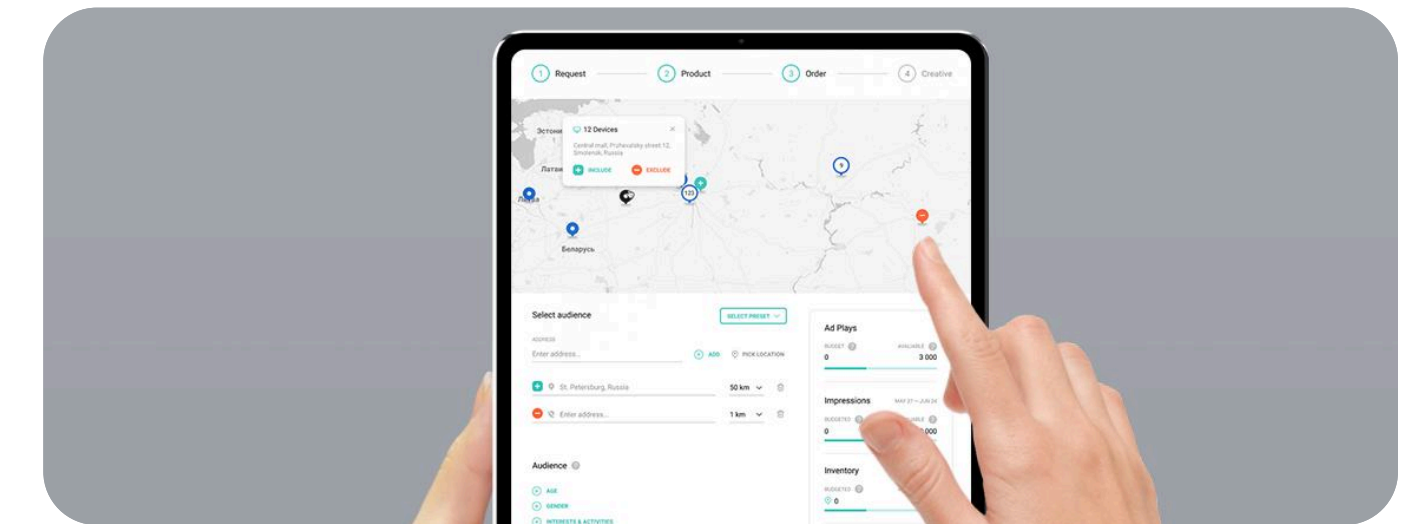
1. Know your audience

GDPR-compliant tool for customer tracking and audience analytics



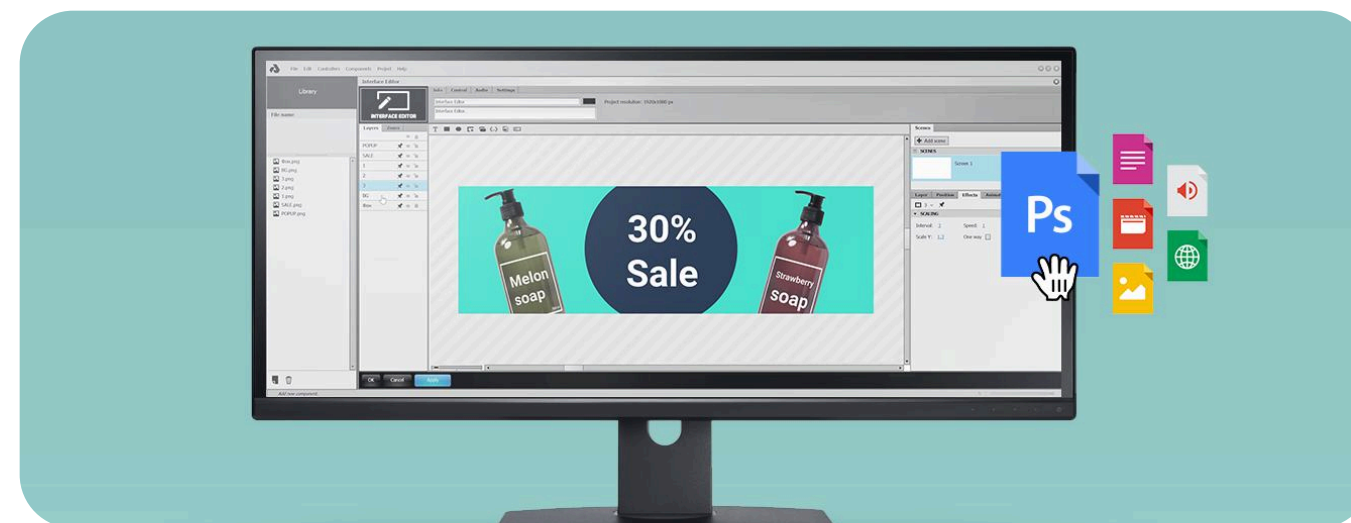
2. Be relevant

Media planning tool with campaigns management based on real audience



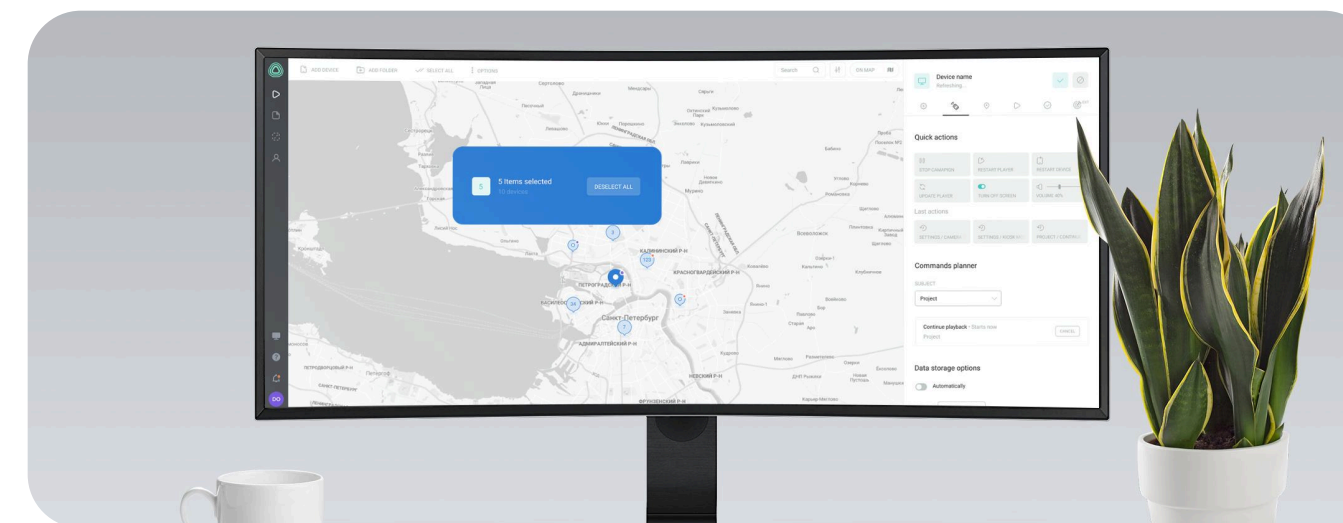
3. Maximize your ROI

Access to SSP and DSP extensions for selling programmatic ads



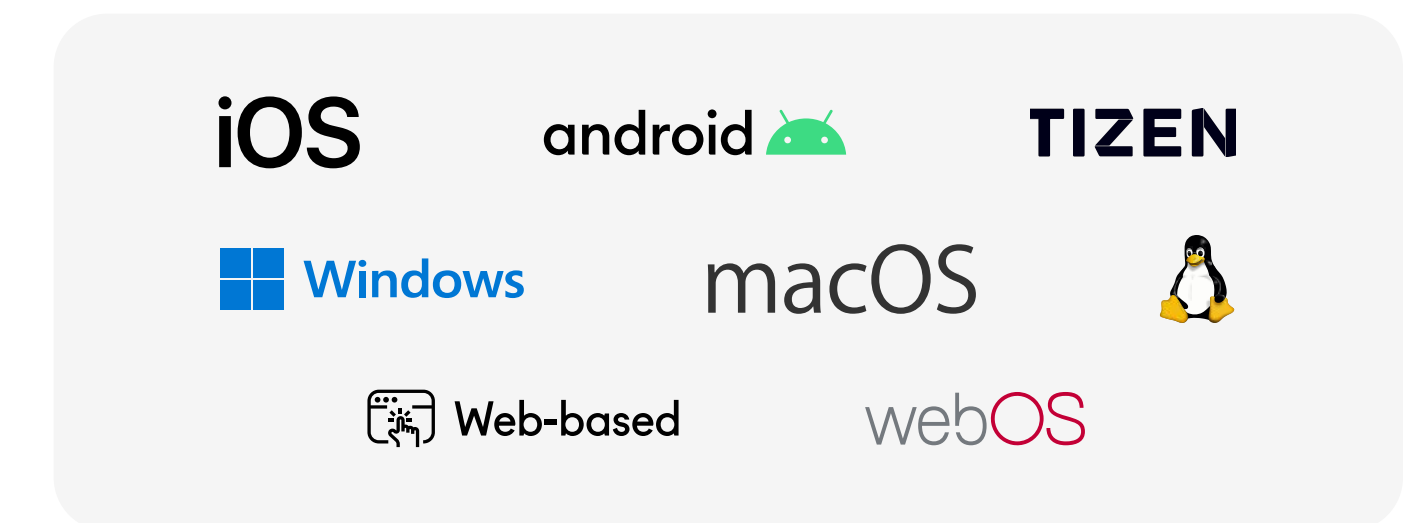
4. Reduce costs

Visual designer tool for content creation and integration without coding



5. Be sure it works

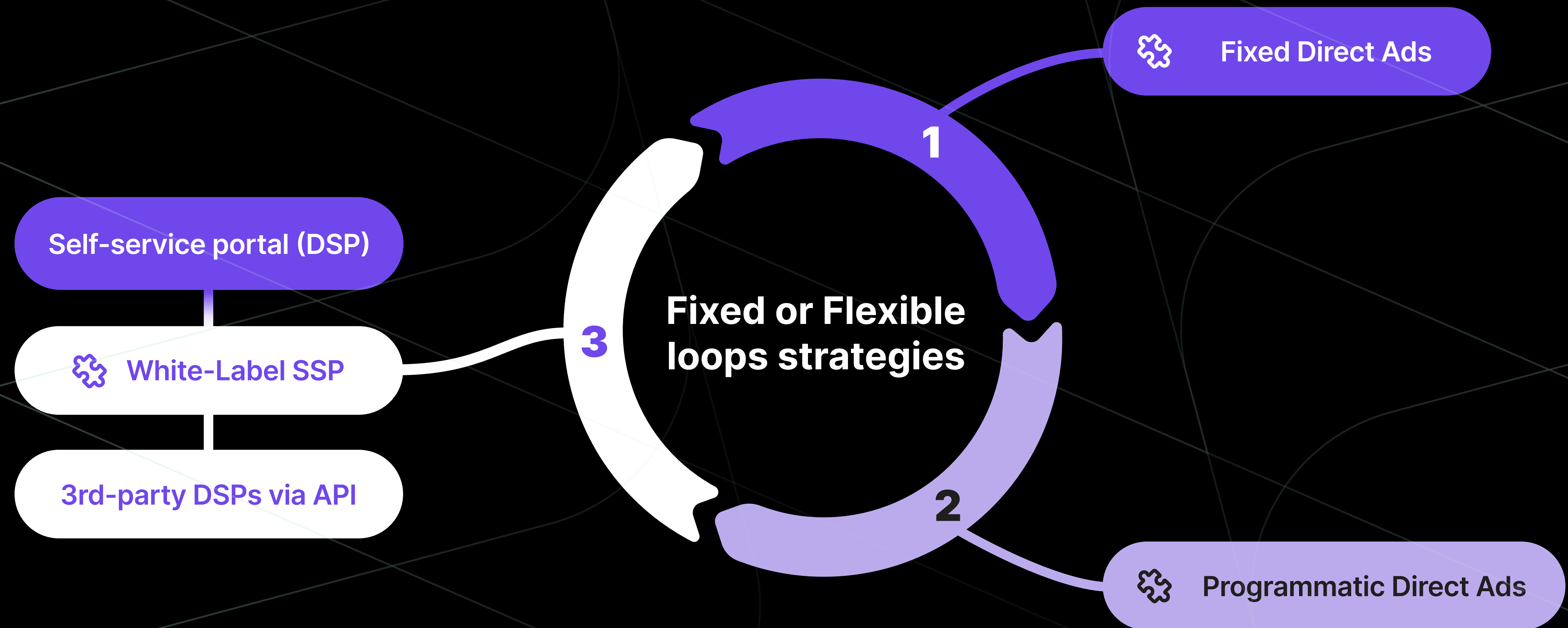
Infrastructure management and control of IoT network with real-time monitoring



6. Connect any channels

Cross-platform SW and HW players for audio, video and interactive broadcasting

Extensions for Ads



Ads sales models

Extensions maximize advertising revenue through audience and time-based selling models to achieve a 100% sell-out rate.

01

Calendar

Guaranteed ads from date to date with a fixed price

 Fixed Direct Ads

02

AdPlays

Cost per 1000 ad plays

 Programmatic Direct Ads

 Self-service portal (DSP/SSP)

03

CPM

Cost per 1000 impressions

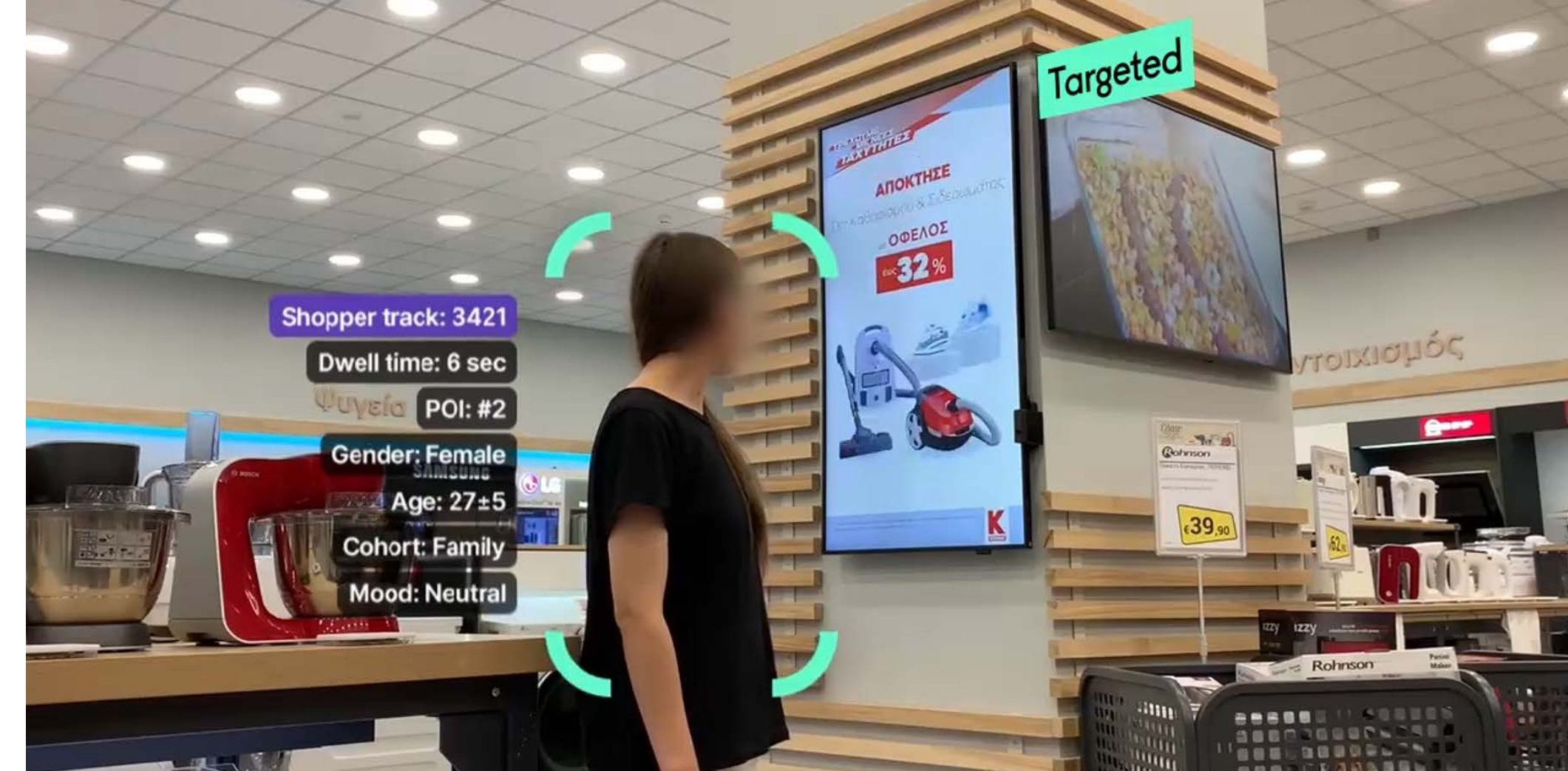
04

CPV

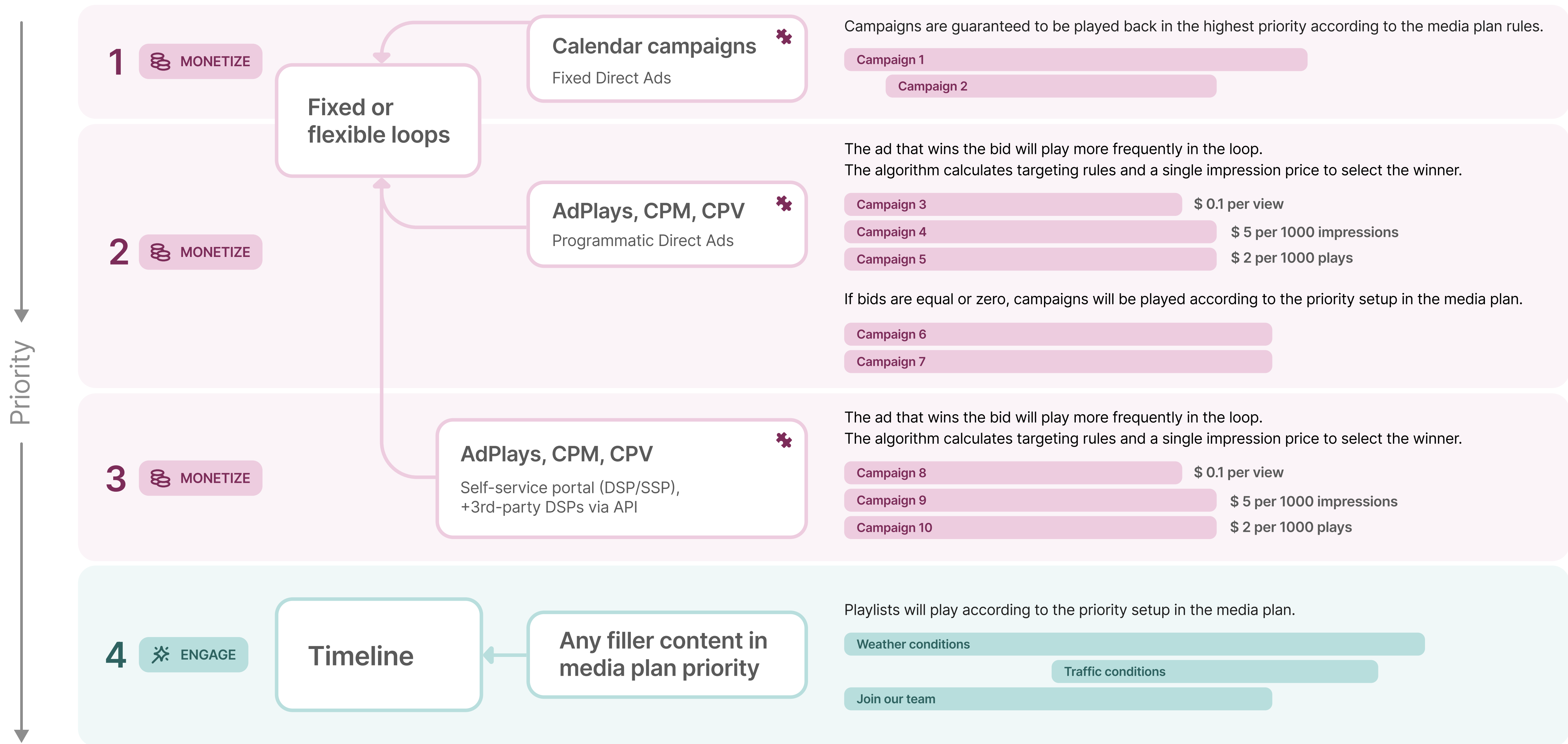
Cost per targeted contact



Confirmation of contact with face recognition technology



Revenue-boosting waterfall algorithm





Fixed Direct Ads Extension



Fixed Direct Ads

Fixed Direct Ads

Automate Direct Ads sales with Professional Sales Platform



Direct ad sales automatization

Guaranteed ads from date to date with a fixed price

📅 Calendar Ads sales model with high priority

📊 Metrics forecast at setup stage

📄 Automated reports

01

Calendar

The sales model
has proven to
generate core
revenue over time

02

AdPlays

Cost per 1000
Ad Plays

03

CPM

Cost per 1000
Impressions



04

CPV

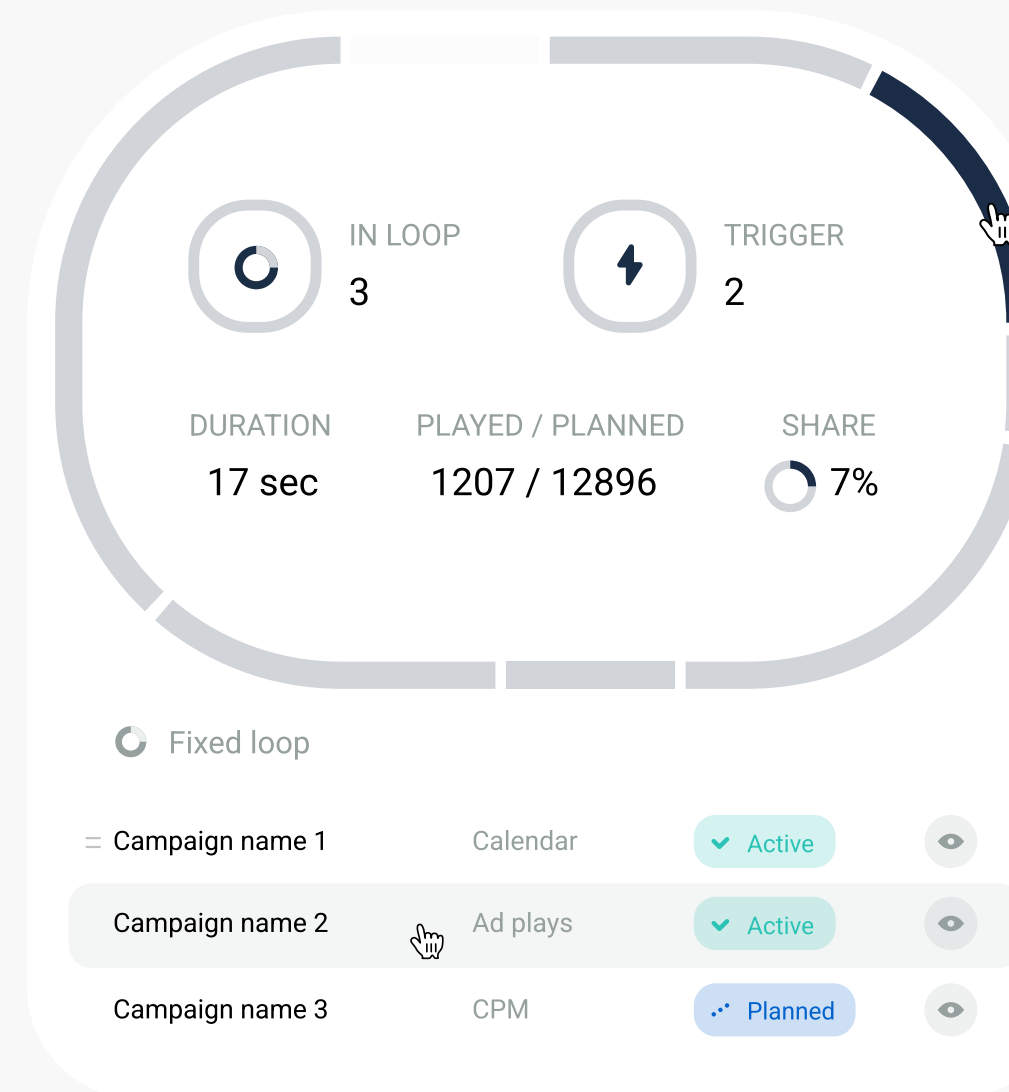
Cost per
targeted contact

Yield management

Direct ad sales automatization

Setup Fixed or Flexible loops for any sales strategies

- 🔄 Fixed Ads loops
- ∞ Flexible Ads loops
- 🎯 Mix any Ads loops and filler content

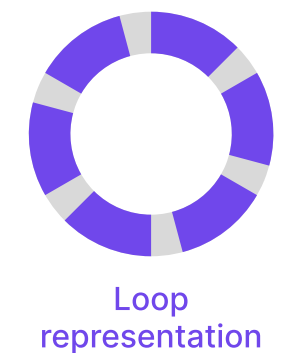


Loop ?

Loop duration 1 hour

Replay 1

Time(s) per 1 hour



Cost of advertising sales ?

1000 plays of 1 sec.

0.13 EUR

CPM ?

2 EUR

CPV ?

0.1 EUR

Yield management

Cross-channel inventory

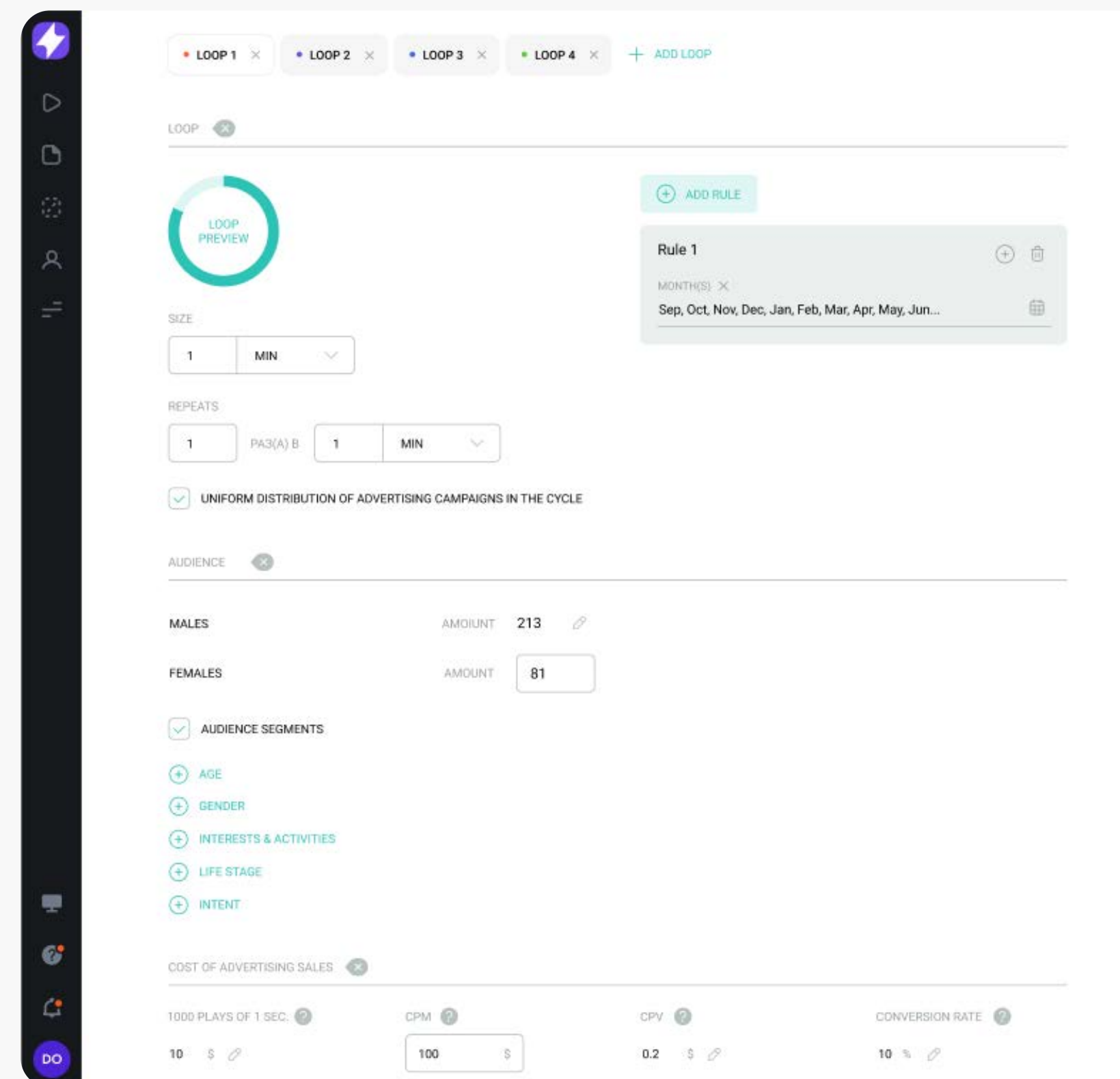
Direct ad sales automatization

Create advertising products

 Pricing management

 Historical Audience data setup

 Black and white lists



The screenshot displays a complex configuration interface for creating advertising products. At the top, there are tabs for 'LOOP 1', 'LOOP 2', 'LOOP 3', and 'LOOP 4', along with an 'ADD LOOP' button. Below this, a 'LOOP PREVIEW' section shows a circular progress indicator. To the right, an 'ADD RULE' button is visible. The main configuration area includes several sections: 'SIZE' with a dropdown set to '1' and a 'MIN' button; 'REPEATS' with a dropdown set to '1' and a 'MIN' button; a checkbox for 'UNIFORM DISTRIBUTION OF ADVERTISING CAMPAIGNS IN THE CYCLE'; 'AUDIENCE' settings with 'MALES' and 'FEMALES' amounts (213 and 81 respectively); a list of 'AUDIENCE SEGMENTS' including AGE, GENDER, INTERESTS & ACTIVITIES, LIFE STAGE, and INTENT; and 'COST OF ADVERTISING SALES' with fields for '1000 PLAYS OF 1 SEC.', 'CPM', 'CPV', and 'CONVERSION RATE'.

