SALES OF ADIDAS PROJECT REPORT

(Project Semester August - December 2024)

SALES OF ADIDAS

Submitted by

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Registration No. 12203202

Program and Section: B.Tech CSE

and K22GB

Course Code: INT233

Under the Guidance of

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Transforming Education Transforming India

CERTIFICATE

This is to certify that Golla Manikanta Kumar bearing Registration no. 12203202 has completed the INT233 project titled, "Sales of Adidas" under my guidance and supervision. To the best of my knowledge, the present work is the result of his/her original development, effort and study.

Maneet Kaur

Assistant Professor

School of Computer Science and Engineering

Lovely Professional University

Phagwara, Punjab.

Date:15-11-2024

DECLARATION

I, Golla Manikanta Kumar, student of CSE under CSE/IT Discipline at, Lovely Professional University, Punjab, hereby declare that all the information furnished in this project report is based on my own intensive work and is genuine.

Manikanta Kumar

Date: 15-11-2024 Signature

Registration No. 12203202 **Name of Student:** Golla Manikanta Kumar

Acknowledgment

The satisfaction that accompanies the successful completion of this project would be in complete without the mention of the people who made it possible, without whose constant guidance and encouragement would have made efforts go in vain. I consider myself privileged to express gratitude and respect towards all those who guided us through the completion of this project.

I convey thanks to my project guide Maneet Kaur of the Computer Science and Engineering Department for providing encouragement, constant support, and guidance which was of great help in completing this project successfully.

Last but not least, we wish to thank our parents for financing our studies in this college as well as for constantly encouraging us to learn engineering. Their personal sacrifice in providing this opportunity to learn engineering is gratefully acknowledged.

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1. Introduction

Introducing the Adidas sales dashboard for the USA, meticulously crafted using the powerful analytical tool, Tableau, this dynamic visualization offers a comprehensive exploration of sales trends, performance metrics, and market insights spanning the pivotal years of 2020 and 2021. Leveraging Tableau's intuitive interface and robust data visualization capabilities, this dashboard provides stakeholders with a user-friendly platform to delve into the intricacies of Adidas's sales landscape, unraveling the story behind the numbers. From revenue trends and product performance to regional sales distribution and demographic analysis, every facet of Adidas's sales journey is brought to life through interactive charts, graphs, and heatmaps. Tableau's dynamic features enable users to drill down into the data, uncovering actionable insights and identifying opportunities for growth and optimization. Whether it's tracking the impact of marketing campaigns, evaluating the effectiveness of distribution channels, or forecasting future sales trends, this Tableau-powered dashboard serves as a strategic compass, guiding stakeholders in making informed decisions and driving business success.

Moreover, Tableau's versatility allows for seamless integration with external data sources, enabling stakeholders to augment Adidas's sales data with market research, competitor analysis, and macroeconomic indicators for a holistic view of the sportswear landscape. With the ability to customize views, filter data, and generate on-the-fly visualizations, Tableau empowers users to tailor their analysis to specific business objectives and audience preferences, fostering collaboration and driving data-driven decision-making across the organization. In essence, the Adidas sales dashboard powered by Tableau transcends traditional reporting paradigms, offering a dynamic and interactive platform for exploring, analyzing, and deriving insights from sales data. Whether you're a marketing executive seeking to optimize advertising spend, a sales manager aiming to identify untapped market opportunities, or a C-suite executive tasked with charting the company's strategic direction, this Tableau-powered dashboard is your indispensable companion in navigating the complexities of the sportswear industry and unlocking the full potential of Adidas's sales performance in the USA.

