

# How to avoid overlap between TV and Digital?

A study on Incremental Reach

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# 01 Introduction

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The world of media and entertainment has been witnessing the convergence of TV and digital media, as consumers move to newer platforms to watch more and more content. As a result, it becomes imperative for agencies and advertisers to connect brand experiences across multiple screens.

This gives rise to the need for building reach and maximizing frequency around cross media packages involving TV and digital. This also explains the high demand for digital advertising and increasing share of digital in advertising spends.

However, to optimize the media plan, it is important to understand the brand's objective. Is it to:

1. Build reach, where one should create cross media packages with minimal audience overlap
2. Maximize frequency, where one should construct cross media packages with high audience overlap

When the objective of a brand is to build reach, it becomes necessary to understand the extent of audience overlap and make efforts to reduce the same. With TV and digital advertising working in silos, reports have suggested huge overlaps between the two modes of advertisement, thereby leading to high inefficiencies.

Zapr can help brands assess the wastage in digital spends by deterministic statistical estimates on TV-to-Digital data and suggest avenues for an optimized plan to integrate TV and digital.

# Executive Summary

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As digital spends are high and so are TV spends, a TV plan integrated wisely with digital can help in a lot of savings. **In 2017, the ad spends for TV in India has been reported as USD 3 Bn and that of digital USD 1.4 Bn (27% higher than that of 2016)<sup>1</sup>.** With such enormous growing spends on advertisement, it becomes essential to realise that the overlap would also be increasing between the modes of advertisement.

This paper serves the purpose of identifying the overlap in TV and digital advertisement and throws light on the inefficiencies happening subsequently, thereby laying greater focus on an integrated media plan.

<sup>1</sup>Source: Pitch Madison Advertising Report 2018

# 02 Detailed Problem and Solution

## 2.1 Dynamics around overlap of reach

### 2.1.1 What is the audience overlap between TV and digital?

Reach refers to the total number of different people or households exposed, at least once, to a medium during a given period. Reach has become an important metric in digital media buying as the industry moves towards a more audience-focused approach.

With multiple platforms available for reaching out to the audience, there is a demand for accurate reach. Reach efficiency becomes important in such cases. This helps in reaching out to a set of unique people against a set of ad spots/impressions. **Basically, it is the difference between showing an ad 10 times to the same person versus showing the ad to 10 different people. Hence, the gaps observed lie in calculating the number of unique people reached out per 1000 ad spots/impressions served.**

However, despite the value of efficiency, there is a natural tendency to believe that more impressions will automatically generate more reach. A Nielsen report contradicts this myth and suggests that reaching new target individuals is harder as impressions count increases (illustration shown in figure below).



Figure 1: Reach achieved per thousand impressions<sup>2</sup>

<sup>2</sup>Source: Nielsen Ad Ratings, All Campaigns, June 2016

<sup>3</sup>Source: Nielsen Report on Incremental Reach 2017, Global Case Studies

Hence, overlap becomes an important metric to be calculated while checking for incremental reach. **Globally, reports suggest only 2-10% of overall reach on digital is what contributes to an incremental reach over the TV plan. And the inefficiencies come to be in the range of 90-98%<sup>3</sup>. We have conducted an experiment on Zapr user base to testify the same.**

