

DATAZINE

A hand is shown from the bottom, holding a glowing green sphere of digital data. The background is a dark space filled with falling green characters and symbols, reminiscent of the Matrix code rain effect.

VOL. 1.1

DATA VISUALISATION - MARKETING ANALYTICS

CHEATSHEET - CROSSWORD

MARKETING ANALYTICS

WHAT IS MARKETING ANALYTICS?

The techniques and tools that enable marketers to assess the performance of their marketing operations are referred to as marketing analytics. This is performed through the use of performance metrics (e.g., blogging versus social media versus channel communications). Important business measures including ROI, marketing attribution, and overall marketing performance are used in marketing analytics. In other words, it shows you how effective your marketing campaigns are.

PILLARS OF MARKETING ANALYTICS

Business Intelligence

- KPI Reports/ Dashboards
- Digital Analytics
- Product/Channel Reports
- Campaign Performance Analysis

Descriptive Analytics

- Customer Profiling
- Segmentation & Clustering
- Customer Journey Analysis

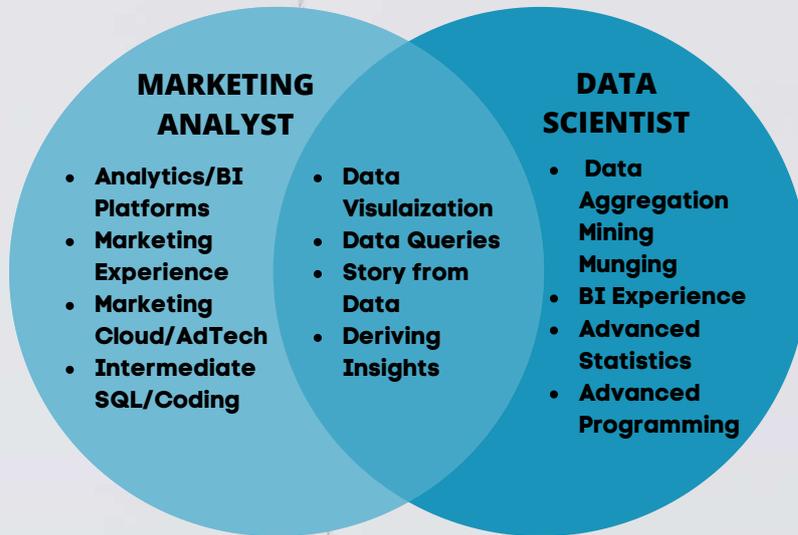
Predictive Modeling

- Propensity Models
- Persona Models
- Churn Models
- Demand Forecasting
- Customer Value Models

Optimization

- Channel Optimization
- Marketing Spending Analysis
- Marketing Mix Modeling
- Attribution
- Pricing Models

