Transforming Operational Efficiency and Campaign Success in OOH Advertising

Talon's Atlas transforms traditional OOH advertising into a dynamic, automated platform, enhancing better targeting, and improved results for both advertisers and media owners.

Talon is a specialist Out-of-Home (OOH) agency with over 30% UK market share and operations in the USA, Canada, Europe, UAE, and Asia Pacific regions. OOH is a collective term for advertisements found on public billboards, wallscapes, and posters seen while "on the go". Traditionally, OOH agencies have been managing and running campaigns manually. Even for Talon, handling campaign planning to media buying, pricing, placement, and tracking was not an automated process. In addition, lack of industry standards created information silos making measurement and accountability complicated.

The company embarked on a digital transformation journey in partnership with Sahaj Software, aiming to re-imagine OOH by utilizing technology to not just automate, simplify, and optimize outcomes but also incorporate cutting-edge technologies to make the OOH medium attributable. This transformation demanded superior engineering expertise and a proven track record of solving complex problems. So, Sahaj brought in not only the requisite skills but also acted as a trusted partner in developing Talon's technology strategy to enable this transformation.

Business Challenge

Talon was facing issues with ad-slot-bookings and scheduling ad-creatives on digital media panels (frames) from different media owners. Given below is an overview of some of Talon's business challenges:

1   **Scheduling through booking list:**
The purchase of ad slots on a manually intensive back-and-forth communication from the advertisers and media owners, where it took days to finalize.

2   **Optimization problems:**
The frame schedules were not particularly optimal, taking several days up to weeks for manual creation and not always maximizing ad impressions or campaign effectiveness.

3   **Creative trafficking:**
The creatives were being shared over emails and did not contain a standard schedule
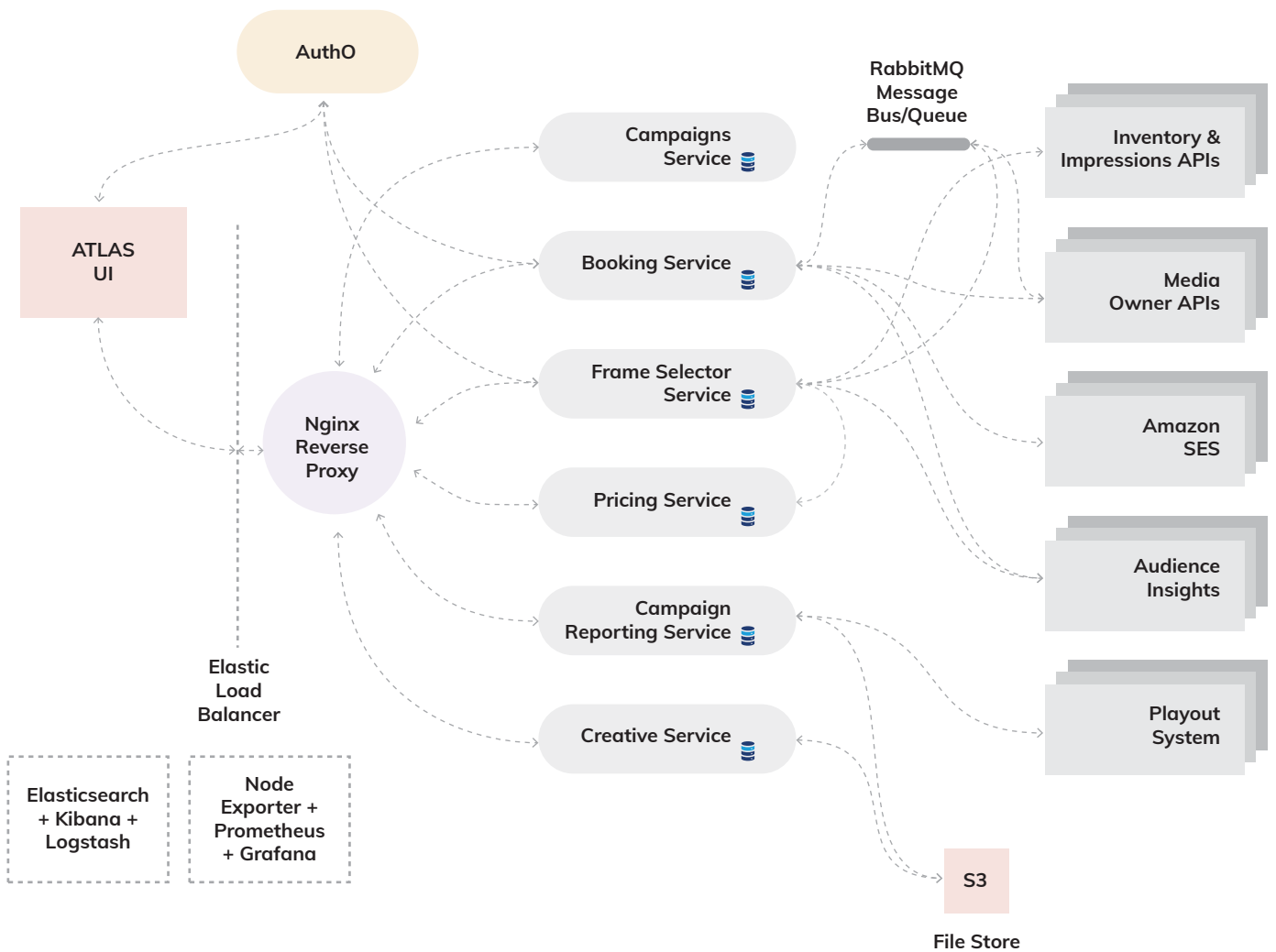
The D-OOH Solution

