

Google Store Analytics

IST 719 Christina Ling, Ruiming Liu, Corey Lucero, Brian Murphy & Kelvin Oliver Jr.

Web analytics can provide an online retailer with very valuable information about its customers such as their purchase patterns and preferences. This poster explores the website analytics of the Google Merchandise Store to find patterns in website visits that lead to increased revenue.

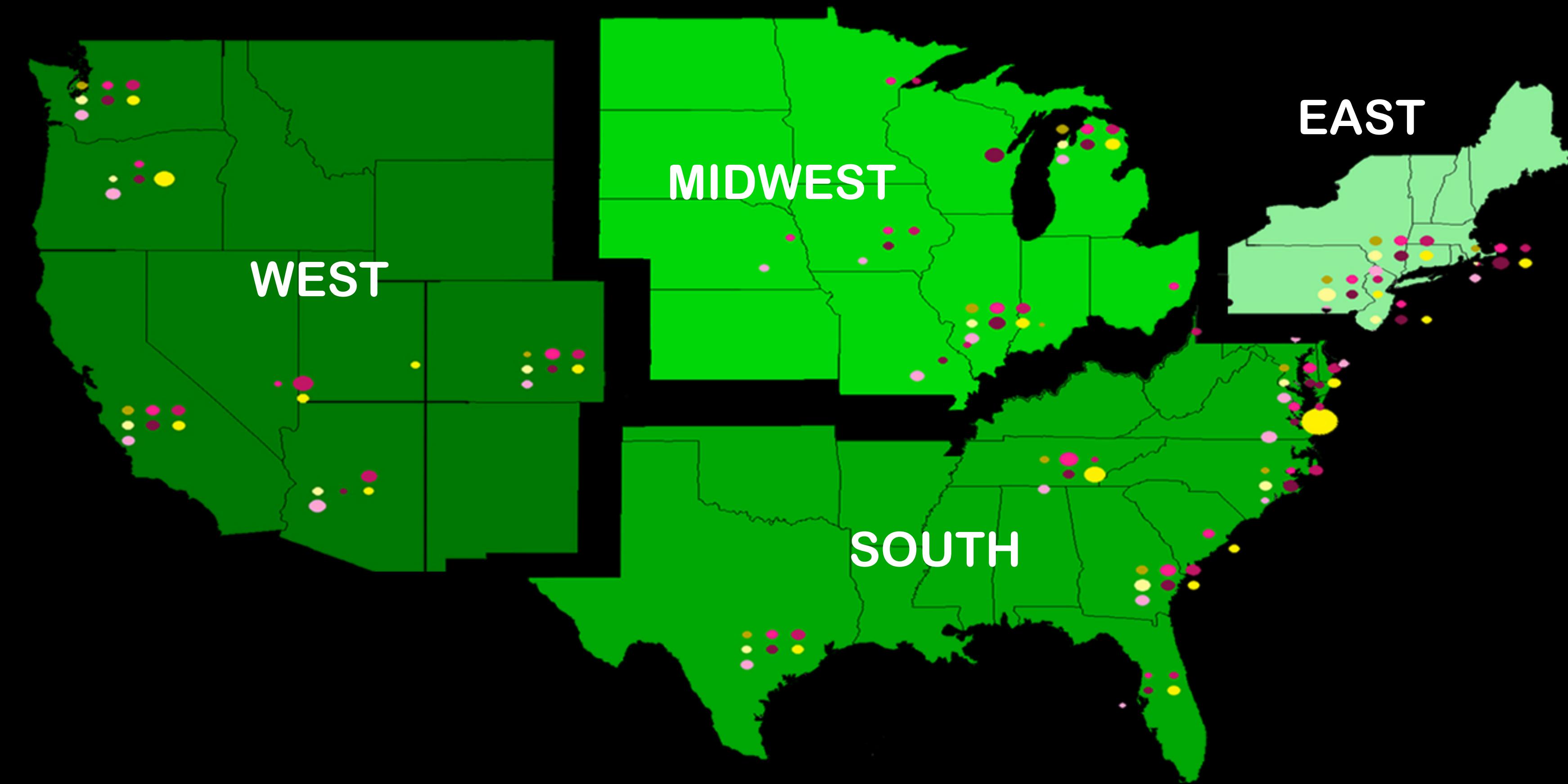
Week Day

Sunday	Monday
Tuesday	Wednesday
Thursday	Friday
Saturday	

Transactions Revenue

● 500 ● 1000 ● 1500

Sales Revenue by State and Day of the Week



WEST Conversion Rate by Device

Desktop	3.92%
Mobile	0.49%
Tablet	1.29%

SOUTH Conversion Rate by Device

Desktop	4.54%
Mobile	0.54%

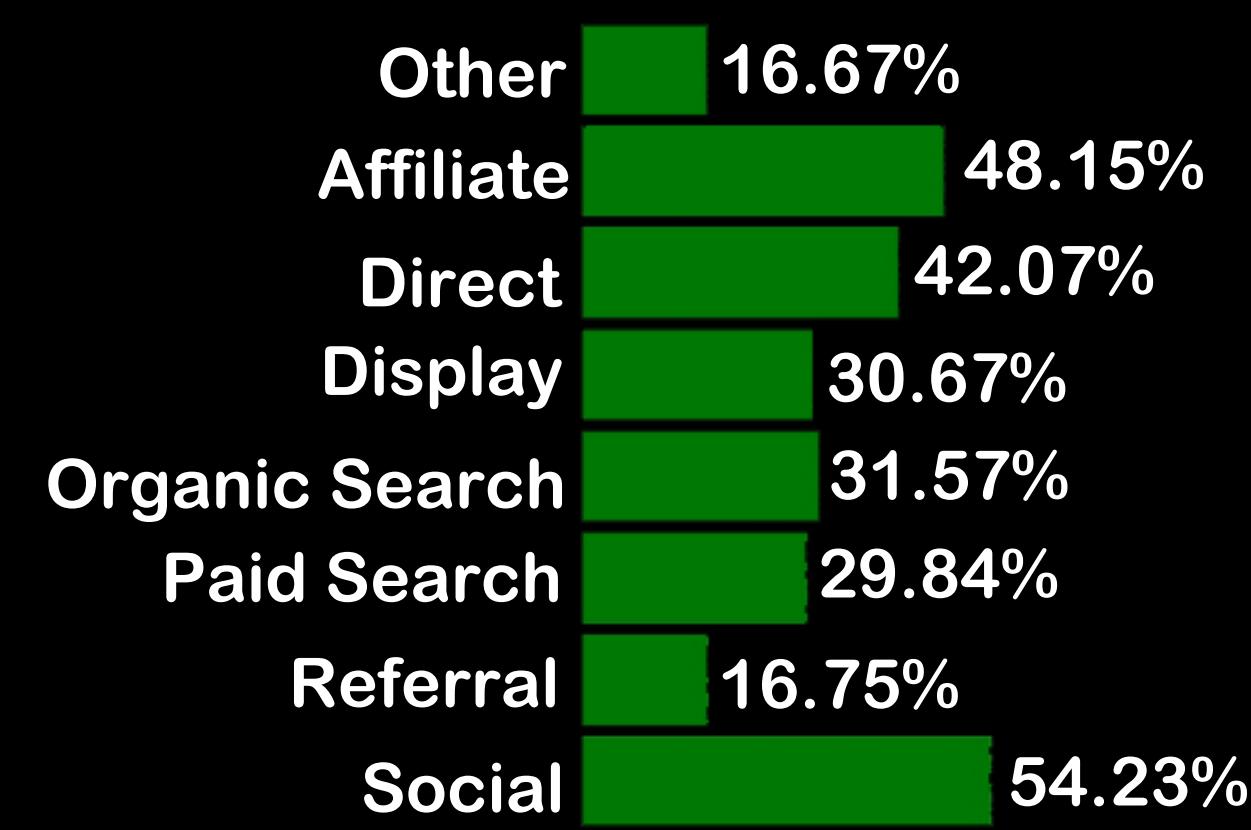
MIDWEST Conversion Rate by Device