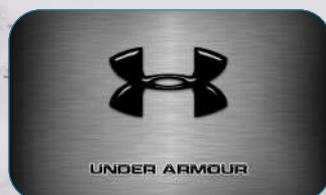
MARKETING ANALYST VS DATA SCIENTIST



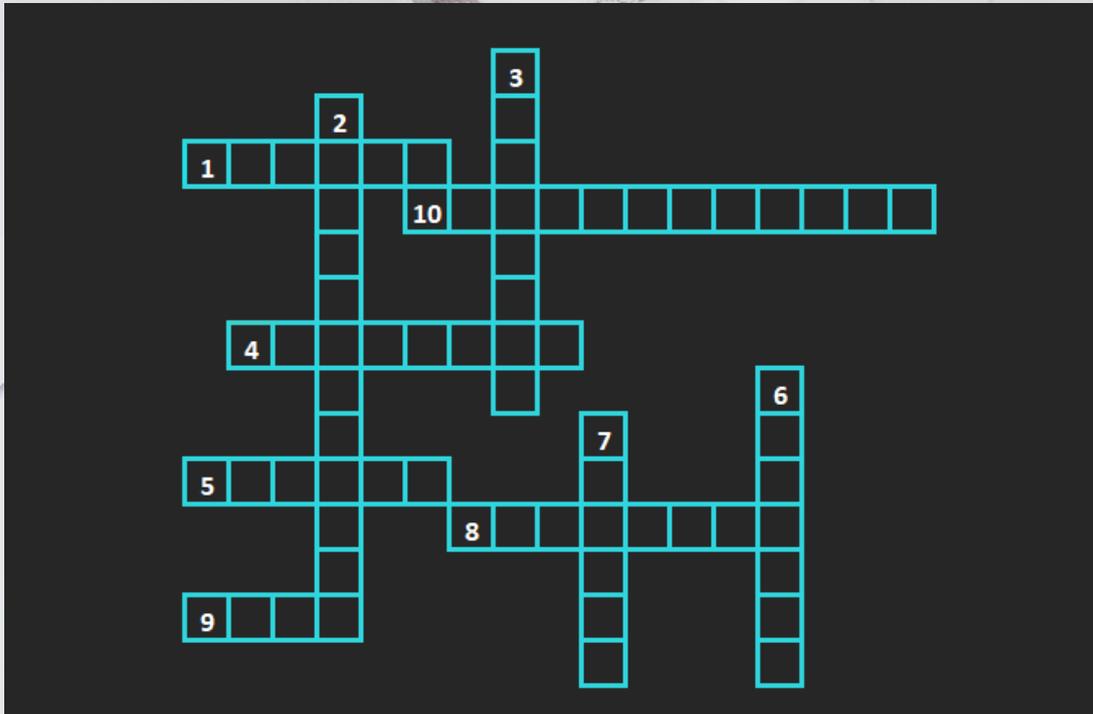
TOOLS USED IN MARKETING ANALYTICS

- Google Analytics
- Mix Panel
- The AdWords Performance Grader
- Heap Analytics
- Cype
- Klipfolio
- Optimizely
- SEMrush
- Buzz Sumo
- Crowd booster

COMPANIES USING MARKETING ANALYTICS



MINI CROSSWORD



Note:

1. Use the Excel file attached with the mail to solve the crossword.
2. Enter your answers besides or below the clue number without erasing it.

Across

1. A function or a method that keeps executing as long as true.
4. Sequence of Python states that have been crafted to do something.
5. This function terminates a loop statement and transfers execution to the statement immediately following the loop.
8. The name of the variable that repeatedly increments a variable.
9. _____ loop executes a sequence of statements multiple times and abbreviates the code that manages the loop variable.
10. A property of a program that can run on more than one kind of computer.

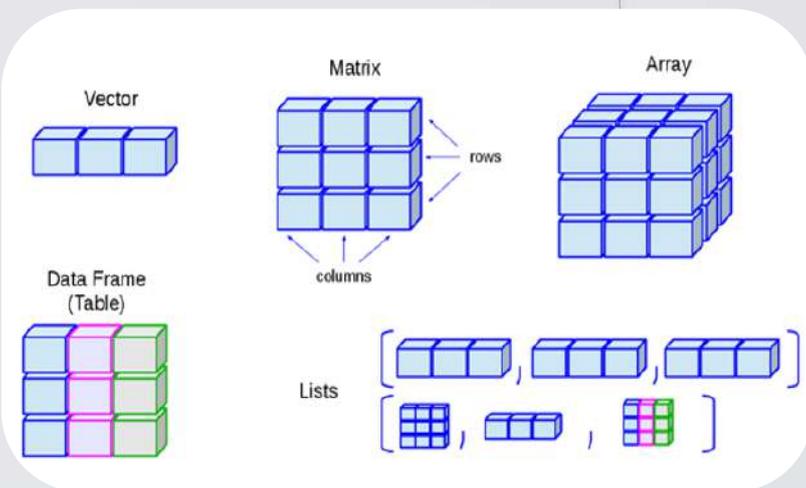
Down

2. Reads the source code of the program as written by programmers.
3. A datatype which has only two possible values.
6. A function used to add elements inside a list
7. Another sequence data type that is similar to the list. It has a number of values separated by commas.

CHEATSHEET

R DATA STRUCTURES

- **Vector** : The very basic data types are the R-objects called vectors which hold elements of different classes. When we want to create vector with more than one element, we should use `c()` function which means to combine the elements into a vector.
- **List** : A list is an R-object which can contain many different types of elements inside it like vectors, functions and even another list inside it.
- **Matrices** : A matrix is a two-dimensional rectangular data set. It can be created using a vector input to the matrix function.
- **Array** : While matrices are confined to two dimensions, arrays can be of any number of dimensions. The array function takes a `dim` attribute which creates the required number of dimension.
- **Data Frames** : Data frames are tabular data objects. Unlike a matrix in data frame each column can contain different modes of data. The first column can be numeric while the second column can be character and third column can be logical. It is a list of vectors of equal length.



SCATTER PLOT USING GG PLOT

```
# install.packages("ggplot2")
# load package and data
options(scipen=999) # turn-off scientific notation like 1e+48
library(ggplot2)
theme_set(theme_bw()) # pre-set the bw theme.
data("midwest", package = "ggplot2")
# midwest <- read.csv("http://goo.gl/G1K41K") # bkup data source

# Scatterplot
gg <- ggplot(midwest, aes(x=area, y=poptotal)) +
  geom_point(aes(col=state, size=popdensity)) +
  geom_smooth(method="loess", se=F) +
  xlim(c(0, 0.1)) +
  ylim(c(0, 500000)) +
  labs(subtitle="Area Vs Population",
       y="Population",
       x="Area",
       title="Scatterplot",
       caption = "Source: midwest")

plot(gg)
```

