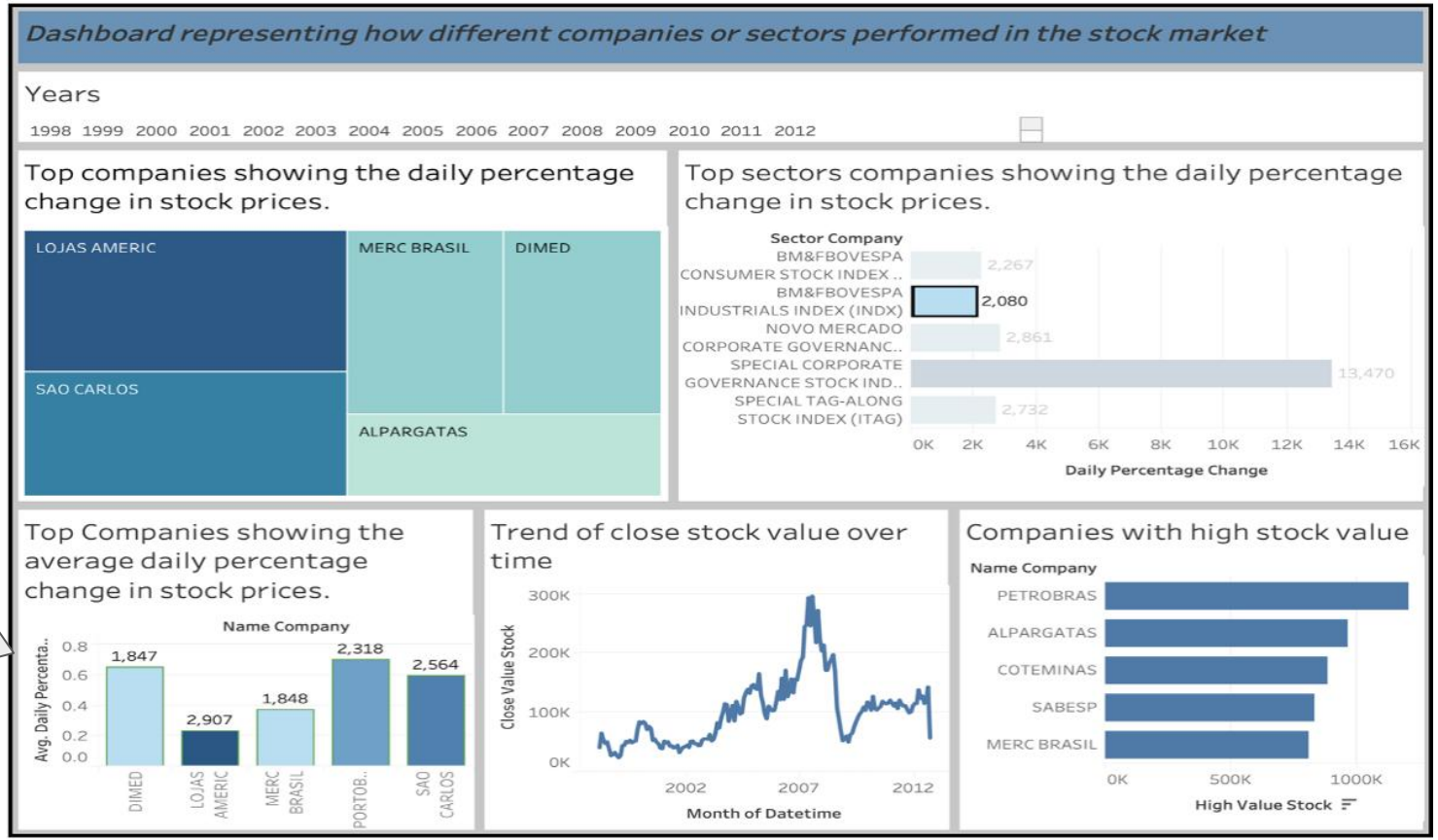
