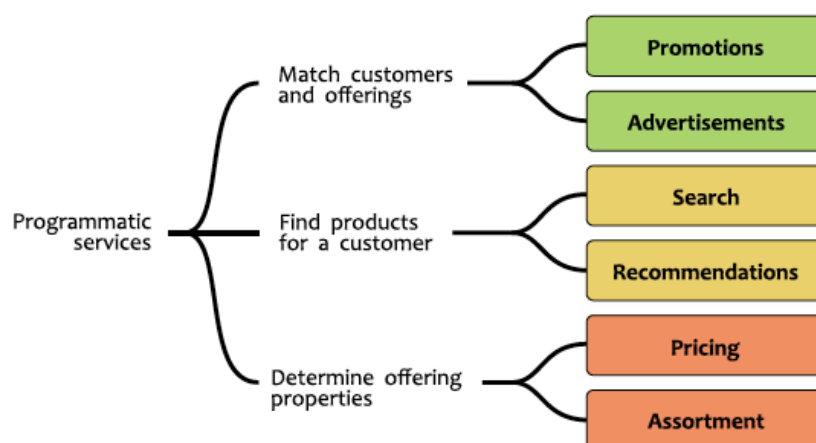# Algorithmic Marketing
Fall Semester 2021

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Assignment 1 Part 1 (Due Oct 16)

In this assignment, you are given a company to evaluate and understand how programmatic services are integrated into applications.. As we discussed, there are multiple elements to be considered when you evaluate various algorithmic marketing concepts. We looked at various programmatic services incorporated into a company's website. This part to help you understand how different companies are leveraging marketing services. This isn't one of the case studies that will be graded but will count towards class participation

The goal of this assignment is to evaluate a company (see below for allocations and answer the following questions:

1. What is the product?
2. How are they selling it?
3. How is it priced?
4. What promotions are they using?
5. What algorithmic marketing services are they using? (See above picture)

6. What datasets do you think you will need to build these algorithmic services?
    a. How frequently will data change?
    b. How would you store these datasets?
7. Review the jobs/career site and search for Data/ Data science positions (https://www.stitchfix.com/careers/jobs#below-the-fold). After review of the site, what technologies and programmatic services is the company using?
8. How is the company tracking visitors? (Review the site's webpage to check for google analytics etc.)

1. L'Oréal $27.2 billion

2. Unilever $21.3 billion

3. Estée Lauder Cos. $11.8 billion

4. P&G $11.8 billion

5. Coty $7.7 billion

6. Shiseido $7.3 billion

7. Beiersdorf $5.9 billion

8. Johnson & Johnson $5.9 billion

Part 2: (Due Oct 23)

Your company is embarking on a project to build a marketing dashboard using Snowflake & an analytics tool of your choice. They have asked you to build a prototype and discuss the usecase.

Design:

- Start with the TPC-DS Dataset from Snowflake. Design a dashboard that will leverage queries from to Snowflake to build the dashboard.
- Discuss who is this dashboard targeted towards and the usecases you will accomplish with it:
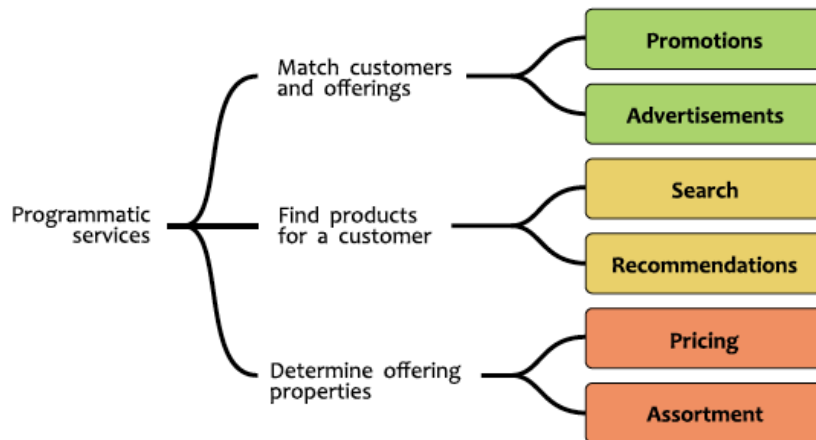
- Your company wants to augment this dataset with a new dataset which will be in csv format:
  - i. Describe your design on how would you onboard the dataset
  - ii. Describe what tools (xsv, Python) will be used for data cleanup
- Prototype your application
  - i. Choose a marketing related dataset from www.kaggle.com, criteo.com etc.
  - ii. Pre-process it with xsv or Python.
  - iii. Show how will you upload it to Snowflake
  - iv. Show how this data can be visualized in an analytics tool of your choice.

Deliverables:

A 2-5 page report in https://github.com/googlecodelabs/tools format to illustrate your understanding of how various algorithms are integrated in websites.

1. Be as technical as possible and discuss what algorithms and frameworks have facilitated the development of the site.
2. You will be given 5-10 minutes to present your company analysis in class.