

The Complete Guide to DOOH Analytics

How to use analytics to boost profits
and win more campaigns

Introduction

As a digital out-of-home (DOOH) media network, you want to improve advertising performance and profits. You want to charge premium fees. You want to win more campaigns.

Now you can.

Modern technology enables you to measure DOOH performance to make dramatic improvements. Analytics transformed online advertising, and it's about to do the same with DOOH.

If you're curious about DOOH analytics but aren't sure where to start, this guide is for you: we'll explain how analytics works, how it helps boost profits, and how you can get started.

If you'd like to learn more about our platform, just contact me directly at douglas@linkett.com to arrange how-to tutorials.

Thanks for reading, and enjoy!

Douglas Lusted
CEO and Co-Founder of LINKETT

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1

What is DOOH Analytics?

Let's start with DOOH...

If you've been to a shopping mall, airport, or an office building, then you've seen a digital out-of-home advertisement. This rich, dynamic content is delivered via networked digital signage displays, and DOOH advertising is expected to become a \$45 billion industry by 2019.

So, why does DOOH need analytics?

According to PWC, In 2015 advertisers spent an estimated \$10 billion on digital billboard advertising, yet so many of them struggle to determine what their ROI is, and a lack of data limits DOOH networks ability to compete with other channels and bring in more advertisers.

Analytics are crucial to the advertising industry because they enable advertising performance to be measured and improved. Online advertising has platforms like Google AdWords, but until now DOOH has lacked a similar platform.

It's time for DOOH to join the 21st century. Other modern advertising channels like search and social media use analytics to drive success, and we believe that DOOH should too.

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**How can analytics
increase profits?**

DOOH analytics increases profits in two main ways:

1. It enables networks to charge **premium fees**, because advertisers are willing to pay for analytics.
2. It provides a **competitive advantage** over other networks, making it easier to win more campaigns.

1. Premium Fees

In DOOH, data has traditionally been collected with old-school methods: manual surveys, research groups, and the like. It takes a lot of time and money to collect and analyze this information, and by the time the results are available, the campaign is finished – making it too late to improve performance based on the findings.

To solve these problems, DOOH networks are now charging a premium fee to advertisers for access to real-time analytics. Advertisers are willing to pay for DOOH analytics, and generally the fee is about 10-20% of the total campaign budget, making analytics an affordable part of any DOOH campaign.

2. Competitive Advantage

As demonstrated in the early 2000's with online advertising, once analytics started to become a common standard, networks started offering them for free in order to win campaigns from competitors who didn't.

Given the low price of implementing an analytics platform vs the high revenue potential from winning campaigns from competitors, DOOH networks are now using analytics purely to drive existing revenue channels and increase profit margins through additional campaign volume.

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Starting with Primary Data

What's primary data, and why is it important?

In order to get real-time analytics, consistent streams of high-quality data must be available. Primary data is the core of DOOH, and without it no type of data analysis or analytics is possible.

There are three kinds of DOOH primary data:



Content

What media is showing
on the screens.



Location

What display(s) the
content is playing on



Time

When the content
was played

Where can you find primary data?

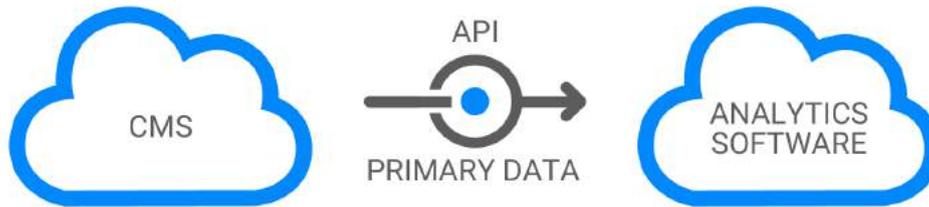
DOOH advertising networks use a Content Management System (CMS) for their digital signage. Each CMS requires content, locations, and time to develop playlists or schedules, and almost every CMS can export this information.

Here's what a typical primary data table looks like:

Content	Location	Time
Ad #1	Mall Display #1	Monday Sept 12 6:05pm - 7:00pm
Ad #2	Airport Display #5	Friday Sept 16 4:00pm - 4:45pm
Ad #3	Office Display #4	Sunday October 2 6:05pm - 7:00pm

How can you use primary data with analytics?