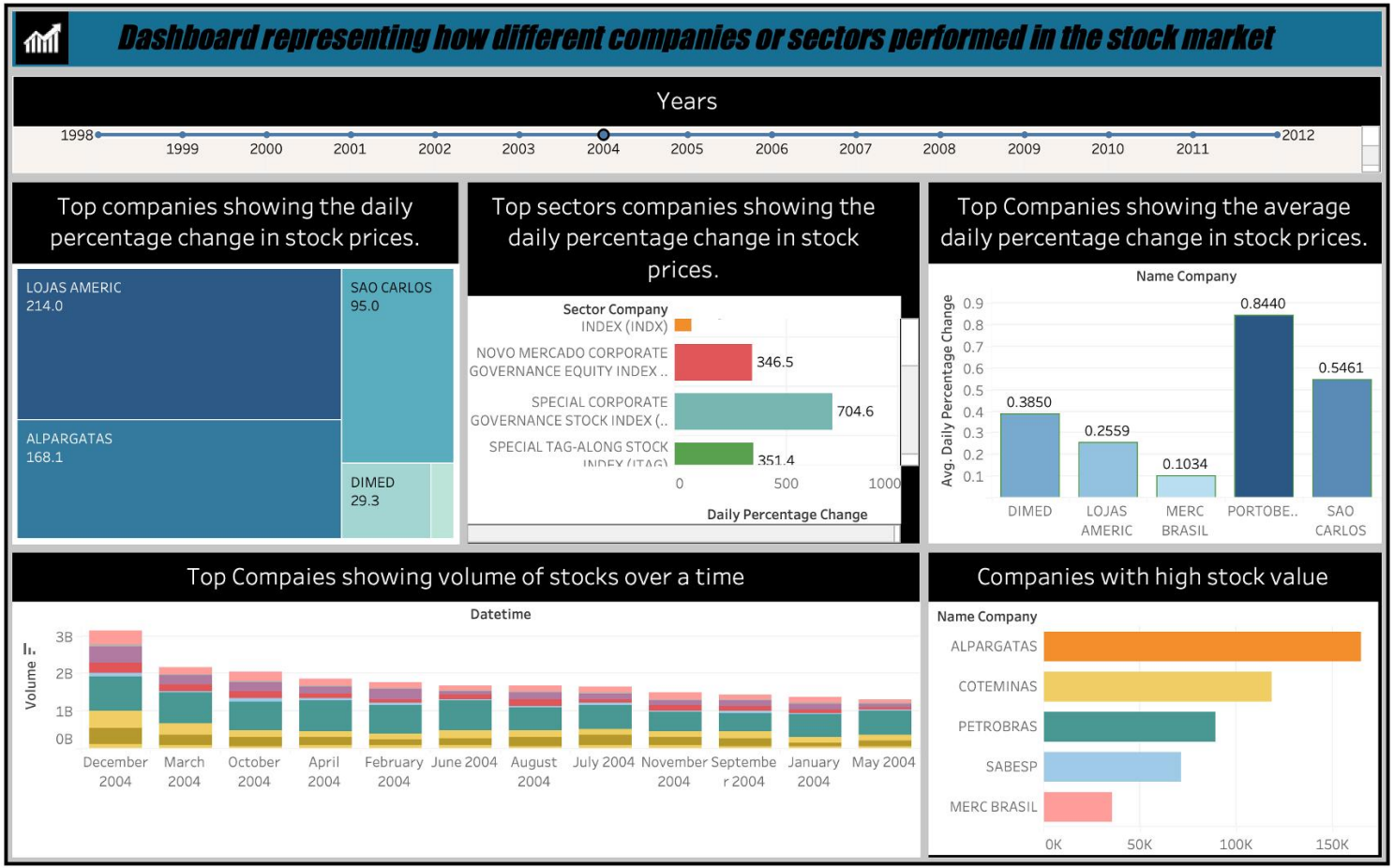
Table of Contents

