

VISTAPRINT - Everything You Create Matters

Summary	In this assignment, you are given a company to evaluate and understand how programmatic services are integrated into applications.
URL	https://www.vistaprint.com/
Category	Web

What is the product?

Product line includes

How does it work?

How are they selling it?

Online Website

Mobile Application

How is it priced?

Dynamic Pricing

Bundling

Supply & Demand Pricing

Psychological Pricing

Promotional Pricing

Corporate Pricing

What promotions are they using?

Bundling Discounts

Recommendations

Monthly Deals & Promo codes

What algorithmic marketing services are they using?

Advertising

Promotions

Search

Recommendations & Pricing

What datasets do you think you will need to build these algorithmic services?

How frequently will data change?

How would you store these datasets?

Review the jobs/career site and search for Data/ Data science positions, what technologies and programmatic services is the company using?

[Domains and Positions available](#)

[How Technologies & Programmatic Services](#)

[How is the company tracking visitors?](#)

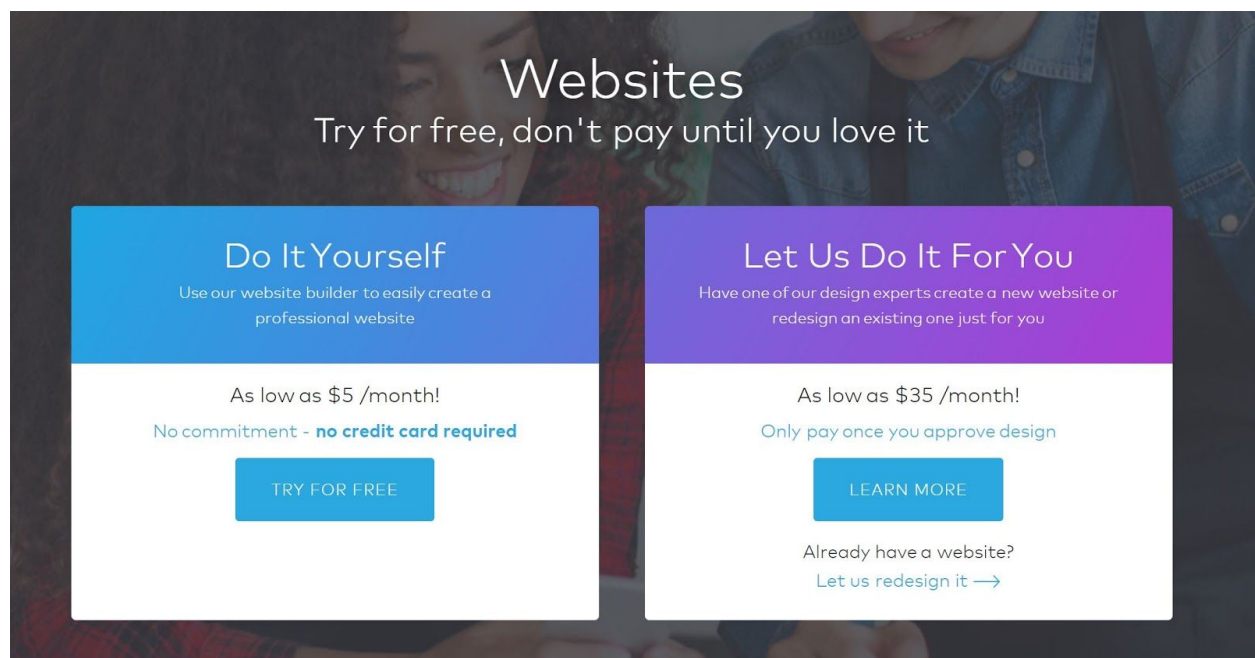
What is the product?



Vistaprint is a Dutch global e-commerce brand that produces physical & digital marketing products for micro businesses.