In order for analytics platforms to be accurate and effective, they need real-time access to primary data streams from the CMS. This is done through a simple, direct API integration, so that analytics platforms can start pairing and sorting the data it collects by content, location, and time.



Primary data is the backbone of DOOH analytics – with it, we can collect and analyze secondary and tertiary data, which we'll focus on in the next two chapters.

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Measure Results With Secondary Data

What's secondary data, and why is it important?

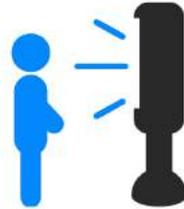
Secondary data is generated from consumer traffic and behavior near the display, and is recorded through analytics platforms.

Secondary data is important because it enables the performance of content, location, and time to be measured using these four stages: Impression, Dwell Time, Engagement, and Conversion:



#1 – Impression

How many people were exposed to the content being played.



#2 – Dwell Time

How long the audience was exposed to the content



#3 – Engagement

A response or action taken by a consumer in direct relation to the content



#4 – Conversion

The consumer completed an advertisements specific call to action

Where to find secondary data

Secondary data is collected from people's smartphones when they are near a DOOH ad, and it's stored in the DOOH network's analytics platform. This data is collected through internet-connected sensors, that passively gather anonymous data from an audience in close proximity, and then send that data to a cloud-hosted analytics platform.

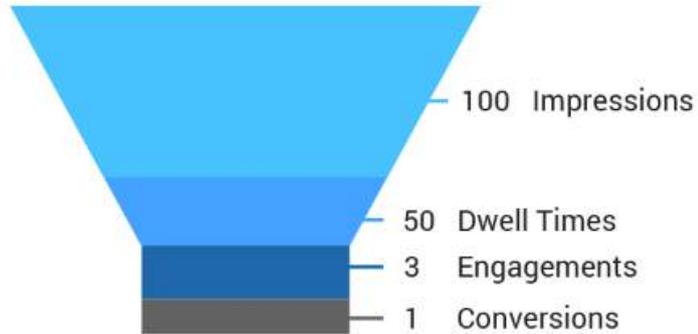


Analytics platforms ([LINKETT](#), for example) then turn the data into custom graphs and charts to provide the key performance insights and indicators used to measure and improve DOOH performance.

* It's important to note that there are no cameras in the LINKETT sensor, but rather, it's Wi-Fi-enabled and can collect a unique, anonymous ID from smartphones that pass by.

How to use secondary data

Analytics platforms use secondary data to construct a key framework for advertising performance measurement, known as **The Advertising Funnel**:



The advertising funnel illustrates the 4 stages of the consumers' journey relative to the DOOH advertisement. This funnel enables performance ratings to be generated, so that DOOH performance can be measured and improved.

The 4 Ratings to Measure

By quantifying the DOOH consumer journey, a ton of data becomes available to help you better understand how effective your content is. To make sense of this data, we use these 4 key ratings:

$$\text{Performance Rating} = \frac{\text{Conversions}}{\text{Impressions}}$$

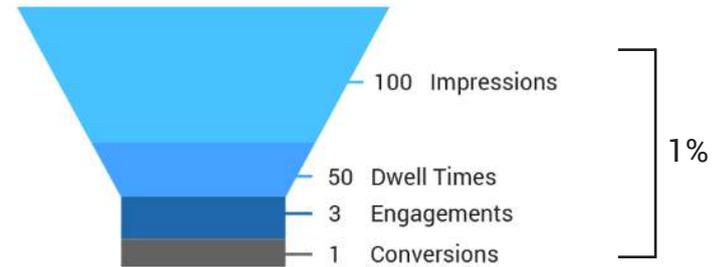
$$\text{Retention Rating} = \frac{\text{Dwell Times}}{\text{Impressions}}$$