Desktop	7.31%
Mobile	1.41%

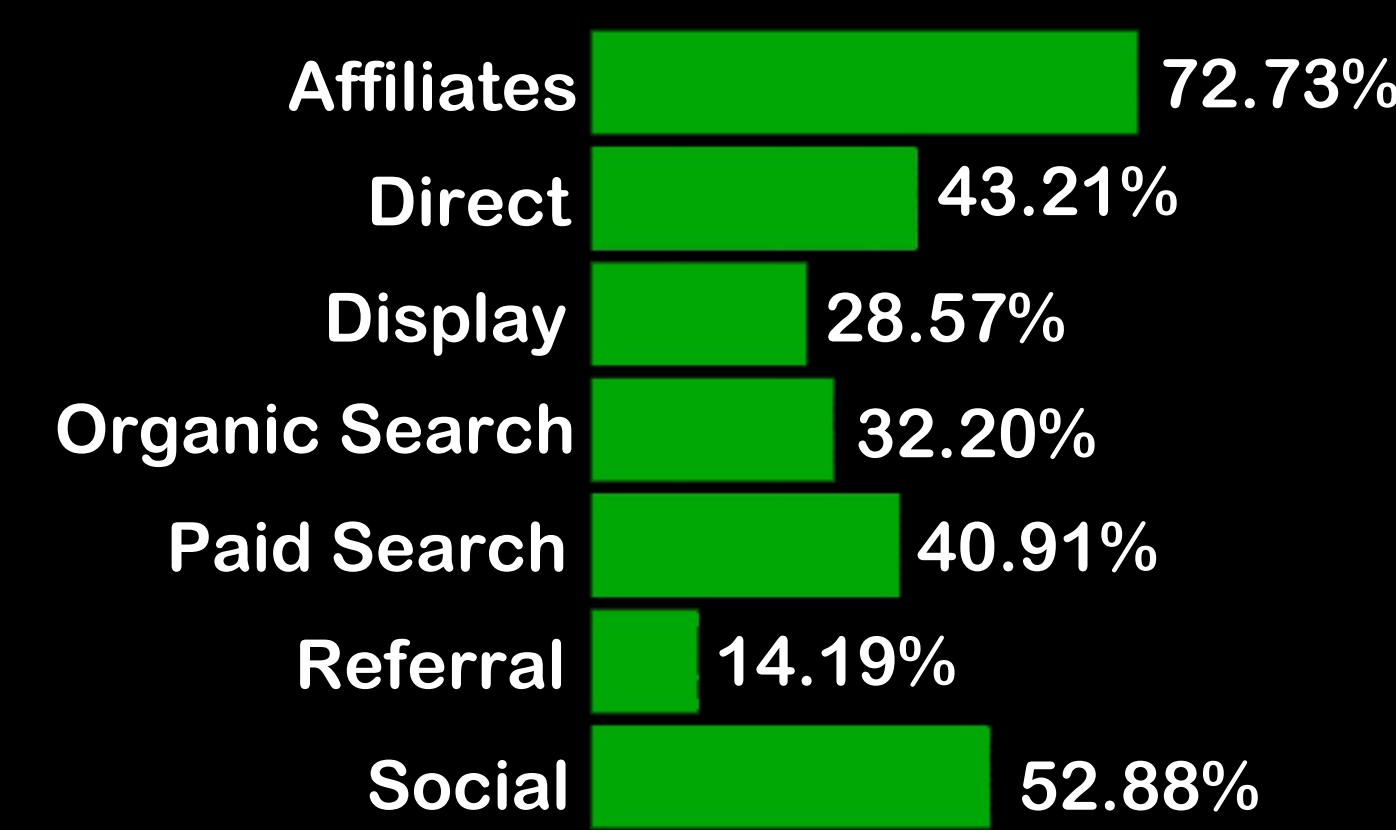
EAST Conversion Rate by Device

Desktop	6.21%
Mobile	0.80%

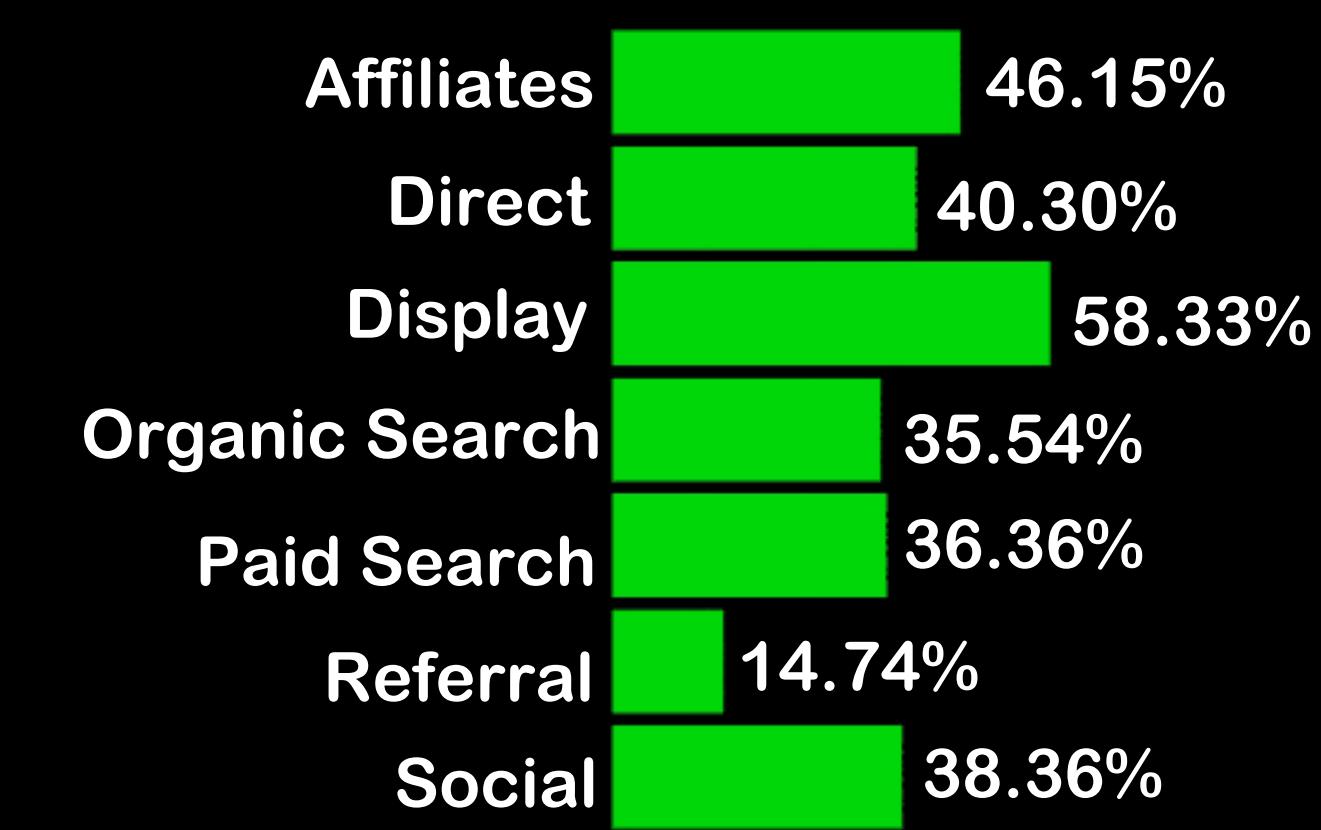
Bounce Rate by Channel



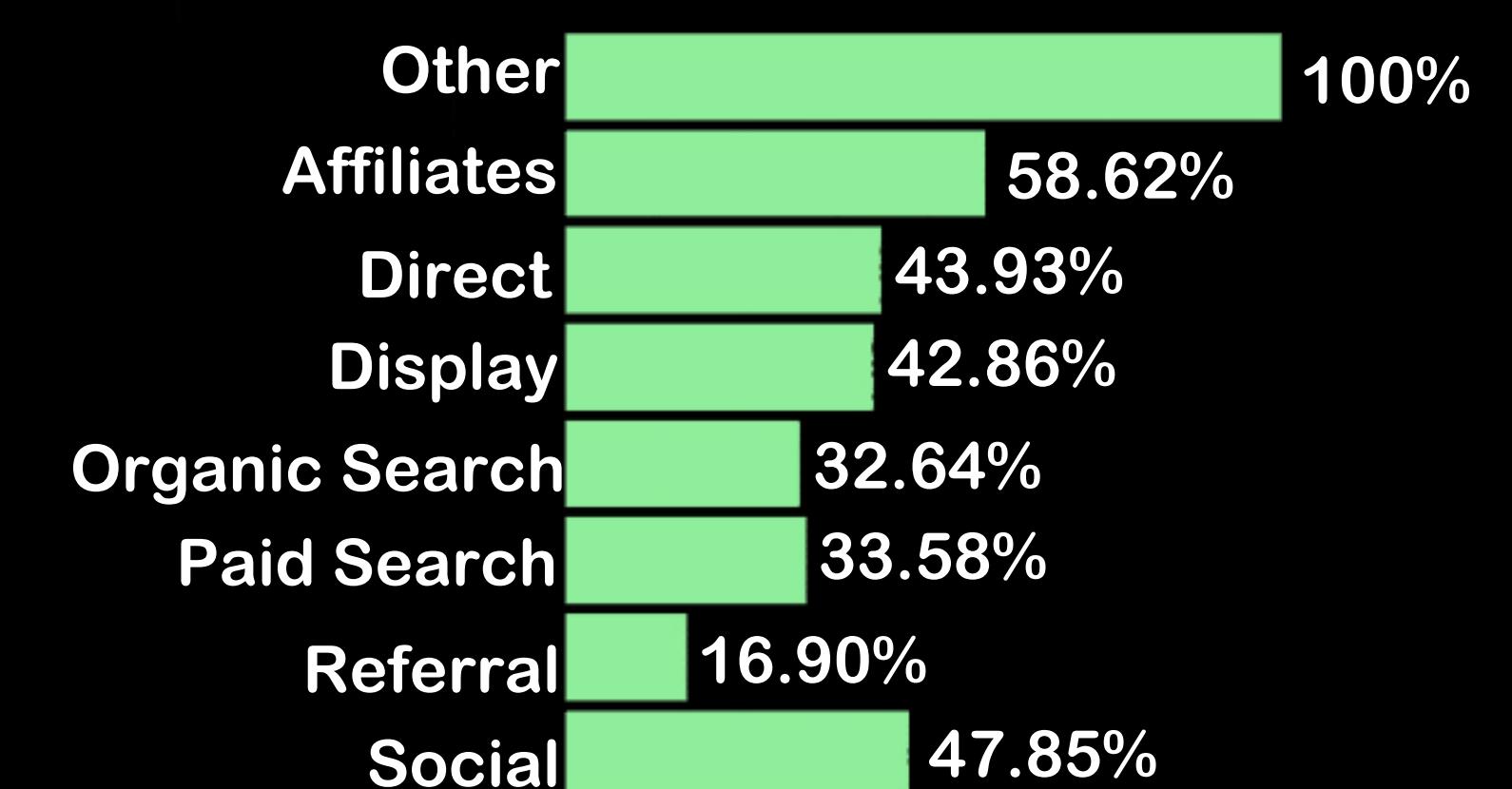
Bounce Rate by Channel



Bounce Rate by Channel

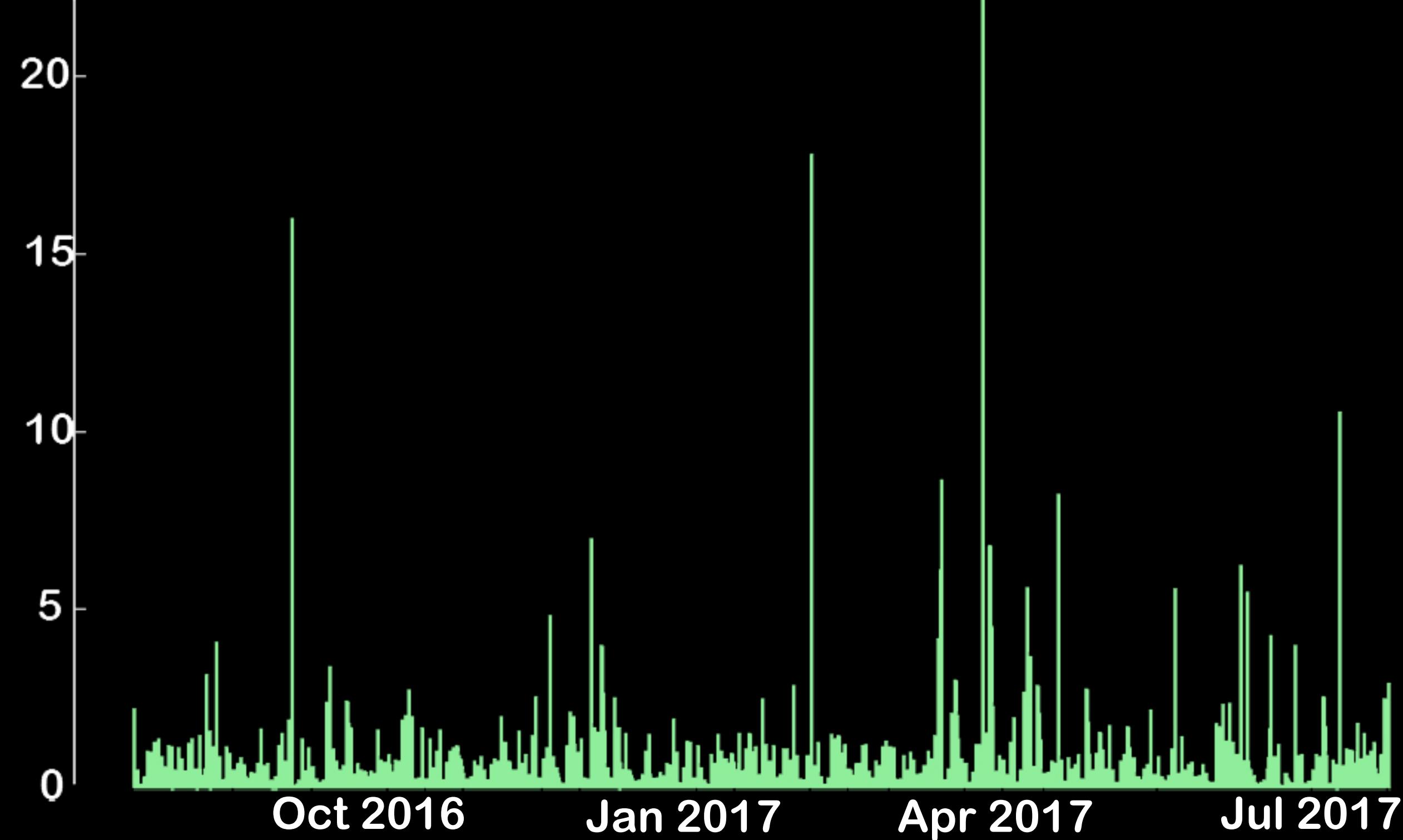


Bounce Rate by Channel

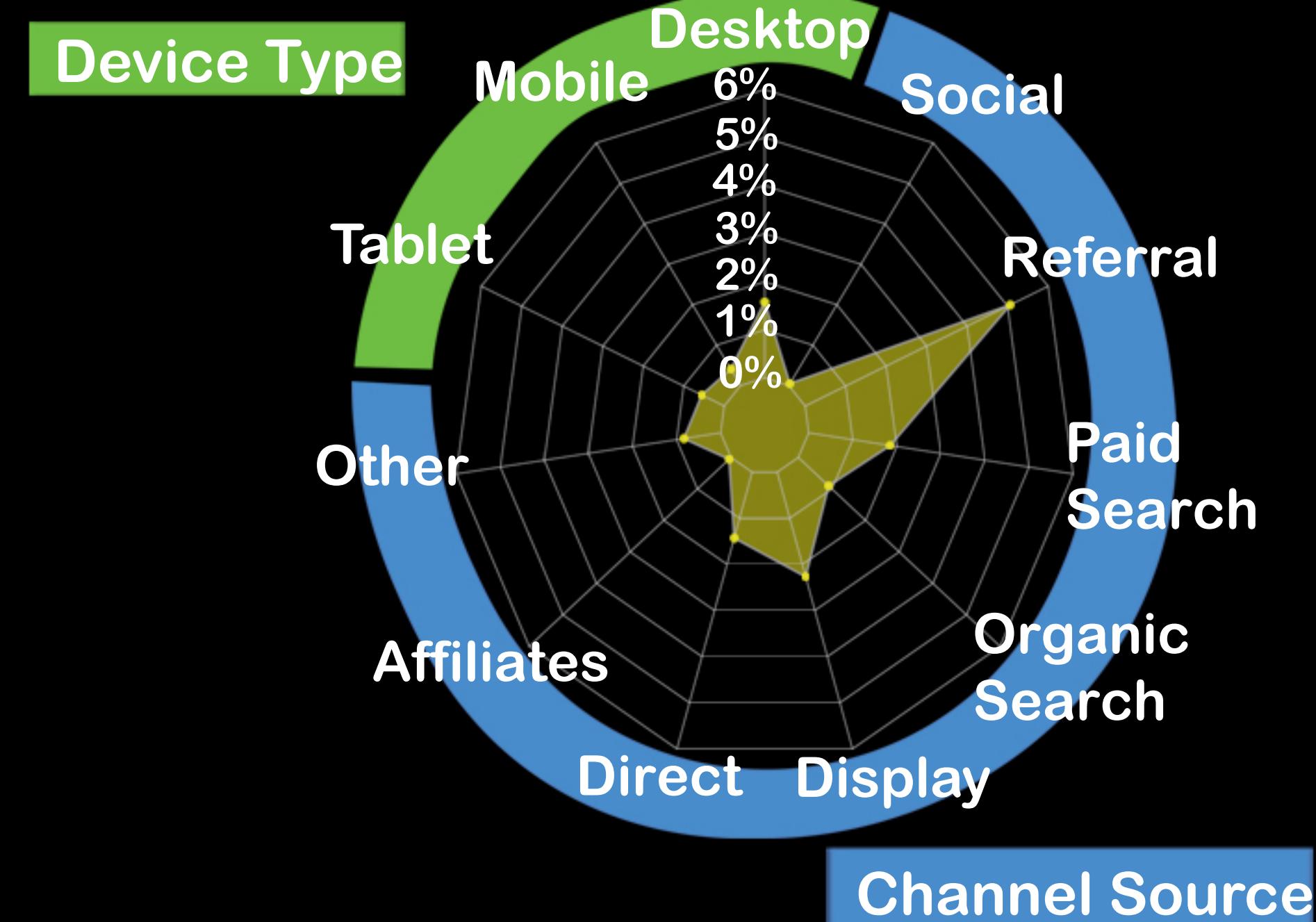