Product line includes :

Business Cards <ul style="list-style-type: none">• Premium Shapes• Brilliant Finishes• Premium Papers	Marketing Materials <ul style="list-style-type: none">• Advertising• Office Supplies• Packaging	Signage & Trade Shows <ul style="list-style-type: none">• Banners• Posters• Car Signs
Photo Gifts <ul style="list-style-type: none">• Mugs• Calendars• Holiday Cards	Invitations & Stationary <ul style="list-style-type: none">• Wedding• Graduation• Birthday	Clothing & Bags <ul style="list-style-type: none">• T-shirts• Sweatshirts• Jackets



Websites

Try for free, don't pay until you love it

Do It Yourself

Use our website builder to easily create a professional website

As low as \$5 /month!

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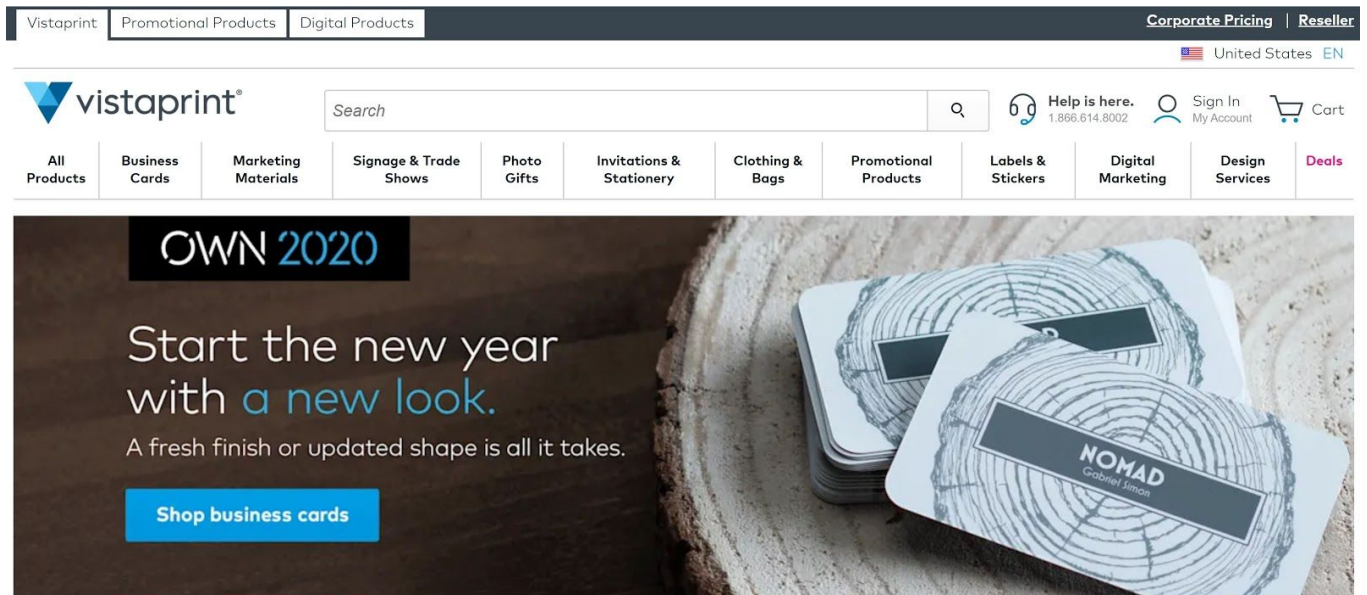
How does it work?

- Orders are processed online and jobs are gang printed.
- The jobs are dependent on the formula based on
 - a. Type of job
 - b. Paper stock type
 - c. Print run quantity
- Within each category, only specific sizes, paper stocks and ink colours are supported.
- Resulting in higher numbers of similar jobs which can be ganged together.

How are they selling it?

Online Website

Vistaprint sells their products through its online website - <https://www.vistaprint.com/>



Mobile Application



How is it priced?

Dynamic Pricing:

Changing the price of a product based on customer segments or market conditions.