2. Scope of Analysis:

The scope of analysis for the Adidas sales dashboard created using Tableau encompasses a multifaceted exploration of sales dynamics within the USA market. Firstly, the dashboard delves into the geographical distribution of sales by identifying the states driving Adidas product purchases, offering insights into regional preferences and market penetration strategies. Secondly, it analyzes units sold region-wise, facilitating the identification of trends, disparities, and growth opportunities across different areas of the country. Thirdly, the dashboard tracks monthly product sales for 2020 and 2021, enabling stakeholders to discern seasonality, trends, and the impact of marketing initiatives on consumer behavior. Additionally, it highlights the top five retail sellers of Adidas products in the USA, shedding light on distribution channels, market share, and competitive dynamics. Lastly, the analysis includes an examination of sales methods, whether through brick-and-mortar stores, e-commerce platforms, or other channels, providing insights into consumer behavior and preferences in purchasing Adidas products. Through this comprehensive scope of analysis, stakeholders gain a nuanced understanding of Adidas's sales performance in the USA market, empowering them to make informed decisions and drive business success.

3. Drawbacks or limitations of the existing system

The existing system for analyzing Adidas sales data in the USA, while benefiting from Tableau's visualization capabilities, encounters several notable limitations that compromise its overall efficiency and efficacy. One significant drawback lies in the reliance on manual data processing methods, which are prone to human error and can result in inaccuracies within the analysis. Moreover, the system's scalability may be constrained, particularly in managing larger datasets or accommodating the evolving complexities of Adidas's sales landscape over time. Additionally, if the system predominantly offers static reports or pre-defined dashboards, it may hinder users' ability to conduct dynamic and nuanced analyses, limiting their capacity to uncover actionable insights and respond promptly to market changes.

Furthermore, data silos and integration challenges may impede the system's ability to access and consolidate information from diverse sources, leading to fragmented insights and inhibiting a comprehensive understanding of Adidas's sales performance. Moreover, while Tableau provides powerful visualization tools, if the existing system lacks interactivity or user-friendly features, it may fail to fully leverage Tableau's potential to engage stakeholders and facilitate data-driven decision-making. Without intuitive interfaces and interactive functionalities, stakeholders may encounter difficulties in exploring the data thoroughly and extracting meaningful insights to inform strategic actions.

Addressing these limitations is paramount to optimizing the Adidas sales analysis system in the USA. By implementing automated data processing solutions, enhancing scalability to accommodate growing datasets, and fostering seamless integration with external sources, the system can overcome current constraints and unlock its full analytical potential. Moreover, by prioritizing interactive visualization features and user-friendly interfaces within Tableau, stakeholders can enhance their ability to explore data dynamically, derive actionable insights, and drive informed decision-making processes that propel Adidas's success in the competitive US market.

4. Source of DataSet:

The dataset is taken from Kaggle. Kaggle is a platform that hosts a variety of datasets from

different domains such as healthcare, finance, sports, and more. The datasets on Kaggle are

contributed by users and organizations from all over the world.

To access datasets on Kaggle, you first need to create an account on the platform. Once you have

an account, you can search for datasets using the search bar on the Kaggle homepage or browse

through the datasets by category.

About: An Adidas sales dataset is a collection of data that includes information on the sales of

Adidas products. This type of dataset may include details such as the number of units sold, the

total sales revenue, the location of the sales, the type of product sold, and any other relevant

information.

Adidas sales data can be useful for a variety of purposes, such as analyzing sales trends,

identifying successful products or marketing campaigns, and developing strategies for future

sales. It can also be used to compare Adidas sales to those of competitors, or to analyze the

effectiveness of different marketing or sales channels.

There are a variety of sources that could potentially provide an Adidas sales dataset, including

Adidas itself, market research firms,

government agencies, or other organizations that track sales data. The specific data points

included in an Adidas sales dataset may vary depending on the source and the purpose for which

it is being used.

Here are the details of my chosen data set.