Yield management

Cross-channel inventory

Direct ad sales automatization
















Schedule Ads in one cross-channel platform

 Any digital screens

 Screensavers of Interactive kiosks

 Huge 15K resolution screens

 Audio Ads

- ▼  Folder opened
-  Undefined
-  Sound
-  Screen
-  Screen with camera
-  Kiosk
-  Table
-  LED
-  Videowall
-  Projector
-  Tablet
-  Shelf screen
-  ATM
-  Cash machine
-  Mirror

Direct ad sales automatization

Configure Ads campaign before start to hit the target

🔗 Metrics prediction at setup stage

📊 Real-time status

Impressions
83 / 212

CR (shows/views)
35%

Ads played
70 / 100

GPR
141 / 303

Viewer demography
F:29% M:71%

Real views
132 / 200

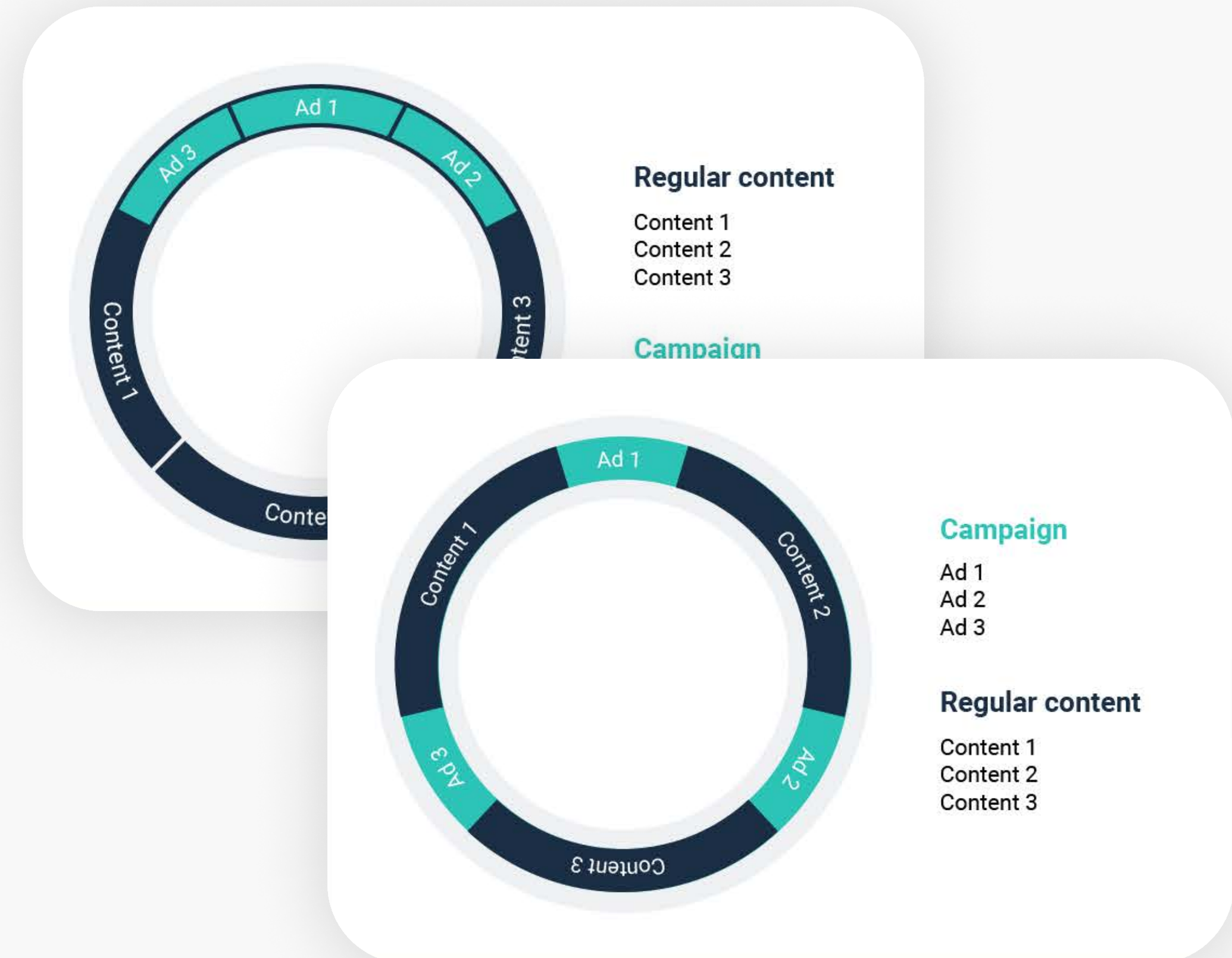
Budget (USD)
120 / 1200

Engagement
5 sec

Direct ad sales automatization

Campaign content separation or grouping

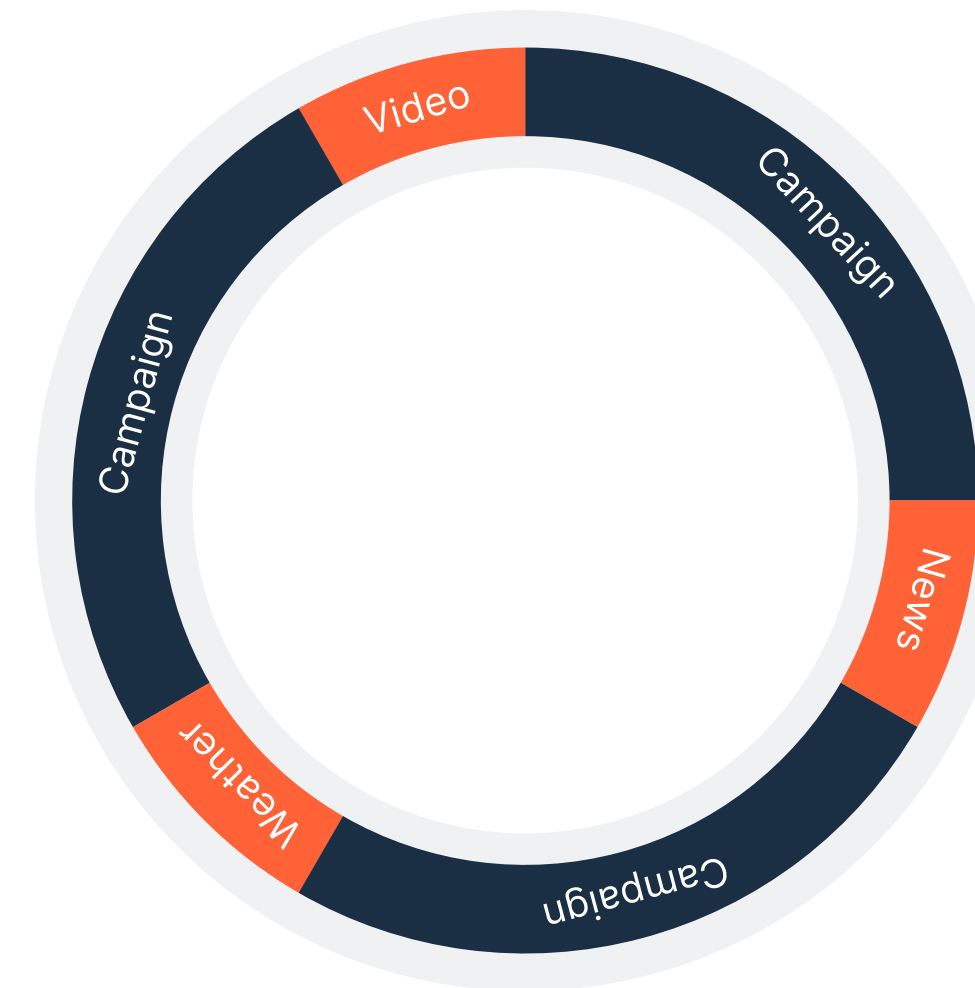
You can loop different content in one campaign to maintain audience engagement.



Direct ad sales automatization

Mix Ads with any type of filler content

Add any type of content that you find useful to be played between ad campaigns in the background.



Campaigns

Campaign 1
Campaign 2
Campaign 3

Campaigns

Video
Data-driven templates
Live streamings

Ad report automation

Campaign plan for advertisers

Report with information about a scheduled
campaign before starting.


Campaign "Cycle test"					
Screens/Devices	Broadcasts	Maximum duration in the loop	Start time	Platform	ise2022
12	178	15,966	2022-07-06 14:00:00	Contact person	Serge
				Phone	79991233678
AdPlays	CPM	CPV	End time	E-Mail	support@displayforce.com
177	78	98	2022-08-06 23:59:59		
Date	Screen/Device	Playback time in loop			
11.06.2022	Test	9:36:05; 10:56:02; 11:24:09; 12:28:09; 13:17:34; 14:41:54; 15:09:42; 16:18:17; 17:03:15; 18:44:21; 19:56:01; 20:54:31; 21:56:01; 22:09:06;			
12.06.2022	Test2	9:36:05; 10:56:02; 11:24:09; 12:28:09; 13:17:34; 14:41:54; 15:09:42; 16:18:17; 17:03:15; 18:44:21; 19:56:01; 20:54:31; 21:56:01; 22:09:06;			
13.06.2022	Test3	9:36:05; 10:56:02; 11:24:09; 12:28:09; 13:17:34; 14:41:54; 15:09:42; 16:18:17; 17:03:15; 18:44:21; 19:56:01; 20:54:31; 21:56:01; 22:09:06;			
14.06.2022	Test4	9:36:05; 10:56:02; 11:24:09; 12:28:09; 13:17:34; 14:41:54; 15:09:42; 16:18:17; 17:03:15; 18:44:21; 19:56:01; 20:54:31; 21:56:01; 22:09:06;			



Ad report automation

Broadcasting report for advertisers

Real-time analysis report about the campaign status.



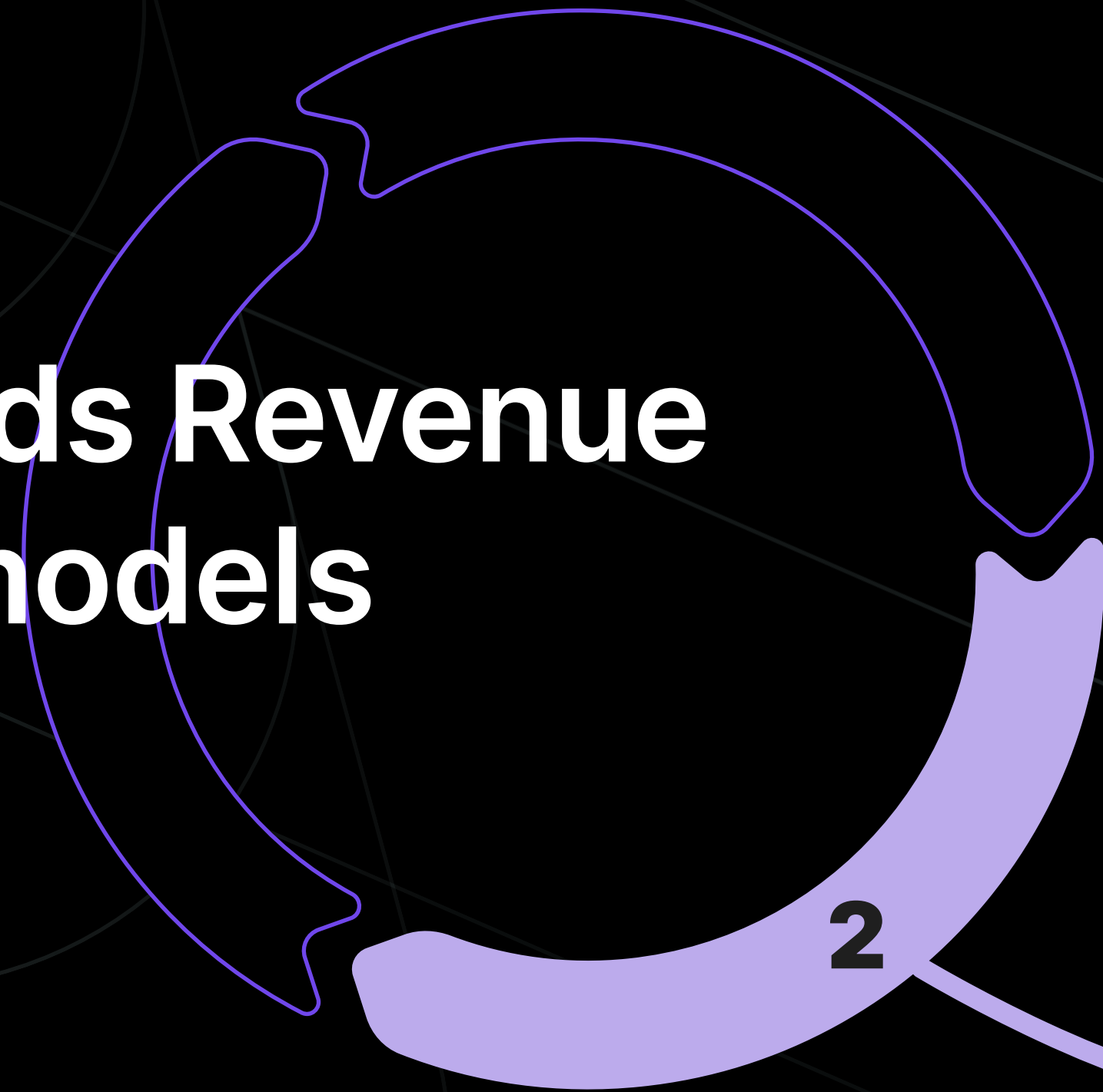
	A	B	C	D	E	F	G	H	I	J	K
1											
2	Platform	n test1									
3	Owner's m	support.@displayforce.ai									
4	Campaign	Filler									
5	ID campai	1244									
6	Customer:										
7	Requested	13-06-2022 00:00 - 13-07-2022 23:59									
8	Devices:	3									
9											
10	By campaigns per day										
11	Date	Campaign	Campaign	Impressio	Views	Males	Females		CR		
12	13-06-202	1244	Filler	14396	1236	1111	123	234	15%		
13	14-06-202	1244	Filler	14295	3456	2689	1543	278	67%		
14	15-06-202	1244	Filler	14290	4567	3451	800	444	89%		
15	16-06-202	1244	Filler	13817	4326	3000	1326	498	94%		
16	17-06-202	1244	Filler	13828	9876	4509	5001	125	96%		
17	18-06-202	1244	Filler	13696	5566	1237	3890	334	100%		
18	19-06-202	1244	Filler	13275	4567	3457	789	981	73%		
19											
20	By content per day										
21	Date	Campaign	Campaign	File's nam	Impressio	Views	Males	Females		CR	Duration
22	13-06-202	1244	Filler	320x192_	1312	1236	1111	123	234	15%	2:11:32
23	13-06-202	1244	Filler	320x192-k	1310	3456	2689	1543	278	67%	2:11:18
24	13-06-202	1244	Filler	320x192-k	1310	4567	3451	800	444	89%	2:11:19
25	13-06-202	1244	Filler	320x192-k	1309	4326	3000	1326	498	94%	2:11:13
26	13-06-202	1244	Filler	320x192-k	1308	9876	4509	5001	125	96%	2:11:07
27	13-06-202	1244	Filler	320x192-k	1307	5566	1237	3890	334	100%	2:11:01
28	13-06-202	1244	Filler	320x192-k	1306	4567	3457	789	981	73%	2:10:55



Programmatic Direct Ads Extension

Direct ad sales automatization

Maximize Direct Ads Revenue by modern sales models



Programmatic Direct Ads

Programmatic ad selling

Audience-based campagins

Direct ad sales automatization

Sell what advertisers want to buy

- ▶ Programmatic: AdPlays
- 🕒 Programmatic: Cost per Mille (CPM)
- 👁️ Programmatic: Cost per Real View (CPV)
- 🔒 Mix with classic fixed campaigns in loops

01 Calendar

Guaranteed ads
fron date to date
with a fixed price

02 AdPlays

Cost per 1000
Ad Plays

03 CPM

Cost per 1000
Impressions



Confirmation of
contact with face
recognition
technology

04 CPV

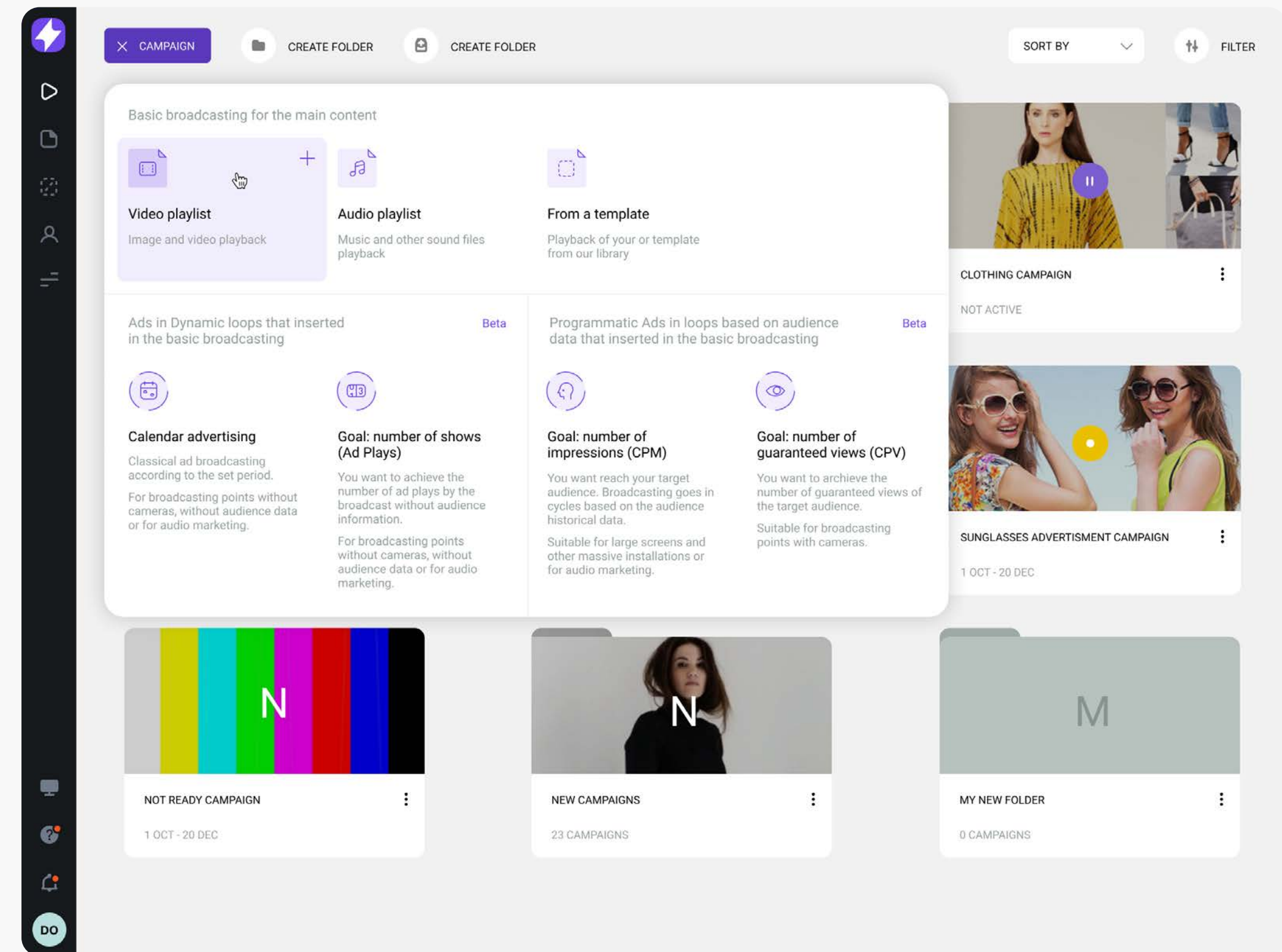
Cost per
targeted contact

Direct ad sales automatization

Audience-based Campaigns

Utilize audience- and time- or GEO location-based selling models to achieve 100% sell-out

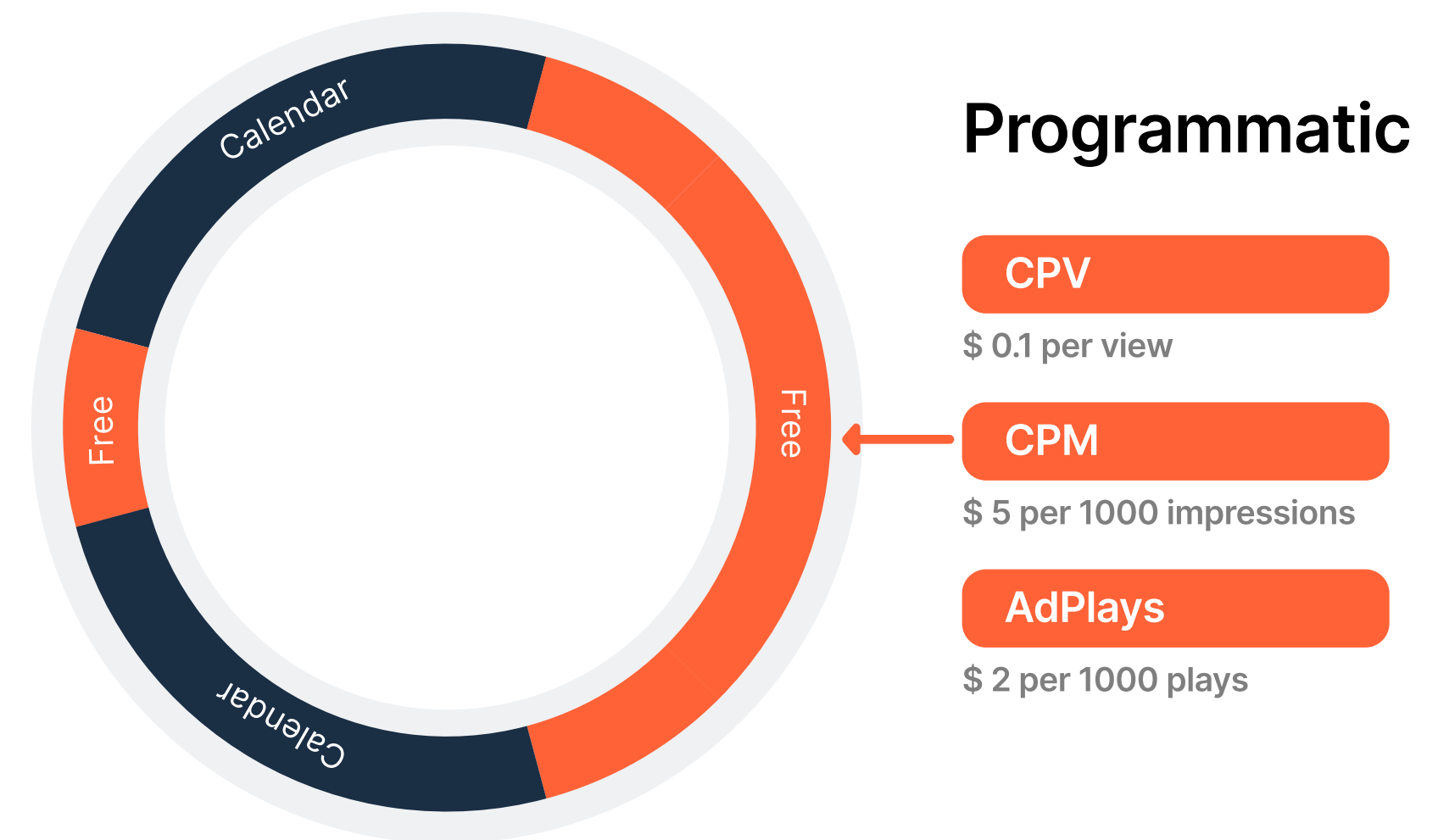
- 🎮 Fixed or flexible loops
- 🔗 Programmatic selling models
- 🎯 Performance marketing targets



Programmatic ad selling

Programmatic revenue-boosting waterfall algorithm

The ad that wins the bid will play more frequently in the loop. The algorithm calculates targeting rules and a single impression price to select the winner.



What kinds of targeting are available?

Demographic targeting

Hyper-local GEO targeting

Direct ad sales automatization



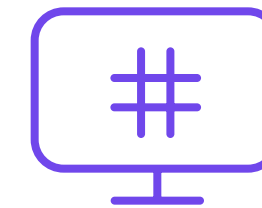
GEO

Location on the map

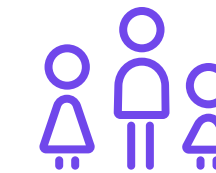


Tags or Venues

Supermarket, pharmacy, clinic, etc.



Touchpoint Type



Audience Attributes

Gender, age, etc.



Day and Time

Schedule

Demographic targeting

Audience-based campagins

Direct ad sales automatization

Target a specific audience

- 👁️ Play a campaign when they're paying attention
- 👤 Demographic triggers: Age, gender
- 😊 Behavior triggers: Dwell time, smile

Targeting

Person

Gender: Female

and

Age: 18 – 34

From 0 To 30

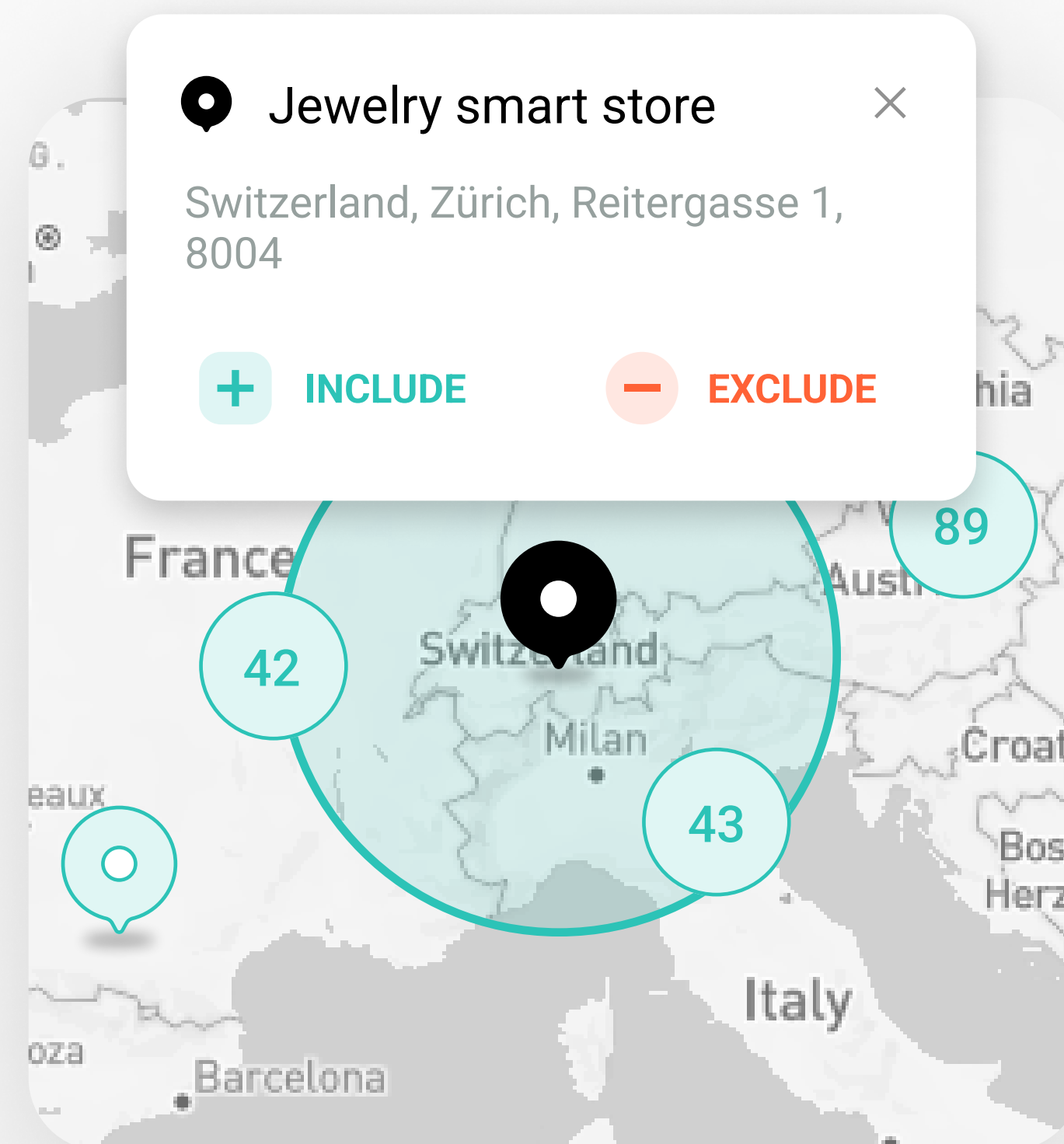
DONE

GEO-based campaigns

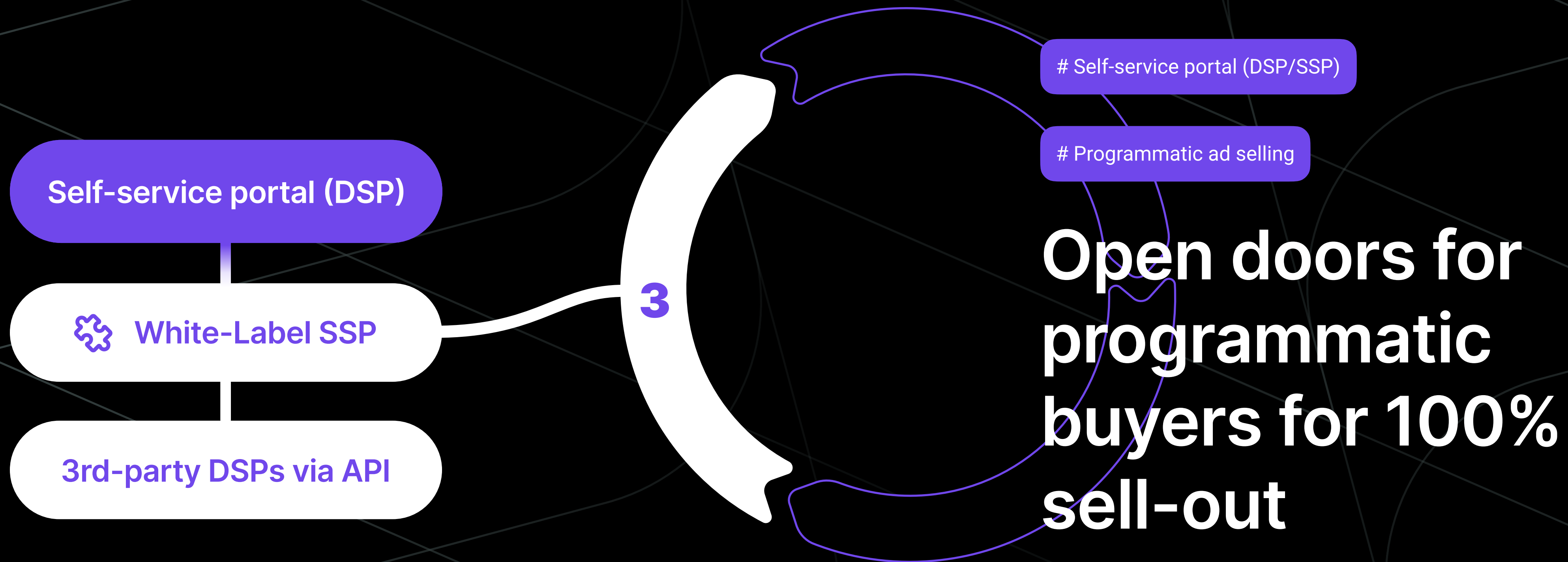
Direct ad sales automatization

Target a specific GEO-location

Play Ads when broadcast devices are in a specific zone on the map.