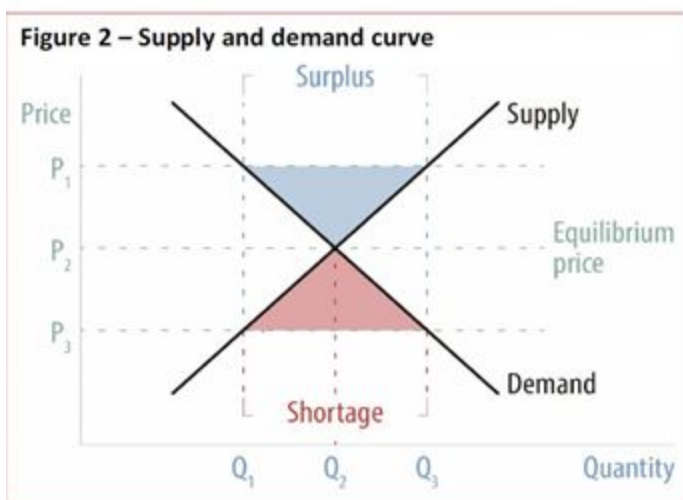
Bundling:

Bundling helps to increase efficiencies, thus reducing marketing and distribution costs. It allows the consumer to look at one single source that offers several solutions.

Quantity	Price per piece	Price
<input type="radio"/> 100	\$0.40	\$40.00
<input type="radio"/> 250	\$0.18	\$45.00
<input checked="" type="radio"/> 500	\$0.10	\$50.00

Supply and Demand Pricing:

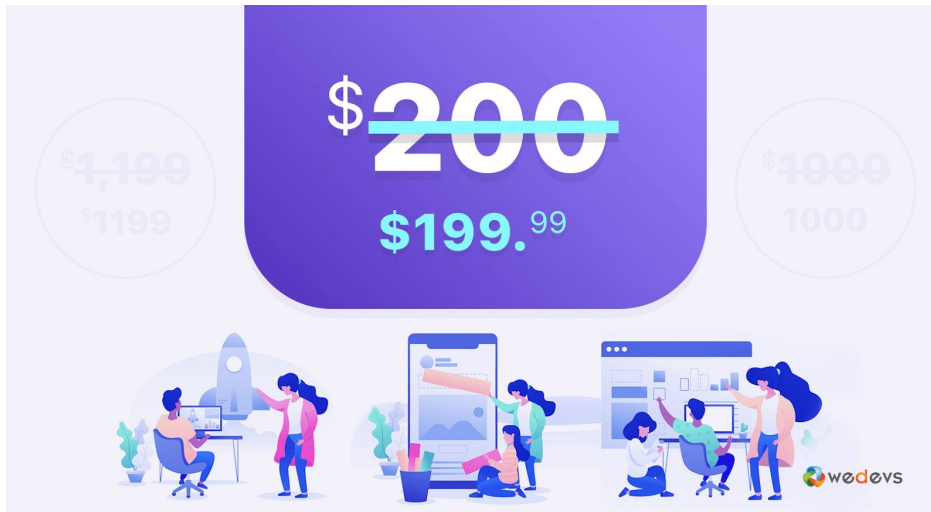
Relationship between the quantity of a commodity that producers wish to sell at various prices and the quantity that consumers wish to buy.



Supply and demand curve

Psychological pricing:

Psychological pricing is the act of pricing your product so that it appeals to customers' emotions rather than their logic.



Promotional Pricing:

It is a short term effort to provide your customers with vouchers or coupons that entitle them to a certain percentage off the good or service



Corporate Pricing:

ProShop	ProShop I OFFICE
This affordable solution gives single users an efficient way to consolidate orders and buy in high quantities.	Users can access approved templates, print designs, order and receive an invoice with a single point of approval.
\$99 / year	\$199 / year
More	More