• Name: Adidas Sales in United States

• Link: https://www.kaggle.com/datasets/ahmedabbas757/dataset

• Format: CSV

• No. of data sets: 1

• Number of Rows: 9641

• Number of columns: 12

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- Size: 21.4 MB
- Date Fields:
 - i. Retailer
 - ii. Retailer ID
 - iii. Invoice Date
 - iv. Region
 - v. State
 - vi. City
 - vii. Product
 - viii. Price per Unit
 - ix. Units Sold
 - x. Total Sales
 - xi. Operating Profit
 - xii. Sales Method

5. ETL process

Extracted the data set from the Kaggle which contains the date of sales of Adidas products in USA from the years 2020,2021.

Transformed the data by removing the state of Alaska.

Loaded the dataset into the Tableau.

Created Sales of Adidas dashboard using the Tableau.

6. Analysis of DataSet

6.1. Adidas in the USA

- i. Introduction: This provides a visual representation of the geographic distribution of Adidas product sales across different states in the USA. By analyzing sales data at the state level, stakeholders can gain insights into regional preferences, market penetration, and consumer behavior. Through interactive maps, users can easily identify which states are driving the highest sales volumes and explore potential opportunities for market expansion or targeted marketing campaigns. Additionally, trends in sales performance across different regions can help stakeholders understand variations in demand and tailor their strategies accordingly.
- ii. General Description: The section on "States Selling Adidas Products in the USA" within the Adidas sales analysis dashboard provides a comprehensive overview of geographic sales distribution across the country. By visualizing sales data at the state level, stakeholders gain valuable insights into regional preferences and market penetration strategies. This analysis enables them to identify which states drive the highest volumes of Adidas product purchases, highlighting key areas of strength and opportunity within the USA market. Armed with this information, stakeholders can tailor marketing campaigns, allocate resources effectively, and optimize distribution strategies to maximize sales and capitalize on emerging trends in specific geographic regions.

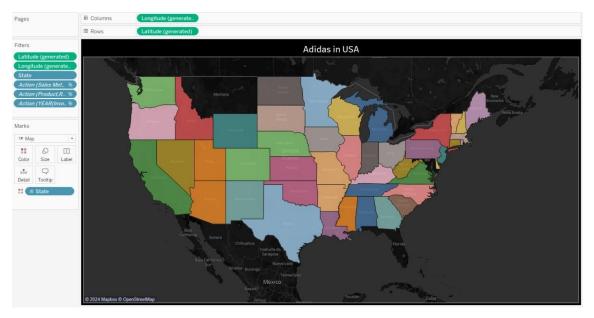
iii. Analysis Result:

Used Map to represent states of USA where products of Adidas are sold or used.

This Map will show the analysis of states of USA where products of Adidas are sold or used.

The map visualization showcases the geographic distribution of Adidas product sales, allowing stakeholders to pinpoint regions with the highest and lowest sales volumes. It enables a visual understanding of market penetration and consumer preferences across different states. By analyzing sales data spatially, stakeholders can identify potential growth opportunities in underperforming regions and allocate resources effectively to capitalize on strong markets. Moreover, the map can highlight areas where targeted marketing efforts or distribution strategies may be needed to further enhance sales performance.

iv. Visualization:



6.2. Units Sold Region-wise

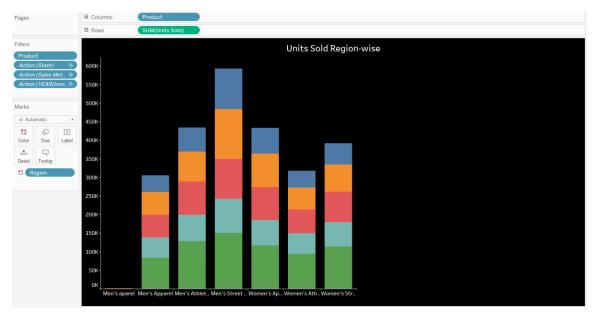
- i. Introduction: Understanding the regional variation in units sold is crucial for pinpointing areas of strength and opportunity within the USA market. By analyzing sales data across different regions, stakeholders can identify trends, disparities, and growth potential, enabling them to allocate resources effectively and tailor marketing initiatives to specific geographic areas.
- ii. General Description: The "Units Sold Region-wise" section of the Adidas sales dashboard offers a detailed examination of sales performance across different regions within the USA market. By segmenting sales data based on geographic regions, stakeholders gain valuable insights into variations in consumer demand and market trends. This analysis allows for a nuanced understanding of which regions drive the highest sales volumes and which areas present growth opportunities. By identifying trends, disparities, and growth potential across regions, stakeholders can tailor their marketing strategies, distribution efforts, and inventory management to optimize sales performance and capitalize on regional market dynamics.

