****

Shifting To Online Advertising From Traditional Media

Team 47 Final Report. Date: 8/13/2022

Members: Crystal Brinkley, Jimmy Wambua, AJ De Castro

Table of Contents

[INTRODUCTION 3](#_Toc111055876)

[DATA ANALYSIS & SOURCES 3](#_Toc111055877)

[DATA WRANGLING AND CLEANING 4](#_Toc111055878)

[TEAM TABLEAU DASHBOARD & DATAFOLIO 10](#_Toc111055879)

[CONCLUSION 12](#_Toc111055880)

[REFERENCES 13](#_Toc111055881)

# INTRODUCTION

**Business Problem**

Advertising spending online now exceeds television and other media. Due to much lower costs, this opens up marketing opportunities for businesses that did not have budgets for television and print media. Social media has the lowest cost per thousand impressions (CPM) at just $2.50 vs. $28 for broadcast TV. Traditionally, companies that market to consumers seeking improvements in their lives have advertised during news programming (think insurance, pharmaceuticals, health & wellness, etc.). Now consumers are as likely to prefer getting news online as television, and news websites & apps are also less expensive platforms for advertising. While those consumers also use social media, they do not tend to use those platforms for obtaining news, but other demographics can be used for targeted advertising.

**Business Impact**

The shift to online advertising has allowed companies to engage with their customers in new ways. They have opportunities to fine-tune their brand and garner a following across multiple platforms. According to Radd Interactive “1 in 4 U.S. shoppers now claim to prefer being contacted by brands via social media, making platforms like Facebook, Instagram, and LinkedIn crucial for inbound marketing growth.”  Surprisingly, Facebook ads leads the way with the best ROI for advertisers.

# DATA ANALYSIS & SOURCES

#### **American Trends Panel Wave 73 and American Trends Panel Wave 90**

#### Brief description: These datasets are surveys of Americans in September 2020 and May 2021 regarding their preferences for specific news sources (i.e., CNN vs Facebook vs TikTok, rather than a broader TV vs Social Media), as well as demographics such as age, place of residence, and internet usage.

Source: Pew Research Center

Direct link: <https://www.pewresearch.org/journalism/dataset/american-trends-panel-wave-73/>

Source: Pew Research Center

Direct link: <https://www.pewresearch.org/journalism/dataset/american-trends-panel-wave-90/>

**Share of US Ad Spend**

Brief description: Small dataset with total number of ad spending across traditional and online media, from 2012 through (projected) 2024.

Source: Data.World

Direct Link: <https://data.world/makeovermonday/2020w46>

**Best Times to post on Social Media**

Brief description: Article that describes the best times and days that most people will be on Social Media in 2022

Source: HubSpot

Direct Link: <https://blog.hubspot.com/marketing/best-times-post-pin-tweet-social-media-infographic>

**What Social Media do Millennials Care The Most**

Brief Description: Small dataset with the total number of millennials and their preferred social media preference that they open when asked which social media do they click first when there are multiple notifications such as LinkedIn, Snapchat, Instagram, or Facebook

Source: Breitbart

Direct Link: <https://data.world/ahalps/which-social-media-millennials-care-about-most> or <https://www.breitbart.com/tech/2017/03/17/report-snapchat-is-most-important-social-network-among-millennials/>

# DATA WRANGLING AND CLEANING

Our team came across with raw data that had survey responses with numerical values, and we had to convert those numerical values into their corresponding key pair values and those converted values can be found in the table below.

**News Use Across Social Media Platforms in 2020**<https://www.pewresearch.org/journalism/dataset/american-trends-panel-wave-73/>

This dataset is a survey of over 9000 Americans in September 2020 regarding their preferences for specific news sources.