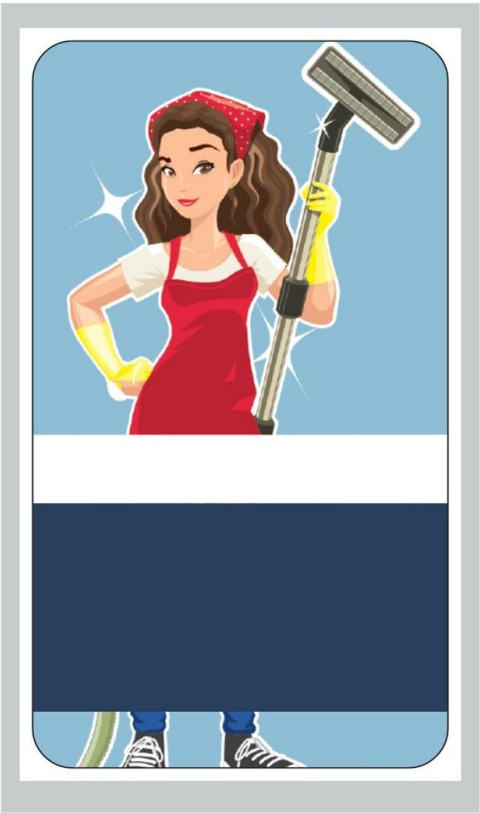
ProShop I ENTERPRISE	ProShop I DIRECT
This enterprise-level solution offers corporate pricing and global delivery.	A private, custom-branded storefront where reps can order any product they need to market and grow their business.
\$499 / year	Let's talk
More	More

What promotions are they using?

Bundling Discounts

In this they sell a package or set of goods or services for a lower price than they would charge if the customer bought all of them separately.

Please review your quantity



Paper Stock

See how your value adds up. The more you order, the lower your cost per piece and the more customers you can reach.

Quantity	Price per piece	Price
<input type="radio"/> 100	\$0.40	\$40.00
<input type="radio"/> 250	\$0.18	\$45.00
<input checked="" type="radio"/> 500	\$0.10	\$50.00
<input type="radio"/> 1000	\$0.09	\$87.00
<input type="radio"/> 1500	\$0.09	\$127.50
<input type="radio"/> 2000	\$0.08	\$166.50
<input type="radio"/> 2500	\$0.08	\$203.50
<input type="radio"/> 5000	\$0.07	\$372.50
<input type="radio"/> 10000	\$0.07	\$722.50

Approve & Add to Cart

Recommendations

In this they suggest the consumer to buy products that are similar or usually purchased together.



Added To Cart
500 Business Cards

Your cart subtotal \$20.00

If you are done creating, continue to your cart to review your order

[Next](#)

Frequently purchased with Business Cards



Steel Desk Business Card Holders

1 - \$6.00



[Add to cart](#)



Metal Business Card Holders

1 - \$6.00



[Add to cart](#)



Black Leather Vertical Business Card Holders

1 - \$12.00



[Add to cart](#)

Monthly Deal & Promo Codes

The discount associated with a promo code can apply to individual products or an entire order.

Vistaprint Promo Codes



Metallic Business Cards

Code JANUARY20



Rounded Corner Business Cards

Code JANUARY20



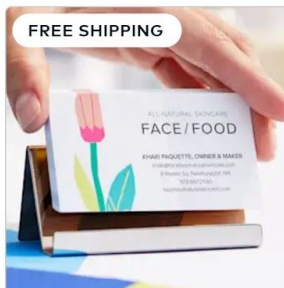
Postcards

Code JANUARY20



Brochures

Code JANUARY20



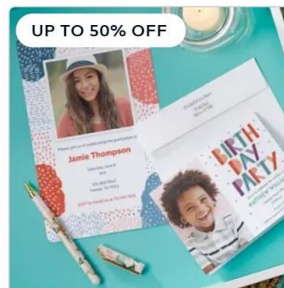
Business Cards

Code JANUARY20



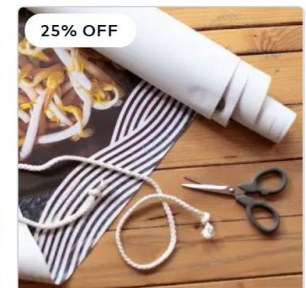
Roll Labels

Code JANUARY20



Invitations & Announcements

Code JANUARY20



Vinyl Banners

Code JANUARY20

What algorithmic marketing services are they using?

Advertising

Advertising is a marketing communication to build a brand image, sell a product, service or an idea. Advertising is done for long term goals to build a brand image for a company and its product line, so they can promote their products and generate revenue.