The team started with a project to build an entire DOOH advertising platform, called Atlas. It involved development of two core components:

1   **Automated ad slot booking**
- This introduced an algorithm, based on real-time impressions and Cost-Per-Thousand (CPT) rates, with audience data sourced from an in-house data management platform called Ada, to select the best frames across multiple media owners.
- This self-service platform was created to enable online ad buyers to make a seamless purchase of digital out-of-home media, without needing to know the intricacies of the traditional media buying process.

2   **Creative scheduling portal**
There was a user-friendly, self-administered portal in which Talon users could upload ad creatives and define how the ad creatives needed to be scheduled in a standard way. The media owners could log into the portal and download the creatives and the schedule file. This option allowed greater flexibility to streamline the creative management process.
The team faced a significant challenge due to integration complexity. The integration with systems of many of the various media owners was quite complex and required a lot of collaboration and customization to accommodate different business processes and technologies.

AuthO

ATLAS UI

Nginx Reverse Proxy

Elastic Load Balancer

Elasticsearch + Kibana + Logstash

Node Exporter + Prometheus + Grafana

Campaigns Service

Booking Service

Frame Selector Service

Pricing Service

Campaign Reporting Service

Creative Service

RabbitMQ Message Bus/Queue

Inventory & Impressions APIs

Media Owner APIs

Amazon SES

Audience Insights

Playout System

S3

File Store

Impact

Atlas introduced programmatic automation to Talon's OOH advertising.
It made huge improvements both in operational efficiency and campaign performance:

1   Optimized frame schedules
It automated what had been a manual, and labor-intensive job, producing much more complex, optimized frame schedules in a fraction of the time. What took days to one week for a planner to create could now be accomplished in minutes, and with much superior results.

2   Faster ad slot booking
The automated booking process eliminates the lengthy exchanges between the Talon planners and media owners, streamlining the entire experience. What once took several days to complete could now be done within minutes, which greatly improved the efficiency of operations.

3   **Increased impressions and uplift**
The proprietary algorithm for frame choice on the platform processed millions of data points within seconds, thus creating highly optimized schedules that increased ad impressions between 30% to 80% against a manual planning schedule. This translated into improvements in audience engagement, thus improved campaign performance.

Atlas equally facilitated better collaboration between media owners and advertisers and significantly reduced errors while streamlining workflows. It streamlined tasks for advertisers and facilitates the launch of intelligent and effective digital OOH campaigns. Powered by state-of-the-art algorithms, Atlas processed millions of data points within seconds, strategically selecting digital advertising frames that aligned with the target audience.

Key Metrics

The following key metrics were noted after implementation of Atlas:

1   **Frame Selection Algorithm**
The algorithm of the system processes millions of data points within a few seconds, generating a schedule optimized for campaign goals and therefore improves precision and speed in placements.

2   **Campaign Performance**
Campaign performance has shown to improve between 30 and 80 percent in impressions and audience uplift due to optimized scheduling by the platform.

3   **Efficiency Gains**
What could take days to book and schedule ad slots can now be done within minutes, improving operational efficiency.

When looking at Atlas versus OOH norms and Talon Traditional planning, Atlas was able to deliver stronger results across Ad Recall, Brand Preference and Purchase Intent. It drove 2.3x stronger uplifts in Brand Preference and 1.6x stronger uplifts in Purchase Intent versus traditional planning. Average uplifts across Atlas campaigns in Brand Preference saw a year on year increase of +78%.

The Road Ahead

Atlas' impact is evident across driving middle funnel metrics and shifting bottom funnel metrics closely linked to digital and social advertising. When looking at Atlas versus OOH norms and Talon's conventional planning, Atlas is able to deliver stronger results across Ad Recall, Brand Preference and Purchase Intent. The platform continues to evolve. As new features continue to get added—including further optimizations to the frame scheduling algorithm and integrations with additional media owners—the platform aims to improve performance even further.