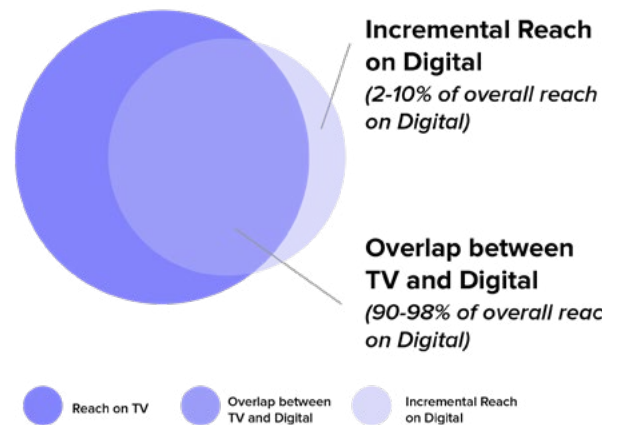


Figure 2: Overlap between TV and Digital

### 2.1.2 Amount spent on the ad segments overlapping with digital

TV being the traditional mode of gaining more popularity, it is imperative for brands to invest more on it. The ad rates of channels are growing with time and are believed to be on an average of 30-70K per 10 seconds, at least in most of the cases with popular channels. Spending this huge an amount on TV and then again spending on mobile may ensure greater number of impressions but does not ensure greater reach.

It is imperative to build reach to unique people and for that it becomes necessary to reduce the overlap and deliver precise marketing techniques across platforms more efficiently.

## 2.2 How to determine overlap

### 2.2.1 Zapr's collection of TV data

At Zapr Media Labs, we've built the world's largest media consumption repository mapping out over 70 million smartphone users across their viewership of 500+ TV channels. We've combined this with in-house Ad-technology to solve some of the most challenging Big Media problems. Zapr is the **only** company in India which houses the world's 2nd largest TV population, with user-level analytics for TV-to-Mobile data and engagement.



Figure 3: Zapr Media Labs - A Snapshot

The Zapr Media Labs technology platform enables the building of a comprehensive media profile for an individual. This is done using proprietary technology built by Zapr Media Labs which can be integrated into any Mobile App on the Android platform. The users send audio fingerprints (samples) every 6 seconds which gets mapped to the repository of fingerprints stored against each show/TVC/promo being telecast on TV. The audio fingerprints are audio signals of a particular frequency which are unique to an offline content and are not real audio/speech samples. Based on the TV data collected at Zapr, we have arrived at a framework of calculating the TV audience exposed to the digital campaigns run on Zapr platform.

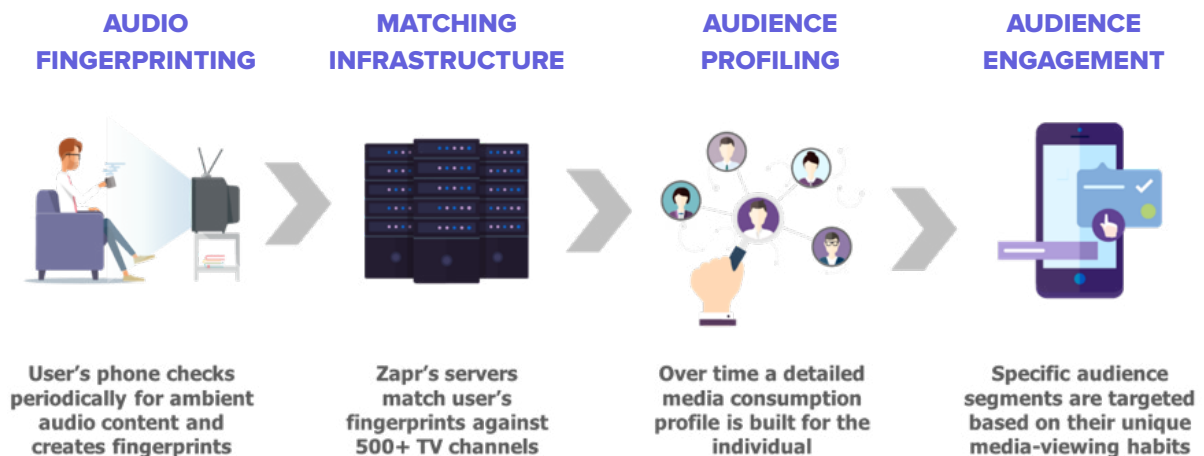


Figure 4: Audio Fingerprinting technology of Zapr Media Labs

## 2.2 Methodology

Time Period	October 2017 – January 2018
No. of Brands	25
Range of Ad spots (monthly average)	7k – 70k