- TV Advertisements, Integrated Content Marketing, Sponsored Ads, Google Ad words, SEO
- Guest blogging, social media activity, influencer marketing, and brand mentions

<https://www.youtube.com/watch?v=eYrBFcpilul>

<https://www.youtube.com/watch?v=PXPyIv2WLdl>

business cards online



All

Shopping

News

Images

Books

More

Settings

Tools

About 4,910,000,000 results (0.52 seconds)

Business Cards - Free Shipping | Any card. Any quantity.

www.vistaprint.com/

★★★★★ Rating for vistaprint.com: 4.8 - 1,153 reviews

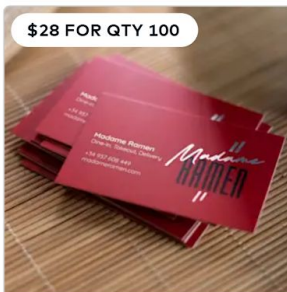
Choose from premium paper stocks, shapes and sizes. Custom **cards**, made your way. Shop Now! **Cards** for all industries. Multiple shapes and sizes. Add a specialty finish. Custom Design Services. Great Customer Service. Types: Metallic, Spot UV, Plastic, Ultra thick, Pearl.

Promotions

Promotion is the variable of the marketing mix. It is used to push short-term sales.

Types of Promotions include - Monthly Deals, Bundling discounts, Promo Codes

Vistaprint Promo Codes



\$28 FOR QTY 100

Metallic Business Cards

Code **JANUARY20**



\$24 FOR QTY 100

Rounded Corner Business Cards

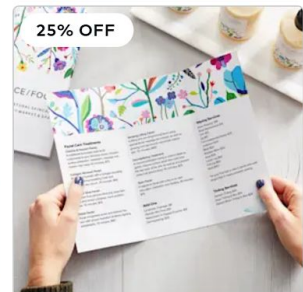
Code **JANUARY20**



30% OFF

Postcards

Code **JANUARY20**



25% OFF

Brochures

Code **JANUARY20**

Monthly Deals
Up to 15% Off
[See all](#)








Life in Motion™ Cargo Box ...
From ~~\$31.18~~ **\$29.62**

60-Inch Slazenger™ Fairwa...
From ~~\$23.35~~ **\$22.18**

PolyPro Non-Woven Quilte...
From ~~\$3.57~~ **\$3.39**


Tri-Pocket Notebook & Pen
From ~~\$2.59~~ **\$2.46**

iFidelity® True Wireless Blue...
From ~~\$65.30~~ **\$62.04**

Torch 18-Ounce Tumbler
From ~~\$2.61~~ **\$2.48**


Search & Recommendations


Users can locate content by searching for specific words or phrases, without needing to understand or navigate through the structure of the Web site.




business

Q


Help is here.
1.866.814.8002


Sign In
My Account


Cart

All Products

Business Cards

Marketing Materials

Signage & Trade Shows

Photo Gifts

Invitations & Stationery

Clothing & Bags

Promotional Products


Labels & Stickers

Digital Marketing

Design Services


Deals

Showing 37 results for: "business"




Business Cards

[Shop Now](#)



Business Services


[Shop Now](#)



Business Cards


100 Starting at \$15.00

[Shop Now](#)



Business Kit


[Shop Now](#)



Rounded Corner Business Cards

100 Starting at \$24.00

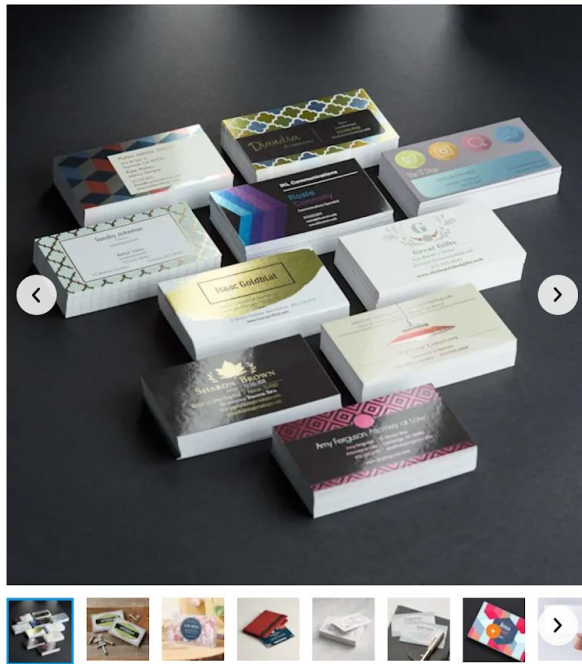
[Shop Now](#)