iii. Analysis results

Used Stacked bars to represent the units sold region-wise. This shows the products sold region-wise that is Midwest, Northeast, South, Southeast, and West. Stacked bar charts provide a detailed breakdown of units sold across various regions within the USA,

facilitating comparisons and trend analysis over time. These visualizations allow stakeholders to identify regional trends, disparities, and growth opportunities. By examining changes in sales volume across different regions, stakeholders can tailor their marketing strategies, inventory management, and distribution efforts to meet specific regional demands effectively. Moreover, the stacked format enables stakeholders to discern the contribution of each region to overall sales performance, guiding resource allocation and strategic decision-making.

iv. Visualization



6.3. Products Monthly Sales

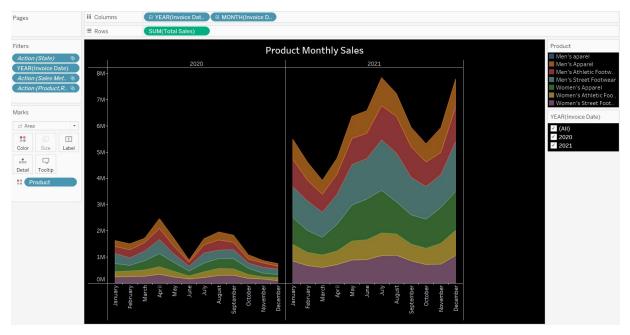
- i. Introduction: Tracking monthly sales performance over two years allows stakeholders to identify seasonality, trends, and patterns in consumer behavior. By visualizing product sales data every month, stakeholders can pinpoint peak periods, assess the impact of marketing campaigns and promotions, and make informed decisions regarding inventory management and product development.
- ii. General Description: The "Products Monthly Sales" section of the Adidas sales dashboard provides a comprehensive overview of sales performance on a monthly basis over the two pivotal years. This analysis allows stakeholders to track trends, seasonality, and fluctuations in consumer demand for Adidas products throughout each year. By visualizing monthly sales data, stakeholders can identify peak periods, assess the impact of marketing

campaigns and promotions, and make informed decisions regarding inventory management and product development. Additionally, this analysis enables stakeholders to understand the evolving preferences of consumers over time and adapt their strategies accordingly to maximize sales and drive business growth effectively.

iii. Analysis results

Used Area Chats (Discrete) to represent the product's monthly sales in years 2020,2021. This area chat shows the product's monthly sales with product and year as the filters. Area charts offer a comprehensive view of monthly sales data for Adidas products over the years 2020 and 2021, illustrating seasonal trends, peaks, and troughs in sales. These visualizations enable stakeholders to identify patterns and changes in consumer demand throughout the year, facilitating informed decision-making regarding inventory management, marketing campaigns, and product launches. By analyzing monthly sales data discretely, stakeholders can pinpoint factors driving fluctuations in sales performance, such as seasonal promotions, product launches, or external market influences, and adjust strategies accordingly to optimize sales and revenue.