1.Mid Term Dashboard



Comments received on this particular sheet

Modified Dashboard



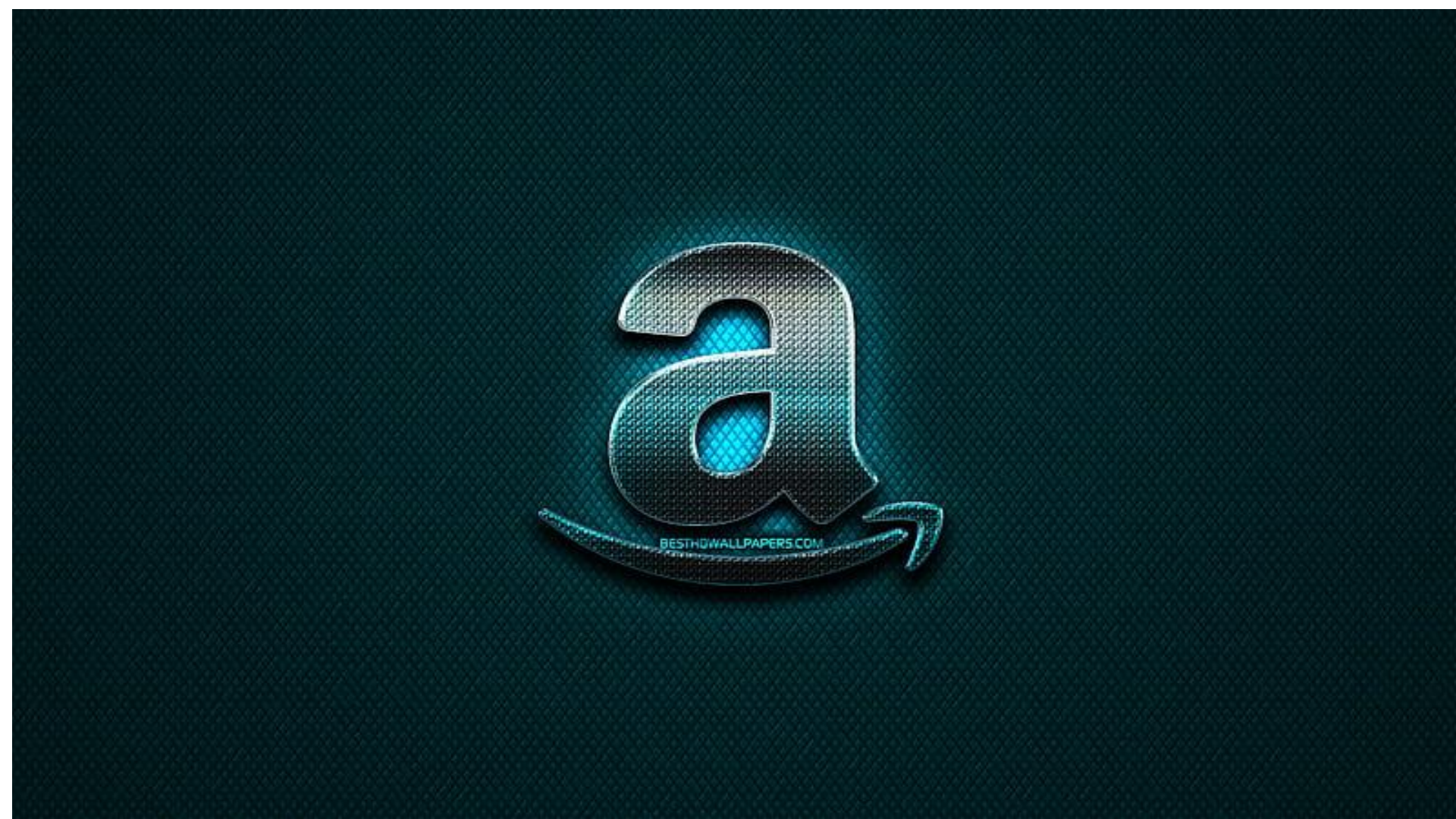
Sector Company
- BM&FBOVESPA CONSUMER STOCK INDEX (ICON)
- BM&FBOVESPA INDUSTRIALS INDEX (INDX)
- NOVO MERCADO CORPORATE GOVERNANCE EQUITY INDEX (IGC-NM)
- SPECIAL CORPORATE GOVERNANCE STOCK INDEX (IGC)
- SPECIAL TAG-ALONG STOCK INDEX (ITAG)

Daily Percentage Change
7.7 — 214.0

Avg. Daily Percentage C..
0.1034 — 0.8440

Name Company
- BRADESCO
- BRASIL
- ELETROBRAS
- GERDAU
- ITAUSA
- PETROBRAS
- SID NACIONAL
- USIMINAS
- VALE

Name Company
- ALPARGATAS
- COTEMINAS
- MERC BRASIL
- PETROBRAS
- SABESP


BESTHDWALLPAPERS.COM

2.About Amazon.com,Inc

Created in 1994 by Jeff Bezos, an American.

The business first dealt in books but now sells a variety of other consumer goods.

Amazon is worth 1.26 Trillion USD thanks to its AWS, warehouses and cloud computing services

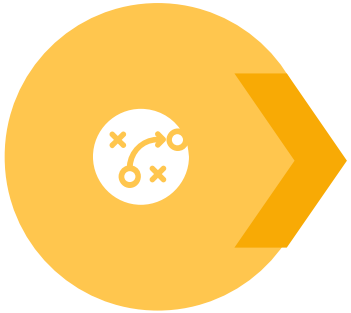
Headquarters in Seattle, Washington

About Amazon.com,Inc

Type of Business

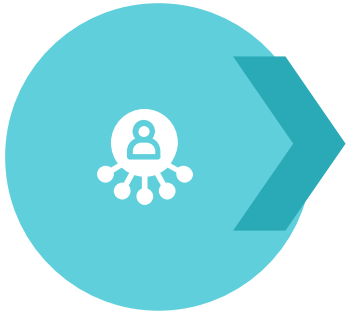
Amazon is mainly an e-commerce firm.Also deals in cloud services, streaming and AI

Operation & Infrastructure



Robust and dynamic infrastructure includes data centres, AWS and warehouses

IT Competency



E-commerce, cloud services, and logistics are all driven by infrastructure, which uses cutting-edge technology, automation, and data analytics to ensure smooth operations and satisfied customers.

3.Business Intelligence Maturity Level at Amazon

Current Level

(Gartner, 2015) Based on the Gartner BI maturity model Amazon is at ”Level 5: Optimization"

Level to be Achieved

The aim is to achieve a higher level of BI maturity, where predictive and prescriptive analytics are routinely used in strategic decision-making (Forbes , 2021).