| **FIELD** | **TYPE** | **DESCRIPTION** |
| --- | --- | --- |
| **F\_CREGION** | string | Census region of respondent |
| **F\_AGECAT** | string | Age category of respondent |
| **F\_GENDER** | string | Gender of respondent |
| **F\_EDUCCAT** | string | Education category of respondent |
| **F\_INC\_SDT1** | string | Income category of respondent |
| **F\_INTFREQ** | string | Category of frequency of internet use |
| **SNSSKEP\_W73** | string | Expectation of accuracy in news found on social media |
| **SNSINFORM\_W73** | string | Does social media help you understand current events? |
| **DEVICE\_TYPE\_W73** | String | Type of device used to access the survey link by respondent |
| **NEWSPLAT\_a\_W73** | String | If people get their news on TV |
| **NEWSPLAT\_b\_W73** | String | If people get their news on the Radio |
| **NEWSPLAT\_DIG\_a\_W73** | String | How often people get their news on news website using phones/computers/tablets |
| **NEWSPLAT\_DIG\_b\_W73** | String | How often people get their news on social media such as Facebook, Twitter, Instagram using phones/computers/tablets |
| **NEWSPLAT\_DIG\_c\_W73.** | String | How often people use Google or other search engines to get their news from using a phone/computer/tablet |
| **SNSINFORM\_W73.** | String | How news on social media influenced the surveyee |
| **GROUP\_TRUST\_a\_W57** | String | How much do people trust the information they get from National new organizations |
| **PLATFORM\_PREFER\_W73** | String | Scores 8 different News sources that respondents prefer |
| **WEB1\_a\_W73** | Integer | Scale of Yes-1 or No- 2 on whether respondents use certain social media platform: |
| **WEB1\_a\_W73** | String | Yes-1 or No-2 on whether respondents use Twitter |
| **WEB1\_b\_W73** | String | Yes-1 or No-2 on whether respondents use Instagram |
| **WEB1\_c\_W73** | String | Yes-1 or No-2 on whether respondents use Facebook |
| **WEB1\_d\_W73** | String | Yes-1 or No-2 response on whether respondents use Snapchat |
| **WEB1\_e\_W73** | String | Yes-1 or No-2 response on whether respondents use YouTube |
| **WEB1\_f\_W73** | String | Yes-1 or No-2 response on whether respondents use LinkedIn |
| **WEB1\_g\_W73** | String | Yes-1 or No-2 response on whether respondents use Reddit |
| **WEB1\_h\_W73** | String | Yes-1 or No-2 response on whether respondents use Tumblr |
| **WEB1\_i\_W73** | String | Yes-1 or No-2 response on whether respondents use WhatsApp |
| **WEB1\_j\_W73** | String | Yes-1 or No-2 response on whether respondents use TikTok |
| **WEB1\_k\_W73** | String | Yes-1 or No-2 response on whether respondents use Twitch |
| **SOCIALNEWS\_a\_W73** | Integer | Scale of Yes-1 or No-2 on whether respondents REGULARLY get news or news headlines on any of the following social media sites or apps |
| **SOCIALNEWS\_a\_W73** | String | Yes-1 or No-2 on whether respondents REGULARLY get news or news headlines on Twitter |
| **SOCIALNEWS\_b\_W73** | String | Yes-1 or No-2 on whether respondents REGULARLY get news or news headlines on Instagram |
| **SOCIALNEWS\_c\_W73** | String | Yes-1 or No-2 on whether respondents REGULARLY get news or news headlines on Facebook |
| **SOCIALNEWS\_d\_W73** | String | Yes-1 or No-2 on whether respondents REGULARLY get news or news headlines on Snapchat |
| **SOCIALNEWS\_e\_W73** | String | Yes-1 or No-2 on whether respondents REGULARLY get news or news headlines on YouTube |
| **SOCIALNEWS\_f\_W73** | String | Yes-1 or No-2 on whether respondents REGULARLY get news or news headlines on LinkedIn |
| **SOCIALNEWS\_g\_W73** | String | Yes-1 or No-2 on whether respondents REGULARLY get news or news headlines on Reddit |
| **SOCIALNEWS\_h\_W73** | String | Yes-1 or No-2 on whether respondents REGULARLY get news or news headlines on Tumblr |
| **SOCIALNEWS\_i\_W73** | String | Yes-1 or No-2 on whether respondents REGULARLY get news or news headlines on WhatsApp |
| **SOCIALNEWS\_j\_W73** | String | Yes-1 or No-2 on whether respondents REGULARLY get news or news headlines on TikTok |
| **SOCIALNEWS\_k\_W73** | String | Yes-1 or No-2 on whether respondents REGULARLY get news or news headlines on Twitch |

**Share of US Ad Spend**

<https://data.world/makeovermonday/2020w46>

Small dataset with total number of ad spending across traditional and online media, from 2012 through (projected) 2024.

| **FIELD** | **TYPE** | **DESCRIPTION** |
| --- | --- | --- |
| **Total TV** | Integer | Total amount spent on TV ads 2012-2024(projected) |
| **National TV** | Integer | Amount spent on national TV ads 2012-2024(projected) |
| **Local TV** | Integer | Amount spent on local TV ads 2012-2024(projected) |
| **Total Radio** | Integer | Amount spent on radio ads2012-2024(projected) |
| **Total Newspapers** | Integer | Amount spent on newspaper ads 2012-2024(projected) |
| **Total Magazine** | Integer | Amount spent on magazine ads 2012-2024(projected) |
| **Out-of-Home** | Integer | Amount spent on ads seen outside of the home 2012-2024(projected) |
| **Direct Mail** | Integer | Amount spent on direct mail ads 2012-2024(projected) |
| **Directories** | Integer | Amount spent on directory ads 2012-2024(projected) |
| **Pure-Play internet** | Integer | Total amount spent on internet ads 2012-2024(projected) |
| **Search** | Integer | Amount spent on internet ads within searches 2012-2024(projected) |
| **Ex-search** | Integer | Amount spent on internet ads other than searches 2012-2024(projected) |
| **Media total** | Integer | Sum of all types of ads 2012-2024(projected) |