$$\text{Engagement Rating} = \frac{\text{Engagements}}{\text{Dwell Times}}$$

$$\text{Conversion Rating} = \frac{\text{Conversions}}{\text{Engagements}}$$

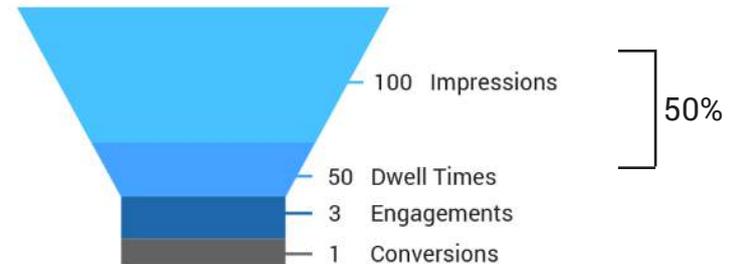
1. Performance Rating

The Performance Rating is most important, because it determines overall performance of content, location, and/or time slots. The Performance Rating is calculated by taking the percentage of impressions that become conversions. A strong Performance Rating is approximately 1%.



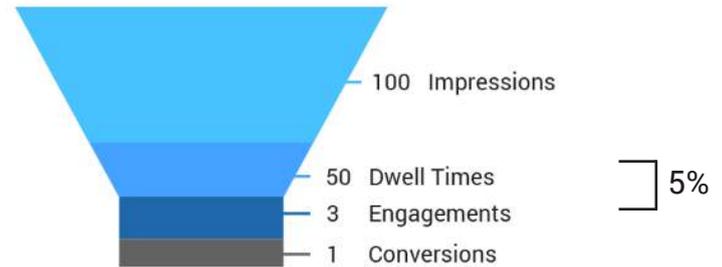
2. Retention Rating

The Retention Rating is percentage of impressions that turn into dwell times. A strong Retention Rating is approximately 50%. If there is no call-to-action, this rating is commonly used to A/B test different content to see what holds consumer interest the longest. The higher the Retention Rating, the more likely it is that consumers will remember, engage, and convert.



3. Engagement Rating

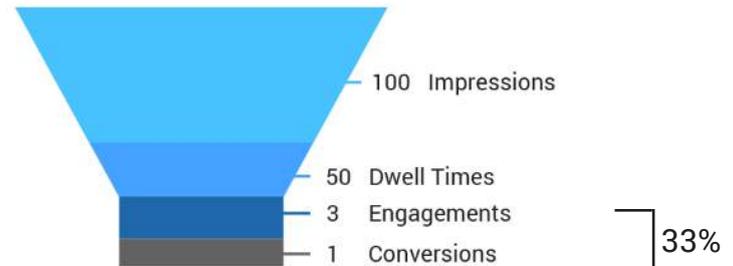
The Engagement Rating is the percentage of dwell time that convert into engagements. A strong Engagement Rating is 5%. For example, if you have 50 dwell times and an average of 3 of people respond to your content, you have a strong Engagement Rating. This rating is most often used as a way to test a call to actions attractiveness – the higher it is, the more effective your content is on driving action.



4. Conversion Rating

The Conversion Rating is the percentage of engagements that turn into a successful conversion. Whether the conversion is app downloads, online purchases, filling out a survey, or something else, the Conversion Rating is a crucial indicator on how effective your landing pages and other channels are at getting people to convert on your offer.

This dramatically varies, because it depends on many factors like the user's experience, copywriting, price competitiveness, and overall demand for your offering.



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Improve Results With Tertiary Data

Getting started with tertiary data

We've covered the fundamentals of primary and secondary data in the context of DOOH – but now we'd like to focus on one of the most exciting opportunities in DOOH advertising: Tertiary data.

Tertiary data is the combination of primary and secondary data to better understand consumers and deliver more targeted, personalized content to them. It can only be found in DOOH analytics platforms like LINKETT.

Using tertiary data, advertisements can be tailored to specific profiles to be more relevant, often resulting in higher performance. Tertiary data is not mandatory to monitor performance, but rather, it's used to improve it.