Business Intelligence Maturity Level at Amazon

Current Level

- Amazon continuously improves its business intelligence capabilities.
- Advanced analytics, data mining, and predictive modeling are all widely used.
- Amazon has a data-driven culture and bases its decisions on data insights (Gartner, 2015).

Level to be Achieved

- Enhancing existing algorithms
- Improving data literacy at all organizational levels
- Increasing data processing speed and efficiency
- Investigating new possibilities in predictive and prescriptive analytics
- Automating more business operations
- Maximizing the Use of Machine Learning (ML) Forbes , 2021).

Example: Maximizing the Use of Machine Learning

Amazon already makes substantial use of Machine Learning (ML), from demand forecasting to tailoring customer experiences. The recommended BI strategy can concentrate on deploying ML more broadly across the enterprise. For example, it could require creating advanced ML models to forecast market trends or find inefficiencies in supply chains. It might also involve training staff at all levels to understand and use ML models, hence enhancing data literacy and the culture of data-driven decision-making (Forbes , 2021).

Amazon's plan is based on their Business strategy.

1)Amazon is a technology and e-commerce corporation focused on providing excellent customer experiences on a worldwide scale.

2) They control the e-commerce market thanks to a wide range of products, affordable prices, and the well-liked Prime membership program.

3) To help third-party sellers grow their product selection and scalability, Amazon uses a marketplace approach.

4) With projects like Amazon Go stores and the Alexa voice assistant, the corporation is renowned for its innovation in fields like artificial intelligence, machine learning, and robotics. A notable cloud computing platform that provides scalability and affordability for enterprises is Amazon Web Services (AWS).

5) They are dedicated to sustainability and CSR, concentrating on programs like community support and renewable energy.

6) their customer-centric strategy and commitment to innovation in the international market, Amazon has tremendous future growth possibilities.

Successful marketing strategies deployed by Amazon

This slide provides information regarding key strategies for successful marketing initiatives in terms of understanding customers, data optimization, emerging as innovative, developing comprehensive CRM strategy, etc.

Understanding customers

⇒ Determining consumer behavior to leverage long—term relationships
⇒ Better understanding of user requirements through analyzing data from transactions, surveys and employee feedbacks
⇒ Add text here

Optimizing data

⇒ Utilizing each touchpoint to develop customized user experience
⇒ Leveraging user data to gain behavioral insights
⇒ Add text here

Considering Customer service

⇒ Develop customer-centric environment
⇒ Leveraging line associates to ensure customer connections and enabling retailers to deliver what user wants
⇒ Add text here

Emerging innovative

⇒ Focus on testing new ideas as a part of Amazon's business strategy such as upgrading merchandise to create buzz around existing customer base
⇒ Embracing new technology or new marketing initiative for attracting new users
⇒ Add text here

Building comprehensive CRM strategy

⇒ Incorporating transactional, demographic and behavioral insights into relevant systems & technology to build potential user profiles
⇒ Add text here

Amazon collects information from several sources.

1) Customer Data: Information gathered from customers during account setup, purchases, reviews, and interactions with Amazon services is known as customer data.

2) Sales and Transaction Data: Information about the products' descriptions, costs, sales volume, shipment, and payments.

3) Website and App Tracking: Tracking of user activities on the Amazon website and mobile apps, including page views, clicks, search terms, and purchasing patterns.

4) Alexa and Smart Devices: Alexa and Smart Devices: Information gleaned through user interactions, voice commands, and usage trends on Amazon's smart devices.

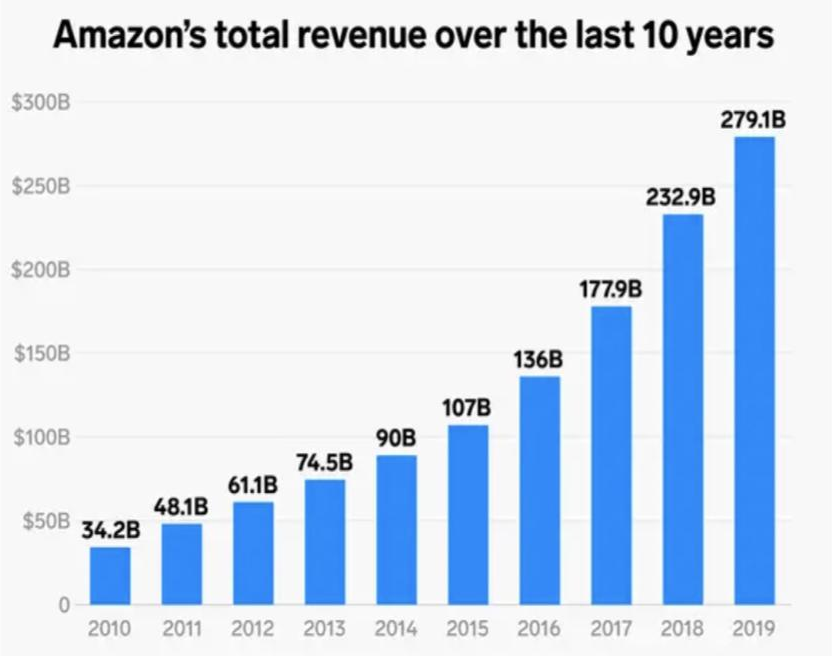
5) Third-Party Sellers and Suppliers: Inventory, pricing, and sales performance data are provided by third-party sellers and suppliers who make use of Amazon's platform.