Self-service portal (DSP/SSP) Extension

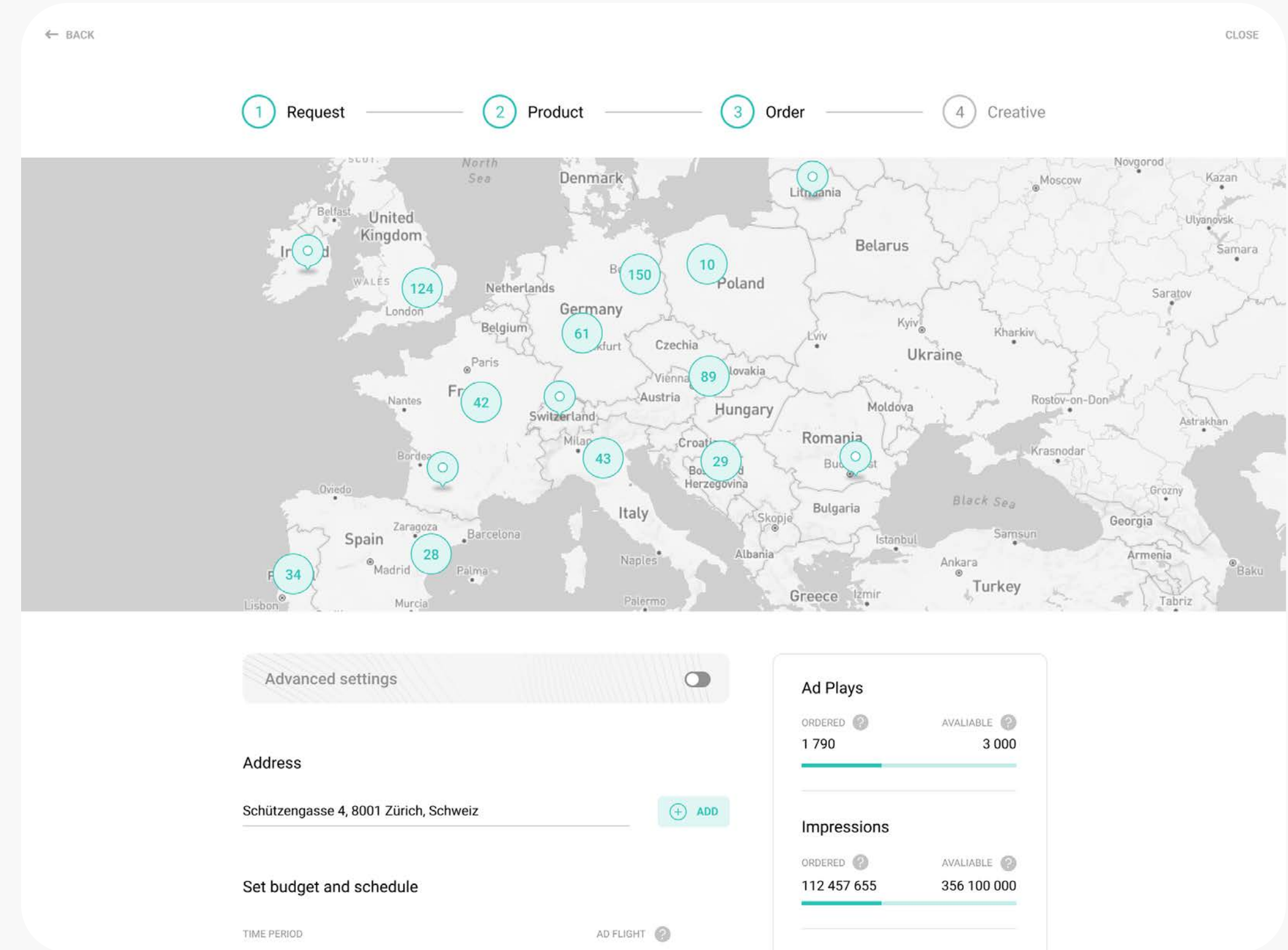


Programmatic ad selling

Self-service portal (DSP/SSP)

Run your own self-service portal for advertisers

- 🔑 100% white labeled SSP & DSP by your brand
- ✳️ Simple wizard for advertisers
- 🔗 API for 3rd-party DSP connections
- ⚙️ Price and order control



Programmatic ad selling

Self-service portal (DSP/SSP)

Monetize any touchpoint

- 👤 New revenue stream of audience-based advertising
- 🛒 Self-service for advertisers by your brand
- 🏠 Algorithmic real-time-bidding auction



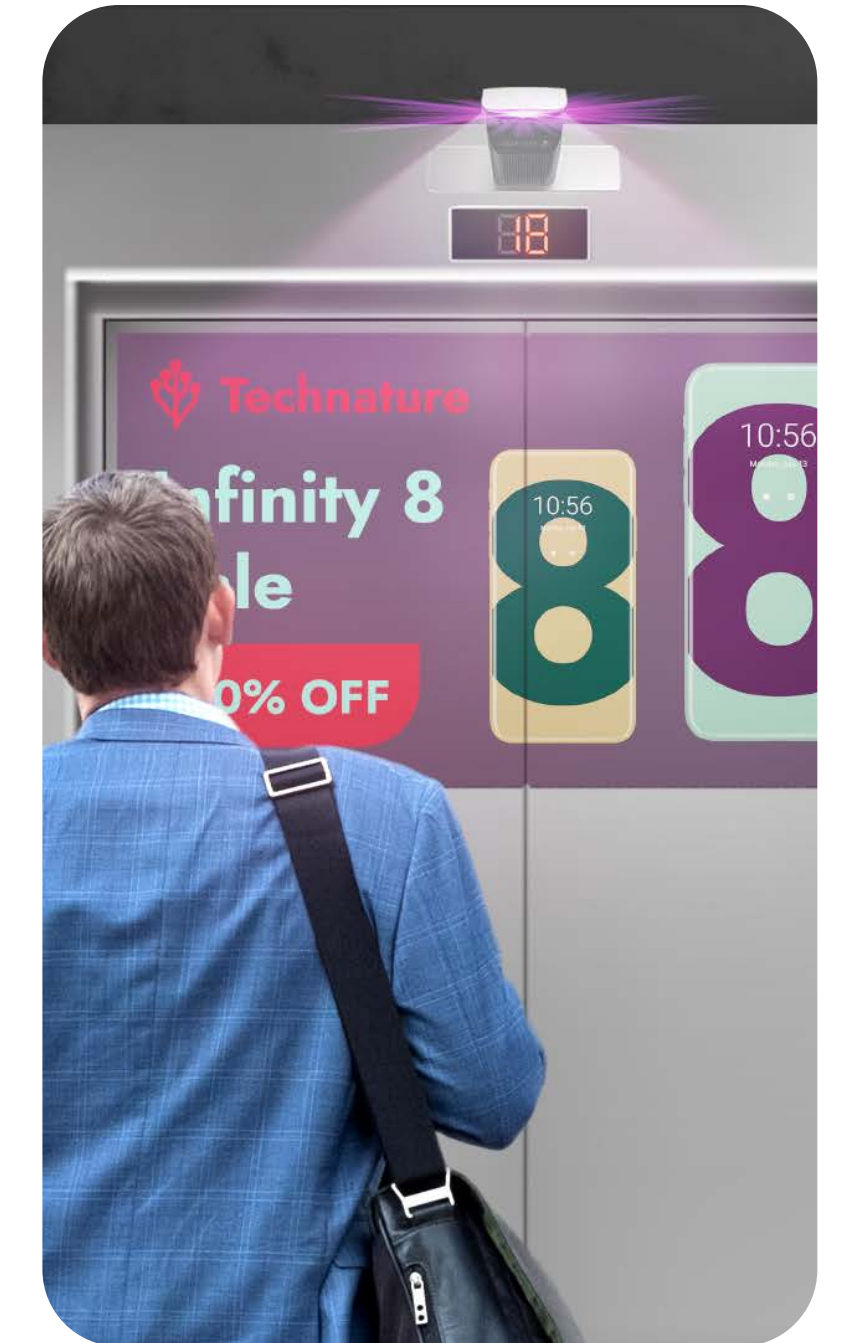
🖥 Screens

Maximize your ROI from any screen or videowall



🖥 Kiosks

Any touch surface will also generate revenue as long as there are no active users nearby



🖥 Projectors

Connect new and non-standard broadcast points

Programmatic ad selling

Self-service portal (DSP/SSP)

Get extra revenue via programmatic audience-attention-based deals

Over 90% of brands buy an audience.

Now you can combine time-based models with:

- 🕒 CPM model (1000 OTS)
- 👁️ CPV model (confirmed contact with the target audience using computer vision technology)

The screenshot displays a user interface for selecting a campaign type. At the top, a progress bar shows four steps: 1. Request, 2. Type (currently active), 3. Order, and 4. Creative. Below the progress bar, the text "Please, select your campagin type" is displayed. Three options are presented in cards:

- Ad plays**: Represented by a TV icon. The goal is "Number of shows". Description: "You want to achieve the number of ad plays by the broadcast without audience information. broadcasting points without cameras, without audience data or for audio marketing." A "SELECT" button is at the bottom.
- CPM**: Represented by a head icon. The goal is "Number of impressions". Description: "You want to reach your target audience. Broadcasting goes in cycles based on the audience historical data. Suitable for large screens and other massive installations or for audio marketing." A "SELECT" button is at the bottom.
- CPV**: Represented by an eye icon. The goal is "Number of guaranteed views". Description: "You want to achieve the number of guaranteed views of the target audience. Suitable for broadcast points with cameras." A "SELECT" button is at the bottom.

Programmatic ad selling

Self-service portal (DSP/SSP)

Add agencies and DSPs in a few clicks

- 🔒 Forbid or open access to a specific inventory with specific prices.
- ⚙️ Set up margins for a specific partner.
- 🔗 Share via API to connect third-party DSPs.

The screenshot shows a web interface for managing agencies and DSPs. At the top, there's a header with a 'BACK' button and a user profile 'Asiaray'. Below this, there's a form for adding a new agency. The form includes a 'Contract # 45684568' with a status 'Active, 53 days left'. It also has fields for 'CREATION DATE' (10 Apr'22) and 'EXPIRATION DATE' (26 Jun'22), with 'DOWNLOAD' and 'UPLOAD' buttons. To the right, there's a section for 'ADDRESS' (Paphos, Cyprus), 'PHONE' (+1 234 567 89 00), 'EMAIL' (serge@displayforce.ai), and 'CURRENCY' (USD). Below the form, there's a table with columns: ACCESS, STATUS, NAME, POINTS, and EXTRA CHARGE TO BASE PRICE. The table lists five entries, all with 'Available for selling' status and '0' points. The first entry has '120 %' extra charge, while the others have 'n/a'. A sidebar on the left contains icons for various functions, and a 'SA' button is at the bottom left.

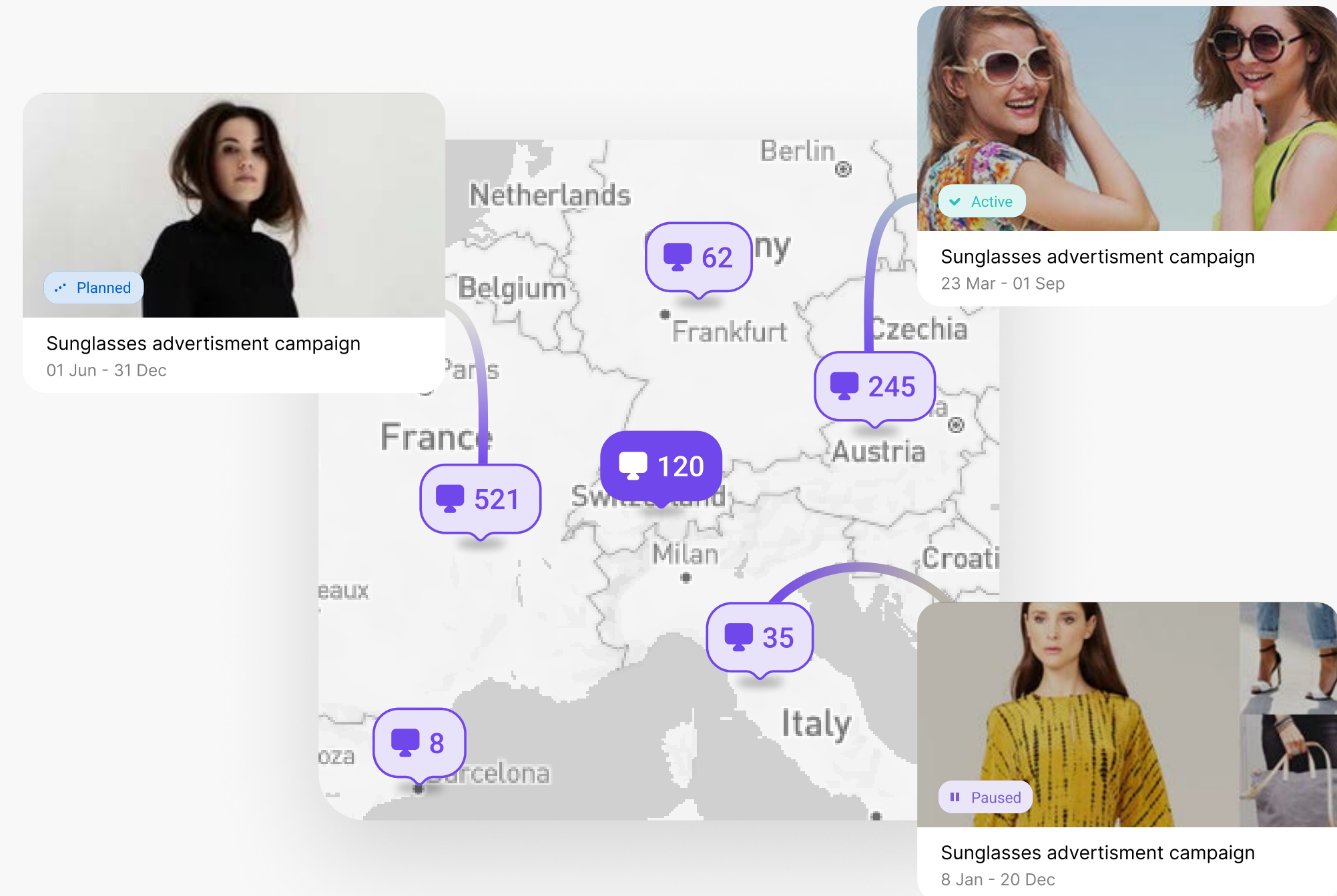
ACCESS	STATUS	NAME	POINTS	EXTRA CHARGE TO BASE PRICE
Has Access	Available for selling	profile	0	120 %
Has Access	Available for selling	Nathan Taylor	0	0 %
No Access	Available for selling	Michael Perez	0	n/a
No Access	Available for selling	AR Network 2	0	n/a
No Access	Available for selling	Platform No4	0	n/a

Programmatic ad selling

Self-service portal (DSP/SSP)

Activate an Uber-based model with your media partners

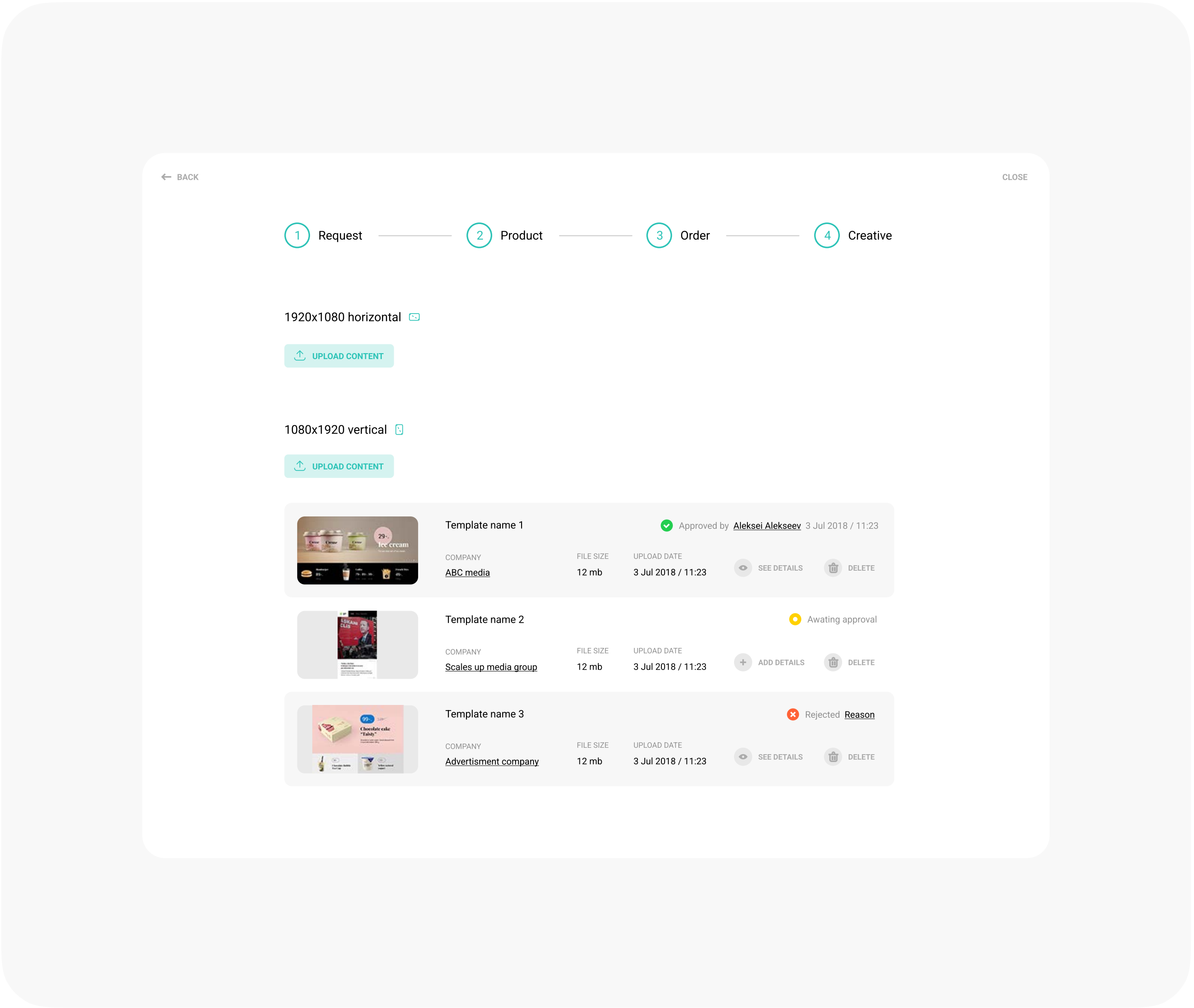
- 🔊 Your partners will be part of your network, in which you will act as an aggregator.
- 🔒 Partners will see income only for their network segment.
- 🔗 At the same time, partners will be able to sell ads throughout the network.



- # Programmatic ad selling
- # Self-service portal (DSP/SSP)

Moderate promotional materials

- ✂ Reject or apply content
- ⚙ Specify the reason for the refusal



Programmatic ad selling

Self-service portal (DSP/SSP)

Keep pricing control via a sell-side platform

- 👤 Keep the content and price under your own control.
- 🛡️ Mediate requests from 3rd-party DSPs on your side.

BUDGET

12.000 USD

You'll spend up to **12.000.00 USD** for this line order.
The current maximum estimated budget for this line order is **111.000.000.00 USD**.

MAX BID

7 USD

CPM for a 15 seconds creative

The effective bid range is **6.30 USD – 9.30 USD**.
Your max bid will be adjusted to your creative duration.

Programmatic ad selling

Self-service portal (DSP/SSP)

Provide campaign reports

AdPlays

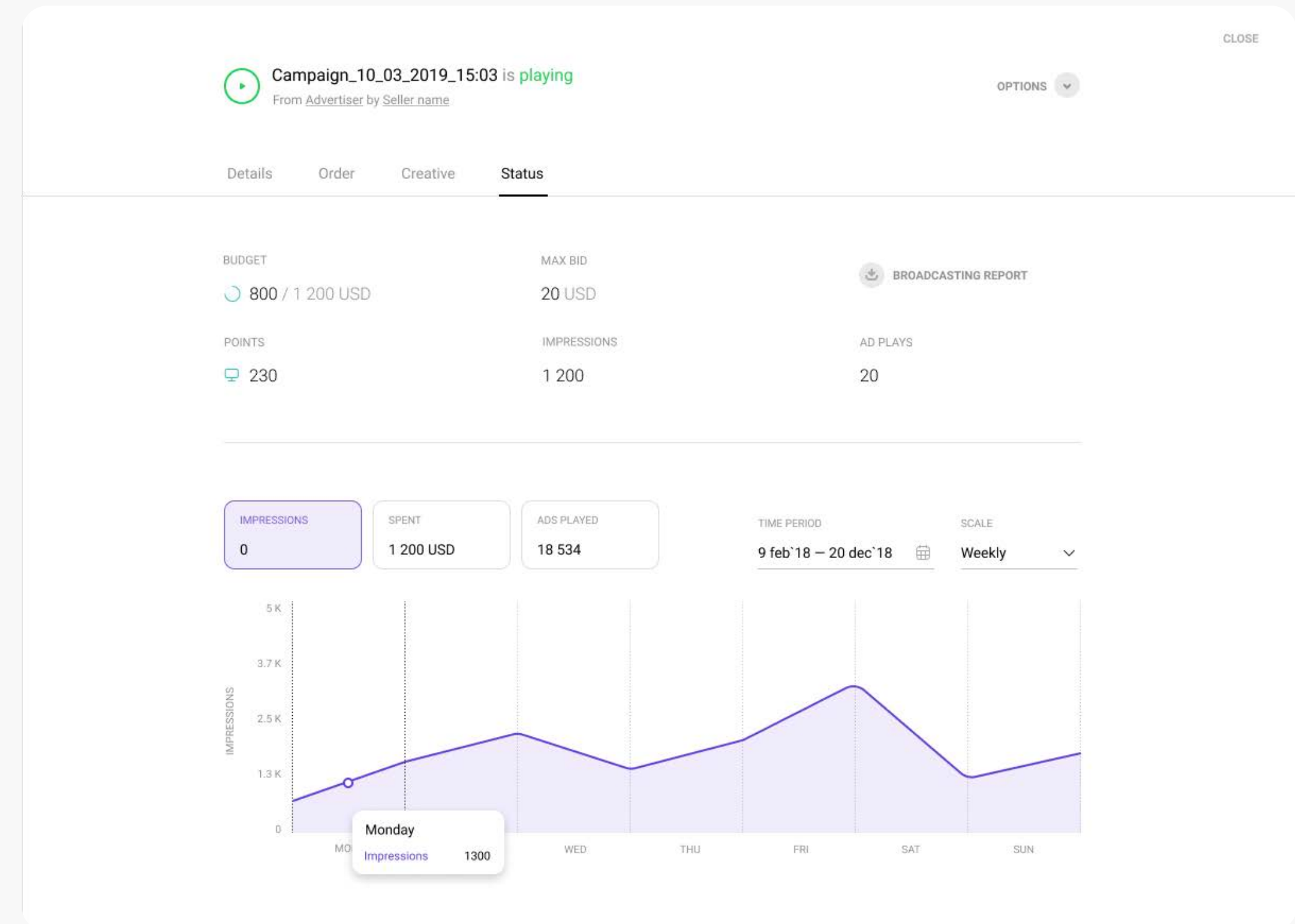
Number of ad plays. Current data.

Budget

The total budget for the current model and the actual expenses for today.

Impressions

OTS — opportunity to see (impressions) based on historical or entered data about screen profiling, targeting rules, timings, and campaign schedule. Current data and forecast.



Programmatic ad selling

Self-service portal (DSP/SSP)

All data unpersonalized and GDPR compliant

Historical data from publishers

For audience prediction, SSP/DSP porta takes data from people counters and POS terminals.






GEO data from 3rd-party suppliers

We supplement the platform with data about audience interests obtained by our partners using the GPS data collection tool.

Non-personalized face detection

Audience attention, age and gender as triggers for campaigns.









Audience

-  AGE
-  GENDER
-  INTERESTS & ACTIVITIES
-  LIFE STAGE
-  INTENT

Broadcasting points

-  RESOLUTION

Environment

-   All
 -   Restobar
 -   Office
 -  Convenience Store
 -  Subway



Content Management System

Content Management System

**Schedule and automate your
own marketing (filler content)
through any touchpoint**

Screen

Audio advertisement

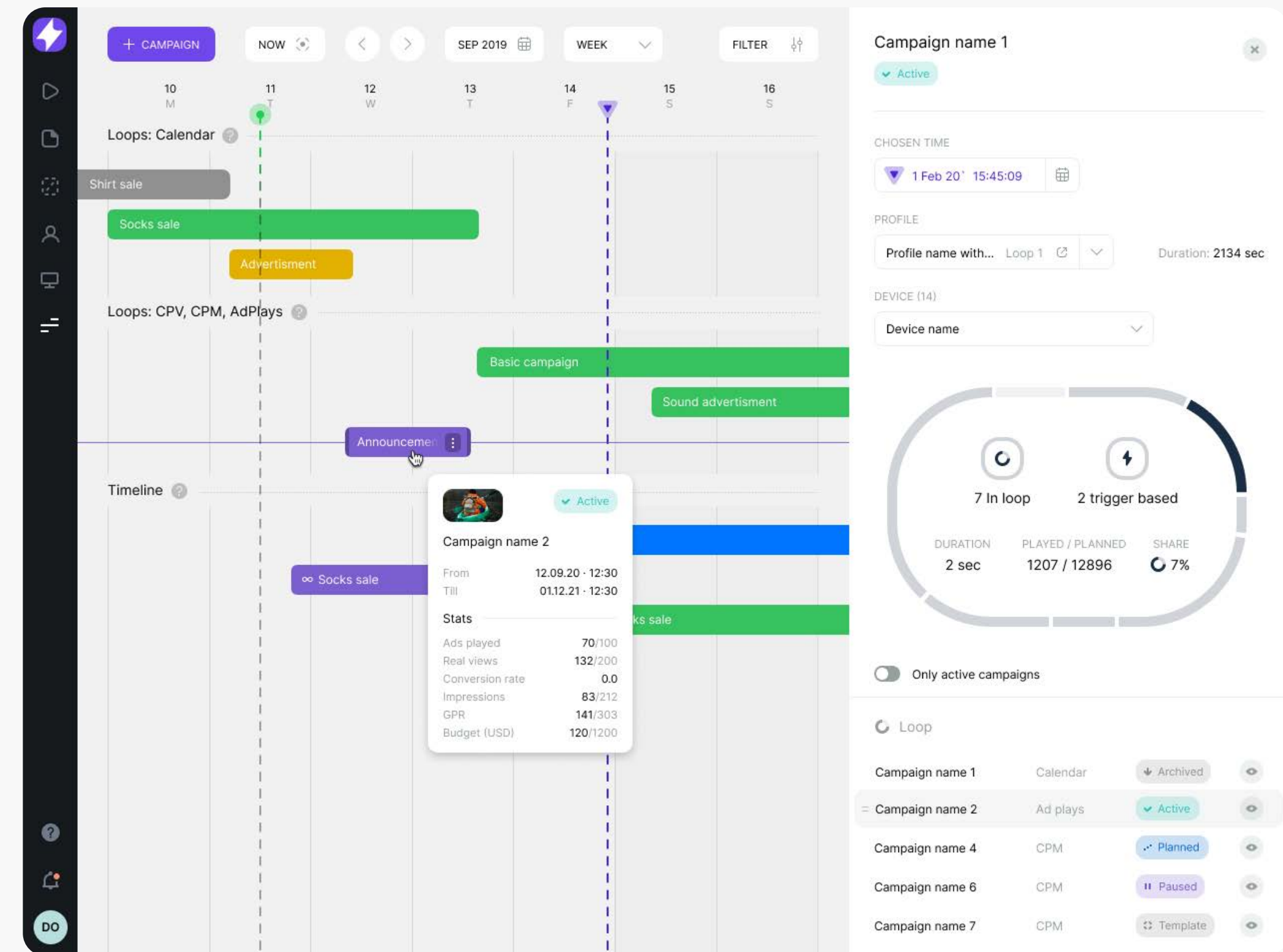
Projector

ATM

Content Management System

Save 90% more time with centralized content management

- Media on any digital screen
- In-store background music
- Dynamic & interactive content on kiosks




Content Management System

Automate schedule with flexible rules

- 📅 At the right time and dates
- 🔗 By triggers from CRM, POS, etc.
- 👤 By attributes of audience in front of the screen

Timings

☒ Unlimited

From 

Till

Periodicity

[+ ADD RULE](#)

▼ Rule 1

×

 Time: 06:30 — 22:00

×

 Week day: Mon — Fri

+

🗑

Set the month

Set the date

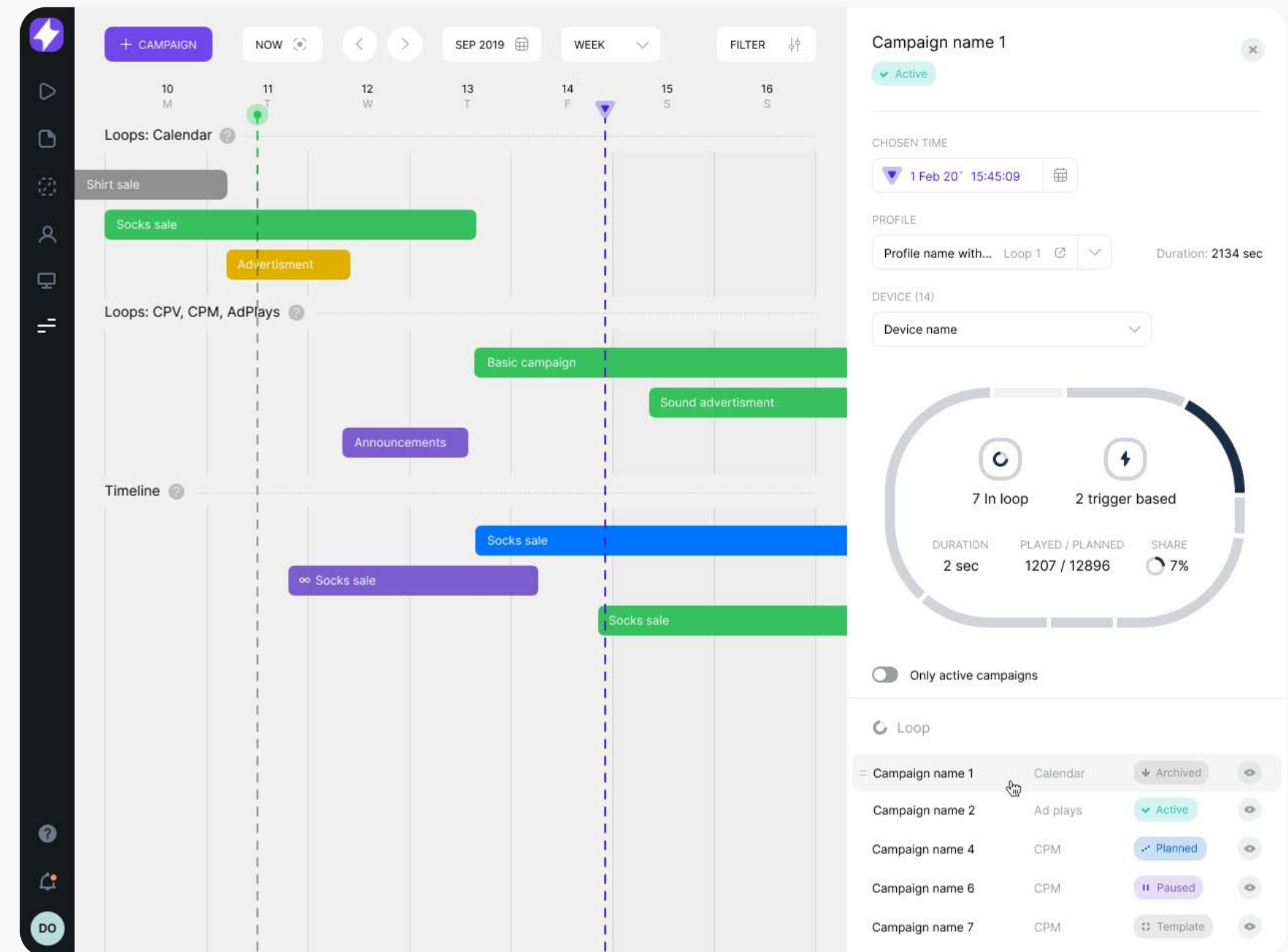
Tags

[+ ADD TAG](#)

Content Management System

Keep control with an interactive schedule

- ⌚ Dynamic visual charts
- 📅 Zoned timeline
- 📅 Planning system



Content Management System

Targeted rule-based automation

Set the rules and the broadcast points
will be selected automatically.