### 2.2.1 Arriving at the brands list

The below mentioned specifications were considered while selecting the brands -

- Brands having GRP of <400, 400-800 and 800+
- Brands which spanned across multiple product categories as well as industries
- Ad spots of the brands varied across multiple genres (male-centric, female-centric as well as common ones)

The below matrix explains the distribution of brands across monthly ad spots and type of genre -

Ad Spot Category	Type of Genre			Grand Total
	Common	Female - centric	Male - centric	
<20K	3	3	3	9
20-35K	3	3	3	9
>35k	3	3	1	7
<b>Grand Total</b>	<b>9</b>	<b>9</b>	<b>7</b>	<b>25</b>

Table 1: Brand Distribution by Ad Spots and Genre

Ad Spot Category	Type of Product Category			Grand Total
	Durables	FMCG	Services	
<20K	3	3	3	9
20-35K	3	3	3	9
>35k	1	3	3	7
<b>Grand Total</b>	<b>7</b>	<b>9</b>	<b>9</b>	<b>25</b>

Table 2: Brand Distribution by Ad Spots and Product Category

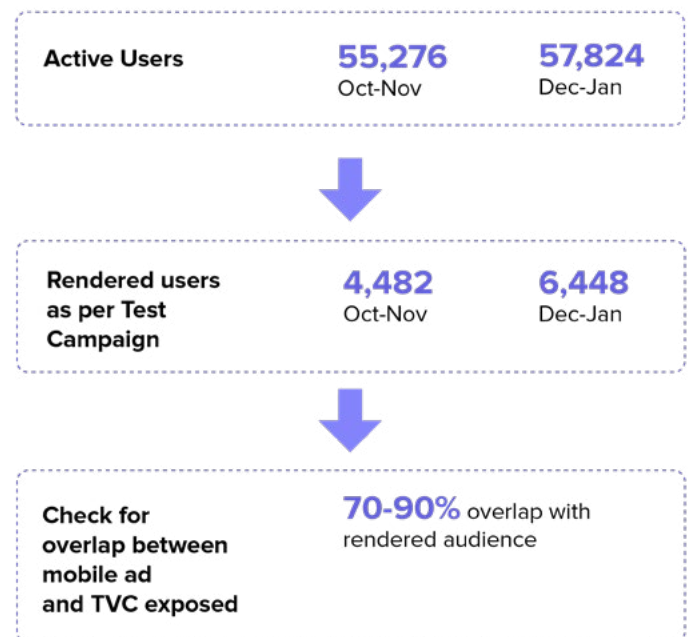
As seen above in our exercise, we have tried to capture brands which advertise across genres as well as brands which belong to different product categories.

### 2.2.2 Arriving at the user base

The exercise was performed separately in two phases of one month duration each – October-November and December-January. The user base was decided as the number of users who were continuously active and were not prone to churn or leave our base during both the phases. A test campaign was run on the active user base. The users on whom the campaign was rendered were taken further for the overlap exercise.

The number of users came as below –

### 2.2.3 Statistical significance of the reach numbers shown in the experiment



Further, to prove the statistical significance of the overlapping reach numbers on TV and mobile, we performed a Z test with a confidence level of 95%. The margin of error for the 95% confidence intervals was calculated as below -

$$\text{Margin of Error} = \frac{\sqrt{(1-\beta)}}{(\beta * \text{Mobile Audience})} * \text{Z Score}$$

\*Overlap TV audience/Mobile audience =  $\beta$ ; Z Score = 1.96 (for a 95% confidence interval)

Overall the error percentage was seen to be in the range of 1% to 2%. This suggests that the data sets of reach values of TVC exposed and mobile campaign exposed user base were statistically similar.

## 2.2.4 Results as per category of brands

The overlap between TVC exposed and mobile campaign exposed went up to as high as 91%. This experiment thereby asserts the idea of the huge extent of overlap existing in TV and mobile advertisements.