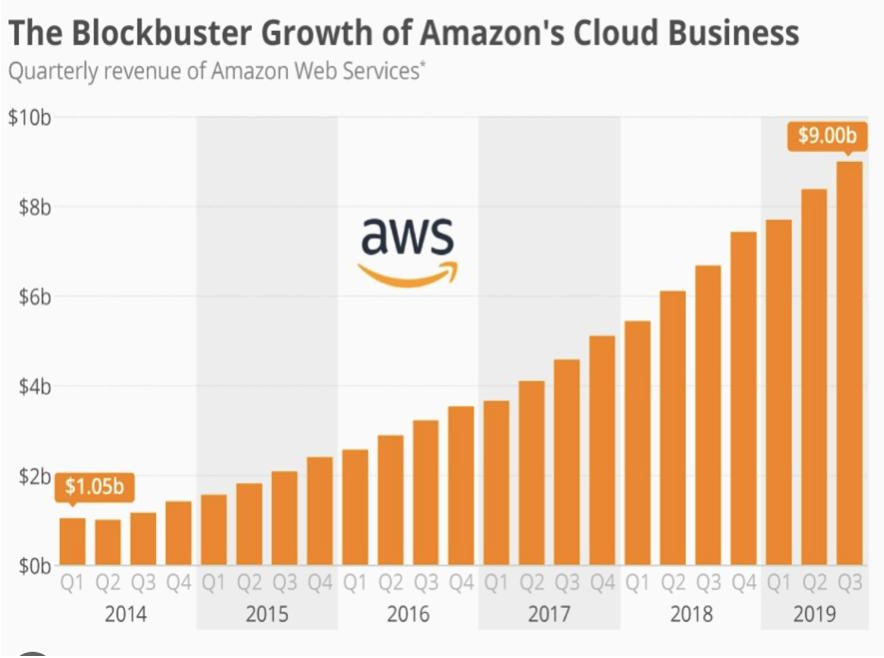
6) Advertising and marketing data includes details on advertising campaigns, clicks, impressions, conversions, and consumer reactions.

7) Social media and Outside Sources: Information obtained from open social media accounts and other Outside Sources to comprehend client preferences and interests.

8) Devices connected to the Internet of Things (IoT): Information gathered from IoT gadgets like AmazonBasics smart home gadgets and Ring doorbells, including user interactions and sensor readings.