● Males

● Age 19-25

● Tags

● Venues

Content Management System

Visual template editor

Reduce costs with auto-generated content

- 📁 Animated template library
- ✎ Visual template editor
- 📁 Data from E-com, XML, etc.

Headphones
with active
noise suppression

Special price

\$ 135 ~~\$ 220~~

Database





Insights & data

Audience analytics

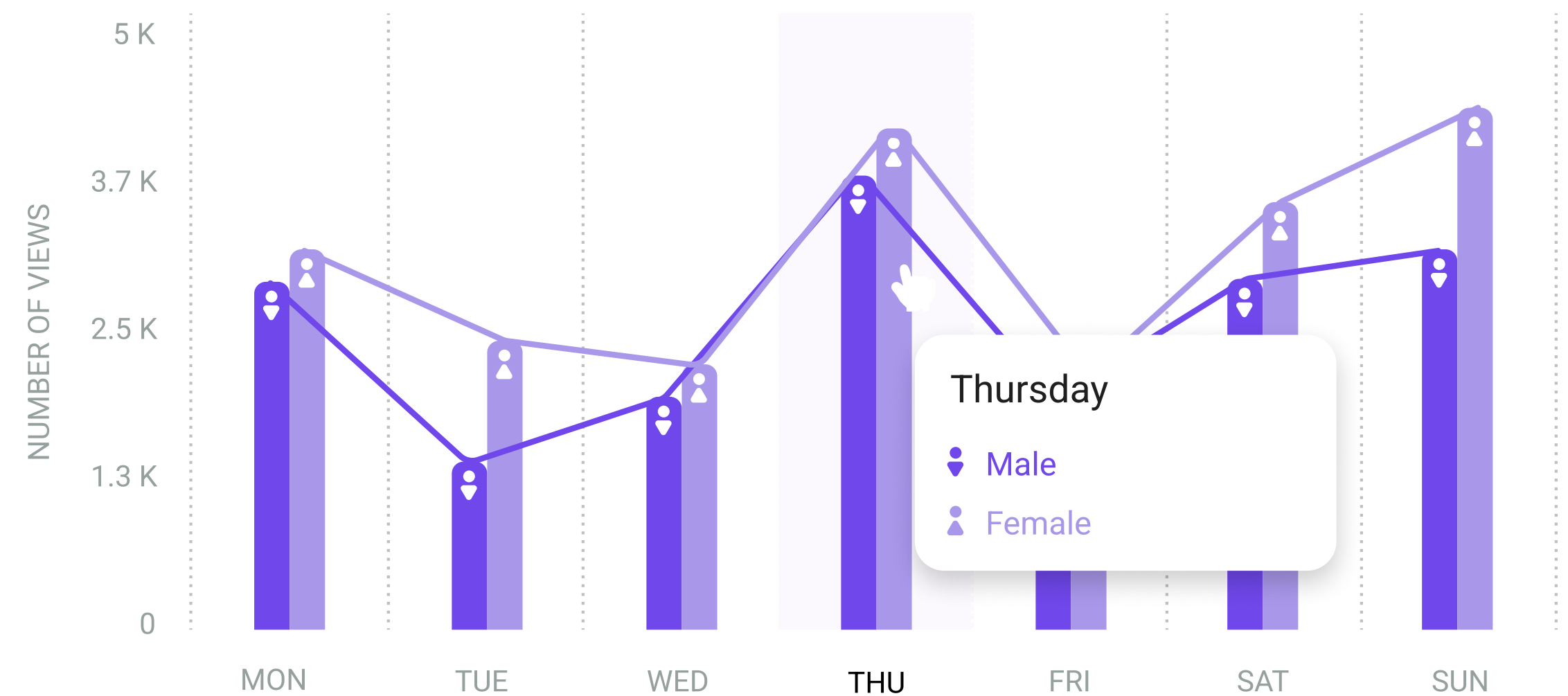
Impression Analytics

All necessary reports for
ad sales and audience
analysis

 Proof of Play

 Campaign audience behavior

 System usage



Advertisers and businesses need metrics to measure performance

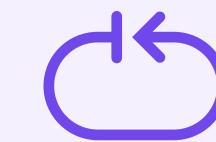
Now you have access to accurate and confirmed real-time numbers.



OTS



Conversions



Frequency



Dwell time

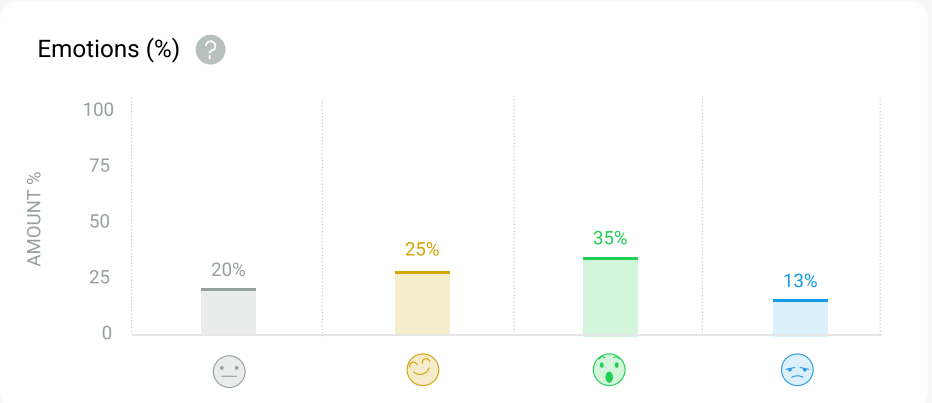
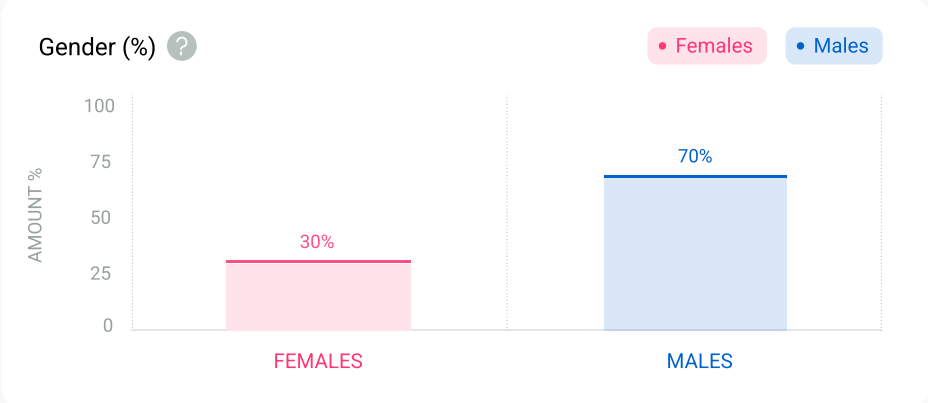
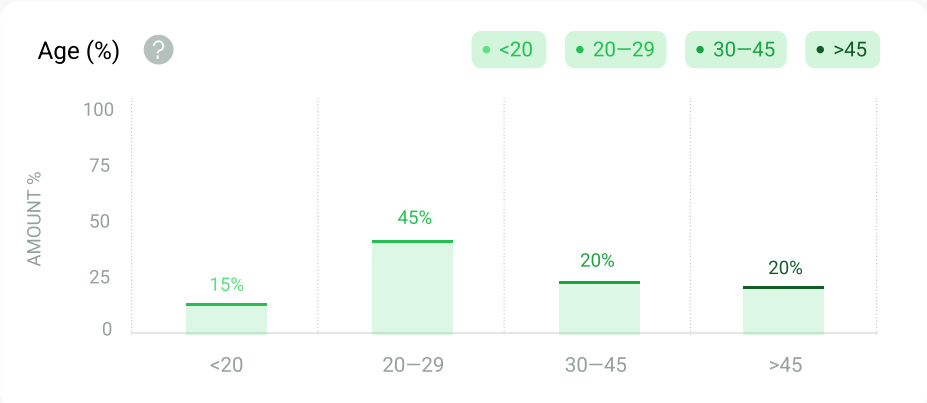
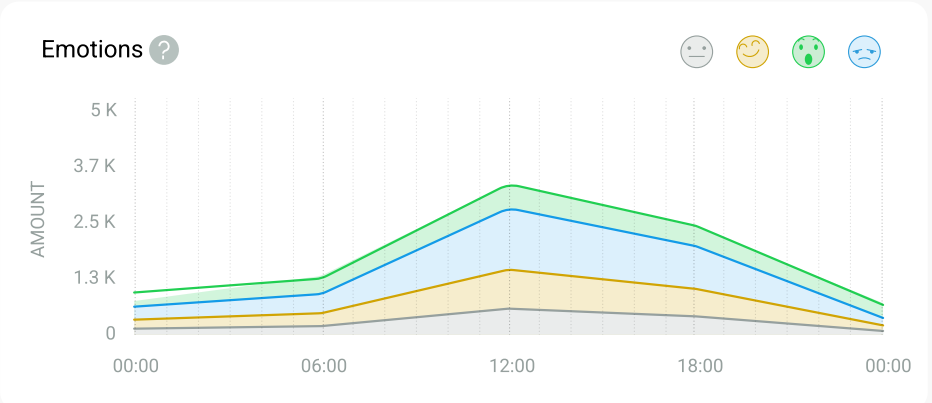
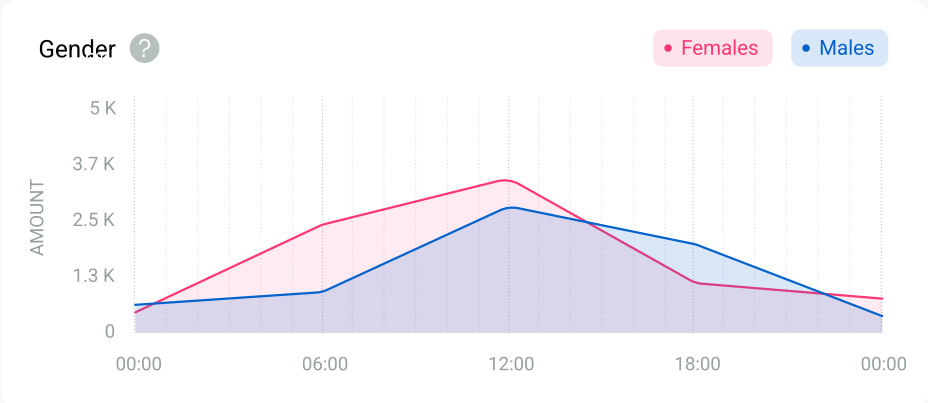
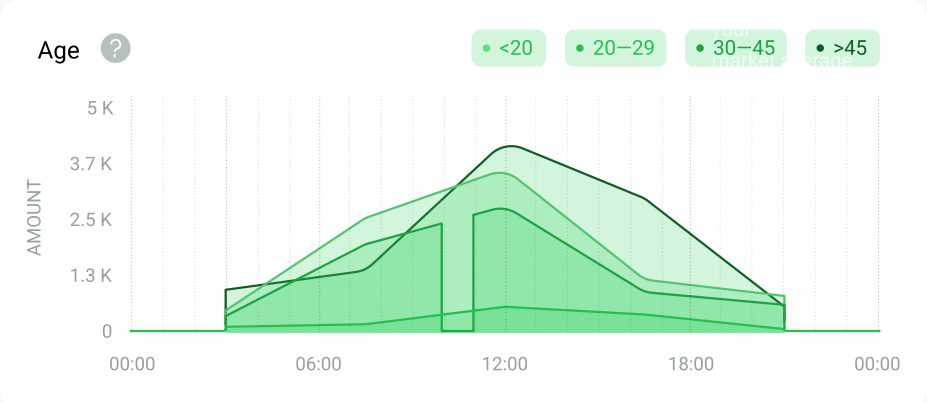
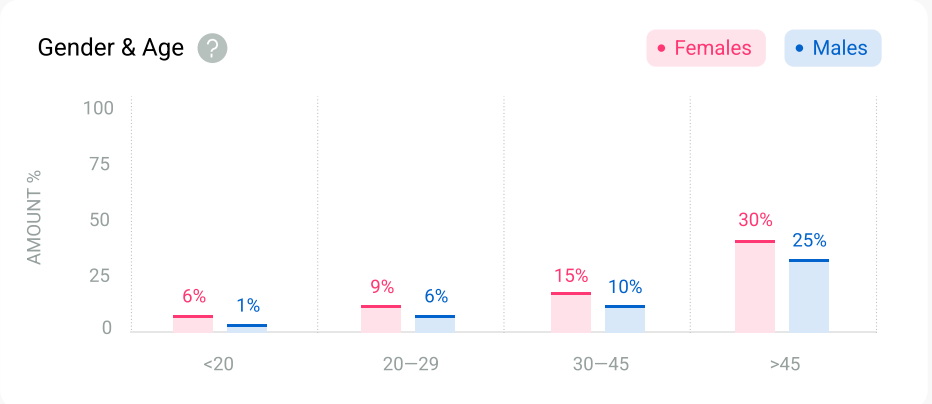
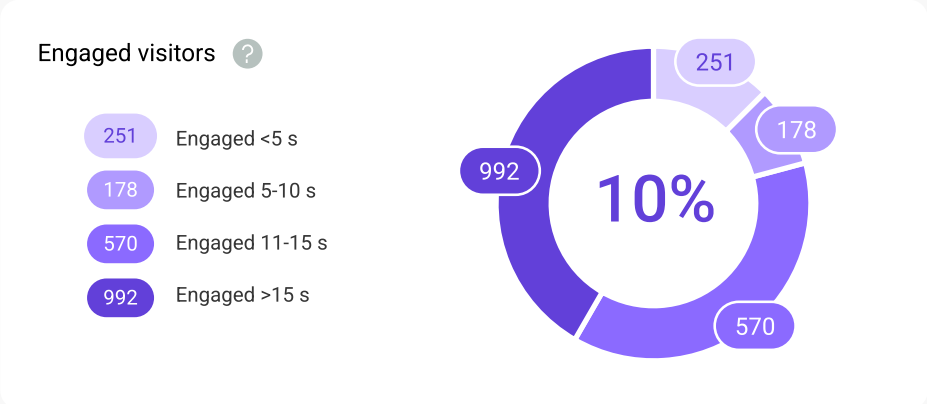
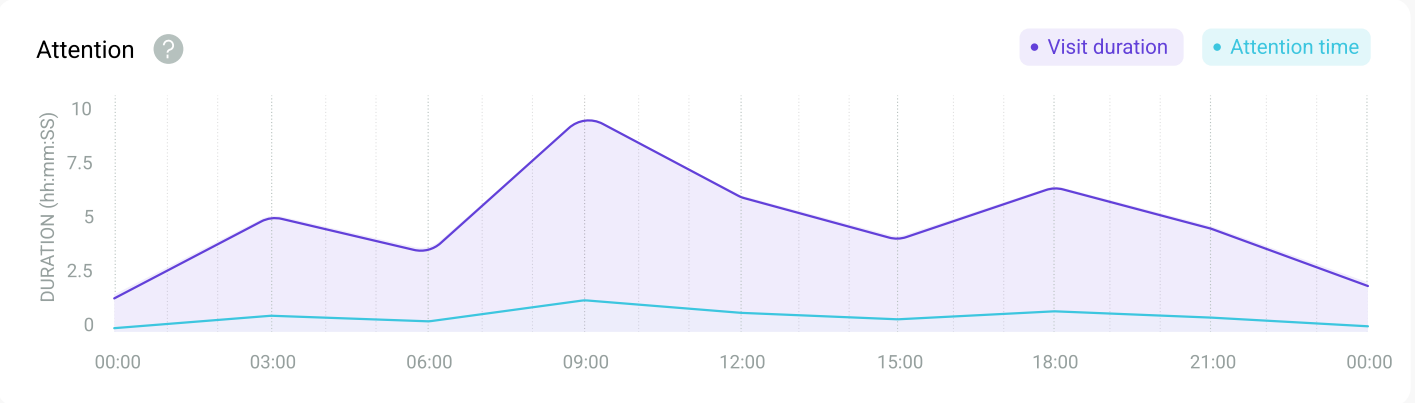
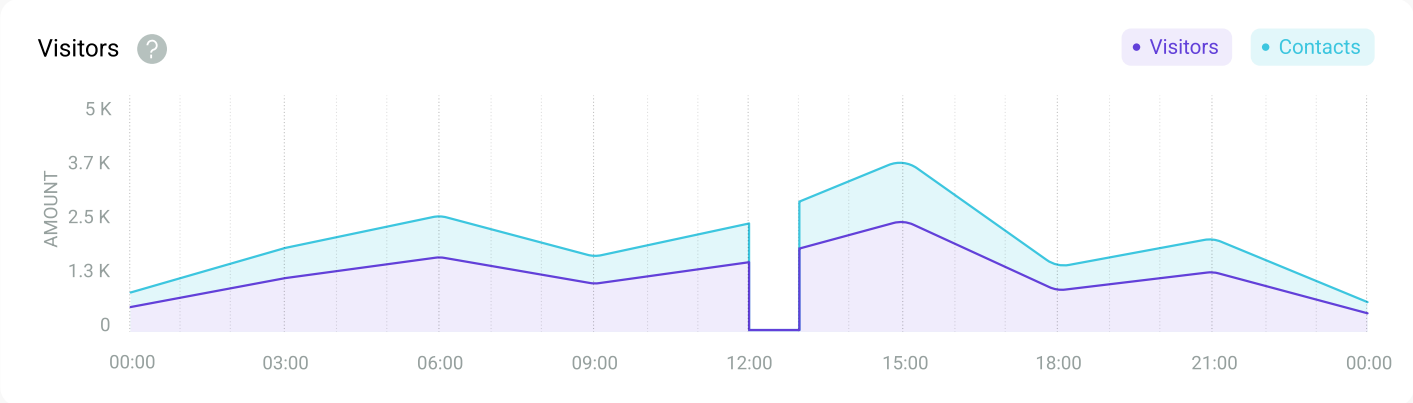


Reports

Audience analytics

Visitor Insights

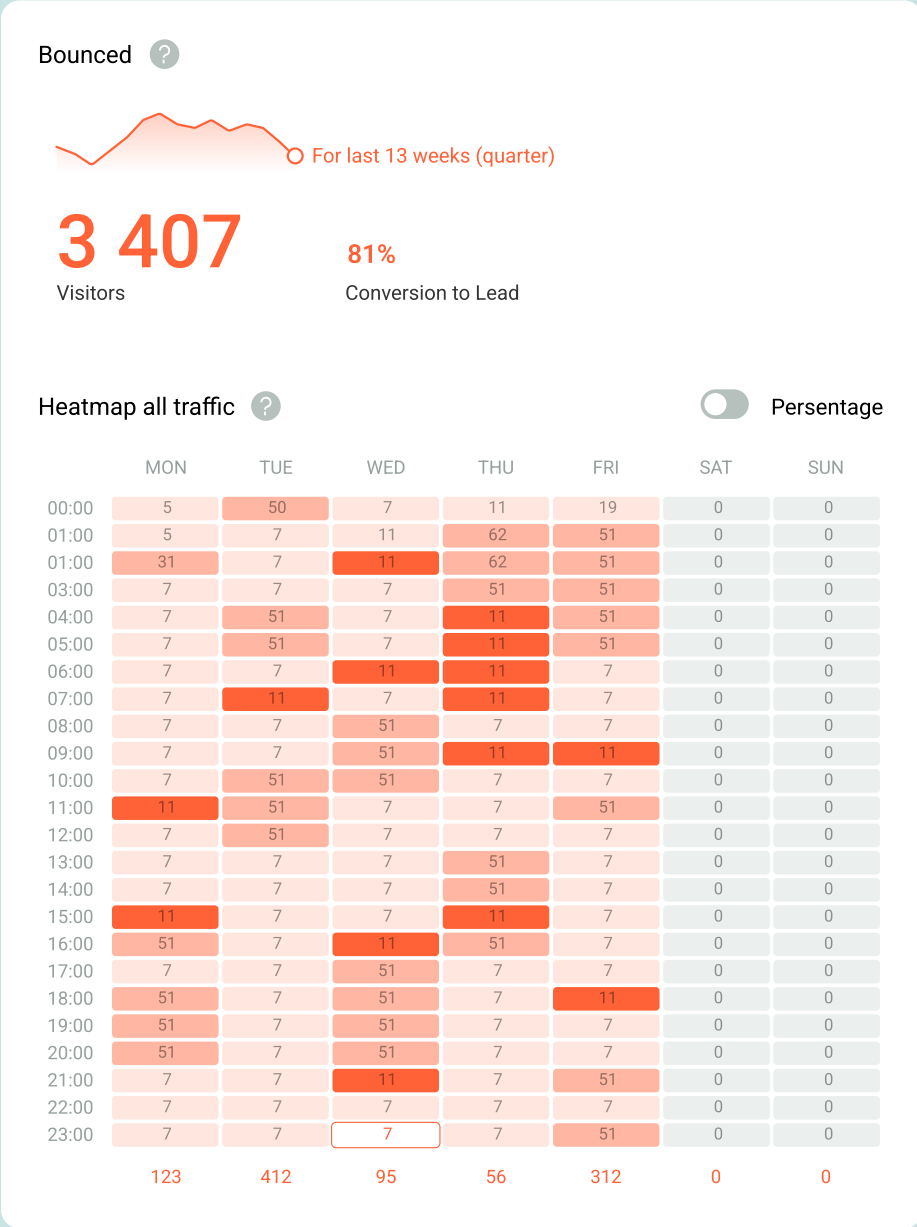
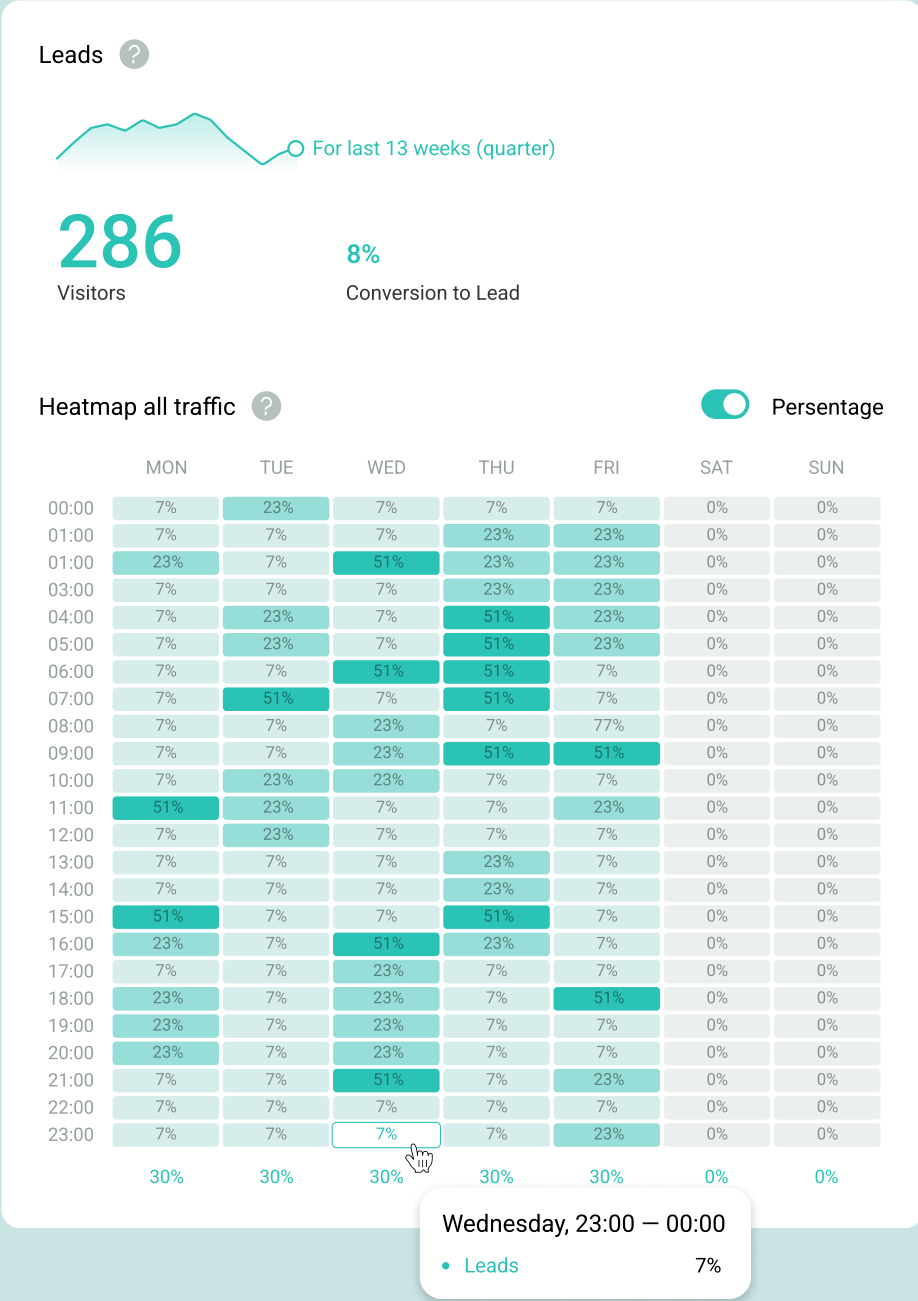
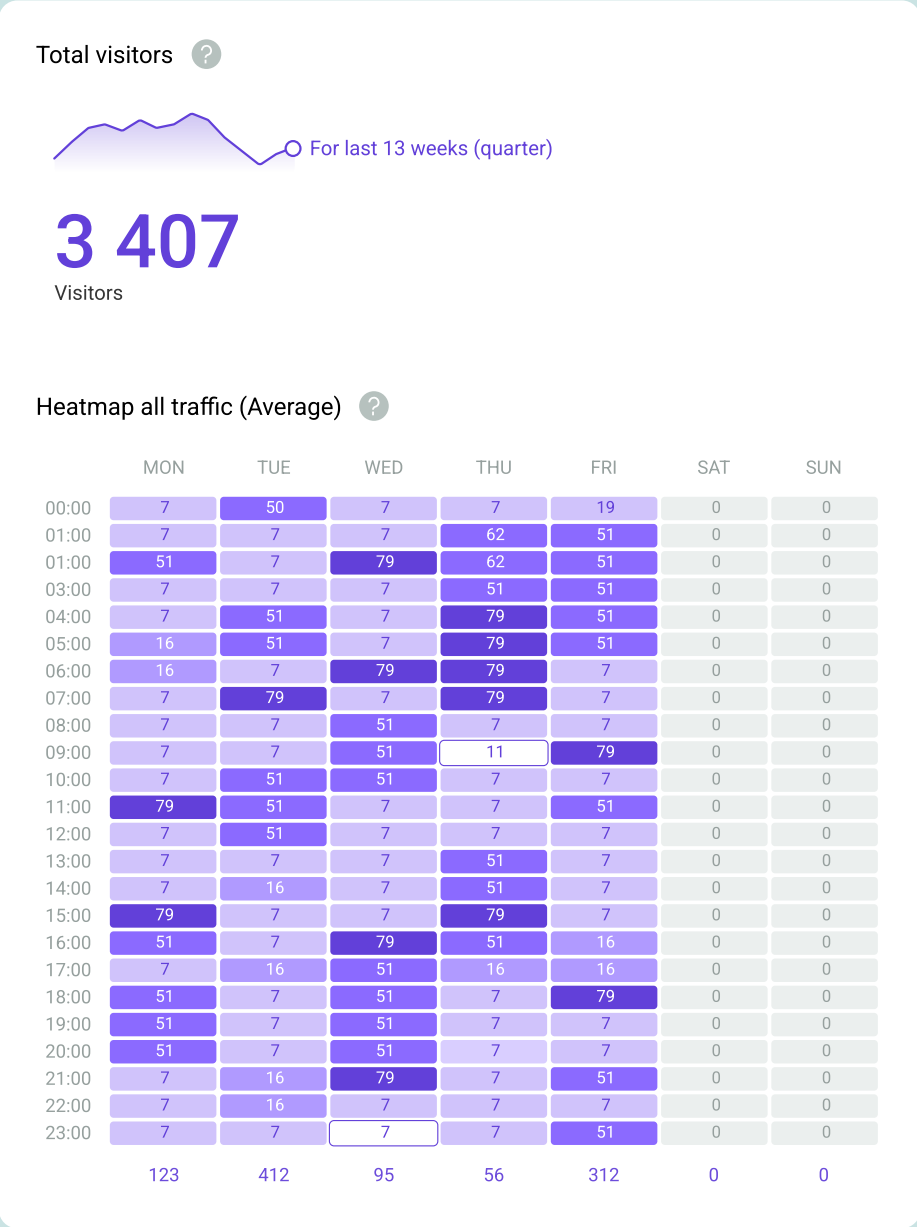
Boost Revenue up to 40%
with High-Value data.



Audience analytics

Traffic heatmaps

Use peak traffic time date for engaged and bounced leads to adjust marketing campaigns and allocate staff accordingly.

