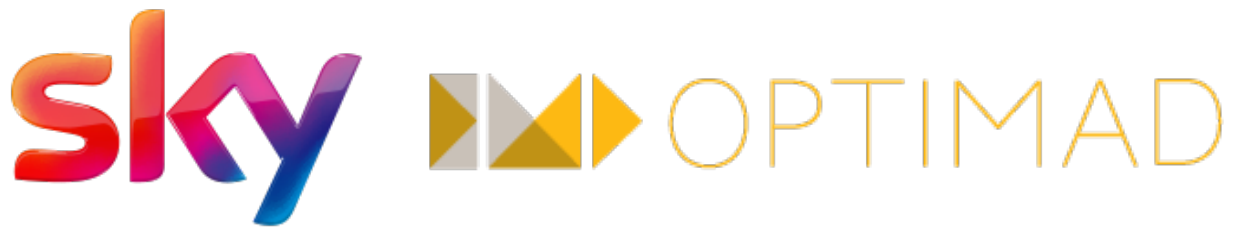


# The Future of TV

A case study in the application of programmatic TV.



## The Solution

Adalyser's programmatic TV solution is not dependent upon connected TV's, addressable users or the roll out of software solutions and industry standards. It is leveraging existing solutions and automating current workflows.

Building bridges between existing solutions creates a programmatic TV solution that can automatically optimise an advertisers plan based on response and makes use of infrastructure already in place.