Linen Business Cards

100 Starting at \$24.00

[Shop Now](#)



Standard Business Cards

★★★★★ 4.2

15431 Reviews

Personalized cards with a professional look.

- High-quality, durable card stock
- Thousands of design options
- Standard glossy or matte paper included
- Premium upgrades available – learn more below
- Eco-friendly, FSC-certified paper

Free shipping on all business cards. Code: **FREESHIP**

[Let us help you with your design](#)

Paper Thickness

Standard

Recommended

Premium

Premium plus

Pricing

ProShop

This affordable solution gives single users an efficient way to consolidate orders and buy in high quantities.

\$99 / year

ProShop | OFFICE

Users can access approved templates, print designs, order and receive an invoice* with a single point of approval.

\$199 / year

ProShop | ENTERPRISE

This enterprise-level solution offers corporate pricing and global delivery.

\$499 / year

ProShop | DIRECT

A private, custom-branded storefront where reps can order any product they need to market and grow their business.

Let's Talk

[Get Started Today](#)

What datasets do you think you will need to build these algorithmic services?

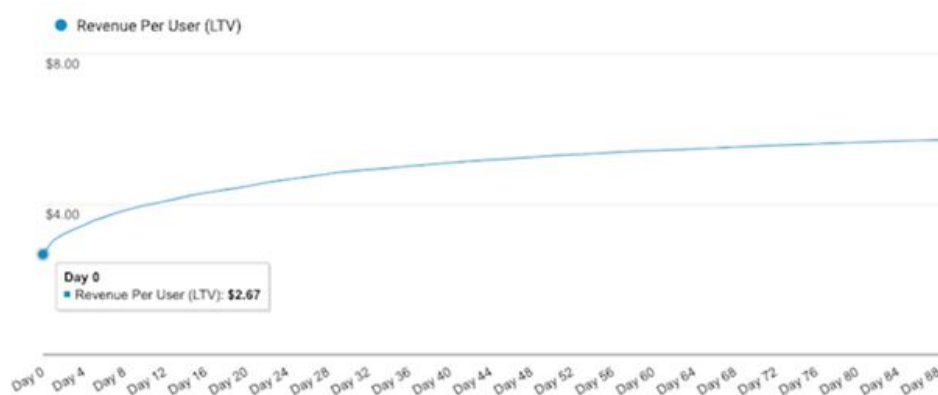
Dynamic datasets are needed for the algorithmic services to be used efficiently. We can see better and act faster by consistently monitoring dynamic data streams.

Broad Domains:

Product Monitoring	Customer Experience Management	Dynamic Remarketing using Google Analytics
Product information, like pricing, description, customer reviews, image. Datasets for Supply chain analytics to forecast the demand and handle warehouse storage, logistics and delivery.	This is important in order to provide a more personalized experience. For example, Extracting can help decipher how customers are feeling about the product by analyzing the positive and negative feedbacks	It lets us show remarketing ads for content or products that are most likely to interest users based on the content or products they viewed earlier on our site, related & top-performing products, as well as their purchase histories and demographics.

LTV data for Revenue Generation

LTV datasets are required for forecasting the Revenue per customer and to understand the long term value of your marketing channels



SPECIFIC TO MARKETING MIX

- **Advertising & Promotions**

Promotional Campaign data which includes features like items sold per minute, tracking number of impressions/clicks during a promotional campaign, conversion statistics of various forms of promotions (for instance, Email promotions, Ad words, bundling discounts) combined with historical purchase data of customers to figure out which bundling promotions they are most likely to buy.