Growth of Amazon Business

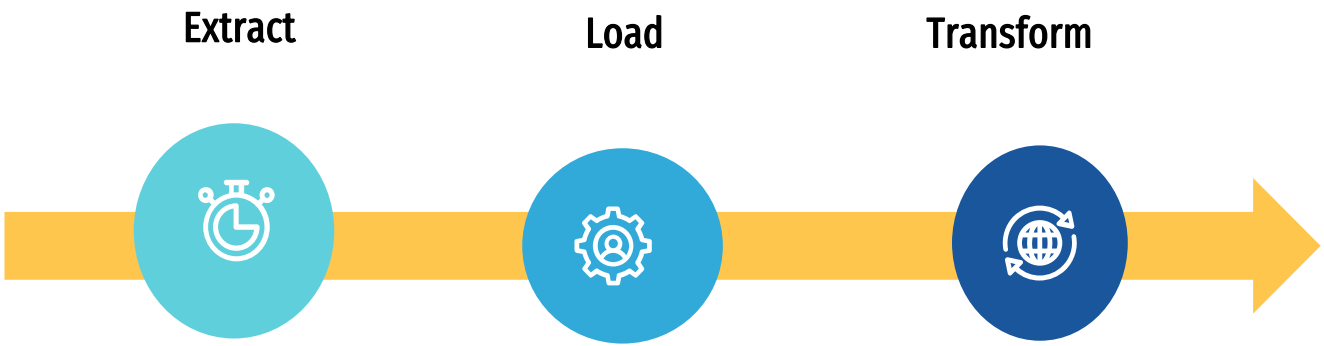




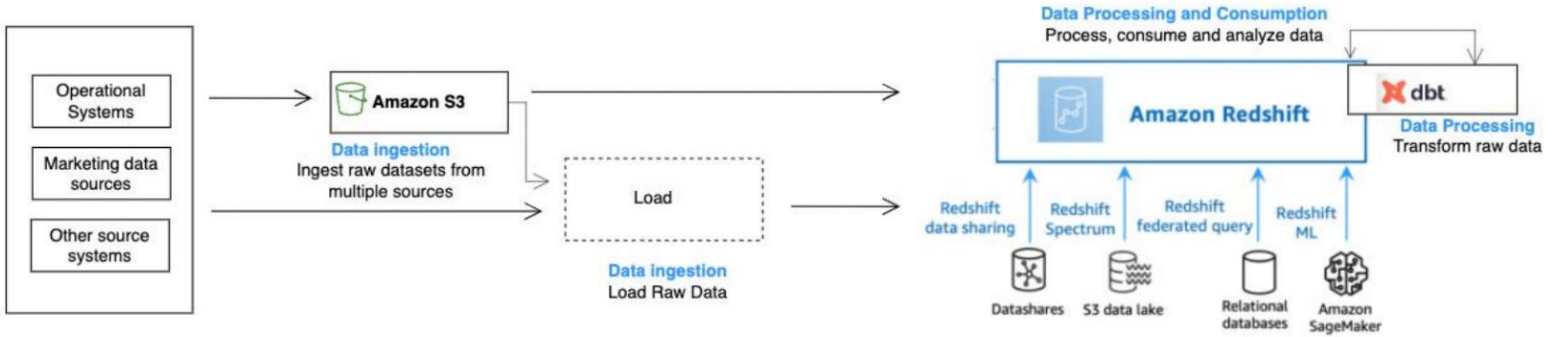
Data Warehousing Infrastructure of Amazon

In its data warehousing procedures, Amazon mostly uses an ELT (Extract, Load, Transform) strategy (GeneAka, 2022).

Amazon Web Services (AWS) offers a cloud-based data warehousing service called Amazon Redshift implements an ELT data warehousing system.



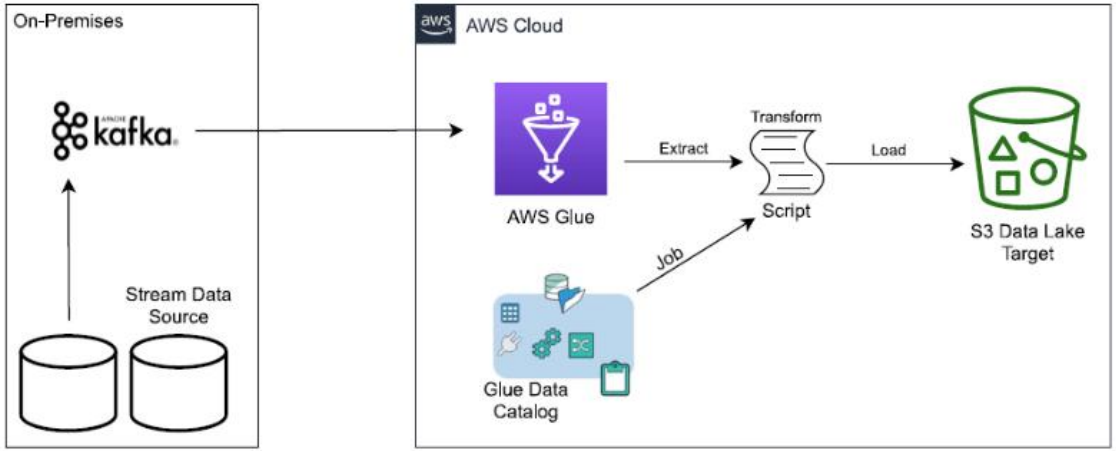
ELT Data Warehousing of Amazon -Amazon Redshift



Amazon Redshift Data Warehouse Infrastructure

Data Extraction	• AWS Database Migration Service • Amazon S3
Data Loading	• COPY Command • Amazon Kinesis Data • Firehose
Data Storage	• Compute Nodes • Columnar Storage • Amazon Redshift Spectrum
Data Processing	• Query Execution Engine • Amazon Redshift Compiler • Workload Management
Data Security	• Encryption • Access Controls • VPC Connectivity

ETL Warehousing of Amazon- AWS Glue



Why ELT over ETL in Amazon?

Let's discuss why Amazon uses an ELT technique for data warehousing operations in more detail now (Amazon Web Services, Inc., n.d.).