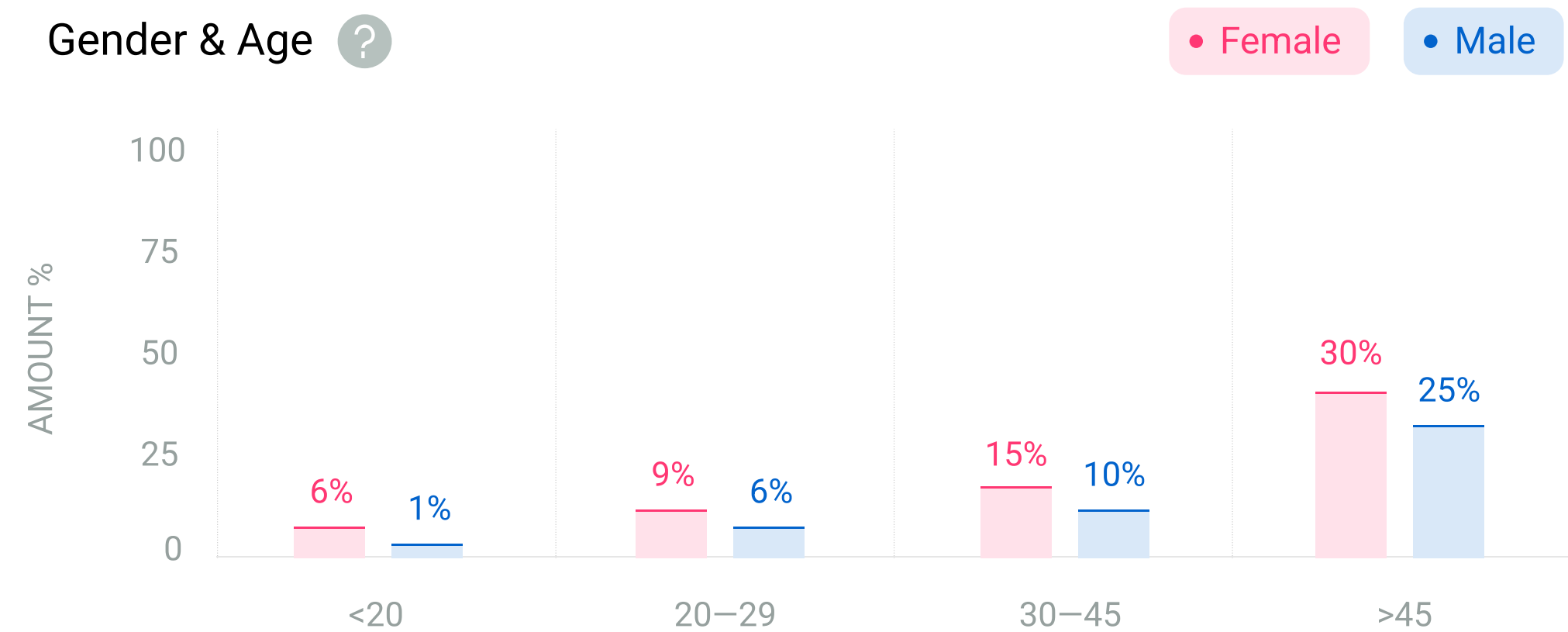


Audience analytics

Audience portrait

Knowledge of demographic data helps to understand the portrait of the real audience of the campaign and draw conclusions about changes in the message.

Gender & Age ?



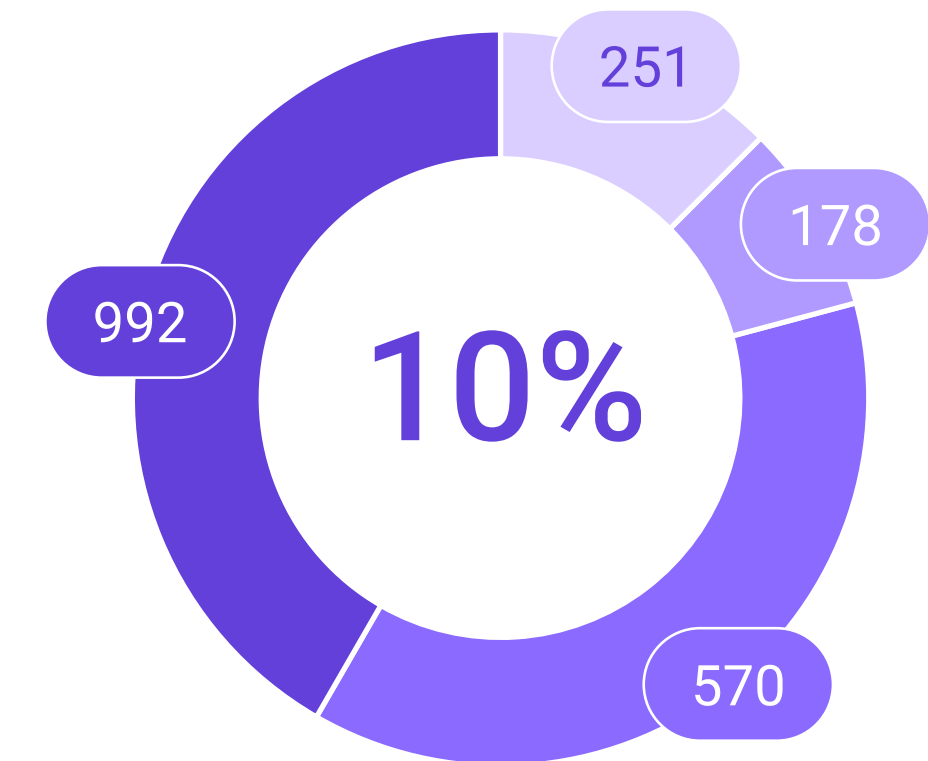
Audience analytics

Ad dwell time (engagement)

If your target audience is watching content for 50% of the campaign time, then you are probably playing the right content.

Engaged visitors ?

- 251 Engaged <5 s
- 178 Engaged 5-10 s
- 570 Engaged 11-15 s
- 992 Engaged >15 s



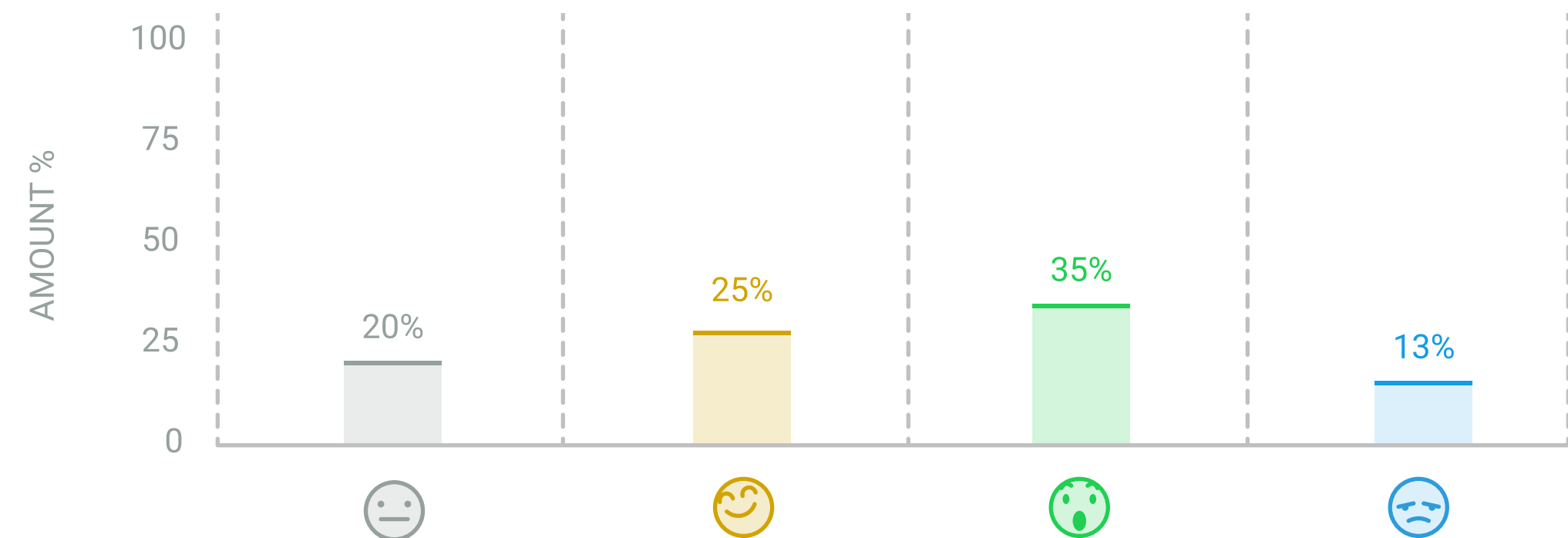
Audience analytics

Emotion tracking

Allows you to find out how the emotional state of people affects the decision to purchase.

Make a mood map.

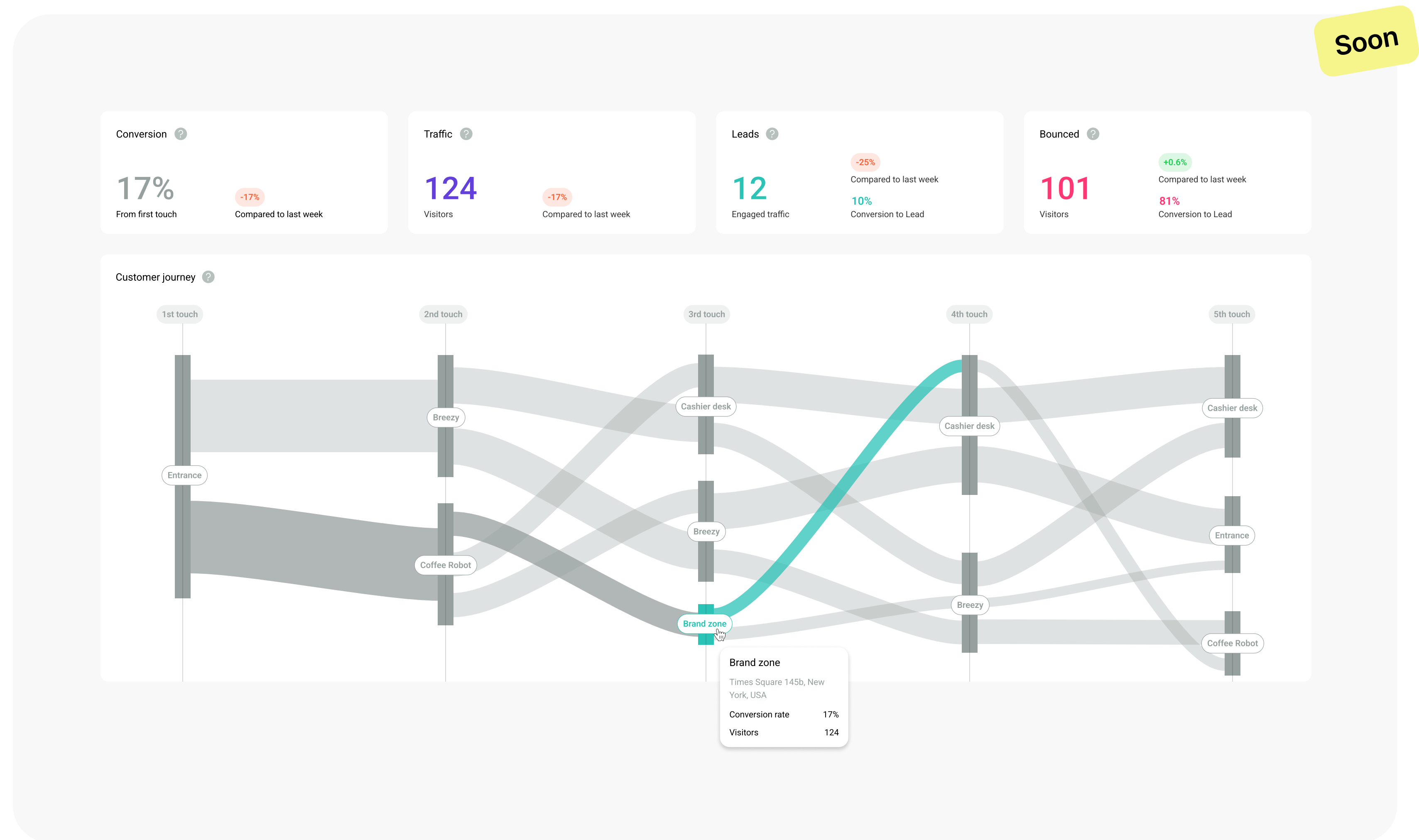
Emotions (%) ?



Audience analytics

Customer journey

The most popular routes around touchpoints. Find out where most shoppers go and how long they stay in front of touchpoints.

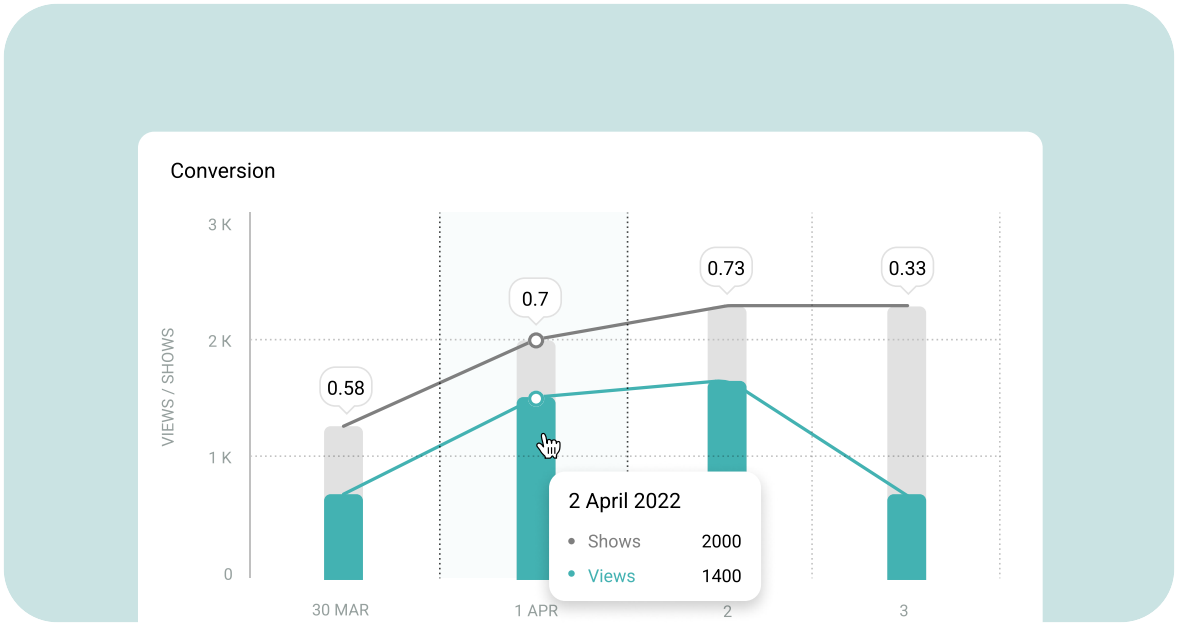


Impression Analytics

Impression Analytics for Digital Signage

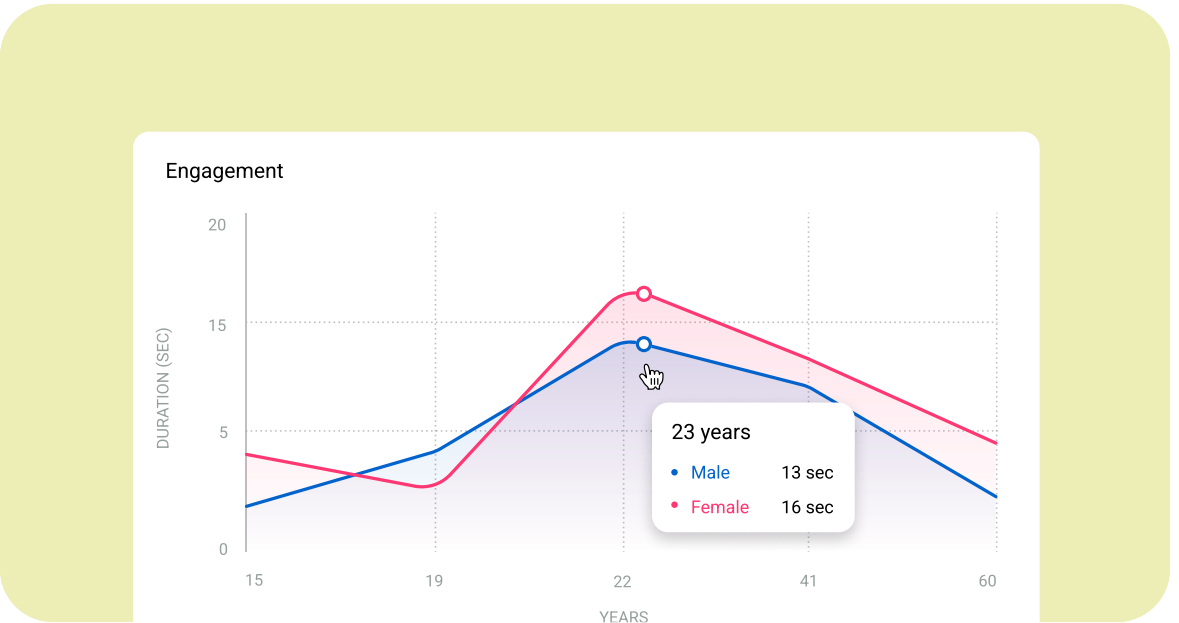
Know the force of content on screens

- Real views
- A/B tests
- Dwell-time
- Conversions



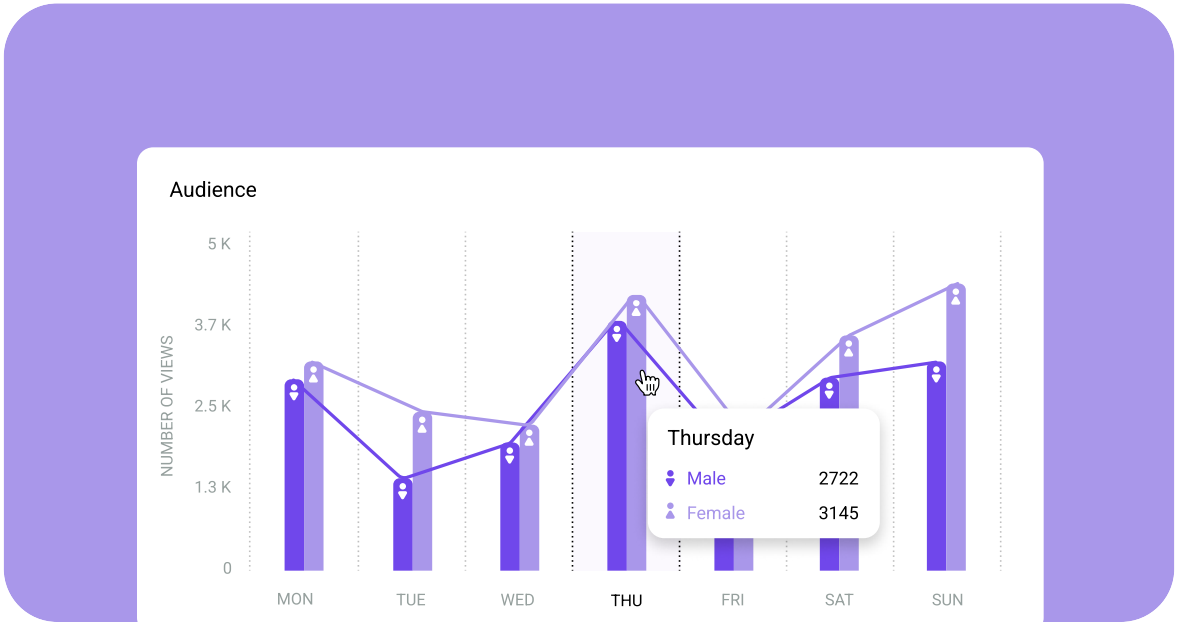
Conversion in views

Know the real number of views of your campaign compared to the number of impressions.




Views Dwell-time (Engagement)

If your target audience is watching content for 50% of the campaign time, then you're probably playing the right content.



Demography of views

Demographic data helps you get a realistic portrait of your audience and adjust your campaign message accordingly.



Customer Journey	Start time	Start time	Dwell time	Age	Gender	Dev
Track_35142	2022-06-24 12:37	2022-06-24 12:39	0:00:03	29	Female	143
Track_23514	2022-06-25 12:37	2022-06-25 12:39	1:00:03	29	Male	143
Track_83481	2022-06-26 12:37	2022-06-26 12:39	2:00:03	29	Female	143
Track_18418	2022-06-27 12:37	2022-06-27 12:39	3:00:03	29	Male	143
Track_04329	2022-06-28 12:37	2022-06-28 12:39	4:00:03	29	Female	143
Track_43559	2022-06-28 12:37	2022-06-27 12:39	5:00:03	29	Male	143

History of all views

Track most popular routes around the store. Find out where most shoppers go and how long they stay in front of touchpoints.

Forms & action data

All audience responses during interaction with data entry forms in templates created for touch screens.

Data of custom conversions configured in project templates.

Unloading data from the system.

Forms & action data

09 Sep '22 — 16 Sep '22

Send report

Filter

Forms & action data

Data 20 Feb 202412

Data 21 Feb 202451

Data 22 Feb 202484

Data 23 Feb 202443

Data 20 Feb 2024

ID	Time / Date	First name	Last name	1-5
w2g60456	10:15 (UTC0) 20 Feb 2024	Phil	Horus	5
3513e5	11:05 (UTC0) 20 Feb 2024	Jin	Lamero	3
w4egwer	11:37 (UTC0) 20 Feb 2024	Antony	Simons	4
ry243gw	12:01 (UTC0) 20 Feb 2024	Jane	Klavski	5
eywgdf2	12:17 (UTC0) 20 Feb 2024	Dave	Porter	4
df3wexn32	12:31 (UTC0) 20 Feb 2024	Sun	Wong	3
15daamq	12:49 (UTC0) 20 Feb 2024	Gerhardt	Flamong	5
212fqbzx	12:59 (UTC0) 20 Feb 2024	Xin	Jung	4
43r1gji	13:01 (UTC0) 20 Feb 2024	Kate	Vilski	3
awpv267a	17:42 (UTC0) 20 Feb 2024	Simon	Skatt	5

Audience analytics

AI that works out of the box



Only real faces

Algorithms trained against face spoofing (faces on POS materials, video walls, other screens, T-shirts and so on).



GDPR

Fully compliant with privacy. Our algorithms comply with GDPR and CCPA. We do not store personal identifiers, and we do not send photos and videos from devices.



Staff exclusion

Separate staff from statistics data. Staff will be marked to exclude them from the main analytics data. No selling ad content to them if you don't want to.

Ad report automation

Campaign plan for advertisers

Report with information about a scheduled
campaign before starting.

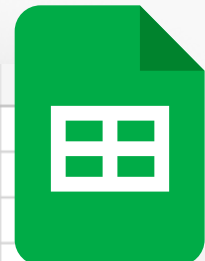
Campaign "Cycle test"					
Screens/Devices	Broadcasts	Maximum duration in the loop	Start time	Platform	ise2022
12	178	15,966	2022-07-06 14:00:00	Contact person	Serge
				Phone	79991233678
AdPlays	CPM	CPV	End time	E-Mail	support@displayforce.com
177	78	98	2022-08-06 23:59:59		
Date	Screen/Device	Playback time in loop			
11.06.2022	Test	9:36:05; 10:56:02; 11:24:09; 12:28:09; 13:17:34; 14:41:54; 15:09:42; 16:18:17; 17:03:15; 18:44:21; 19:56:01; 20:54:31; 21:56:01; 22:09:06;			
12.06.2022	Test2	9:36:05; 10:56:02; 11:24:09; 12:28:09; 13:17:34; 14:41:54; 15:09:42; 16:18:17; 17:03:15; 18:44:21; 19:56:01; 20:54:31; 21:56:01; 22:09:06;			
13.06.2022	Test3	9:36:05; 10:56:02; 11:24:09; 12:28:09; 13:17:34; 14:41:54; 15:09:42; 16:18:17; 17:03:15; 18:44:21; 19:56:01; 20:54:31; 21:56:01; 22:09:06;			
14.06.2022	Test4	9:36:05; 10:56:02; 11:24:09; 12:28:09; 13:17:34; 14:41:54; 15:09:42; 16:18:17; 17:03:15; 18:44:21; 19:56:01; 20:54:31; 21:56:01; 22:09:06;			

Ad report automation

Broadcasting report for advertisers

Real-time analysis report about the campaign status.

	A	B	C	D	E	F	G	H	I	J	K
1											
2	Platform	n test1									
3	Owner's m	support.@displayforce.ai									
4	Campaign	Filler									
5	ID campai	1244									
6	Customer:										
7	Requested	13-06-2022 00:00 - 13-07-2022 23:59									
8	Devices:	3									
9											
10	By campaigns per day										
11	Date	Campaign	Campaign	Impressio	Views	Males	Females		CR		
12	13-06-202	1244	Filler	14396	1236	1111	123	234	15%		
13	14-06-202	1244	Filler	14295	3456	2689	1543	278	67%		
14	15-06-202	1244	Filler	14290	4567	3451	800	444	89%		
15	16-06-202	1244	Filler	13817	4326	3000	1326	498	94%		
16	17-06-202	1244	Filler	13828	9876	4509	5001	125	96%		
17	18-06-202	1244	Filler	13696	5566	1237	3890	334	100%		
18	19-06-202	1244	Filler	13275	4567	3457	789	981	73%		
19											
20	By content per day										
21	Date	Campaign	Campaign	File's nam	Impressio	Views	Males	Females		CR	Duration
22	13-06-202	1244	Filler	320x192_	1312	1236	1111	123	234	15%	2:11:32
23	13-06-202	1244	Filler	320x192-k	1310	3456	2689	1543	278	67%	2:11:18
24	13-06-202	1244	Filler	320x192-k	1310	4567	3451	800	444	89%	2:11:19
25	13-06-202	1244	Filler	320x192-k	1309	4326	3000	1326	498	94%	2:11:13
26	13-06-202	1244	Filler	320x192-k	1308	9876	4509	5001	125	96%	2:11:07
27	13-06-202	1244	Filler	320x192-k	1307	5566	1237	3890	334	100%	2:11:01
28	13-06-202	1244	Filler	320x192-k	1306	4567	3457	789	981	73%	2:10:55



Logging, filters, audit

Different types of logs, filters and search subsystem. Initiator linking and audit mechanisms.

Device logs

Device logs register all operations and situations with OS, software and hardware that could be used in maintenance and audits.

System logs

System logs register internal events about metrics, quality, component availability and so on. Necessary for system administrators.

User logs

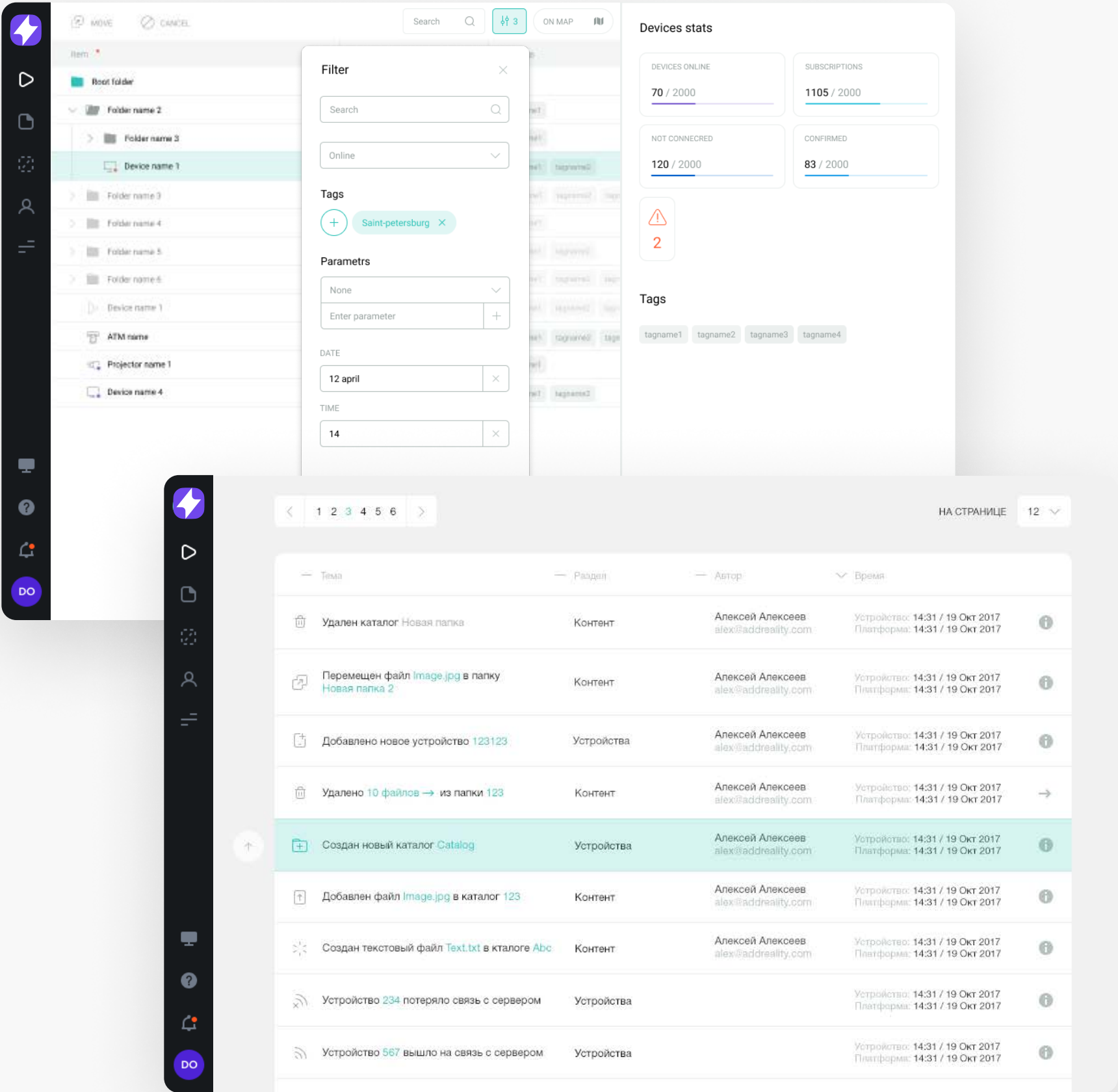
User logs record actions performed by every user.

Reports for audit

Reports for audit for any duration by any filters with initiators of specified operations, time and links.

Filters and search engine

Filters and search engine to quickly get the results of your requests in gigabytes of data.