- **Search & Recommendations**

User behavior reports and Google Search Console traffic datasets can be used. User behavior reports, for instance, show you how people behave once they land on your site, while Google Search Console data tracks key metrics, such as number of sessions, number of unique sessions, bounce rate, and more.

- **Call to Action (CTA)**

Words could be used for Search Engine optimization.

- **Pricing & Assortment**

Dynamic pricing system that crawl the web and create a periodic pricing dataset for similar products based on how the competitor companies are pricing it. These systems alter prices dynamically based on a lot of factors including the supply and demand.

We would need data regarding production & operational costs for each product category in order to build a strategic Pricing system considering how much margin we should keep, to generate profits across all verticals. Once the initial prices are determined for products, they should be updated using dynamic pricing based on supply/demand, promotional offers, prices of similar products by competitors, seasonal discounts, revenue targets, clearance sales etc.

How frequently will data change?

These datasets are dynamic and constantly changing. But in the context of Predictive Analytics, nature of the data will decide whether we need to update it daily, periodically or only a one-time activity and then retrain our predictive models using Transfer Learning or personalize the website for Search & Recommendations periodically.

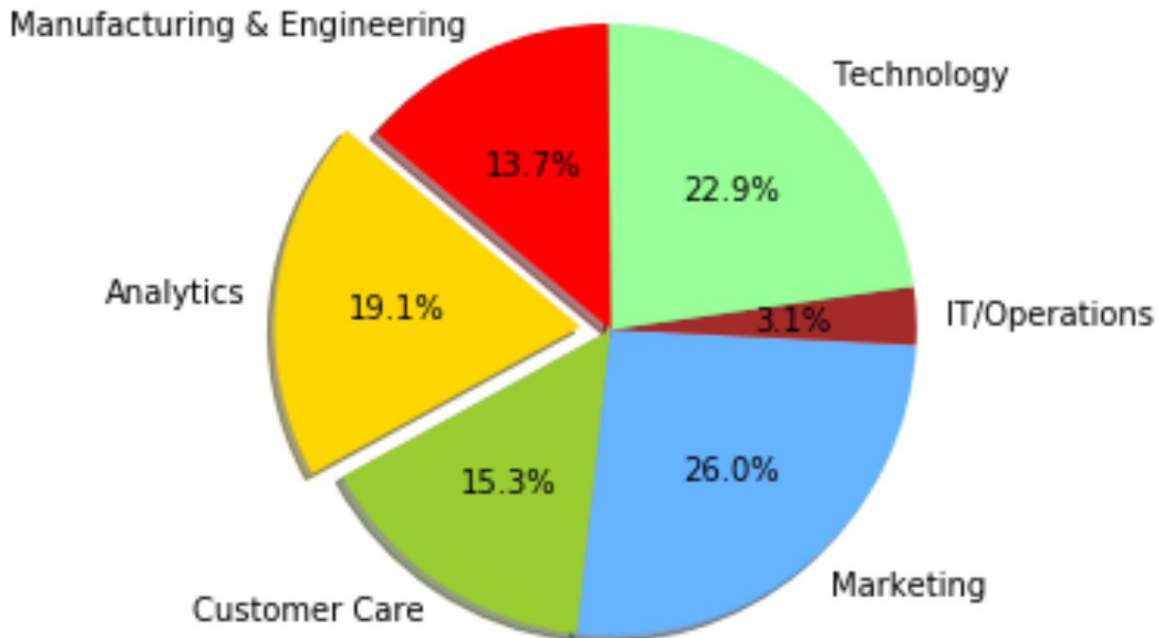
How would you store these datasets?

