

Bilkent CTIS 365 - Project Phase 2:

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Advertisement Investments Distribution of Turkey by Medium

About This Study

In this study, the quantitative data are organized and analyzed in order to interpret with visualization. Data visualization is important to discover the patterns in datasets and clearly demonstrate the trends [1]. To be able to see the “big picture” of the data from Turkey which is our study area, we have tried to present relationship by comparing it with another country (USA) in the same context.

In order to create a dataset for this study, we have used mostly the websites of Turkish Association of Advertising Agencies (TAAA) and IAB (Interactive Advertising Bureau). In the website of TAAA (rd.org.tr) there are Media and Advertising Investment Reports that is published twice per year for the first and second half of the year. We have cleaned and prepared the data to be used in this study.

1. Introduction

Developing technologies and wide spread use of internet have a great impact on both firms' marketing and advertising strategies and consumption habits of customers[2]. The interaction of users with the advertisement increases at the same level as the time spent on the internet [3]. Since internet covers communication and information tools of both past and future, it has a constantly changing, developing and growing structure. Past communication and

information tools correspond to books, magazines, newspaper, radio and television which can be also called as traditional. That is why users interact with digital advertisements much more than the traditional way of advertisement [4].

Figure 1

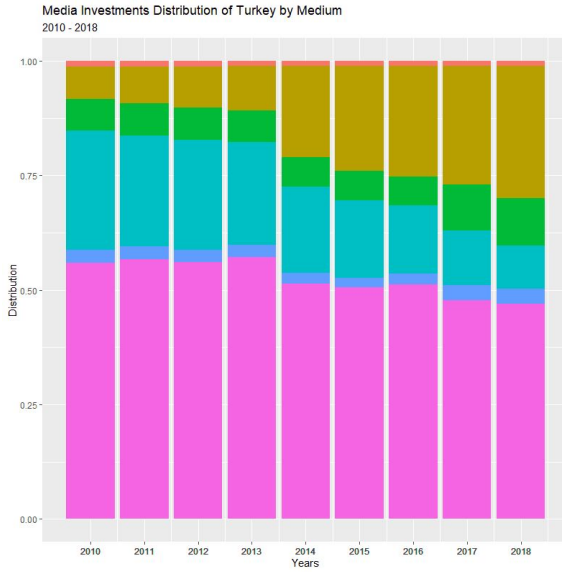


Figure 1: 2010 - 2018 Media Investments Distribution of Turkey by Medium According to Data from Reklamcılar Derneği [5]

This percent stacked barplot visualizes the difference of the media investments distribution by year. Each color represents a medium and the vertical axis shows the percentage they got out of the total investments.

It is clear that while press marketing is decreasing, digital marketing channels are increasing. Majority of the investments are going into TV advertisements, however it is also slowly decreasing. It can be said that from looking at the Figure 1, the reason behind this is the growth of digital marketing.

The minimum investments that the digital marketing got is at 2010 with 252 million TL. However it constantly grew and got 2.385 million TL of investments at 2018 [5]. This is an attention grabbing amount of growth.

Figure 2

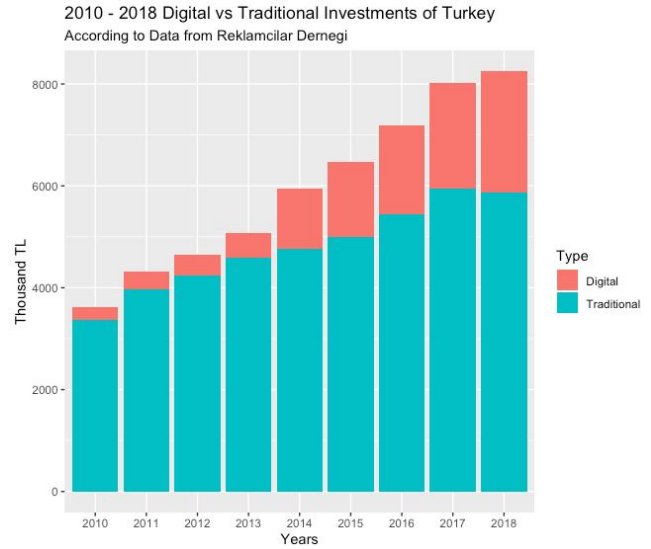


Figure 2: Media Investments in Turkey From 2010 to 2018 by Digital and Traditional Marketing Aspects [5]

This stacked barplot illustrates the amount of spending for digital and traditional advertising investments between the years 2010 and 2018. The vertical axis represents the money spent in thousand TL, and the horizontal axis represents years at 1 year intervals.