The two most common forms of tertiary data are:

Demographic & Historical

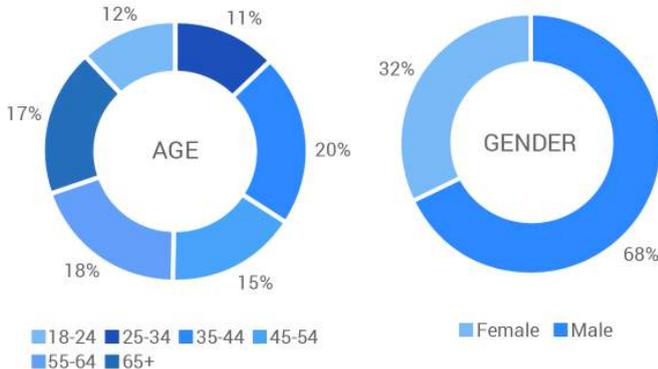
Demographic

Demographic data is associated with an audience's specific characteristics such as age, gender, income, etc. However, if you store demographic data and associate it to anything trackable, you need to have the consumer's permission to do so through some form of an "opt-in".

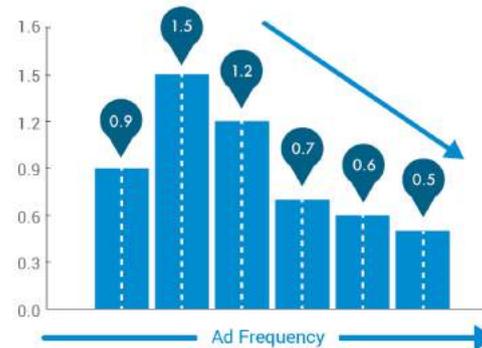
Historical

Historical data helps generate new insights like "campaign impression frequency", which uses content, time, and impression data to determine how many times an audience has seen your campaign, when they are likely to convert, and when they start to lose interest.

Tertiary Demographic Data



Conversions by Ad Frequency

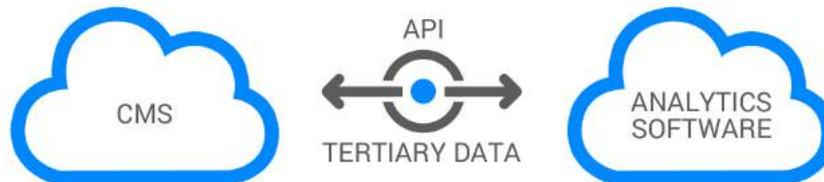


Why is tertiary data important?

Tertiary data enables a major breakthrough in advertising: the ability to change content on any DOOH display depending on who is standing in front of it. This means that the DOOH industry can run real-time targeted ads, just like online. For example, content will change depending on what locations or websites you have been to previously, the number of times you have seen an ad, what ads you have engaged with, and more. This makes your DOOH advertising efforts more effective than ever before.

How to use tertiary data

In order to generate targeted advertising using tertiary data, your analytics platform and CMS must be integrated via a two-way API.



Content Triggers

To get the most from tertiary data, your CMS must be capable of real-time content delivery and setting-up “triggers”. Triggers are predefined content schedules, so that when the appropriate audience is detected in front of a display targeted content can be triggered on the screen and replace what other content was originally going to be played. Here are four common examples of triggers:



#1 – Frequency triggers

Content is triggered on the screen depending on how many times the audience has already been exposed to it.



#2 – Demographic triggers

Content is triggered on the screen depending on the audience's demographic.



#3 – Historical Triggers

Content is triggered on the screen that the audience has already engaged with previously.



#4 – Behavioural Triggers

Content is triggered on the screen depending on what websites the audience is currently browsing on their smartphone.

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Optimizing Ads In Real Time

What's optimization, and why is it important?

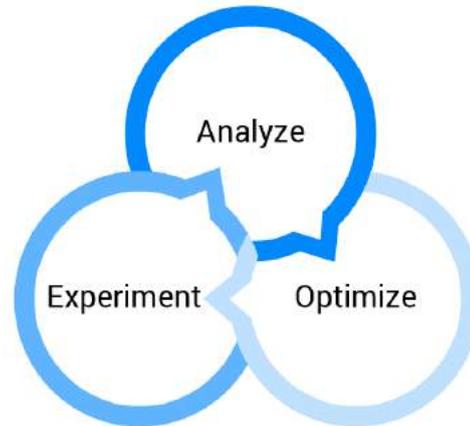
Optimization makes an ad perform as effectively as possible by using data to adjust your campaign in real-time. This means taking action based on the data analyzed, such as tweaking the content, locations, and time your ad is shown to maximize performance.