Daily Revenue

Revenue (thousands)



Conversion Rate by Devices & Channel Source



Questions

- Does the date and location influence their likelihood to purchase? How?
- Does the way a customer reaches the website or the customer device impact their likelihood to purchase? How?
- What are recommendations to help improve overall revenue for the Gstore?

Audience

- Management - Knowing what is performing well and where helps them make overall organization decisions
- Marketing Personnel - Knowing which channels are performing best allows them to optimize marketing efforts through digital channels and geographic targeting.
- Operations Personnel - Understanding seasonal trends helps operations know what they should have in stock when.

Data Description

The dataset consists of 903,653 rows, each representing one instance in which an online user visited the Gstore website from August 2016 to August 2017. The dataset required substantial cleaning to extract the JSON fields. Once the fields were flattened, there the dataset consisted of 59 total columns consisting of user information. Of the 903,653 Gstore web visits, 15,515 resulted in purchases. These transactions were subset for additional analysis and visualizations.

Sources

- Kaggle - Google Analytics Customer Revenue Prediction
- Packages: data.table, jsonlite, dplyr, tidyr, magrittr, lubridate purr, ggplot2, gridExtra, countrycode, ggExtra, ggmap, ggalt, maps, ggpublisher, tidyverse, plyr, fmsb
- Layout & Design Template: Sample Final Projects Submissions Tzuchuan & Yong
- Color: YouTube - Understanding Color by Blender Guru