Visual template editor

Visual template editor

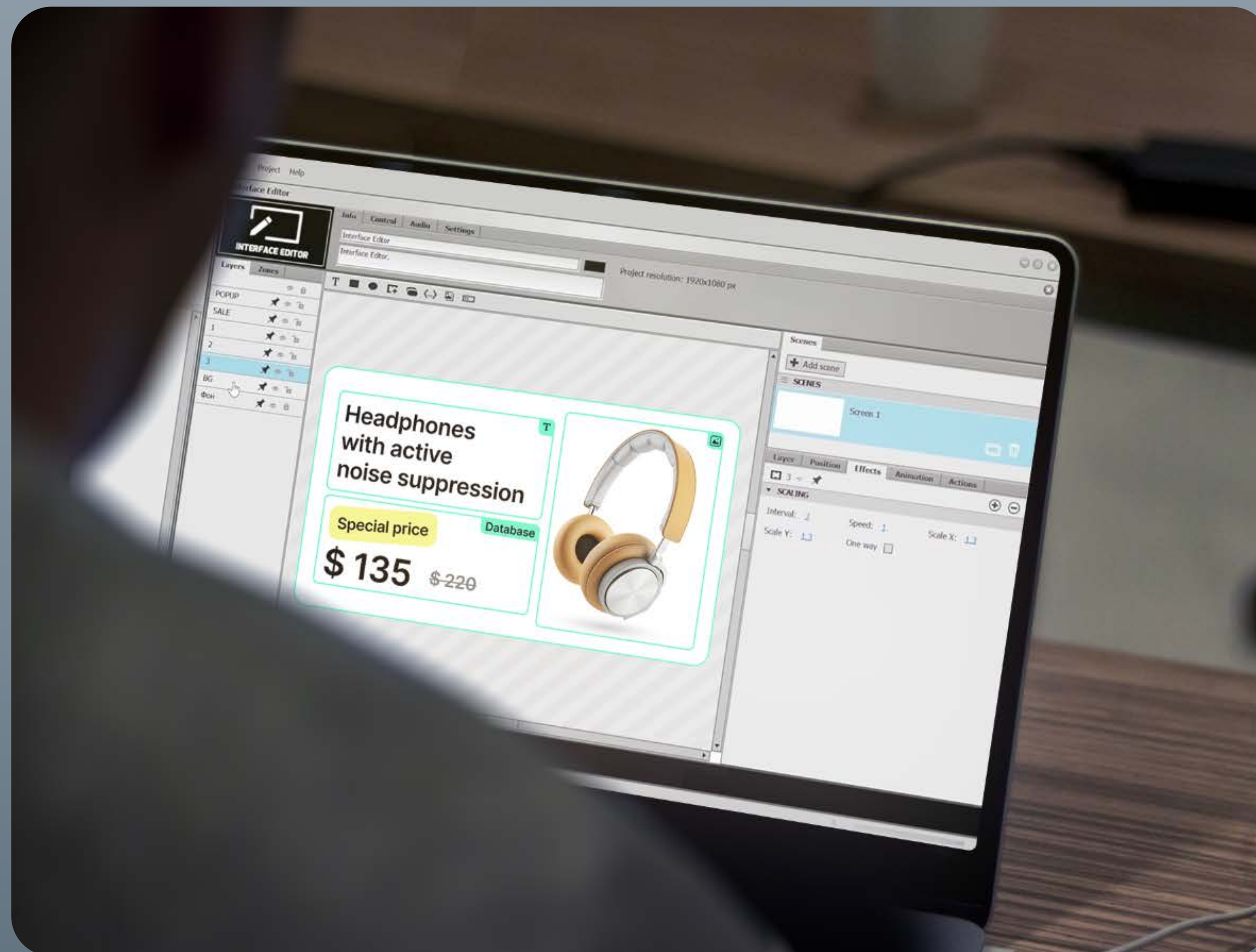
Interactive kiosks

Save budget with
a no-code visual editor

 Visual template editor

 Visual data integration

 Interactive app creation



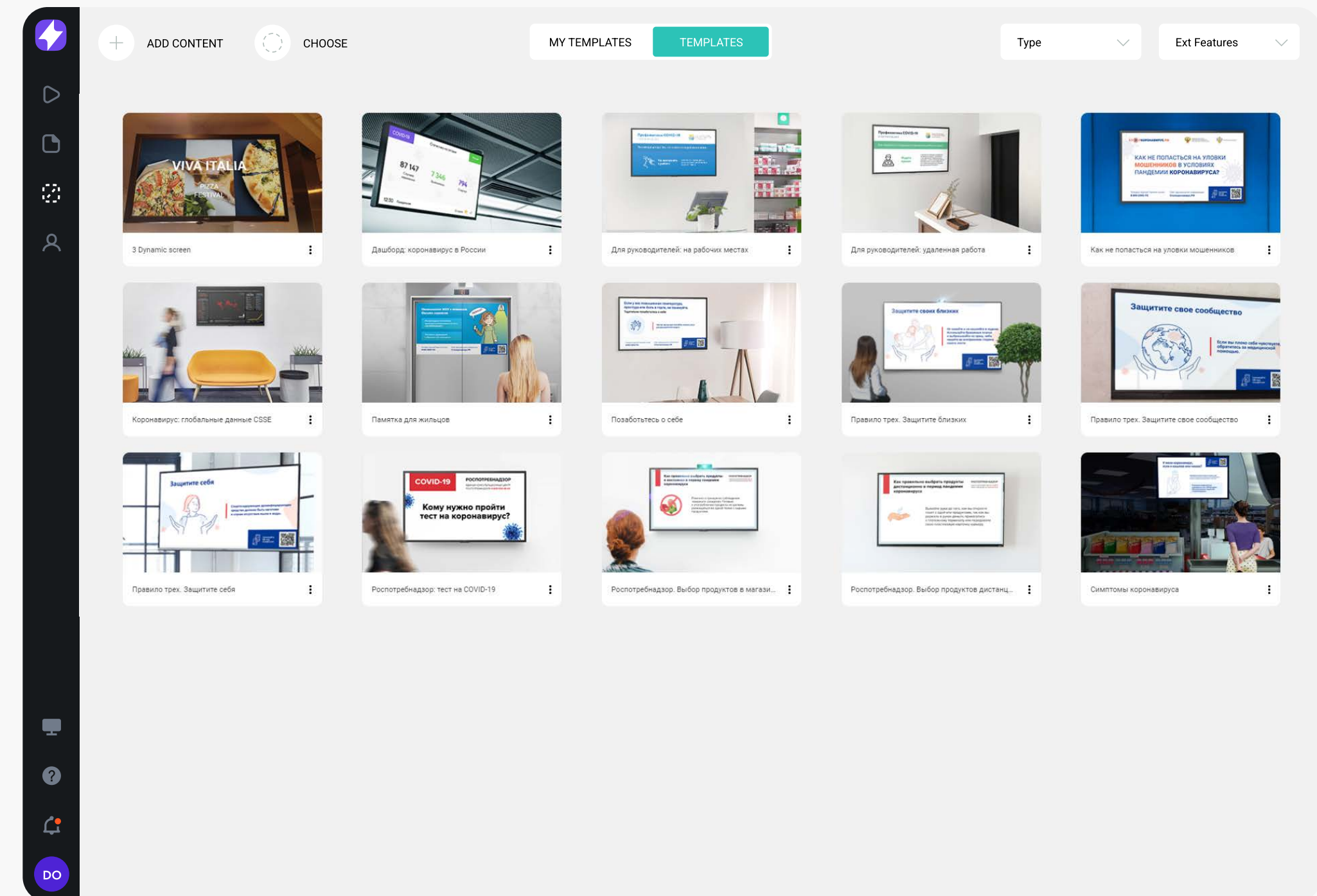
Visual template editor

Start with the library or create a template from scratch

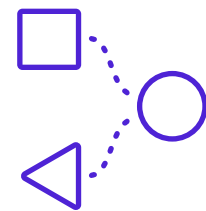
▣ Add text and media in templates

⌂ Change the animation

👤 Add buttons in interactive interfaces

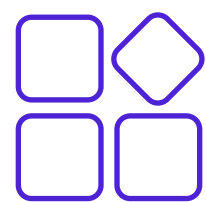


Visual template editor



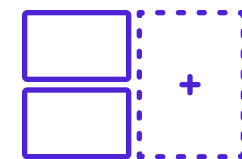
Visual editor

Easily create complex and beautiful templates which use dynamic external data, effects, and animations without programming.



Widgets

Use various widgets (media galleries, text fields, web frames, camera/TV tuner output, etc) to create what you want.



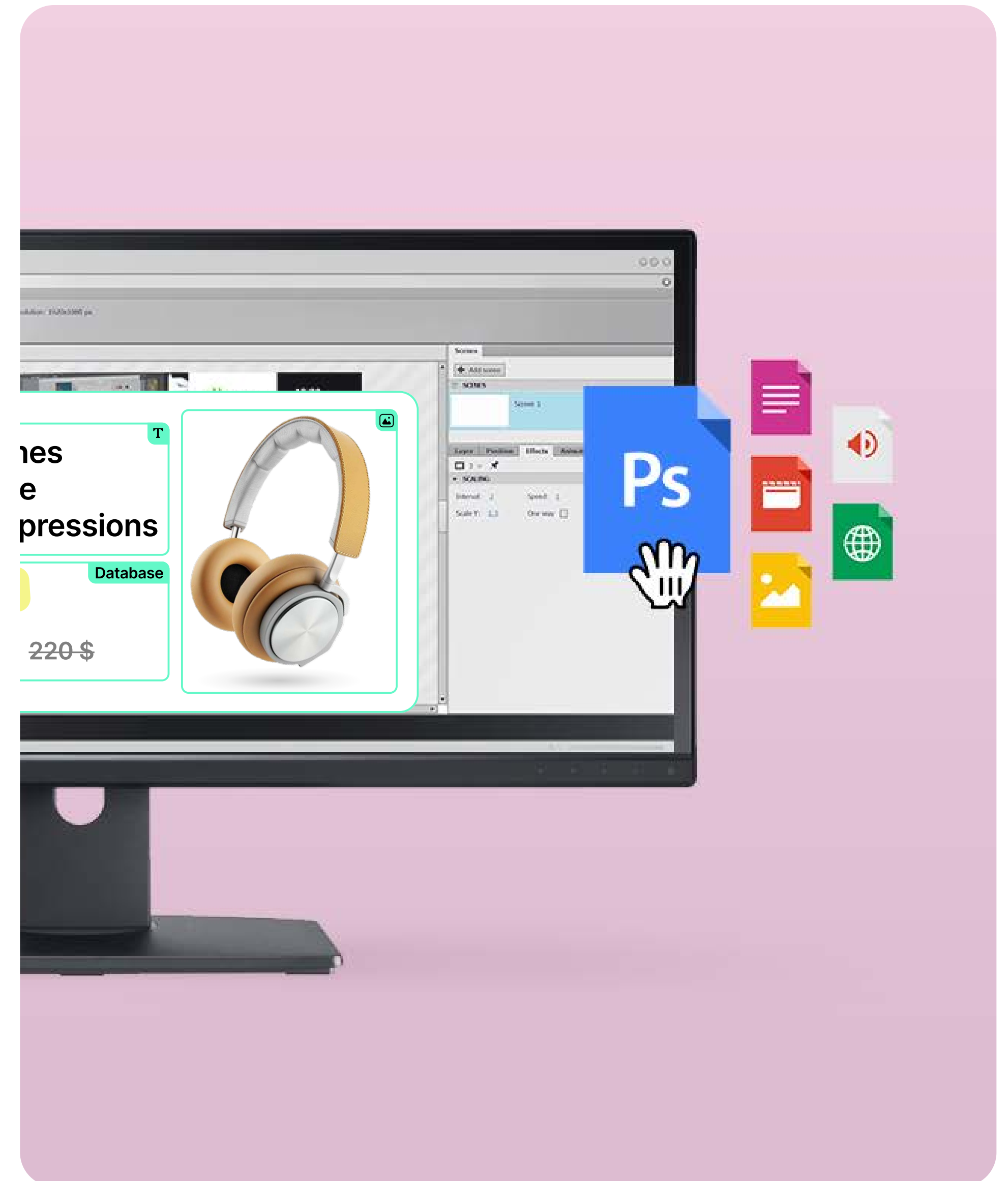
Zones and layers

Create templates with multiple zones, layers, and widgets. Share templates with other users and use version history.



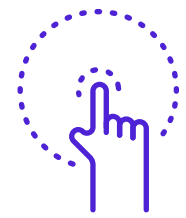
Parsing PSD files

No need for special knowledge to create templates. Just drag and drop a PSD file and the designer will make a template with graphic layers automatically.



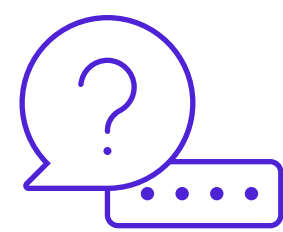
Visual template editor

Interactive kiosks



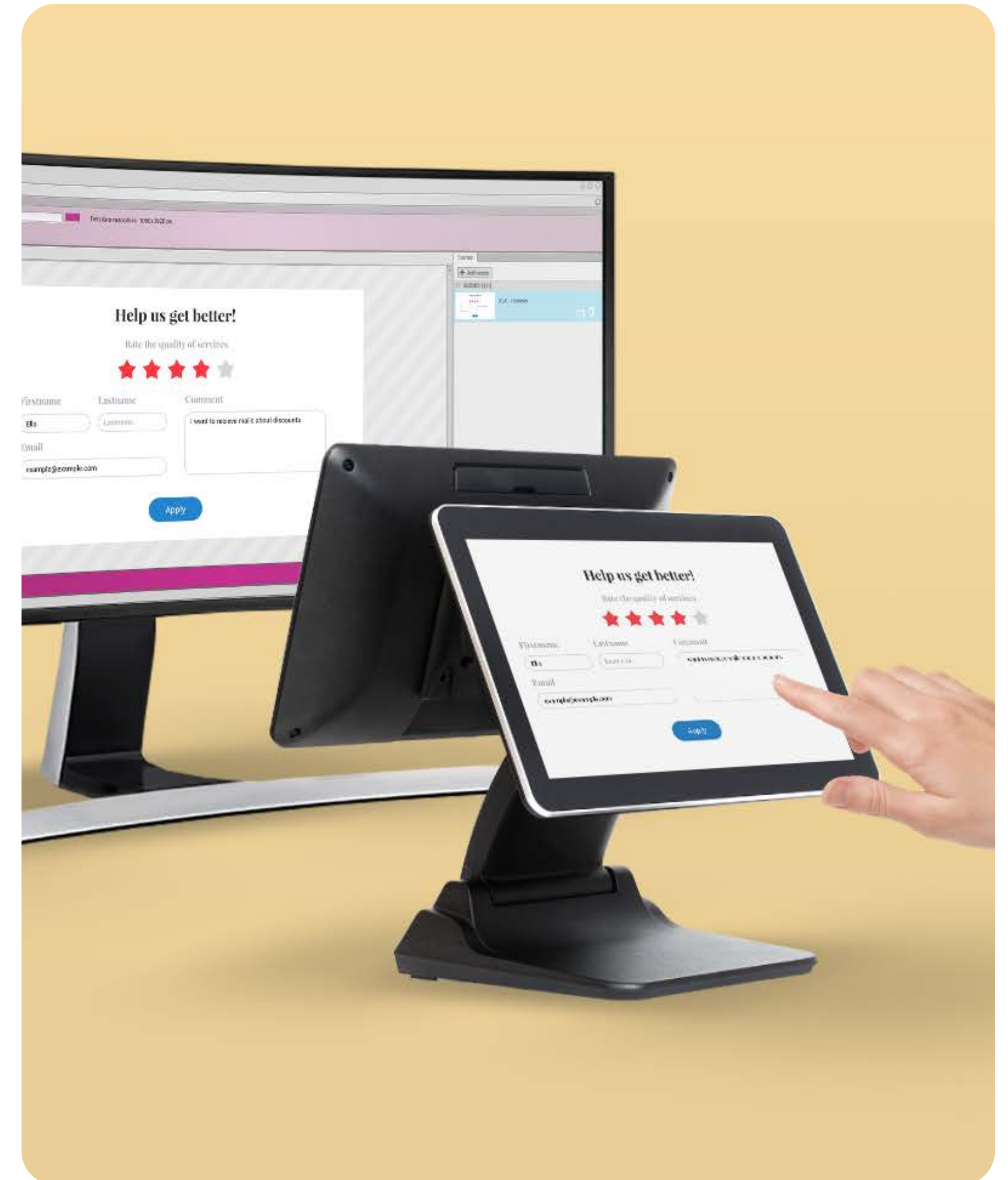
Interactive app editor

Create touch and interactive templates that can be used in self-service kiosks, interactive video walls, and tablets.



Data gathering

Text inputs, buttons, and feedback forms can be used for interactive mechanics and getting data from your audience.

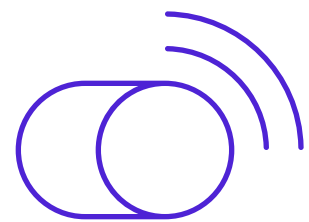


Visual template editor



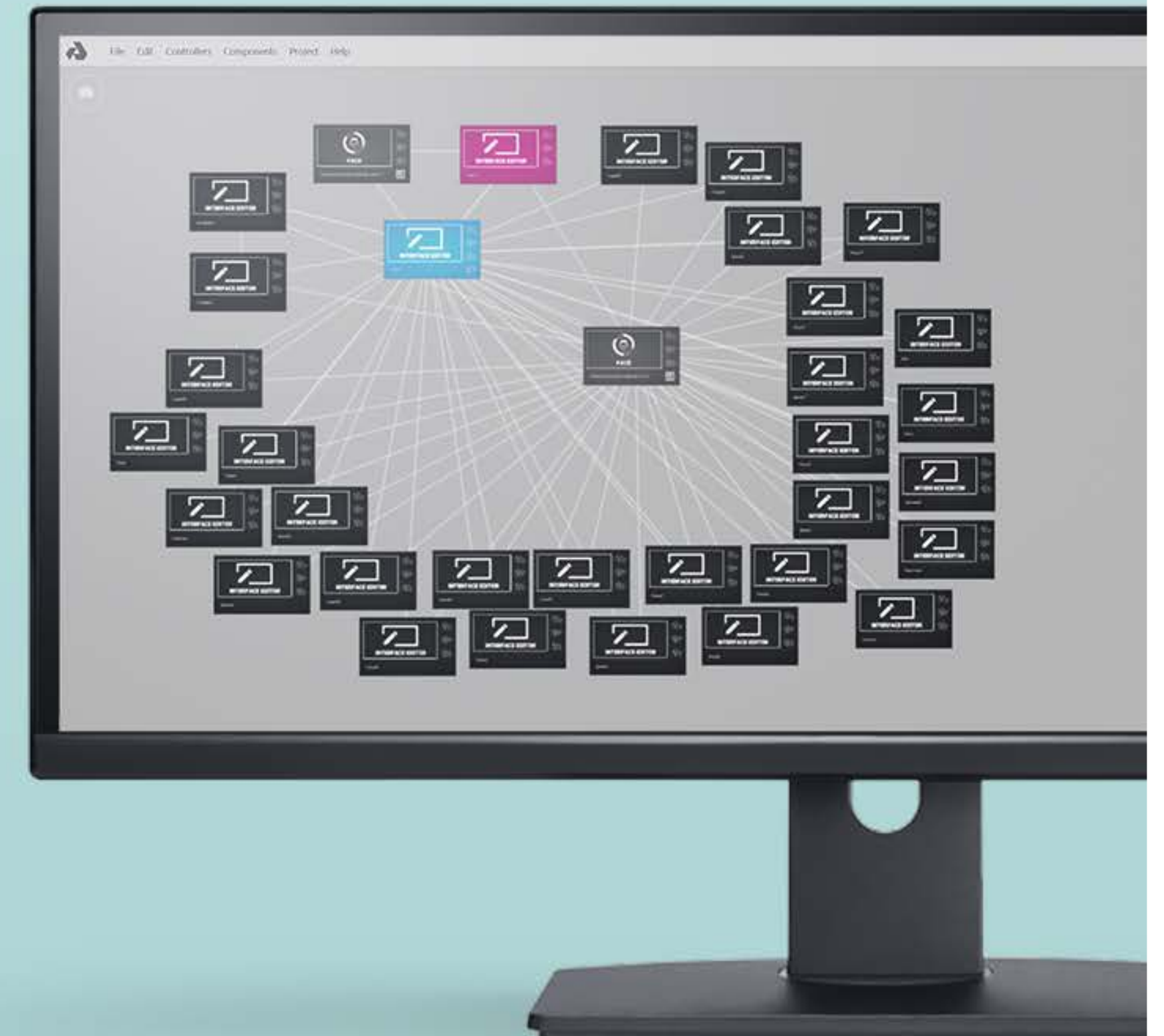
Scheduled scenarios

The interface screens will change depending on time-based scenarios as time, data, repeats and frequency.

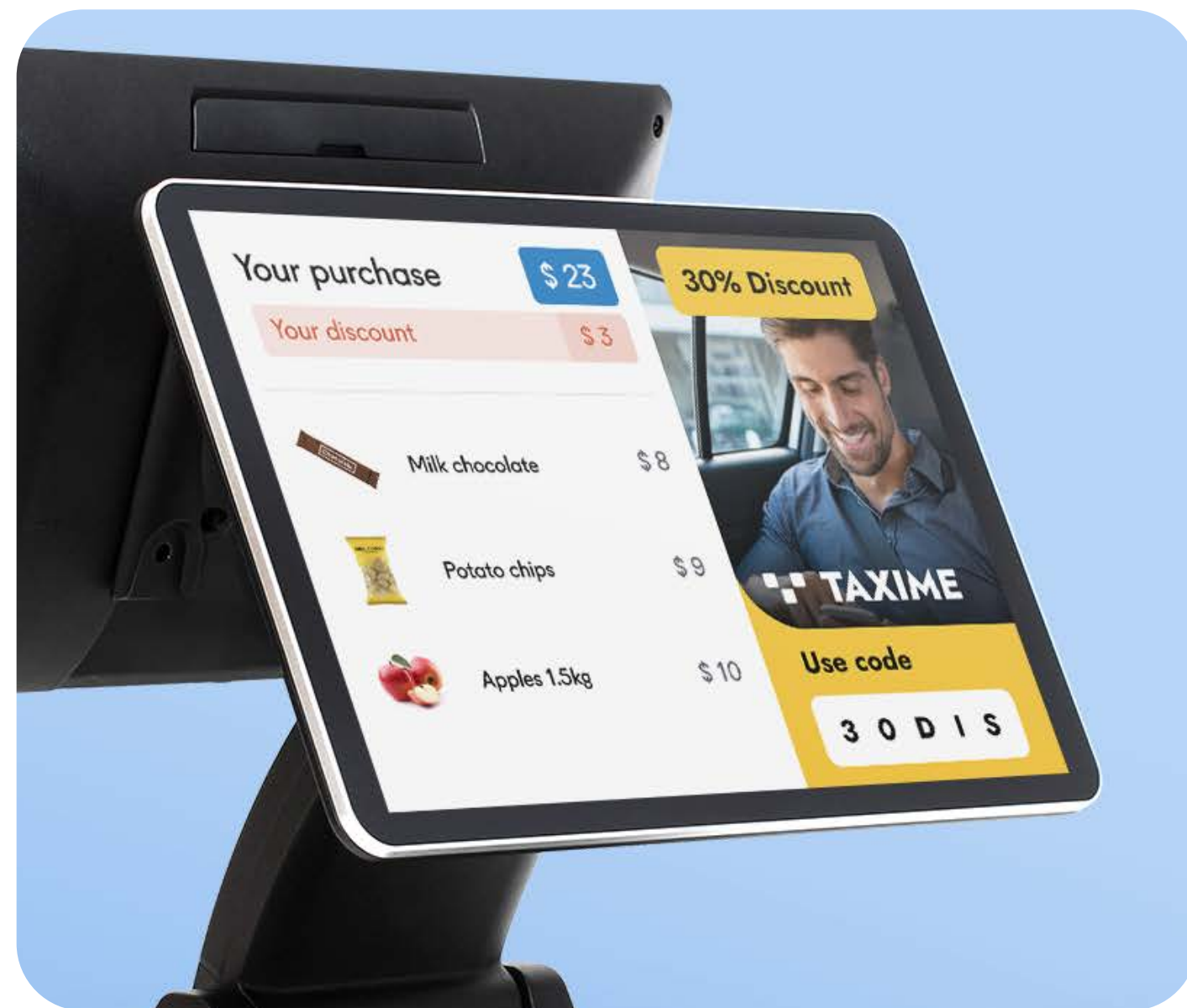


Triggers

Trigger-based scenarios depend on external peripheral devices, face detection, audience behavior, changes in XML, etc.

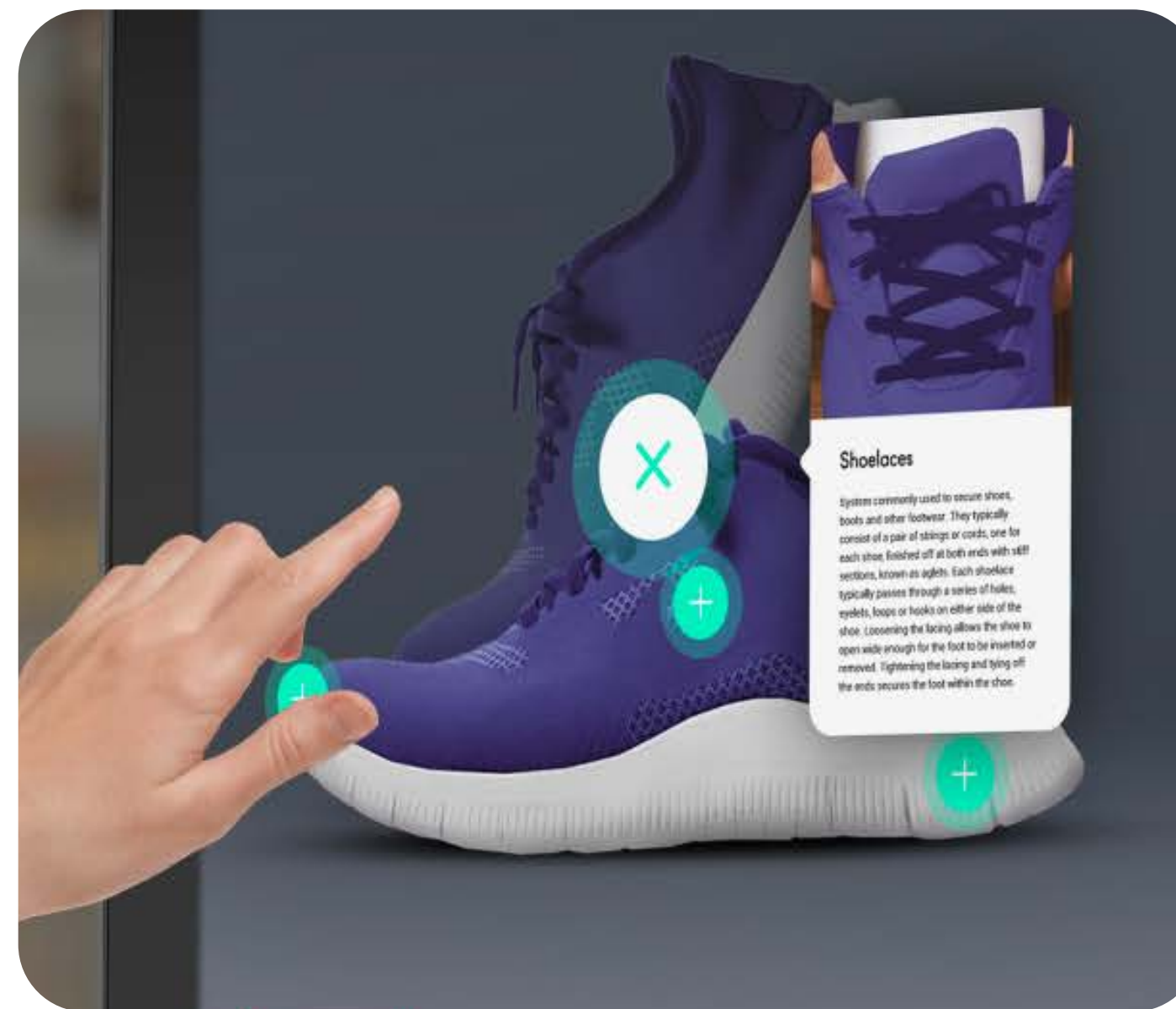


Visual template editor



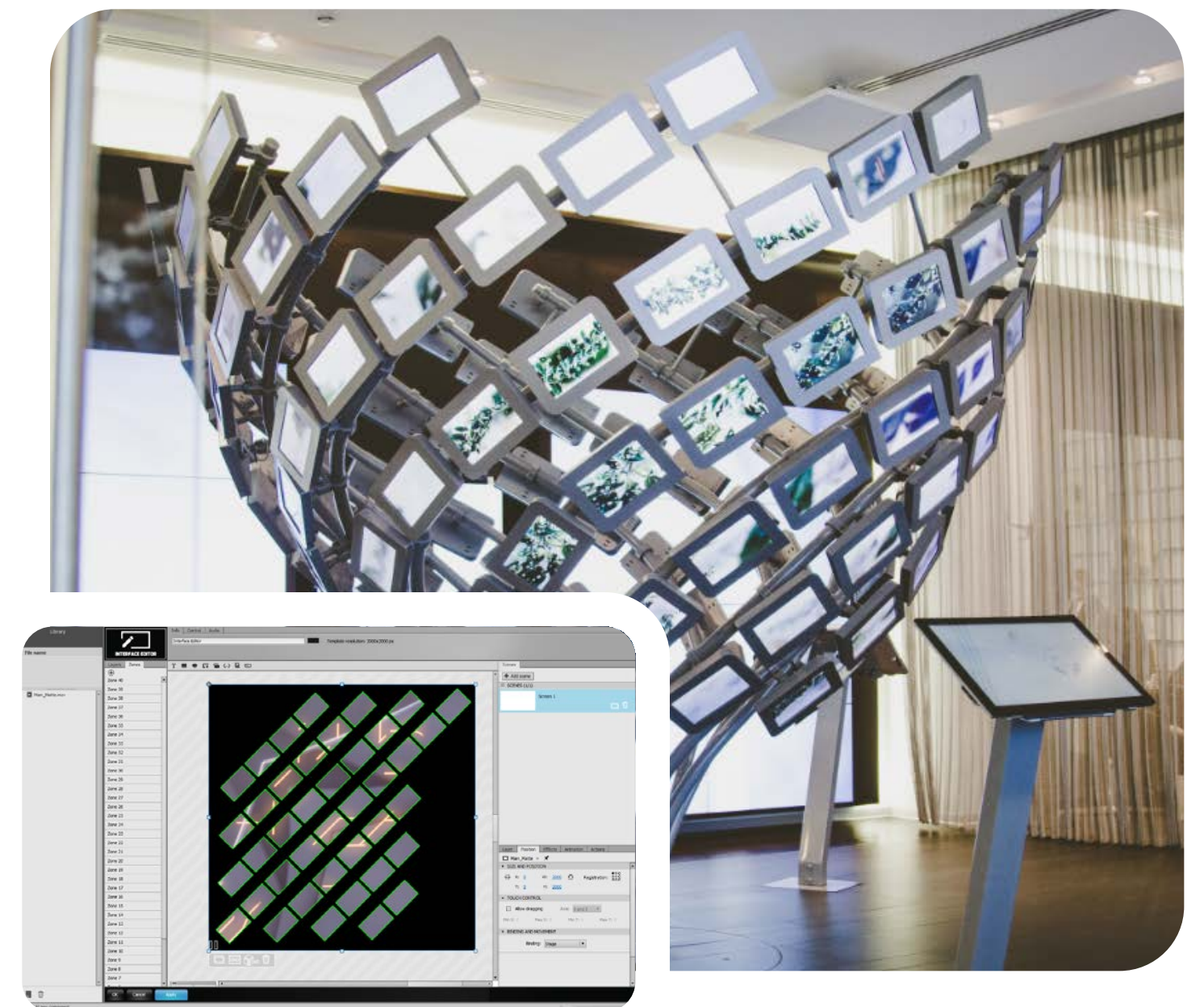
External data sources

Connect external sources, databases, and services to grab texts, media content, weather, currency rates, and a queue management system. Set up fallback scenarios when one or more of those services go out of service.