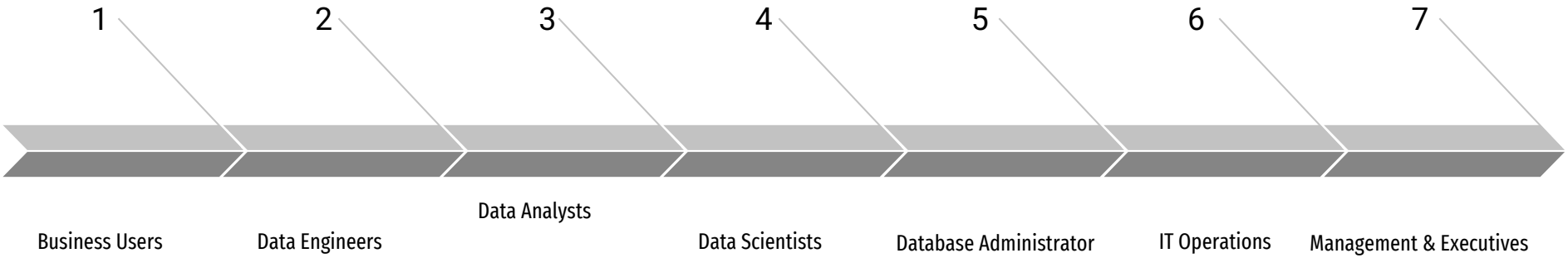
Scalability and Performance

Cost Efficiency

Flexibility and Iterative Analysis

Simplified Data Pipelines

Workflow of Stakeholders involved in Data Warehousing



1. Clearly state the data needs, offer feedback on insights, and use the data warehouse to aid in decision-making.
2. Work with business users to extract and transform data, create and maintain ETL procedures, and enhance the performance of data warehouses.
3. Work with business users to develop reports and dashboards, analyze and visualize data, and offer ad hoc analysis.
4. Work together with engineers and analysts to produce actionable insights by utilizing the data warehouse for advanced analytics.
5. Work with data engineers to establish backup and recovery plans, manage user access privileges, and monitor and maintain database performance and security.
6. Work with DBAs and data engineers to establish security measures, handle upgrades and configurations, and support the infrastructure.
7. Develop a data strategy, allot resources, and base decisions on information.

IT Infrastructure

1 Hardware

- Servers (Mainly high availability)
- Networking hardware like routers, switches and firewalls, access points and cables
- Data centres (a mix between on premise and cloud based infrastructure)

2 Software

- SQL for data management
- PowerBI or Tableau for data visualization
- TensorFlow or PyTorch for machine learning implementations

3 Cloud

- AWS

4 System Admin

5 Data Storage and Management

- Data Warehouse

6 IT Support and Maintenance

Proposing a Dashboard

01

Goal

02

Stakeholders

03

Data Source

04

Metrics and KPI

05

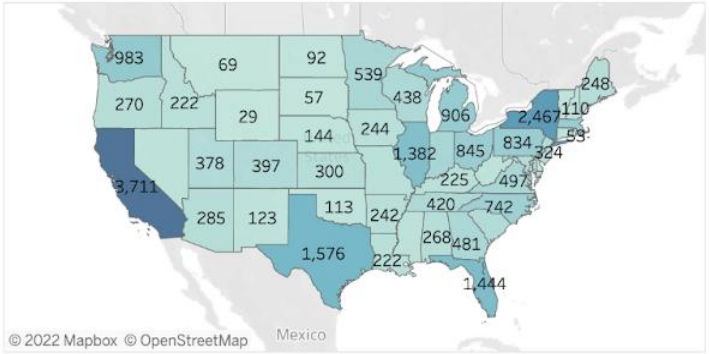
Visualisation

Sales Metrics Analysis

Monthly Sales

Profit by Product Category

Quantity Ordered by State



Profit

Profit Contribution

Goal - Sales and Profit Analysis across product categories

Achieved Profit contribution of product category

Amazon Advertising | Product Performance

SELECT WEEK START:
7/14/19

Amazon Product Category Performance

Performance by Product Category

Product Category	Ad Spend	Ad Revenue	ACOS	ROAS	Conversion %	Units	CPC
Scanners	$164,029	$550,624	29.8%	335.7%	5.0%	8,222	$1.09
Other	$154,782	$438,099	35.3%	283.0%	2.1%	4,294	$0.81
Paper	$64,805	$208,374	31.1%	321.5%	5.6%	3,615	$1.07
Black Cartridge	$31,465	$92,286	34.1%	293.3%	5.7%	2,892	$0.70
Folders	$5,532	$15,357	36.0%	277.6%	4.4%	114	$1.74
Color Cartridge	$1,575	$2,651	59.4%	168.4%	6.6%	157	$0.67
Pens	$1,560	$1,748	89.2%	112.1%	1.2%	13	$1.10

Ad Spend by Category

Ad Revenue by Category

Product Category
- Black Cartridge
- Color Cartridge
- Folders
- Other
- Paper
- Pens
- Printers
- Scanners

Goal - Study the Advertising Costs for product segment

Achieved - ROAS for product segment

Amazon Advertising | Weekly Summary

SELECT WEEK START: 7/14/2019

SELECT CAMPAIGN TYPE: (All)