The light-red part of the bars represent the digital advertising spendings and the blue part of the bars represent the traditional advertising spendings. Traditional one contains TV, Press, Outdoor, Radio and Cinema.

It can be seen that the total money spent on advertising are increased year to year. Digital advertising investments are increased faster than traditional one [5]. While the difference between 2 aspects is extreme in 2010, digital seems to close the gap with traditional.

Figure 3

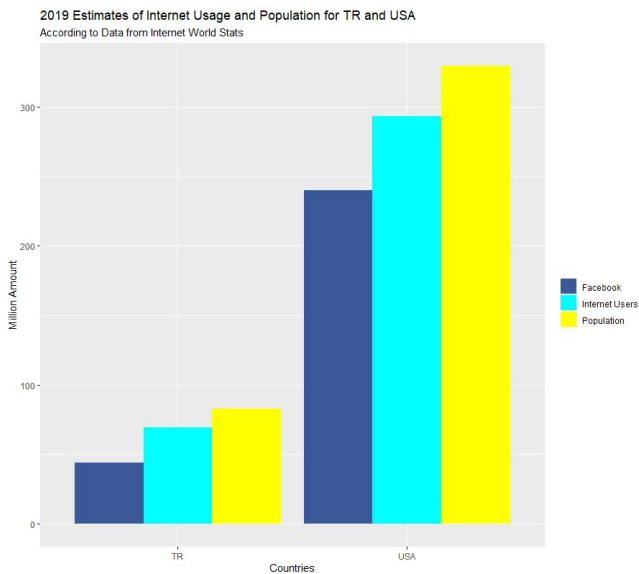


Figure 3: Turkey and USA Comparison of Population, Internet and Facebook Users by 2019 According to Data From Internet World Stats [6], [7]

This grouped bar chart compares Turkey and USA by internet penetration rate. The horizontal axis is the amount of people and the groups are by the countries. The colors represent Population, Internet and Facebook Users.

It can be seen that USA has more amount of people that they can do marketing to. Which means that they are more likely to have a bigger market and impact. However, there is not a noticeable difference internet penetration rate wise.

USA has 329 million and Turkey has 83 million population approximately. While USA has 89% internet penetration rate, Turkey has 83.3%. This means that Turkey should place importance on digital media as much as the USA does [6], [7].

Figure 4

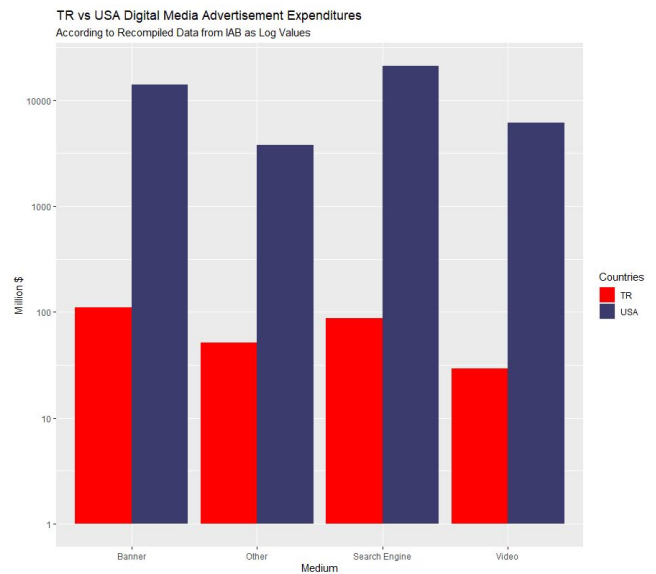


Figure 4: Digital Media Expenditure Comparison between Turkey and USA in the first half of 2018 as Logarithmic Scale [8], [9]

This grouped bar chart illustrates the amount of expenditure between the TR and USA. The vertical axis represents the money spent in Million \$, and the horizontal axis represents media consist of Banner, Search Engine, Video and Other.