Apache Hadoop It is a java based free software framework that can effectively store large amount of data in a cluster. Hadoop Distributed File System (HDFS) is the storage system of Hadoop which splits big data and distribute across many nodes in a cluster.	Microsoft HDInsight It is a Big Data solution from Microsoft powered by Apache Hadoop which is available as a service in the cloud. HDInsight uses Windows Azure Blob storage as the default file system. This also provides high availability with low cost.	PostgreSQL It is a free & open-source relational database management system (RDBMS) emphasizing extensibility and technical standards compliance. It is designed to handle a range of workloads, from single machines to data warehouses or Web services with many concurrent users.
PolyBase This works on top of SQL Server 2012 Parallel Data Warehouse (PDW) and is used to access data stored in PDW. PDW is a datawarehousing appliance built for processing any volume of relational data and provides an integration with Hadoop allowing us to access non-relational data as well.	Presto Facebook has developed and recently open-sourced its Query engine (SQL-on-Hadoop) named Presto which is built to handle petabytes of data	Bulk Apex/SOQL Salesforce platform to efficiently query large data sets and reduce the number of API requests. A bulk query can retrieve up to 15 GB of data, divided into 15 1-GB files. The data formats supported are CSV, XML, and JSON.
Progressive Loading/Dataflow Data can be programmed to be loaded in batches; this is a big data feature to avoid overloading the memory of the tool to execute commands	Redshift It is a fully managed, cloud-based, petabyte-scale data warehouse service by Amazon Web Services (AWS). It is an efficient solution to collect and store all your data	Hive This is a distributed data management for Hadoop. This supports SQL-like query option HiveSQL (HSQL) to access big data.

Review the jobs/career site and search for Data/ Data science positions, What technologies and programmatic services is the company using?

Just to give you an idea - VistaPrint is hiring around 50 Data Scientists in the next 1 year.

Domains & Positions Available



Analytics

Principal Data Scientist, Data Science Chapter Lead, Senior Research Analyst, Senior Pricing Specialist, Pricing Strategy Manager

Digital Marketing

Email Marketing Specialist, Content SEO Specialist, Product Marketing Specialist, Data Product Owner, Senior eCommerce Merchandising Specialist

Technology

Software Engineer, DevOps Engineer- CI/CD, Web Analytics Manager, Pricing Strategy Manager, Senior Front-End Engineer, Operational Support Engineer

Technologies & Programmatic Services



Data Science

Recommendation Systems, Price Optimizations, Time Series Modeling, Customer LTV, Propensity Modeling, Image Recognition, Programmatic Advertising, Attribution Modeling, Segmentation, cohort analysis

Tech Stack - Python, R, Spark, Java, Scala, Bayesian Statistics, Tensorflow, PyMC3, SPSS, MarketSight, Tableau or Looker, Qualtrics, Google Analytics, Adobe (Omniure), Hotjar, CrazyEgg, A/B testing

Marketing

Marketing Automation, Hypothesis testing, A/B & Multivariate Testing,

Tools - Adobe Campaign, Responsys, Exact Target, Google Search Console, SEO

Software & Technology

JavaScript, Java, Angular.js, React, Vue, Jenkins, GitLab, Docker, Kubernetes, Amazon AWS, CI/CD Pipelines, SQL, ETL, Looker

How is the company tracking visitors?

They use website tracking for gathering information about the users, their digital activity or journey between websites. They use the below tools & techniques for tracking visitors

Advertising Cookies

Third party cookies for Targeted advertisement.

Analytics Cookies

Cookies to track and log visitor behavior to gain insights

Web beacons & Tracking Pixels

Web beacons are used to monitor the activity of users at a website for the purpose of web analytics.

Tag placed in an email for Email Marketing, which provides information if and when the user opens the email and how they interact with the content

Dynamic Remarketing

Google Analytics track visitor behavior on our websites, their purchase histories, demographics to show targeted ads when they visit other sites for products they viewed earlier on our website

We can segment users into few categories to target for Remarketing based on the data associated with them

- Product Searchers – Users who viewed any of your search-results page.
- Conversion Abandoners – Users who viewed their shopping carts but didn't confirmed the purchase.
- Product Viewers – Users who viewed any of your product lists.

Tools used for Tracking

Analytics Platforms including Google Analytics, Google Remarketing, Adobe Analytics (Omniture), Optimizely, VWO, SiteSpect, AB Tasty

Below are some of the information these tools might track -

- The sites the user visits
- The frequency of a user's returning visits to a site
- What the user clicks on
- How long the user lingers on a site
- The speed with which the user scrolls
- Where the user stops
- The movements of the mouse around a webpage

- The reviews a user might add