### Results as per Genre and Ad spots

Furthermore, we mapped the average value of overlap for all the brands considered across the ad spots and genres to see in which category highest overlap happens. The results are tabulated below:

Ad Spot Category	Common	Female	Male	Grand Total
<20K	78%	72%	79%	76%
20-35K	81%	79%	84%	81%
>35k	75%	86%	86%	81%
<b>Grand Total</b>	<b>78%</b>	<b>79%</b>	<b>82%</b>	<b>80%</b>

Table 3: Avg. Percentage of Overlap by Genre and Ad spots

Ad Spot Category	Common	Female	Male	Grand Total
<20K	79%	74%	83%	83%
20-35K	82%	80%	85%	85%
>35k	91%	87%	86%	91%
<b>Grand Total</b>	<b>91%</b>	<b>87%</b>	<b>86%</b>	<b>91%</b>

Table 4: Maximum Overlap by Genre and Ad spots

**Insight** – Brands with higher ad spots which advertise on male-centric genres like News and Sports channels seem to have the highest overlap.

**Insight** – The maximum overlap has been witnessed in the brands which have high count of ad spots and advertise most in the common genres like Entertainment, Music, Religious, etc.

### Results as per Product Category and Ad spots

Additionally, we mapped the average value of overlap for all the brands considered across the ad spots and product categories to see in which category highest overlap happens. The results are tabulated below:

Ad Spot Category	Durables	FMCG	Services	Grand Total
<20K	79%	73%	77%	76%
20-35K	80%	80%	83%	81%
>35k	86%	85%	86%	86%
<b>Grand Total</b>	<b>80%</b>	<b>79%</b>	<b>82%</b>	<b>81%</b>

Table 5: Avg. of Overlap by Product Category and Ad spots

Ad Spot Category	Durables	FMCG	Services	Grand Total
<20K	83%	78%	79%	83%
20-35K	82%	84%	85%	85%
>35k	86%	87%	91%	91%
<b>Grand Total</b>	<b>86%</b>	<b>87%</b>	<b>91%</b>	<b>91%</b>

Table 6: Maximum Overlap by Product Category and Ad spots

**Insight** – Products in the Durables and Services sector with high ad spots are seen to have the highest overlap percentage.

**Insight** – Products in the services sector like e-commerce, cellular services, etc. seem to have witnessed the maximum overlap.



**Cost Savings across Product Categories and Genres**

We also calculated the cost savings from advertising on Zapr compared to other untargeted digital platforms across the categories of Ad spots, Genres and Product Categories.

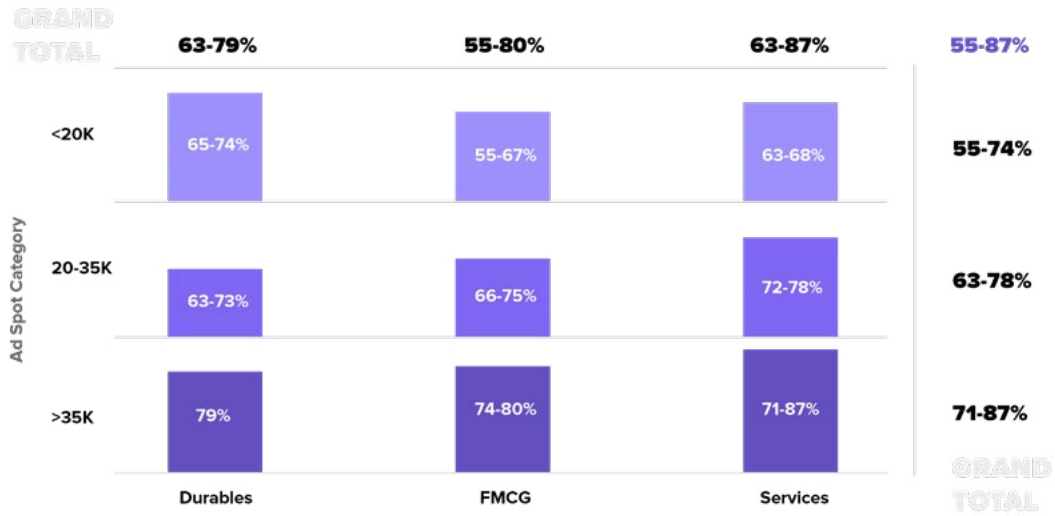


Table 7: Cost Savings on Zapr by Genre and Ad spots\*

**Insight –** Cost savings seem to increase with higher ad spots and are noticed to be higher, especially in cases of brands which advertise most in male-centric genres.