iv. Visualization



6.4. Top 5 Retail Sellers of Adidas Products in the USA

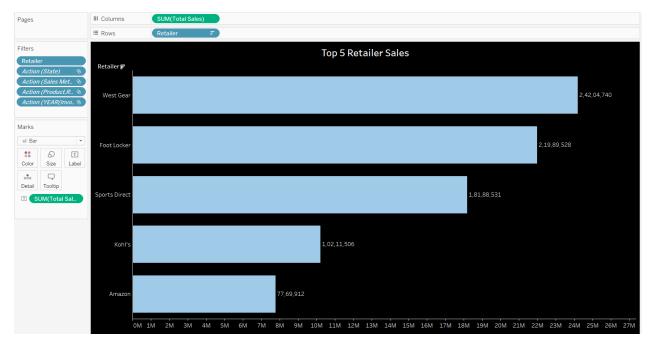
- i. Introduction: Identifying the top retail sellers of Adidas products provides valuable insights into distribution channels, market share, and competitive dynamics. By ranking retailers based on sales volume or revenue, stakeholders can assess the effectiveness of distribution partnerships, identify potential collaborators for co-marketing initiatives, and gain a deeper understanding of consumer preferences and shopping habits.
- ii. General Description: The "Top 5 Retail Sellers of Adidas Products in the USA" section of the Adidas sales dashboard highlights the leading retail partners based on sales volume or revenue. By identifying these top sellers, stakeholders gain insights into the distribution channels that drive the highest volumes of Adidas product sales within the USA market. This analysis sheds light on market share, competitive dynamics, and the effectiveness of distribution partnerships. By understanding which retailers are driving sales, stakeholders can optimize their distribution strategies, foster stronger collaborations with key partners, and capitalize on growth opportunities within the retail landscape.

iii. Analysis results

Used Bar graph to represent top 5 retailer sales.

This shows the total sales of the retailers selling Adidas products in the USA. The bar graph depicting the top five retail sellers of Adidas products provides insights into market share, competitive dynamics, and distribution effectiveness. Compare sales performance among the top retailers, identifying key players in the market and assessing their relative strengths and weaknesses. By analyzing sales data by retailer, stakeholders can evaluate the effectiveness of distribution partnerships, identify potential collaborators for co-marketing initiatives, and gain a deeper understanding of consumer purchasing behavior within different retail environments.

iv. Visualization



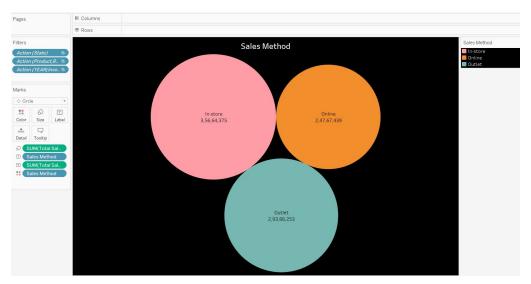
6.5. Sales Method

- i. Introduction: Understanding the sales method through which Adidas products are sold in the USA—whether through brick-and-mortar stores, e-commerce platforms, or other channels—is essential for optimizing sales strategies and resource allocation. By analyzing sales data by method, stakeholders can identify trends in consumer behavior, assess the performance of different sales channels, and tailor their approach to meet evolving customer preferences and market dynamics.
- ii. General Description: The "Sales Method" section of the Adidas sales dashboard provides insights into the various channels through which Adidas products are sold in the USA market. By analyzing sales data across different methods such as brick-and-mortar stores, e-commerce platforms, and others, stakeholders gain a comprehensive understanding of consumer purchasing behavior and preferences. This analysis helps stakeholders optimize their sales strategies, allocate resources effectively, and tailor their approach to meet the evolving needs of consumers. By understanding which sales methods are most effective and efficient, stakeholders can drive business growth and capitalize on emerging trends in the dynamic retail landscape.

iii. Analysis results

Used Packed Bubbles to represent sales method. This shows the total sales from the different methods that are In-store, Outlet, Online and using method filter for this. The packed bubble chart visualizes sales distribution across different methods such as brick-and-mortar stores, e-commerce platforms, and others, providing insights into consumer purchasing behavior and preferences. By analyzing sales data by method, stakeholders can identify trends in consumer shopping habits, assess the performance of different sales channels, and tailor their approach to meet evolving customer preferences and market dynamics. Moreover, the packed bubble format allows stakeholders to easily compare sales volume and distribution efficiency among different sales methods, guiding strategic decision-making regarding resource allocation and channel optimization.