SPEND	SALES	UNITS	ACOS	ROAS	CPC
$55,615	$205,095	2,720	27.1%	368.8%	$1.03
▲ 14.5% WoW	▲ 30.4% WoW	▲ 38.8% WoW	▲ 0.01 ppt WoW	▼ -0.12 ppt WoW	▲ 1.3% WoW

Performance by Week - Attributed Revenue

Performance by Week

	Ad Spend	Ad Revenue	ACOS	ROAS	Units	CPC	Conversion %
09/01/19	$13,864	$44,248	31.3%	319.2%	552	$0.96	3.5%
08/25/19	$12,807	$48,041	26.7%	375.1%	552	$0.96	3.6%
08/18/19	$12,778	$53,734	23.8%	420.5%	611	$0.96	4.4%
08/11/19	$12,417	$69,694	17.8%	561.3%	702	$0.92	5.5%
08/04/19	$13,046	$66,065	19.7%	506.4%	825	$0.80	5.0%
07/28/19	$26,467	$100,226	26.4%	378.7%	1,407	$0.88	4.8%
07/21/19	$41,465	$127,174	32.6%	306.7%	2,078	$0.94	4.7%

Goal - Study the Advertising Costs

Achieved - Understanding of advertising expenses against returns

Our Recommendations

Amazon.com, Inc.

Quantity ordered by State

They can strengthen relations, localize offerings, understand the market and expand marketing in California as shown in the dashboard

Performance by Category

Can avoid ad spend on categories such as pens, color cartridges and printers as the revenue generated from it is insignificant

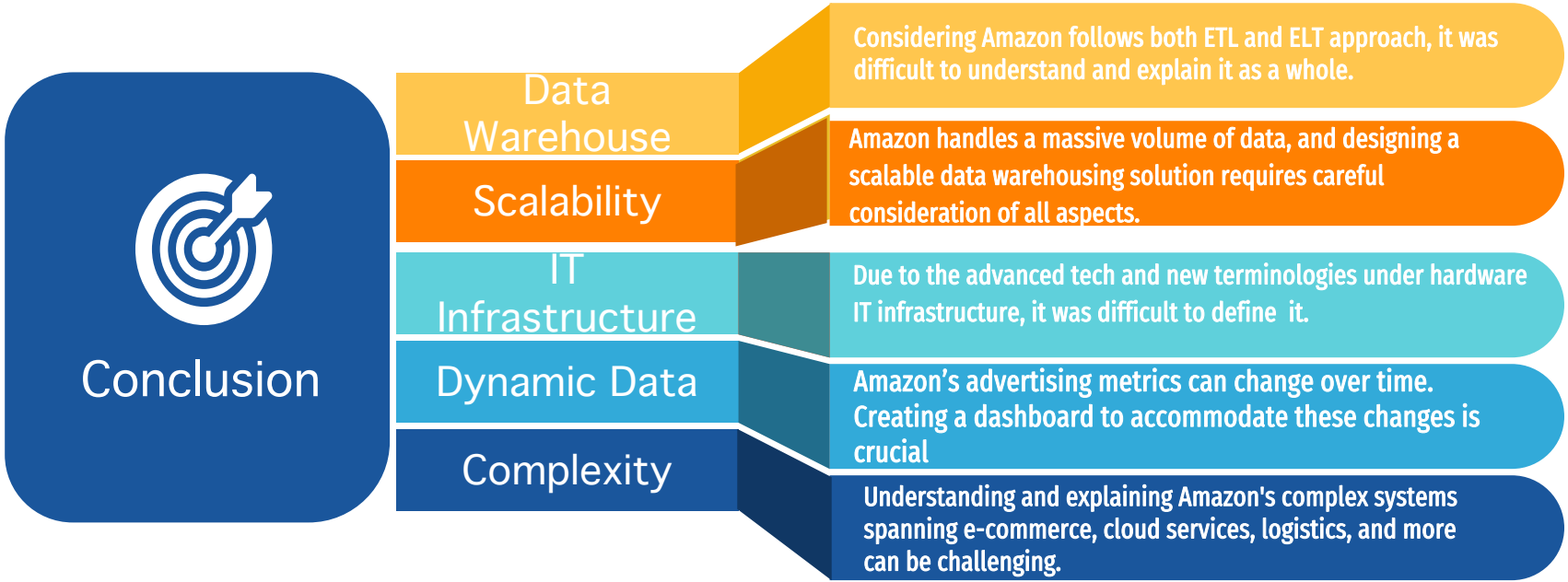
Enhance product discoverability

Optimize product discovery by recommending strategies to improve search rankings and product visibility.

Expand into new markets and sectors

Amazon’s success in diverse sectors like cloud computing, entertainment, and smart devices show their ability to diversify Exploring new customer centric markets can create growth opportunities

Conclusion on challenges we faced



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