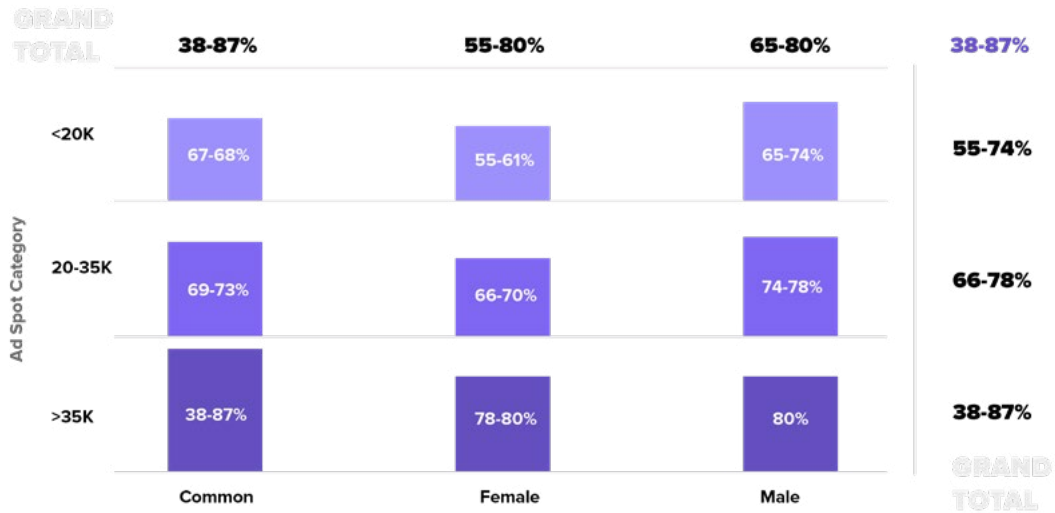


Table 8: Cost Savings on Zapr by Product Category and Ad spots\*

**Insight –** Cost savings seem to increase with higher ad spots and are noticed to be higher, especially in the case of brands falling under the services sector.

# 03 Conclusion

## LEARNINGS AND RECOMMENDATIONS

### 3.1 Key learnings and outcomes

#### 3.1.1 Cost Savings



As seen from our exercise and the concluding results, it is evident that the **cost savings of brands through Advertising on Zapr** compared to advertising on other untargeted digital platforms can go **upto 80-90%**.

#### 3.1.2 Learnings from the exercise



The key learnings from the exercise are as below –

1. Brands with **higher count of ad spots** have witnessed **higher overlap**.
2. Overall brands advertising in **male-centric genres with ad spots more than 35K** are seen to have **higher overlap compared to others**.
3. Products in **services sector** are also seen to have **higher overlap**.

#### 3.1.3 Recommendations for brands



Few actionable items which brands can garner from this experiment –

1. If the TV plan has higher count of ad spots and is spanning across male-centric genres then the overlap with an untargeted digital campaign will be high. To reduce the overlap, such brands should have a **targeted digital plan** which will effectively help them in reducing **advertising inefficiencies**.
2. For products in services sector, a TV plan with higher ad spots would again **necessitate a targeted TV plan to have lesser overlap**.