iv. Visualization



7. List of Analysis with Results

States Selling Adidas Products in the USA (Map Visualization): The map visualization showcases the geographic distribution of Adidas product sales, allowing stakeholders to pinpoint regions with the highest and lowest sales volumes. It enables a visual understanding of market penetration and consumer preferences across different states. By analyzing sales data spatially, stakeholders can identify potential growth opportunities in underperforming regions and allocate resources effectively to capitalize on strong markets. Moreover, the map can highlight areas where targeted marketing efforts or distribution strategies may be needed to further enhance sales performance. Units Sold Region-wise (Stacked Bar Charts):Stacked bar charts provide a detailed breakdown of units sold across various regions within the USA, facilitating comparisons and trend analysis over time. These visualizations allow stakeholders to identify regional trends, disparities, and growth opportunities. By examining changes in sales volume across different regions, stakeholders can tailor their marketing strategies, inventory management, and distribution efforts to meet specific regional demands effectively. Moreover, the stacked format enables stakeholders to discern the contribution of each region to overall sales performance, guiding resource allocation and strategic decision-making.

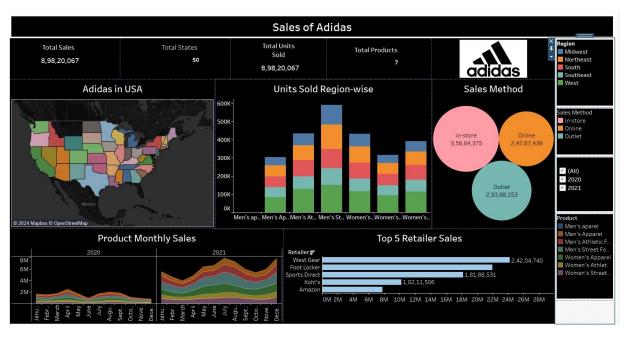
Product Monthly Sales for Years 2020, 2021 (Area Charts): Area charts offer a comprehensive view of monthly sales data for Adidas products over the years 2020 and 2021, illustrating seasonal trends, peaks, and troughs in sales. These visualizations enable stakeholders to identify patterns and changes in consumer demand throughout the year, facilitating informed decision-making regarding inventory management, marketing campaigns, and product launches. By analyzing monthly sales data discretely, stakeholders can pinpoint factors driving fluctuations in sales performance, such as seasonal promotions, product launches, or external market influences, and adjust strategies accordingly to optimize sales and revenue.

Top 5 Retail Sellers of Adidas Products in the USA (Bar Graph): The bar graph depicting the top five retail sellers of Adidas products provides insights into market share, competitive dynamics, and distribution effectiveness. Stakeholders can compare sales performance among the top retailers, identifying key players in the market and assessing their relative strengths and weaknesses. By analyzing sales data by retailer, stakeholders can evaluate the effectiveness of

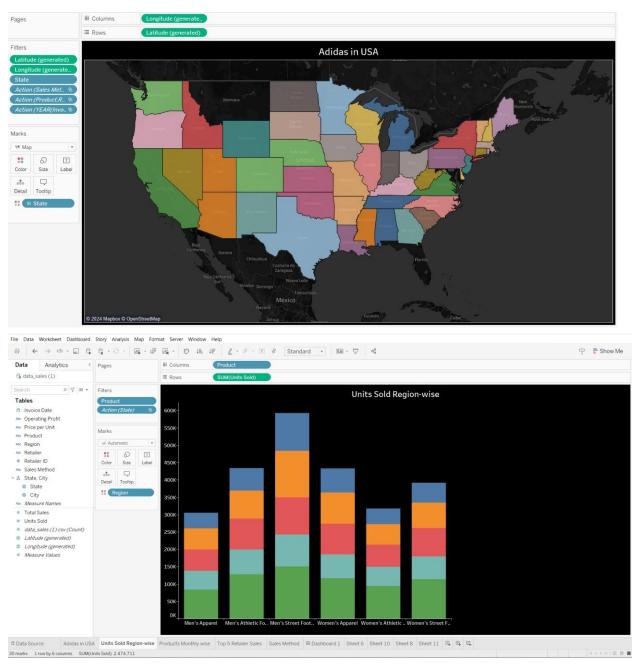
distribution partnerships, identify potential collaborators for co-marketing initiatives, and gain a deeper understanding of consumer purchasing behavior within different retail environments.