Effects & animations

Set up multiple effects and animations to make your templates attractive.



Create videowalls

Specify zones for playback on different devices from one big template and synchronize them.

Visual template editor

Manage template versions

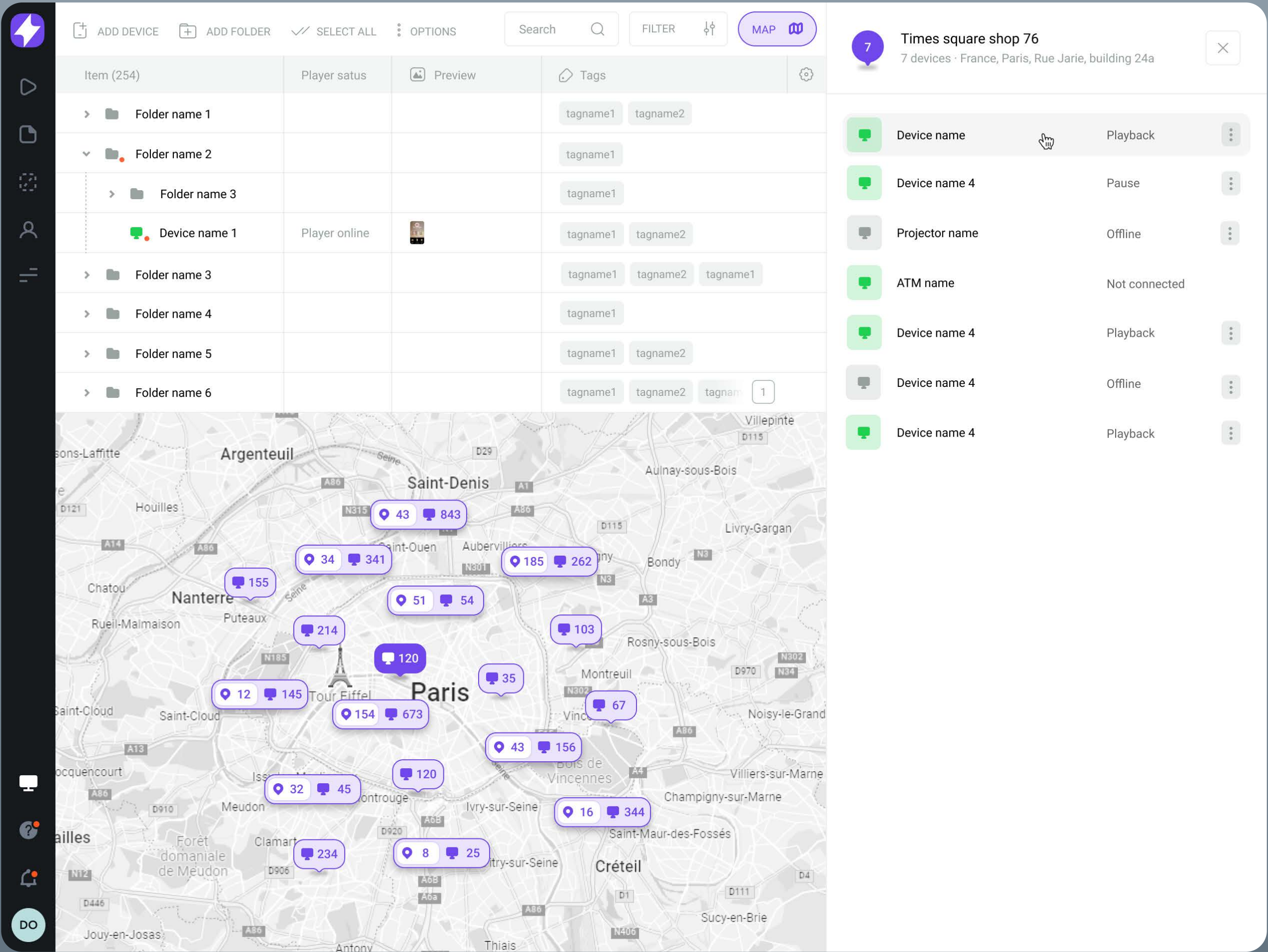
- ↶ Go back to previous versions
- ✔✗ Approve or reject new versions
- 👤 Know who made changes

ID	Status	Uploaded by	Upload date	Approved by	Approval date	Actions	File
1287	In use	support@displayforce.ai	11 May 2022 00:50	support@displayforce.ai	11 May 2022 00:50	X → USE	159.6 Kb 👁 📄 🗑
1286	Approved	ag@displayforce.ai	11 May 2022 00:30	ag@displayforce.ai	11 May 2022 00:30	X → USE	159.6 Kb 👁 📄 🗑

Network IoT management

Network IoT management
















Control and manage your hardware network with real-time monitoring



Network IoT management

Manage your broadcasting points remotely

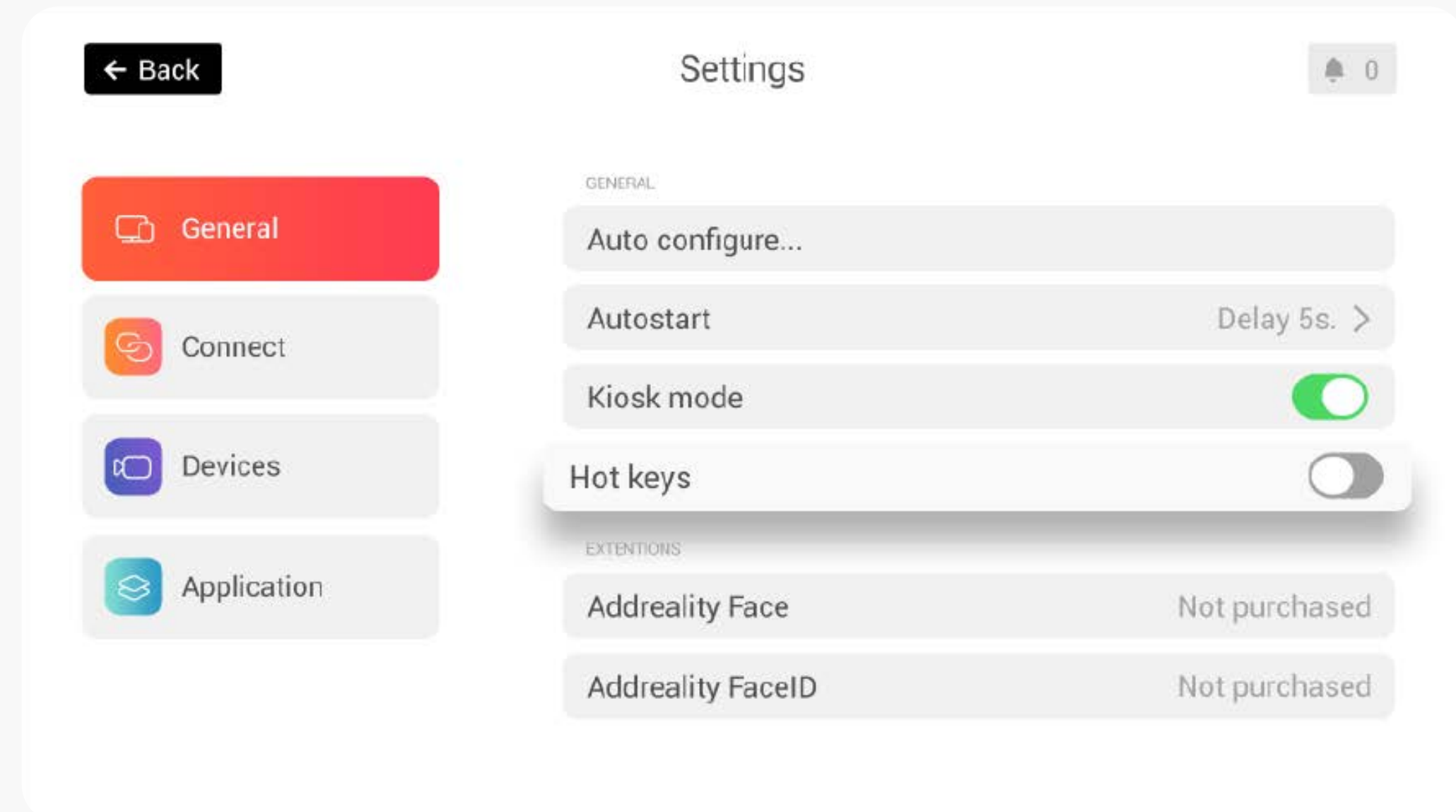
Control different types of devices from one place: create catalogs and tags, collect logs, update players, and schedule commands.

- ▼  Folder opened
-  Undefined
-  Sound
-  Screen
-  Screen with camera
-  Kiosk
-  Table
-  LED
-  Videowall
-  Projector
-  Tablet
-  Shelf screen
-  ATM
-  Cash machine
-  Mirror

Network IoT management

Automatically configure OS at broadcasting points

- 🔧 Auto-configuration of the device's operating system for best Displayforce Player performance.
- ⚙️ More than 100 settings to improve performance.



Network IoT management

Schedule working commands for months in advance

Set the time of command execution including
different time intervals during a day.

Device name

Refreshing...

✓

✕

⚙️

📶

📍

▶

🛡️

🔄 EXT

Quick actions

⏸

STOP CAMPAIGN

🔄

RESTART PLAYER

🔄

RESTART DEVICE

🔄

UPDATE PLAYER

🔴

TURN OFF SCREEN

🔊

VOLUME 40%

Last actions

🔄

SETTINGS / CAMERA R

🔄

SETTINGS / KIOSK MOD

🔄

PROJECT / CONTINUE

Commands planner

SUBJECT

Project

▼

Continue playback • Starts now

Project

CANCEL

Network IoT management

Save and manage traffic with smart shaper

Set up a time period for every device to download advertising campaigns and content. Time intervals within every day of the week and speed limit in KB/s to download.

Data loading intervals

☒ Intervals

Allows you to set specific intervals at which it is allowed to download data to devices

Mon Tue Wen Thu Fri **Sat** Sun

Saturday

- 08:00 – 13:00 · 124 kb/s
- 15:00 – 19:00 · 124 kb/s
- 21:00 – 00:00 · 124 kb/s

13 : 30 — 14 : 30 124 kb/s

Network IoT management

Manage roles and user groups

Add, edit, and remove platform user roles, including turning on/off access to individual platform features

Managers

8 members

The team that is responsible for filling the content.

Users

Rights

Campaigns

Content

Tempates

Devices

- All

- Devices

☒ Access control

☒ Editing

☒ Editing root folder

☐ View

☒ Content

☒ Approving

☒ Editing

☒ View

☒ Planning

☒ View

☐ My templates

☐ Approving versions

☐ Downloading

- Devices

☒ Access control

☒ Editing

☒ Editing root folder

☐ View

☒ Content

☒ Approving

☒ Editing

☒ View

☒ Planning

☒ View

☐ My templates

☐ Approving versions

☐ Downloading

- Devices

☒ Access control

☒ Editing

☒ Editing root folder

☐ View

☒ Content

☒ Approving

☒ Editing

☒ View

☒ Planning

☒ View

☐ My templates

☐ Approving versions

☐ Downloading

DELETE GROUP

CANCEL

SAVE

End touchpoints

Cross-channel inventory

Play on any digital surface,
even on self-service POS,
scales, or kiosks

Use DISPL Kit or install on



android 

Tizen®

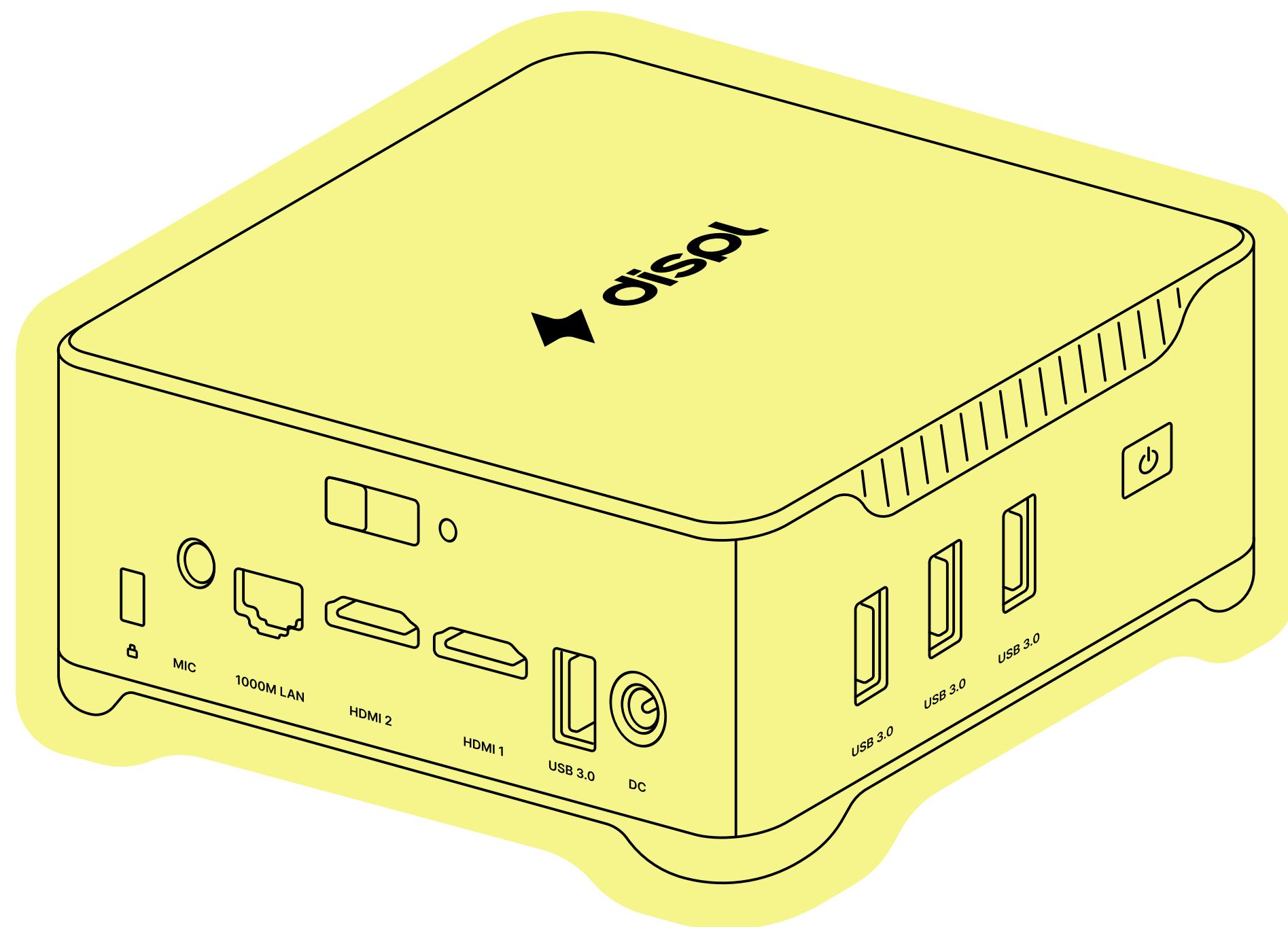


 Web-based



iOS

DISPL Box Advanced (2.0)



Upgraded performance

The device is powered by the Intel N100 processor, ensuring smooth performance of face detection algorithm and support for native 4K video playback.



Up to 3 display output

2 HDMI and 1 VGA ports combined with a powerful hardware allow connecting three screens to one media player.

Net weight and gross weight

Net weight: 0.85kg

Gross weight: 1kg



Windows IoT operating system

Specialized edition of Windows designed for professional applications. Enables continuous operation and doesn't require updates.



Robust local networks

Improved connectivity allows having more devices on local network for customer journey mapping and P2P content distribution between DISPL Boxes.

Size of the packing

220mm x 150mm x 70mm

Introducing the new DISPL Sensor

**Connected to the Internet via
cable or Wi-Fi**

USB 3.0×1 (USB 2.0 for data, USB 3.0 for
power)

**Recommended installation height:
approximately 2.90 meters on
ceiling or rod**

131 mm x 20 mm x 57 mm



**Compact black cube
(4×4×4 cm)**

easy to place everywhere



**Matte black
front surface**

not attracting attention



Fixed mounting angles
vandal resistant



Can be glued
to fit every project

Recommended technical requirements for Visitors Insights



PC

Windows PC | x86 3 GHz, 4Core Tiger Lake CPU, 4 GB DDR4 RAM, 128 GB SSD.

Linux PC | x86 2.4 GHz, 4Core Tiger Lake CPU, 4 GB DDR4 RAM, 128 GB SSD.

Android Box, Tablet | ARM 2 GHz, 4Core Cortex-A55 up to 2.0GHz.

Apple iPad, iPhone.



Camera Resolution

2.1+ Megapixel sensor with 30+ FPS.

Various Lens 4-12mm focal length.

USB/CCTV IP-Camera.



Display Type (optional)

LCD, LED, as a part of complex solutions — interactive kiosks and furniture, shelf displays.



Network

Player Internet connection from 2 Mbit/s. All devices connected to the same subnet (Ethernet and dedicated switch is recommended)
Multicast enabled. IGMPv2 supported.



OS

Windows IoT Enterprise LTSC 2016+
Ubuntu LTS 16.04.1+
Android 8+
Apple iOS 12+

Technical requirements for Digital Signage

PC

Recommended Hardware:

Windows PC | x86 2.4 GHz, 4Core Tiger Lake CPU, 4 GB DDR4 RAM, 128 GB SSD

Android Box, Tablet, TV, Smartphone | ARM 2 GHz, 4Core Cortex-A55

Linux PC | x86 2.4 GHz, 4Core Tiger Lake CPU, 4 GB DDR4 RAM, 128 GB SSD

Apple Mac, iPad, iPhone

Samsung Smart Signage Displays

LG WebOS Signage Displays

Display Type

LCD, LED, as a part of complex solutions — interactive kiosks and furniture, shelf displays. Up to 12K resolution.

Camera Resolution

1280 × 720px (720p) and higher, USB connection, no autofocus

OS

Windows IoT Enterprise LTSC 2016+

Android 5.1+

Ubuntu LTS 16.04.1+

Apple iOS 12+, MacOS 10.13+

Samsung SSSP3+

LG WebOS 3.0+, SCAP 1.5+

Network

Player Internet connection from 2 Mbit/s

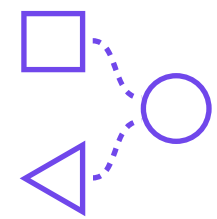


**Have a question?
Contact us!**

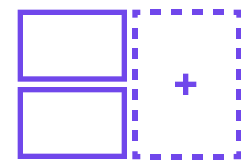
order@displ.com

Appendix —————→

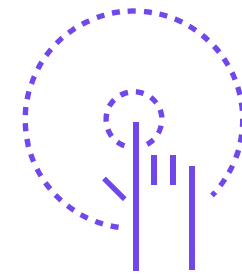
Rich feature set



Visual content editor



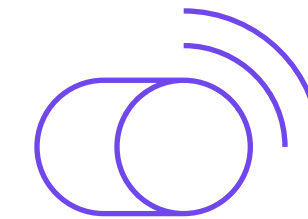
Templates



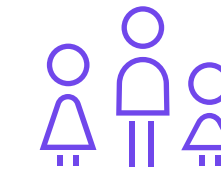
Touch apps



Scheduler



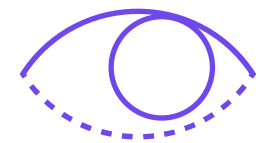
Triggers



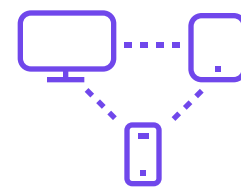
Audience detection



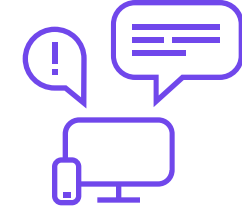
Attention capture



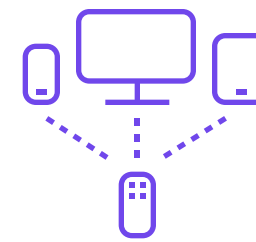
Audience measurment



Peer-to-Peer data transfer



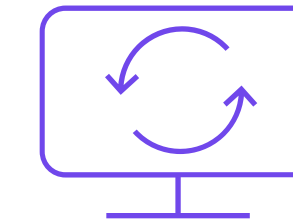
System logs



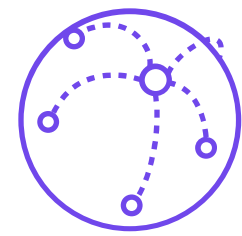
Commands between devices



Proof of play



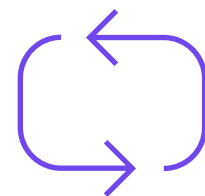
Screen synchronization



Network management



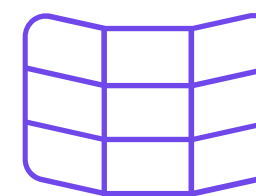
Security



Remote updates



Background music management



Custom video walls



Kiosk mode



Email notifications

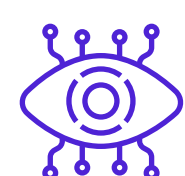


User and role managemet

Major features of our computer vision

Audience analytics

Computer vision and machine learning algorithms intended for advertising and digital signage purposes.



Marketing applicable

Our own computer vision algorithms with 9+ years of development designed for real-world usage at retail locations and any indoor points.



Top-ranked

Algorithms in the top of NIST Computer Vision rankings. One of the best in speed and accuracy.



Fast response

Very fast algorithm in real-world usage. Up to 300 ms for age/gender detection and up to 1 second to recognize attributes. Less than a second to show relevant message to customer.



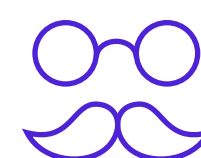
Out of the box

Local computations without transferring video streams or images to a server. Work without extra devices or traffic out of the box.



Face detection & match

Even as people move and turn their faces, our algorithm still recognizes the same faces.



Facial attributes

Recognizes 14+ facial attributes for targeting or use in statistics/analytics. Age, gender, ethnicity, headwear, etc.



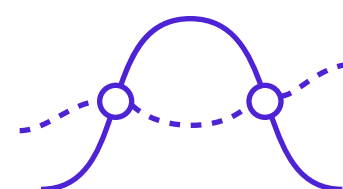
Identification (on-demand)

Face identification works with or without personalization (on-demand). Communicate with people individually.



Real-time triggers

Content triggering by any attribute, fact of presence, social demographic features, etc. to influence your audience at the right moment.



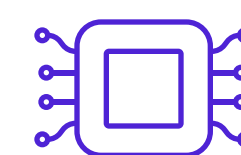
Data enrichment

Collects a lot of statistics data for audience and behavior analytics.



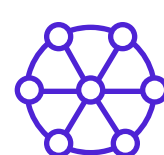
Customer heatmap (on-demand)

Decentralized face tracking between different devices to create a customer journey for each person in a retail location and learn more about their preferences.



Low-quality face recognition

Our neural network and data sets are trained to work in real cases (not ideal “passport-like” photos with good light and so on).



Machine learning

Auto-training neural network. The more faces it sees, the better identification quality it gets.

Face identification features (on-demand)

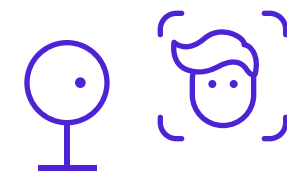
Audience analytics

Functionality access after checking the client's legality and compliance with the GDPR



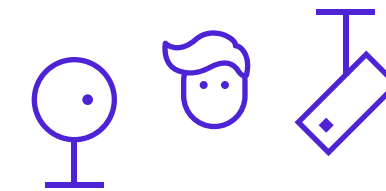
CRM integration (on-demand)

Face identification by photo to use in interactive scenarios or in statistics, CRM or other services.



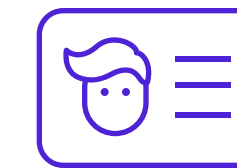
Face match

Face identification by previous history to recognize a person who appears again in front of the same camera.



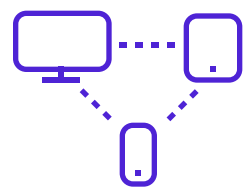
Face match inherit

Face identification by previous history from other devices to recognize a person who appears again in front of a different device.



Face match tracking

Track each person by one ID in a location without collisions and recognize them as a new person. Identify unique people.



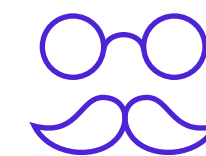
P2P synchronization

P2P algorithms for exchanging anonymous face hashes between devices to perform cluster analysis of the entire audience inside the location, know their history and interests, and use it to show relevant messages.



Customer heatmap

Customer journey algorithms create a person's entire path in a location with their attributes, interests (POI), mood changes and so on. It can then be matched with a cashier deck, CRM and other data.



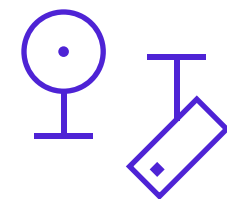
Safe & hyper-personalized

Face identification works with or without personalization (depends on client). Communicate with people individually.

All computer vision features

Audience analytics

Our computer vision algorithms are designed to work in real-life situations locally even without a network using basic cameras, and can recognize 14+ different attributes.



Mass devices

Use classic USB RGB cameras. No special hardware requirements. Easy and cheap installation.



Only real faces

Algorithms are trained against face spoofing (faces on POS materials, video walls, other screens, T-shirts and so on).



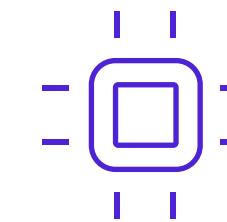
Privacy compliant

By default, no photos, videos, etc. are sent from devices to comply with GDPR, CCPA, and other regulations.



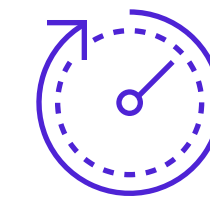
No internet

Algorithms work locally on devices without an internet connection. No servers needed for computer vision. No server or traffic costs.



Optimized

Optimized for low-end devices with simultaneous content playback. Support for different CPUs: x86, 64-bit, ARM, ARMv8.



Real-time

Trigger on audience right away without delays or remote processing.



Staff exclusion

Staff will be marked to exclude them from the main analytics data.



Mask detection

Face detection works even for people in masks. Don't lose your audience, even during COVID.



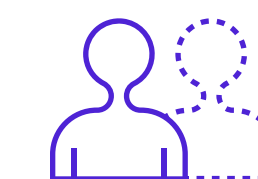
Hair detection

Facial hair, hairstyle and hair color recognition.



Accessory detection

Glasses and headwear recognition.



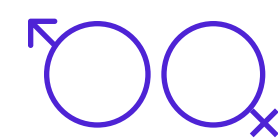
Group recognition

The algorithm can recognize and track 20+ faces simultaneously. It depends only on the hardware.



Face movement

Facial movements are recorded in the timeline.



Gender recognition



Age recognition



Smile detection



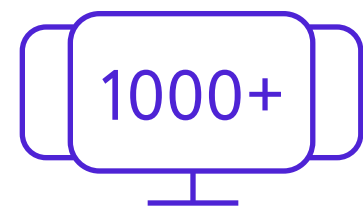
Mood recognition



Ethnicity recognition

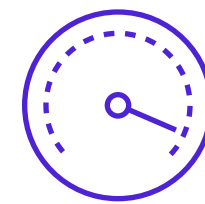
Support for big networks and high load

Enterprise networks



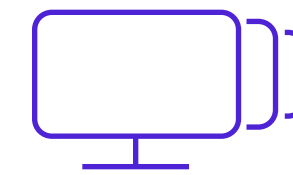
10,000+ devices

Networks support thousands of devices.



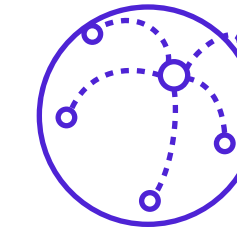
Sustainable architecture

High-load architecture with 10K+ RPS.



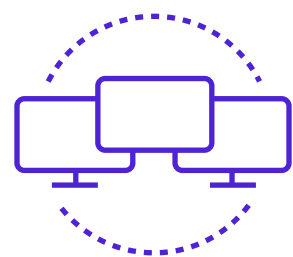
Horizontal scaling

Seamless scaling without development.



Around the world

Works around the world with multiple users simultaneously from any point on the globe.



Mass operations

Mass operations support to manage multiple devices simultaneously.



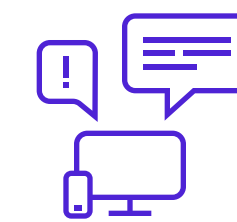
Remote operations

Operations without physical (sometimes even remote) access to devices.



Audience data

Gigabytes of data about shows and audience.



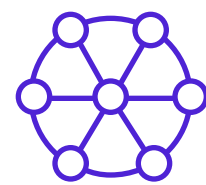
Device metrics

Hundreds of devices' metrics are constantly monitored to notify you about hardware problems.

Peer-to-Peer algorithms

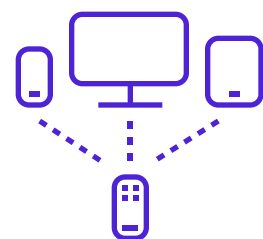
Enterprise networks

P2P algorithms are used for different mechanics, from complex interactive templates on multiple devices and content playback synchronization to robust face data exchange without a server.



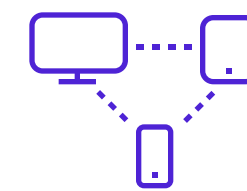
P2P algorithms

P2P algorithms with implemented transport layer and auto lookup to enable various serverless mechanics.



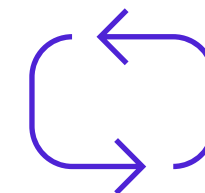
Serverless commands

Serverless commands between devices provide a lot of opportunities to create interactive mechanics and communicate with customers in stores. Change shop decor on LED: audio and target layouts on screens depend on what clients or staff choose on a tablet, for example.



P2P data transfer

Peer-to-peer data transfer is used between devices to speed up face hashes and their history inside the location without a server. Only final aggregated data is sent to the server.



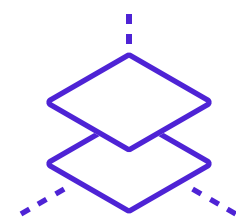
Synchronized playback

Synchronize content playback on different screens to create seamless delivery across the location and launch content from different channels (audio, screens, LED) simultaneously.

Real-time render on end devices

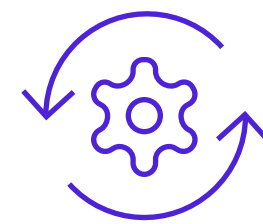
Enterprise networks

Optimized to show dynamic content with real-time changed data for any types of devices and platforms.