The red part of the bars represent the Turkey and the blue part of the bars represent the USA. Since there is a huge gap between the 2 countries in terms of money spent on advertising, logarithmic scale is used in order to clarify the difference.

It can be seen that the total money spent by the USA on digital advertising are much more higher than TR. The distribution of 4 media are close when the country examined within itself. However when 2 countries are compared to each other, it is obvious that there is a huge gap between. As a result, with the help of logarithmic scale, the difference is tried to be demonstrated.

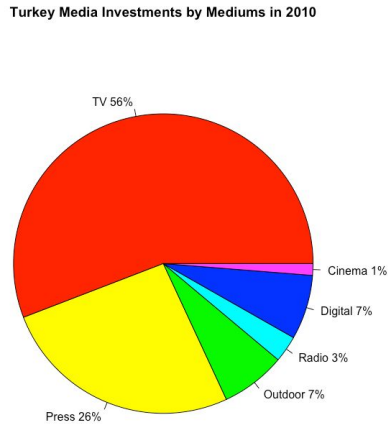
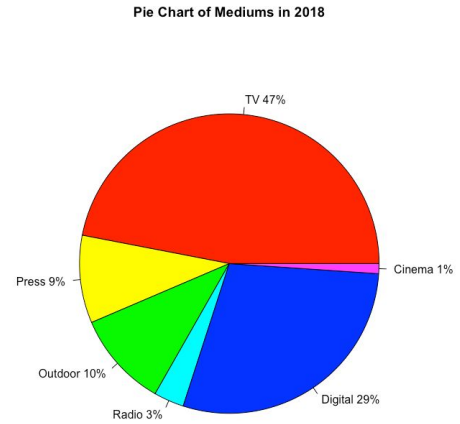
Figure 5**Figure 6**

Figure 5: Media Investments In Turkey by Medium in 2010 [5]

Figure 6: Media Investments In Turkey by Medium in 2018 [5]

These pie charts basically illustrates the media investments in Turkey by medium according to specific year which is 2010 and 2018. The colors red, pink, blue, cyan , green and yellow parts represent accordingly TV, Cinema, Digital, Radio, Outdoor and Press.

From these pie charts it is clear that the majority of media spendings for Turkey is allocated for TV. However, it is apparent that the money spent on TV are decreased in an interval in 8 years. Beside this, the media investments allocated for digital are dramatically increased.

Descriptive Statistics

MI of Turkey Million TL	Descriptive Statistics										
	NAD	Max	95%	75%	Average	25%	5%	Min	Std	Skew	Kur
Television	9	3.875,00	3.834,00	3.680,00	3.076,78	2.606,00	2.447,79	2.017,69	649,97	-0,15	-1,55
Press	9	1.139,00	1.118,57	1.114,00	1.029,90	963,00	942,12	781,00	115,68	-0,97	-0,40
Outdoor	9	852,00	805,00	449,00	460,09	328,10	306,35	252,00	217,15	0,92	-0,97
Radio	9	269,00	255,00	169,00	161,80	129,80	121,07	103,72	59,47	0,90	-1,01
Cinema	9	89,00	85,00	81,14	66,52	54,15	53,30	45,50	15,63	0,19	-1,74
Digital	9	2.385,00	2.077,00	1.736,00	1.152,96	421,10	344,10	251,84	810,64	0,20	-1,78
Average	9	1434,83	1362,43	1204,86	991,34	750,36	702,46	575,29	311,42	0,18	-1,24

Table 1: Descriptive Statistical Values of Media Investments in Turkey by Medium during 2010 - 2018 [5]

References

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