### 3.2 Problems in determining overlap

During the course of this exercise, few problems as mentioned below were encountered which need to be treated to arrive at a refined set of results -

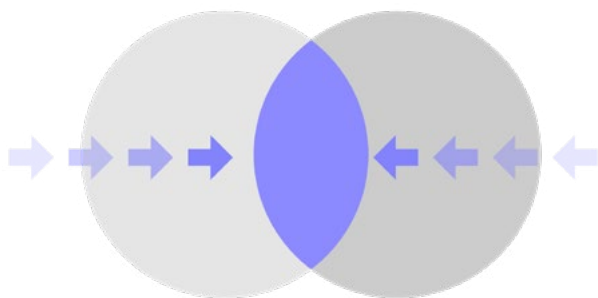
**1. Erroneous data** – Real time data has samples coming every 6 seconds; these samples might have issues in accuracy which we resolved by correcting the data by removing cases of false positives and taking corrected samples of data.

**2. User churn** – Users sending samples might not be active TV users as they might be sending a sample just once during the day and might not have watched TV for rest of the time; hence we took those audience who have been active all throughout our analysis period.

**3. Confidence level** – The mobile campaign exposed user base and the TVC exposed user base were made to run through a 95% confidence interval test at a Z score\* of 1.96 to prove the statistical significance of the two lists. The maximum margin of error was taken as 2% on the test results between the two lists to achieve higher accuracy of the overlapping exercise.

\*Z scores are measures of standard deviation from the mean in a normal distribution

### 3.3 How to reduce wastage due to overlap



Today, successfully reaching the right audience first requires finding your audience across the vast digital landscape and then delivering a large percentage of your impressions to this audience. Metrics such as on-target rate provide insight into how much of a campaign's media impressions were actually served to the right audience to ensure you aren't wasting your media budget.

To have a better on-target rate of reaching out to unique audience on digital, one should target only unexposed TV audience and thereby reduce costs. The objective should be to bring home users through precise targeting. This can be made possible through knowing the audience exposed to TV and filtering them out while targeting them on mobile.

Here Zapr's ACR technology is the go-to solution for helping brands identify the exact TV audience and filtering them out for digital campaigns, thereby helping brands to switch deterministically to digital.

Additionally, TV targeting criteria can also be refined to spread out the ad spots on genres and content which can help build masses in numbers but with lesser overlap. Zapr can build the case here too, by providing brands with user profiles mapped to different types of content on TV.

#### Some advantages of deterministic TV targeting are cited below -

1. Allows for more granular audience segmentation and targeting
2. Helps determine which audience can be uniquely reached out to on mobile by unique TV viewing habits
3. Fits in alignment with people-based approach that looks at engaging both TV and digital
4. Can help in building frequency as per TV exposure frequency
5. Saves a great amount of costs on non-targeted TV advertising

If you wish to conduct a TV plan optimization analysis with Zapr or further deep-dive into the analysis, reach out to us on [marketing@zapr.in](mailto:marketing@zapr.in). You can also sign up for our newsletters here to stay updated on Zapr's breakthrough campaigns, announcements and articles showcasing our industry expertise.

Funded by 21st Century Fox and multiple angel investors, Zapr is powered by breakthrough Audio Content Recognition technology and has worked with 250+ brands in every sector of the Indian consumer market, all major broadcasters and research companies. Zapr is one of the largest known media consumption repositories in the world and is the only platform that can reach unduplicated audiences across different mediums!

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Zapr is a fast-growing media-tech startup funded by 21st Century Fox, Flipkart, Saavn and is backed by several iconic angel investors with the vision of being the world's largest offline media consumption repository. Zapr bridges the gap between the offline and online worlds by enabling TV-to-Mobile audience engagement. Over the past few months, we've worked with all major players in the industry: 150+ brands from every nook and corner of the Indian consumer market, broadcasters, agencies, media buyers and research companies.

Zapr combines Data Analytics and Ad-technology to solve some of the most challenging problems faced by the Big Media industry globally. Zapr is the only company that measures user-level analytics of TV consumption in India and engages smartphone users via in-house Ad Technology using only Mobile as an advertising medium. To know more about the company, our offerings, careers and work culture, visit: [www.zapr.in](http://www.zapr.in) and [blog.zapr.in](http://blog.zapr.in).

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