Real-time rendering

Real-time rendering engine that composes layers and chooses the best approaches for visualizations on different types of devices.



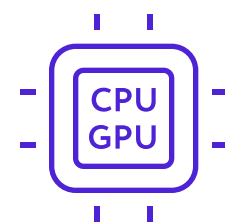
Low-end device support

Optimizations for low-end devices to support content playback, monitoring, reporting, working with video analysis and peripherals.



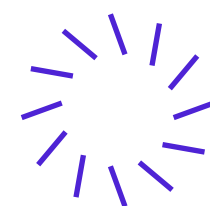
Extreme resolution support

Support extreme resolutions over 12K for video walls and LED to show content on billboards, museums, exhibitions and other non-standard cases.



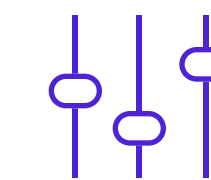
Balanced performance

Combined CPU and GPU render to balance between performance and hardware capabilities.



Smart preloads

Smart preloads and cache to speed up smooth content playback without black screens or long transitions.



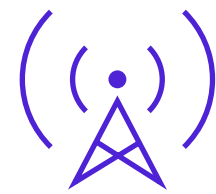
Manual graphics settings

Graphics settings can be manually configured to avoid occasional problems with GPU drivers or hardware.

Telemetry and monitoring

Enterprise networks

Simply know what is going on with your network, perform preventive maintenance, and get useful reports.



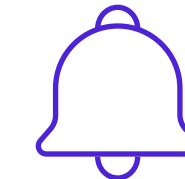
Real-time telemetry

Real-time telemetry is collected to provide actual information to network operators. Huge network of IoT devices.



Problem reports

Devices send information about critical situations and errors.



Event monitoring

Events are monitored with all necessary information about devices, playback interruptions, etc. Reports, filters and audit-ready solution.



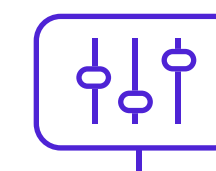
Email notifications

Email notifications are sent to specific administrators (depending on department and region) about errors for immediate reaction.



Server monitoring connected

Use Graphana, Prometheus, Zabbix or similar solutions for infrastructure monitoring and solution health checks.



Monitor device configuration

Do an audit of your network, including CPU, RAM, ROM, screens, cameras, and peripheral devices.

Watchdogs, kiosk mode and auto configuration

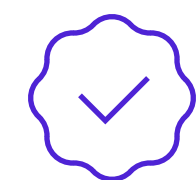
Enterprise networks

Don't worry about black screens, hardware/OS/software faults, vandalism, and unacceptable popups. Our software automatically does the best.



Watchdog mechanisms

Watchdog mechanisms will auto restart the player or device when hardware/OS/software/driver faults are detected to restore correct operation automatically without human involvement.



Long-term software expertise

We have years of experience supplying software for huge networks, which shows in our software, processes and recommendations.



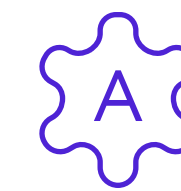
Kiosk mode

The kiosk mode blocks popups from the OS, other software, and error/update windows, and disables features and gestures that prevent playback or are used by vandals.



Reliable network

Protected against traffic spoofing and network interference.



Auto configuration

The auto configuration mechanism applies more than a thousand OS/hardware/service tweaks to prepare the device for stable single-purpose work.



Prevention of user intervention

Automatically block hardware and software buttons and ports to prevent user intervention.

Security

Enterprise networks

Enjoy an advanced set of security features to stay protected.



Encrypted data

Encrypted data transmission by HTTPS protocol and strong TLS certificates to prevent data theft and spoofing.



Protection checks

Headers, tokens, cookies, storage, IPs and other protection checks against multiple attack vectors.



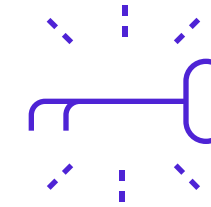
Logs

The system logs every access, operation request and session for security purposes.



Integrity check

Integrity check with file operations to prevent data corruption from device storage faults and sudden power-offs.



Encrypted keys

Encrypted keys on end devices to prevent theft of tokens and sensitive data.



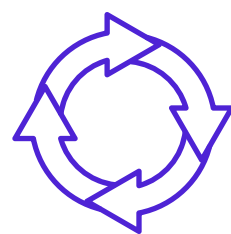
Change confirmation

Content/campaign change confirmations for users without approved rights. Necessary for critical content changes.



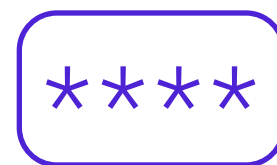
Two-factor authentication

Two-factor authentication to improve security level and prevent credential theft.



CAPTCHA

CAPTCHA implemented to improve security level and prevent attack vectors by password guessing.



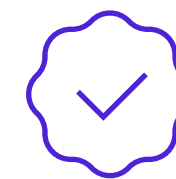
Strong encrypted passwords

Strong passwords with encryption to prevent password theft, decryption, and brute force by dictionary.



Session controls

Session controls to improve security level and close opened sessions on other devices.

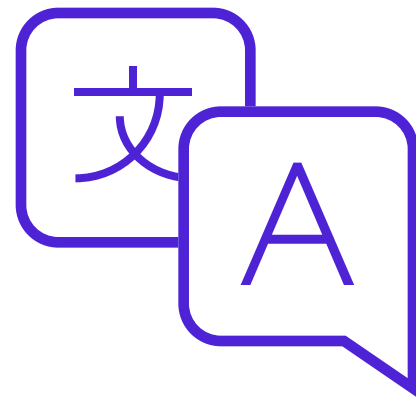


Expertise

Multiple successful security audits with many years of expertise.

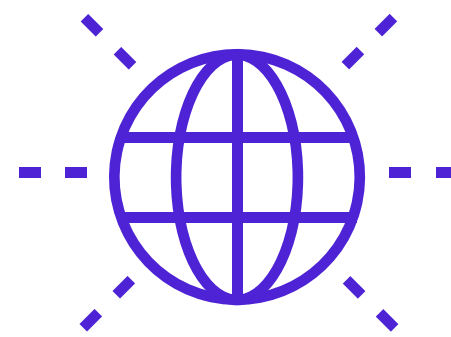
Localization and global support

Enterprise networks



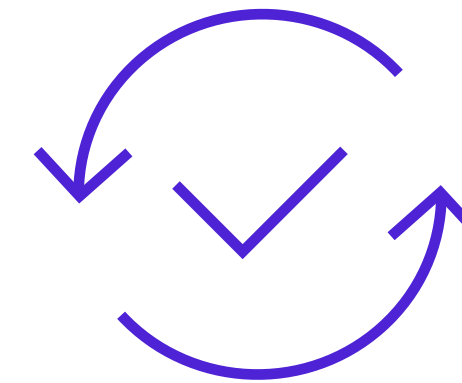
Localization provided

The interface is localized into 20 languages. You and your colleagues from other countries can use your native language.



No firewall restrictions

Servers are located in mainland China. This allows you to control marketing without the restrictions of a firewall.

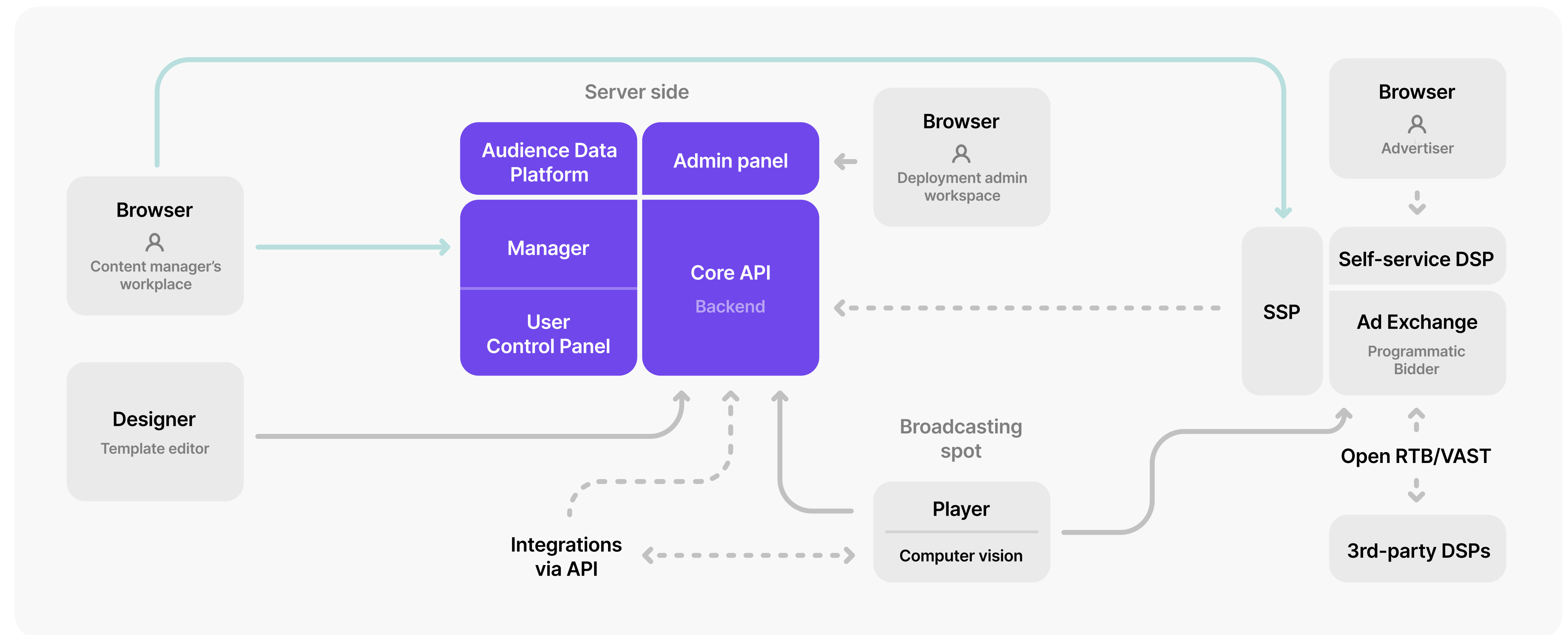


Partners & support

50+ partners in 18 countries around the world. Ready to provide support and assistance with equipment selection.

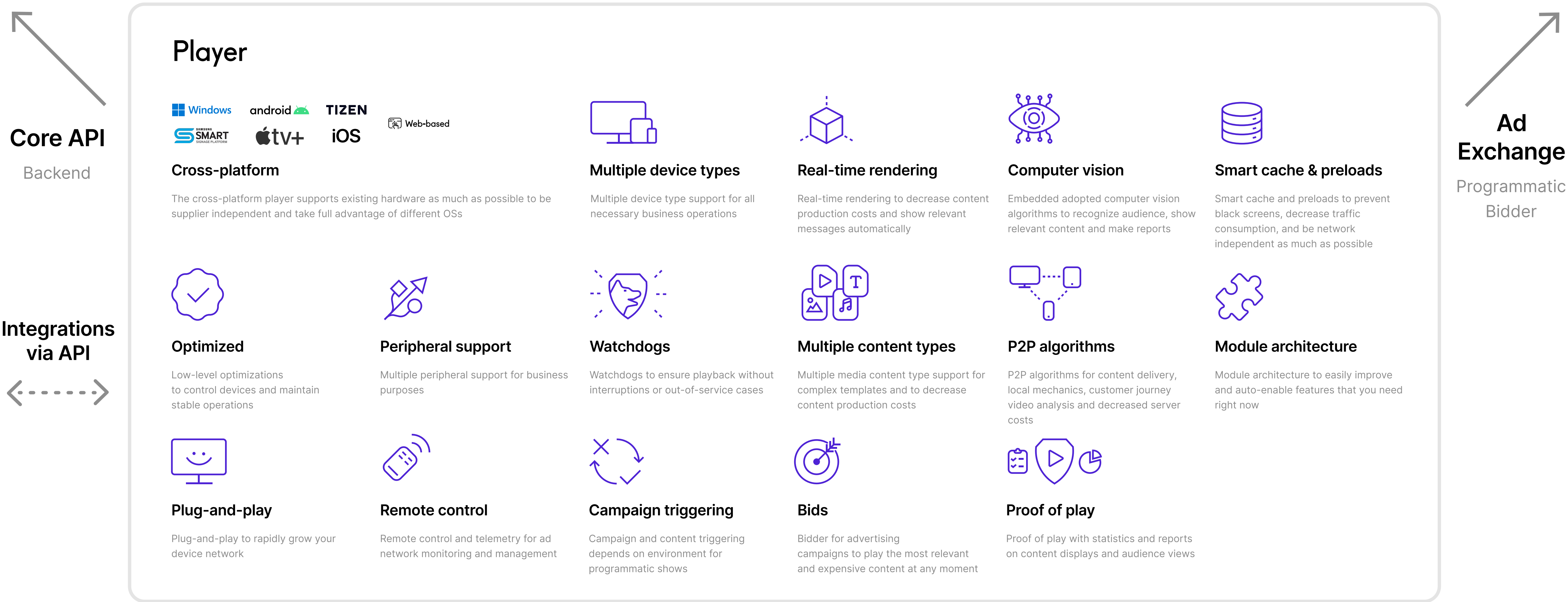
Architecture — General

The architecture is designed for business and IT departments with different approaches for their needs. Communication between components is performed via REST API.



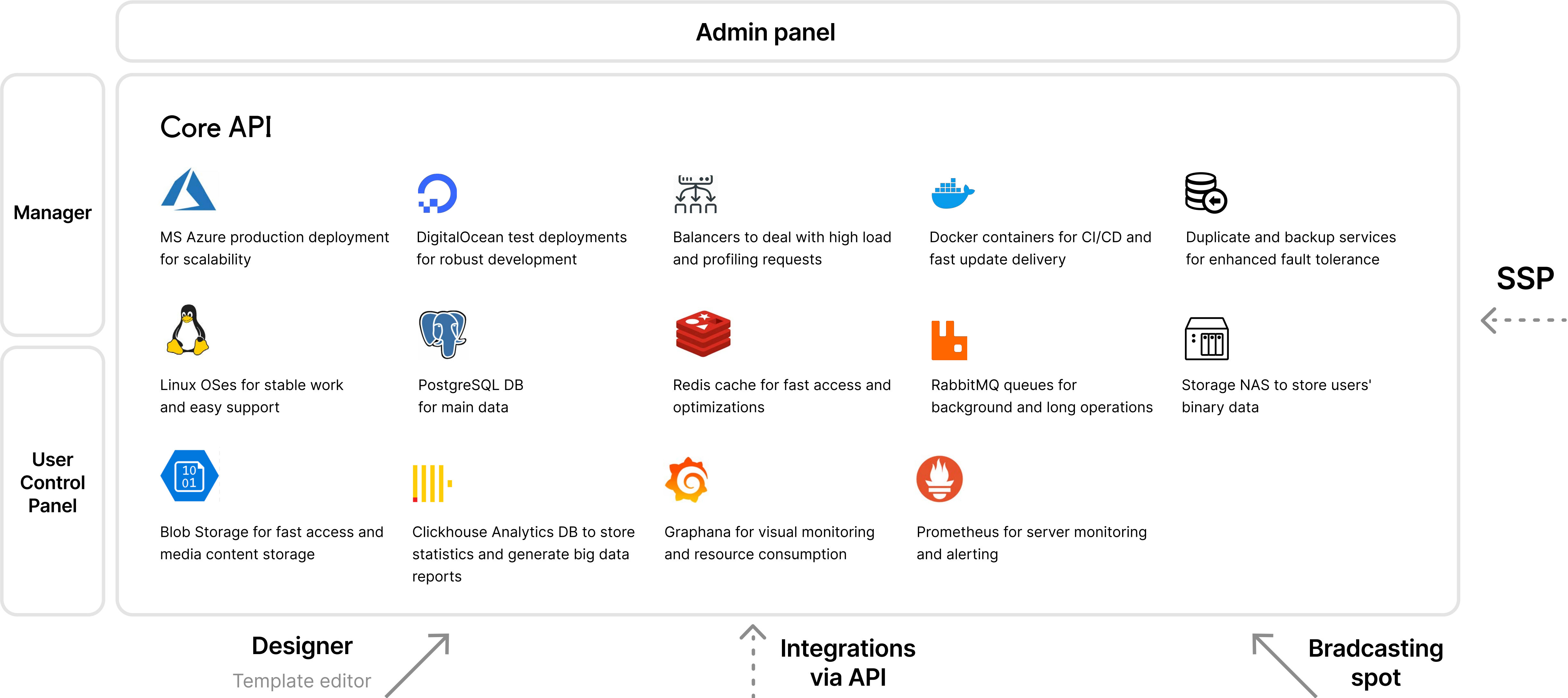
Architecture — Player

The player uses the complete capabilities of the OS, hardware and peripheral devices to provide stable playback and meet the end client's needs.



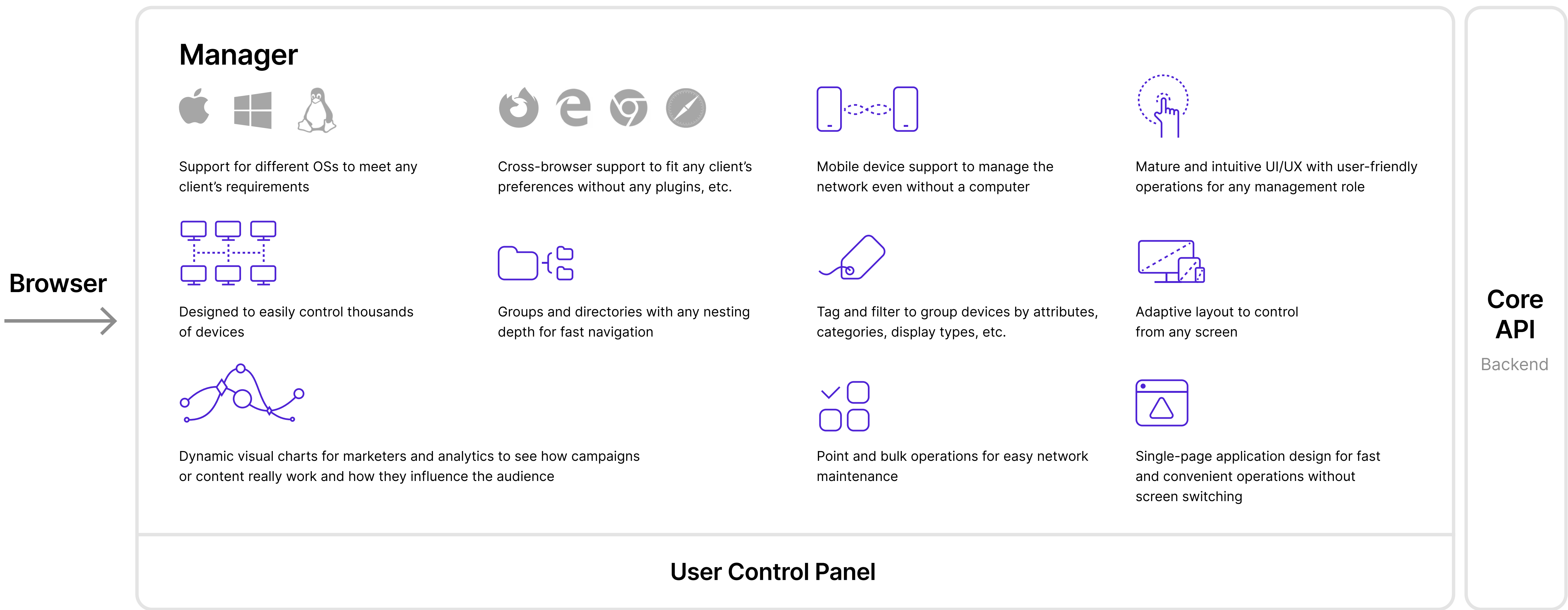
Architecture — API (Server/Backend)

The backend is designed for high performance, security, easy deployment and high load



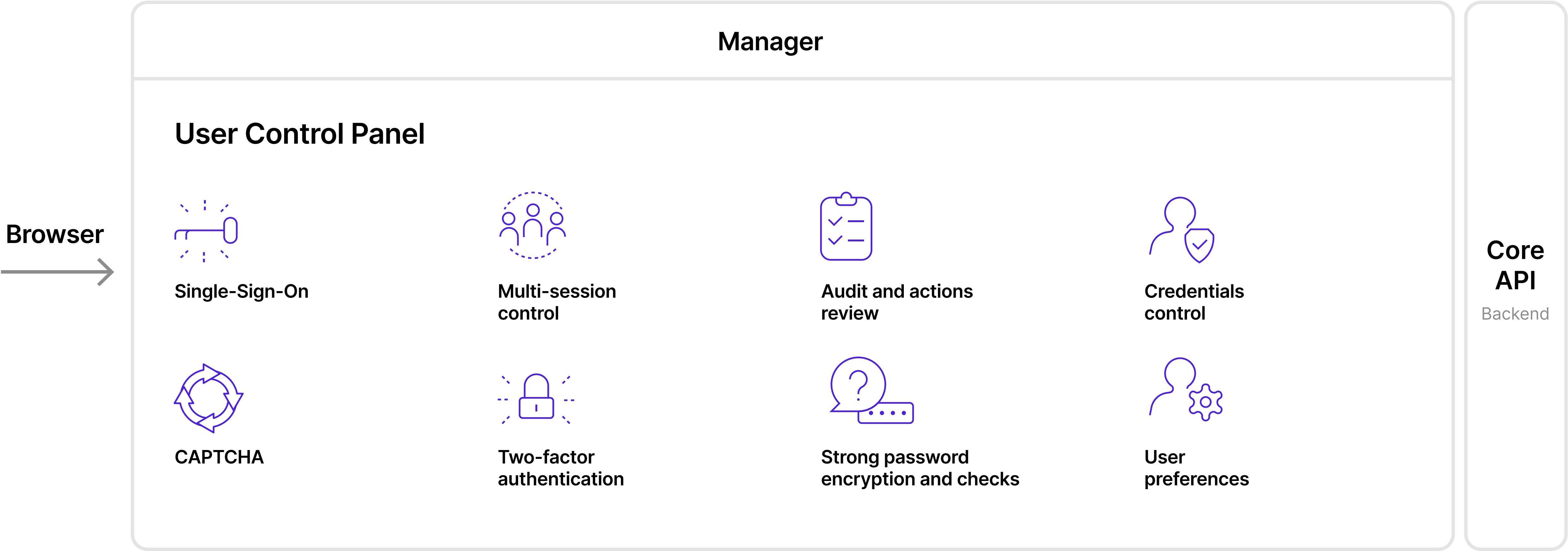
Architecture — Manager

The Manager is designed to provide fast and easy control to users from any device for any network scale



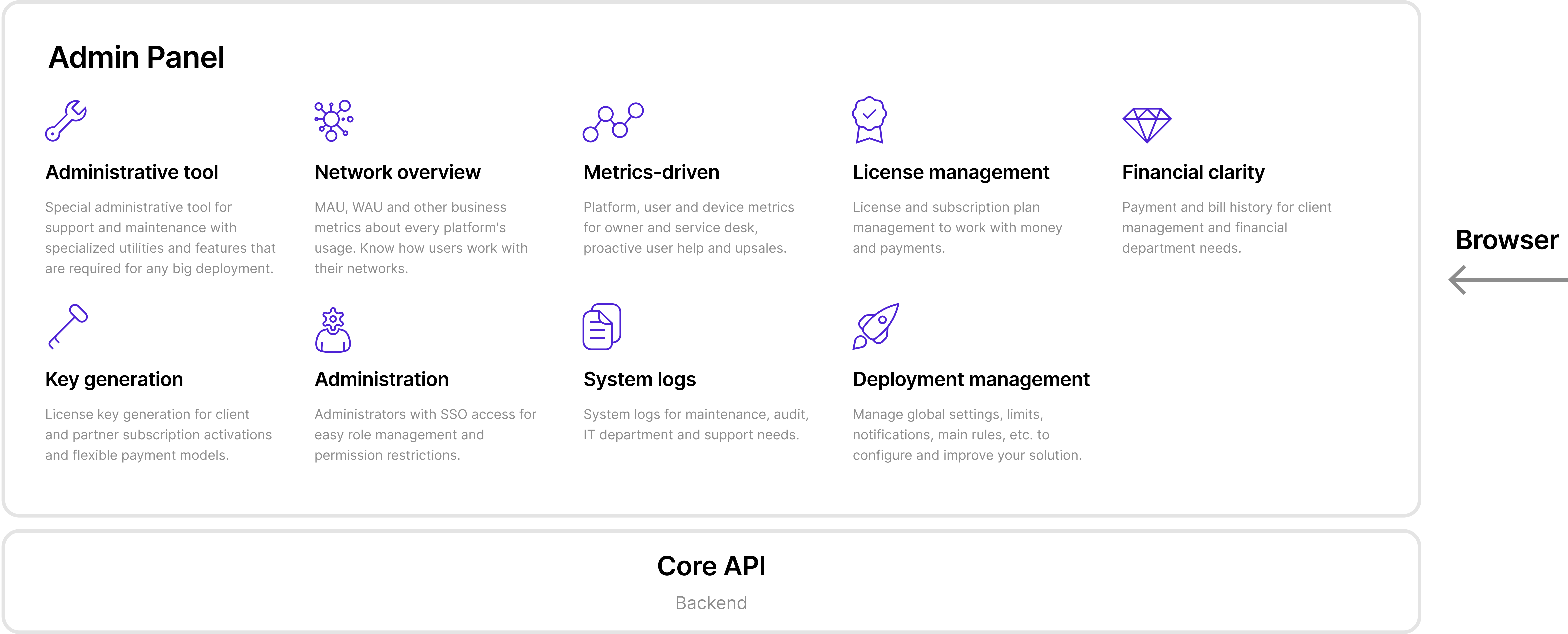
Architecture — User Control Panel

The User Control Panel is designed to provide secure access to any platform from one account using user preferences. Essential for enterprise-quality products.



Architecture — Admin Panel

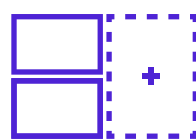
The Admin Panel contains global control features, deployment settings, system logs, platforms, and licensing management.



Architecture — Designer (Template Editor)

The Designer allows you to create any type of template with integrations, layouts for video walls, interactive interfaces, and more.

Designer



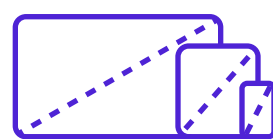
Module architecture

Module architecture with widgets, screen setups, layers and links provides opportunities to assemble application-level templates without programming.



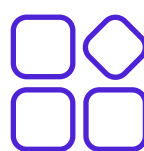
Content parsing

Media content parsing features. Use any type of media content to build a template or just drag and drop a Photoshop PSD file to parse design layers automatically.



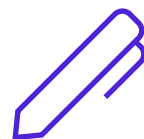
Universal templates

Create templates for your screens, audio systems and interactive solutions in one place. Easy to update, make changes and share results with other users.



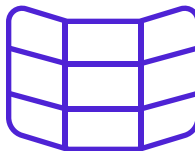
Various integrations

Various integrations are available to connect external resources and services to fit your business needs.



Visual editor

Visual desktop editor in the style of Photoshop or PowerPoint. Manage layers and layouts with familiar approaches.



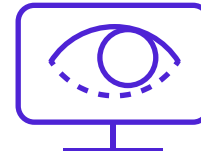
Video walls

Video wall engineering features allow you to create any custom layout for 12K and higher resolution screens.



Font management

Font management without problems with lost files or installation issues. You don't need to install fonts on end devices for your templates. We do it automatically.



Fast preview

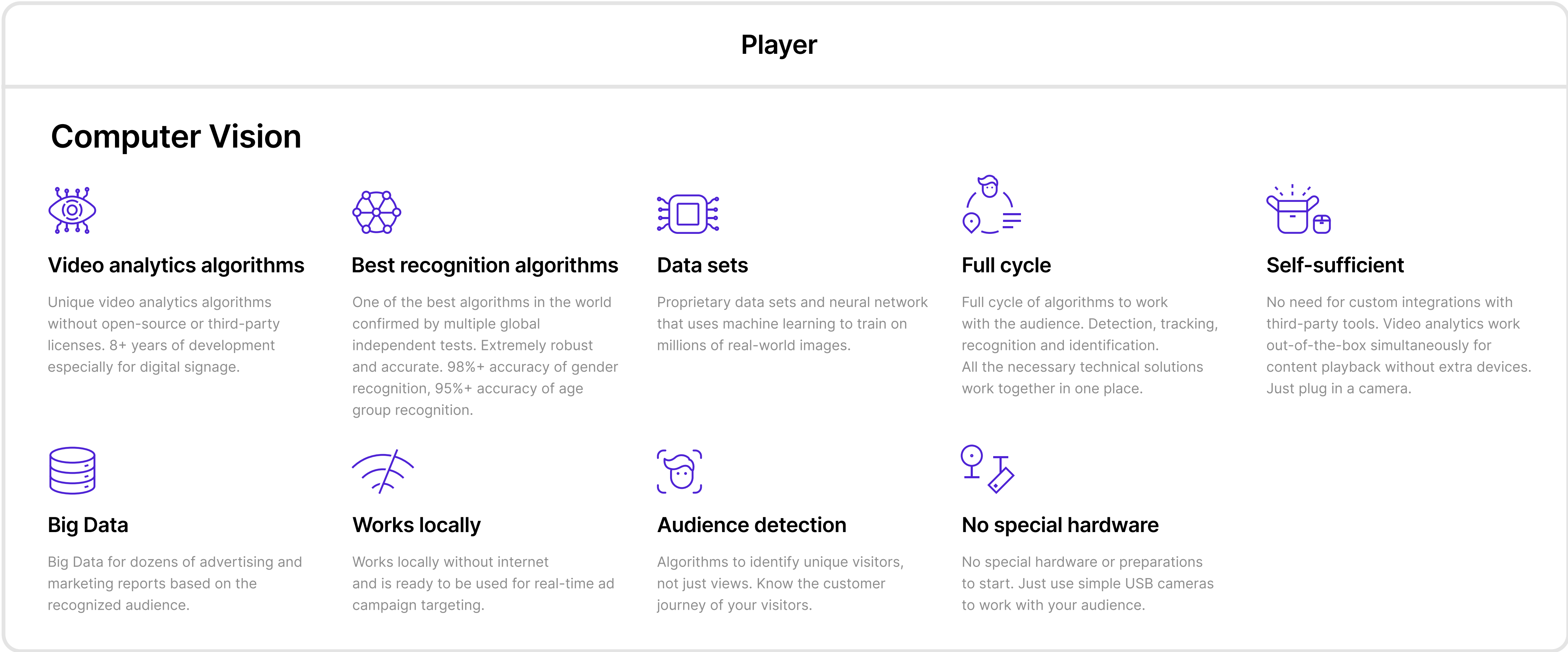
Immediately preview and test how your template works on your device without special hardware.

Core
API

Backend

Architecture — Computer Vision

AI algorithms specially designed and developed to fit the market and work in real-life situations with easy setup.



Architecture — APIs and integration mechanisms

Documented APIs and integration mechanisms to extend functionalities and connect external services, CRMs, hardware, etc. for business purposes.