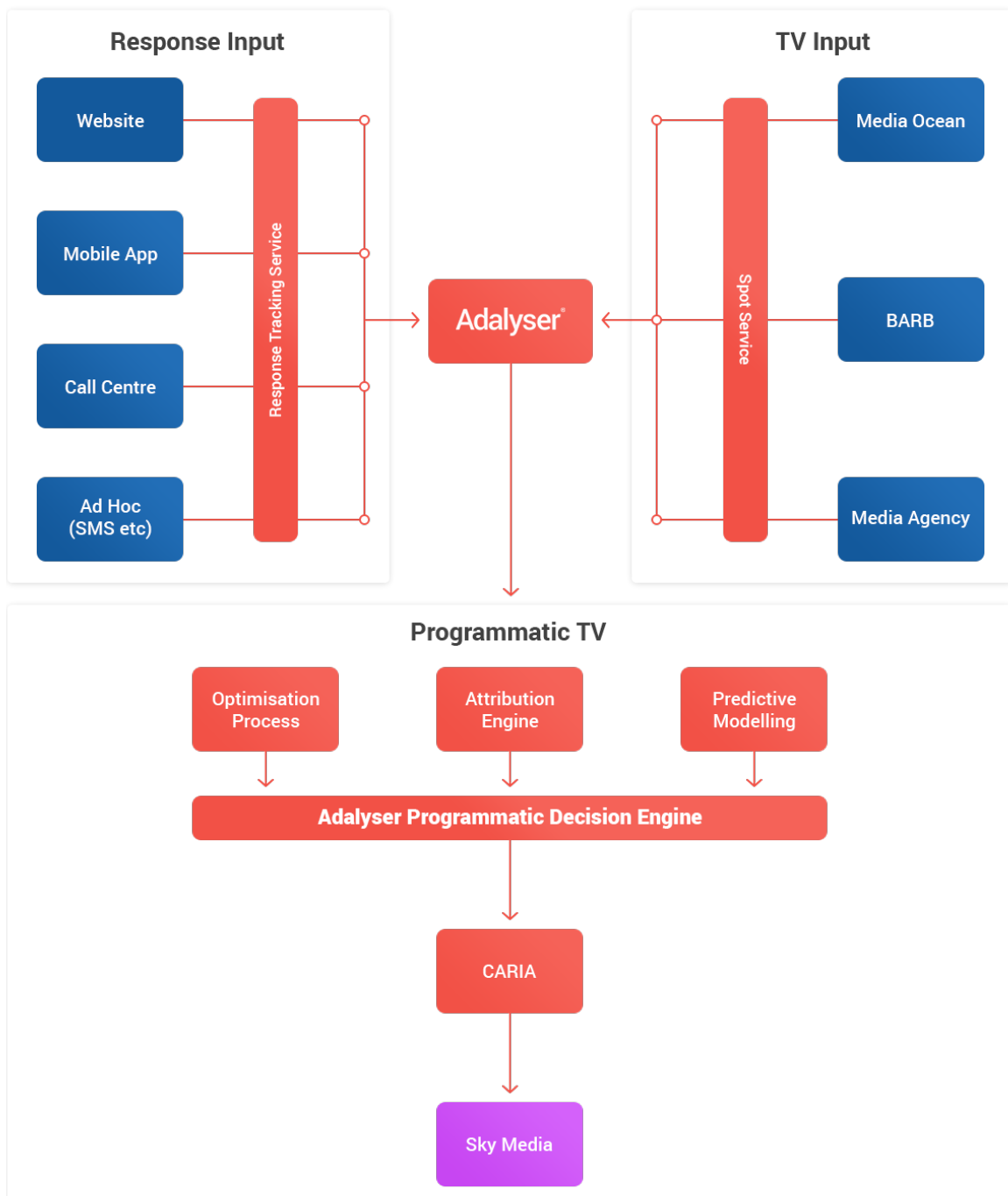


Diagram 3: Adalyser Programmatic TV - The solution

## The Solution - Key Systems

The **Adalyser Tracking Service** is a software solution available to agencies and advertisers that automatically tracks an advertiser's website and app activity. The **Adalyser Spot Service** seamlessly imports TV spot data from Mediaocean and BARB. This provides Adalyser with overnight and consolidated spot information for all channels.

The **Adalyser Programmatic Decision Engine** is responsible for the identification of campaign optimisations. The output from Adalyser's suite of attribution and statistical models is then aligned with the advertiser's goals in order to identify campaign optimisations. The programmatic decision engine applies optimisations in real-time and autonomously via CARIA®.

## Mediaocean

Mediaocean is the world's leading media software company that automates every aspect of the advertising workflow - from planning, buying and selling, to analysing and optimising, to invoicing and payments. Mediaocean's open cross-media platforms power \$125 billion in global media budgets, have unmatched reach and bridge traditional and digital media.

## CARIA®

The conduit between agencies and sales houses is via a software platform called CARIA®. Developed by IMD Optimad and commissioned by Clearcast, CARIA® is a secure online hub that provides a single point of communication and enables agencies to electronically create and amend TV campaigns (bookings and creative instructions). Adalyser sends campaign amendments which update CARIA® and are automatically issued to Sky Media.

## Sky Media

Sky Media are early adopters and drive the broadcast TV market and are responsible for validating the amendment and pushing the change to their TV scheduling systems. In certain scenarios campaign amendments are pushed directly to Sky Media's scheduling platform without any human intervention.

## The Trial

During November and December 2016 Adalyser partnered with a number of organisations to deliver a trial of programmatic TV:

- Sky Media
- IMD Optimad
- Mediaocean
- Carat
- Go Compare

## Objectives

The primary objective of the trial was to prove that Adalyser's Programmatic TV solution can autonomously and in real-time optimise a TV campaign. Detailed objectives included:

1. To prove the ability to identify in real-time the best and worst performing creatives measured against the volume of incremental response received by Go Compare websites.
2. To autonomously remove the worst performing creative associated with the campaign and replace it's advertising slots with the best performing creative.

## The Campaign

During the period 16/11/2016 to 16/12/2016 Go Compare broadcast a total of 13790 spots using four different creatives. A breakdown of spend by creative is shown in table 1.

Table 1: Existing creative breakdown

Creative	Spend	Spots
Lucky Break (45)	£280,845.61	3675
Brides Maids (46)	£309,800.50	3557
Flying High (47)	£299,709.88	3858
Gondola (48)	£260,089.49	2700
<b>Total</b>	<b>£1,150,445.48</b>	<b>13790</b>

## The Optimisation Decision

As the objective of the trial was to identify the best and worst performing creatives the programmatic decision engine was configured with the goal of achieving '**efficient volume**' - defined as generating response at the lowest possible cost whilst maintaining volume.

As a result both Adalyser attribution models and statistical models were invoked in real-time looking for creative efficiency gains that would deliver the campaign goal.

## Attribution

The first step in any programmatic decision requires the Adalyser V4 sparse attribution model to be invoked in order to identify the direct response each spot drives.

Traditionally measuring this response can be difficult because of noisy data, the clashing of spots and minute level data. The Adalyser V4 sparse attribution model uses data with a second level granularity in order to eliminate these issues.

For more information regarding these issues view our model comparison document at [www.adalyser.com/comparing-models](http://www.adalyser.com/comparing-models).

The Adalyser V4 sparse model builds up a 'dictionary' of different response behaviour based on examples of spots that exhibit a 'clear' signal. The dictionary can be thought of as having ideal examples of response behaviour to specific spots.

The dictionary can then be used to identify response curve patterns in noisy data and decompose overlapping spot clashes into component response peaks. This makes it possible to attribute the true response curve to each spot. Something that is simply not possible with other methods, especially when the data is aggregated at minute level.