Sales Method (Packed Bubble Chart): The packed bubble chart visualizes sales distribution across different methods such as brick-and-mortar stores, e-commerce platforms, and others, providing insights into consumer purchasing behavior and preferences. By analyzing sales data by method, stakeholders can identify trends in consumer shopping habits, assess the performance of different sales channels, and tailor their approach to meet evolving customer preferences and market dynamics. Moreover, the packed bubble format allows stakeholders to easily compare sales volume and distribution efficiency among different sales methods, guiding strategic decision-making regarding resource allocation and channel optimization.

Dashboard Picture:



Individual Sheets:







8. Future Scope

Looking ahead, there's a wealth of opportunities to expand and enhance the Adidas sales dashboard, leveraging Tableau's robust capabilities to deliver even greater insights and value. Firstly, incorporating predictive analytics could empower stakeholders to forecast future sales trends based on historical data, market dynamics, and external factors such as economic indicators and consumer sentiment. By integrating machine learning algorithms, the dashboard could dynamically predict sales volumes, identify emerging market trends, and recommend targeted strategies to capitalize on opportunities and mitigate risks.

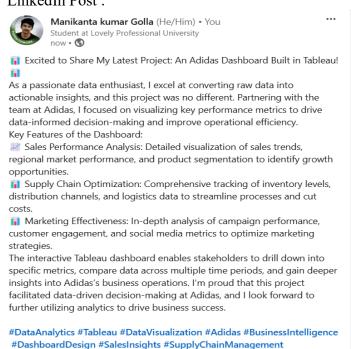
Moreover, expanding the geographical scope beyond the USA could provide a broader perspective on Adidas's global sales performance, enabling stakeholders to compare regional trends, assess market saturation, and identify untapped markets for expansion. By integrating external data sources such as demographic information, social media trends, and competitor analysis, the dashboard could offer a comprehensive view of the competitive landscape and consumer preferences, empowering stakeholders to refine their marketing strategies, product offerings, and distribution channels effectively.

Furthermore, incorporating real-time data feeds could enable stakeholders to monitor sales performance and market trends in real-time, facilitating agile decision-making and rapid response to changing market conditions. By integrating Tableau with other analytics tools and platforms, such as customer relationship management systems and supply chain management software, the dashboard could offer end-to-end visibility into the sales process, from customer acquisition to product delivery, enabling stakeholders to optimize operations and enhance customer satisfaction. Additionally, enhancing the interactivity and user experience of the dashboard could further engage stakeholders and facilitate deeper exploration of the data. By incorporating drill-down capabilities, filters, and dynamic visualizations, users could interactively explore sales data, uncover insights and answer ad hoc questions with ease. Moreover, incorporating storytelling features could enable stakeholders to communicate key findings and actionable insights effectively, fostering collaboration and driving alignment across the organization.

The future scope for the Adidas sales dashboard is vast and exciting, encompassing predictive analytics, global expansion, real-time monitoring, and enhanced interactivity. By leveraging Tableau's powerful capabilities and integrating diverse data sources, the dashboard can evolve into

a strategic tool that empowers stakeholders to make informed decisions, drive business growth, and stay ahead in the dynamic and competitive landscape of the sportswear industry.

LinkedIn Post:





9. References

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