**Best Times to post on Social Media**

<https://blog.hubspot.com/marketing/best-times-post-pin-tweet-social-media-infographic>

Article that describes the best times and days that most people will be on Social Media platforms in 2022.

| **FIELD** | **TYPE** | **DESCRIPTION** |
| --- | --- | --- |
| **Instagram** | integer | Best times to post on Instagram in 3-hour increments |
| **Facebook** | integer | Best times to post on Facebook in 3-hour increments |
| **Twitter** | integer | Best times to post on Twitter in 3-hour increments |
| **LinkedIn** | integer | Best times to post on LinkedIn in 3-hour increments |
| **Pinterest** | integer | Best times to post on Pinterest in 3-hour increments |
| **YouTube** | integer | Best times to post on YouTube in 3-hour increments |
| **TikTok** | integer | Best times to post on TikTok in 3-hour increments |

# TEAM TABLEAU DASHBOARD & DATAFOLIO

<https://public.tableau.com/app/profile/crystal.brinkley/viz/TheShifttoOnlineAdvertisingfromTraditionalMedia-Copy/Dashboard4>

**![Graphical user interface

Description automatically generated]()**

# CONCLUSION

In conclusion, our team started this project with the mindset of finding the best ways on how insurance companies can transition their advertising from news/traditional to digital online advertising but we went broader with the analysis by expanding our project to include businesses and online ecommerce stores in general due to a limited dataset and since we are in the digital age, 2022 is predicted to become the first year in which online advertising expenditures will exceed those of TV advertising expenditures and most consumers are now found online.

Based on insights from our dashboard analysis and what the data tell us, we determined that Young adults are almost constantly online, Majority of users of all age groups are on Facebook, Instagram and YouTube. The data also tells us where consumers prefer to get their news from, whether on Facebook or Instagram, etc and Finally, despite the growing popularity of other social media apps, Facebook is still king with the best ROI for advertising. Thus, making it a better choice for any business to promote their brand and get converting customers for their company and increase revenue.

# REFERENCES

Ariens, C. (2018, March 9). *Here are the biggest advertisers on Fox News, CNN and MSNBC*. TVNewser. Retrieved August 10, 2022, from https://www.adweek.com/tvnewser/here-are-the-biggest-advertisers-on-fox-news-cnn-and-msnbc/359057/

Velocify. (2018, June 29). *Latest Insurance Study reveals strong link between marketing, technology investment, and revenue growth*. Latest Insurance Study Reveals Strong Link Between Marketing, Technology Investment, and Revenue Growth. Retrieved August 10, 2022, from https://www.prnewswire.com/news-releases/latest-insurance-study-reveals-strong-link-between-marketing-technology-investment-and-revenue-growth-300266424.html

Standberry, S. (2020, August 5). *Traditional media vs. social media advertising - cost comparison*. LYFE Marketing. Retrieved August 10, 2022, from https://www.lyfemarketing.com/traditional-media-versus-social-media/#:~:text=Social%20media%20is%20cheaper%20than,into%20your%20social%20media%20campaign

Radd Interactive. (2020, July 20). *Which type of online marketing delivers the highest roi?* Radd Interactive. Retrieved August 10, 2022, from https://raddinteractive.com/which-type-of-online-marketing-delivers-the-highest-roi/

Cox, L. K. (2022, May 9). *The best time to post on social media in 2022 [data from 300+ marketers]*. Blog HubSpot. Retrieved August 10, 2022, from https://blog.hubspot.com/marketing/best-times-post-pin-tweet-social-media-infographic

*2020/W46: Majority of advertising dollars now spent online - dataset by makeovermonday*. data.world. (2020, November 15). Retrieved August 10, 2022, from https://data.world/makeovermonday/2020w46

Pew Research Center. (2021, January 12). *American trends panel wave 73 archives*. Pew Research Center's Journalism Project. Retrieved August 10, 2022, from https://www.pewresearch.org/journalism/dataset/american-trends-panel-wave-73/

*Which Social Media Millennials Care About most - dataset by ahalps*. data.world. (2017, May 19). Retrieved August 10, 2022, from https://data.world/ahalps/which-social-media-millennials-care-about-most