## Creative Scores

The programmatic decision engine does not solely use the result of attribution in order to make the programmatic decision.

The output of attribution is used in conjunction with the campaign goals in order to identify creatives. The campaign goals are then translated into campaign features which are considered important and each indicator given a score. The indicator scores are then combined to create an overall score for each creative in order to identify creative performance.

## Predicted Behaviour

The Adalyser programmatic decision engine employs a number of multi-variate regression models to determine how each creative might perform over the next 14 days using planned spending patterns.

The programmatic decision engine combines the results of attribution modelling, statistical modelling and combined with the campaign goals predicted a cost per response for each of the four Go Compare creatives. The results are shown in table 2.

Table 2: Actual versus predicted CPR

Creative	Actual CPR (16/11/2016 - 16/12/2016)	Predicted CPR ( 17/12/2016 - 31/12/2016)
Lucky Break (45)	£27.77	£26.24
Brides Maids (46)	£31.00	£30.37
Flying High (47)	£26.37	£25.30
Gondola (48)	£34.57	£31.44

As a result the programmatic decision engine identified the following optimisation:

**Replace the Gondola (48) creative the with Flying High (47) creative.**

This optimisation decision was then passed in real-time to CARIA® and then onto Sky Media for scheduling.

## The Outcome

Table 3 summarises the performance of each creative once the programmatic optimisation was applied by Sky Media (17/12/2016 - 31/12/2016).

Table 3: Optimised creative breakdown

Creative	Spend	Spot	Actual CPR
Lucky Break (45)	£164,846.83	3,197	25.67
Brides Maids (46)	£186,328.59	3,084	29.65
Flying High (47)	£237,038.62	4,255	26.55

During this period approximately £86,000 of spend was effectively transferred from the Gondola (48) creative to the Flying High (47) creative. This was estimated using predicted schedule lay downs and comparison with actual spends. Table 4 compares the predictions against actuals.

Table 4: Predicted CPR versus actual CPR

Creative	Predicted CPR (17/12/2016 - 31/12/2016)	Actual CPR (17/12/2016 - 31/12/2016)
Lucky Break (45)	£26.24	£25.67
Brides Maids (46)	£30.27	£29.65
Flying High (47)	£25.30	£26.55

The CPR for the Flying High (47) creative has increased slightly by 18p. This is despite having taken on extra spend, suggesting that it is not being held back by a saturation effect. If we compare the predicted CPR for the replaced creative Gondola (48) with the actual CPR for Flying High (47) we can compare how effective the creative rotation has been:



- Efficiency without rotation optimisation:  
 $\text{Responses} = 1 / (\text{CPR (48)} / \text{Spend}) = 1 / (£31.44 / £86,000) = 2735$
- Efficiency with rotation optimisation:  
 $\text{Responses} = 1 / (\text{CPR (47)} / \text{Spend}) = 1 / (£26.55 / £86,000) = 3239$
- Efficiency gain:  
 $(3239 - 2735) * £31.44 = £15,845.76$

As a result, £86,000 worth of spend was optimised and an efficiency gain of £15,845.76 was achieved. As a proportion of the optimised spend this represents an 18.4% gain.

If we extrapolate the gain to an advertiser spending £10m per annum and assume that half of spend was optimised and half of efficiency gain was obtained this would equate to a gain of £460,000.

## Conclusion

Table 5: Trial Results - (for optimised spots)

Measure	Result
Efficiency of Spend	18.4% 
Cost per Response	15.5% 

This case study has proven that programmatic TV can be delivered by leveraging existing systems and without the need for consumer infrastructure or significant investment in hardware and software.

The 18.4% efficiency gain proves that even a simple optimisation can deliver genuine value to TV advertisers with more sophisticated optimisations likely to generate more value.

The value to each stakeholder in the chain (advertiser > media agency > media owner) is derived from the value that automation brings. It is just not possible to manually optimise campaigns with the same level of speed and accuracy. The time and resource costs alone would quickly erode any gains.

Programmatic TV delivers the following:

- Rules based decision making.
- Robust, repeatable analysis.
- Transparency
- Speed of execution
- Measurable outcomes

The next step is to rollout a premium direct response TV product which delivers the benefits of programmatic TV.



# Get in touch with **Adalyser**



+ 44 (0) 333 666 7366



Manchester Business  
Park, 3000 Aviator  
Way, Manchester, M22  
5TG, United Kingdom



[sales@adalyser.com](mailto:sales@adalyser.com)