This is one of the best ways to leverage analytics – it enables you to play the best content, at the best location, at the best time, generating the best possible results for your advertising.

How to use optimization

There are three steps:

1. Analyze
2. Optimize
3. Experiment



Analyze

Before you can optimize, you first must analyze your raw campaign data. Launch your campaign and do not make any changes for a reasonable period – in the DOOH advertising industry, 1-2 weeks is a common test period.

Once the test period is over, analyze the data to determine what tweaks need to be made in order to achieve higher performance.



Optimize

Based on your analysis, adjust your campaign in real-time and run content that performed best at each location and time slot.

This is mostly a manual process, but as artificial intelligence improves, automatic optimization – where the best ads are automatically played at the appropriate time and location – is bound to become the future of DOOH advertising.



Experiment

Once you have optimized your campaign, the last step is to run experiments to try to continually improve campaign performance.

For example, this could include editing or adding brand new content, locations, or time slots to develop new scenarios that may outperform the others.

Scenario	Content	Location	Time	Performance Score
#1	Ad #1	Location #1	Time #1	0.1%
#2	Ad #1	Location #1	Time #2	0.4%
#3	Ad #1	Location #1	Time #3	1.1%
#4	Ad #1	Location #2	Time #1	0.8%
#5	Ad #1	Location #2	Time #2	0.5%
#6	Ad #1	Location #2	Time #3	0.4%
#7	Ad #2	Location #1	Time #1	0.6%
#8	Ad #2	Location #1	Time #2	1.5%
#9	Ad #2	Location #1	Time #3	0.7%
#10	Ad #2	Location #2	Time #1	0.2%
#11	Ad #2	Location #2	Time #2	1.2%
#12	Ad #2	Location #2	Time #3	1.3%

Here's an example...

For any DOOH network that uses an analytics platform and optimizes their content manually, this is how the process would work:

In this scenario, we have 2 different ads, in 2 locations, playing in 3 different time slots each. This is a total of 12 different possible scenarios.

After running a 2 week testing period, the DOOH network finds that scenario 8 had the highest performance rating at 1.5%.

This gives the advertiser a better understanding of what content, locations, and time perform the best, and they can use this data to continue testing and improving their campaign in real time.

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Reporting Results to Advertisers

DOOH analytics enables you to give custom reports to advertisers and prove you are measuring performance. **Here's how:**

1. Online Dashboard



Some analytics platforms enable you to set-up a new “user” with limited access, so they can only see their campaign’s data. This method is for hands-on advertisers who want to measure and optimize their own campaigns more than once a day.

2. Email Reports



DOOH networks can send custom reports to advertisers on a daily, weekly, or monthly basis. These reports are a summary of the overall performance of their campaign, as well as a performance breakdown of content, locations, and time slots.

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How to Get Started

Try your first 45 days free



Now that you understand the power of real-time analytics to transform your advertising performance, we'd like to invite you to give it a try. Start a refundable 45-day trial with LINKETT, and try out analytics with your own digital signage.

If you have any questions or would like a demo of our analytics platform, you can book a time that works for you [here](#). We're always happy to chat.

If you have any additional questions about the content in this ebook or something else, go ahead and call 1-844-546-5388 or email douglas@linkett.com anytime.

Thanks for reading!

About the Author



Douglas Lusted is the CEO and Co-Founder of LINKETT, the analytics platform for DOOH Advertising. Douglas' expertise lie in adtech, big data, and entrepreneurship, with an educational background from the University of Waterloo and University of Toronto. Named as Forbes 30 under 30 since the age of 19, Douglas continues to publish works in the ever evolving digital signage industry. He currently resides in Mountain View, California and you can connect with him on [LinkedIn](#) or email: douglas@linkett.com.

Want more insights into DOOH advertising and analytics?

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And if you'd like to talk with someone about LINKETT and learn more about what we do, email douglas@linkett.com.



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