Lessons learnt from PBI June

Yes, it is true that having a well-designed data model in Power BI makes it easier to write DAX expressions effectively.

The data model forms the foundation of a Power BI report and defines the relationships between different tables. When the data model is structured correctly, it reflects the relationships and hierarchy in the underlying data. This organization and structure provide several benefits for writing DAX expressions:

1. Data Integrity: A well-designed data model ensures that the relationships between tables are accurately defined, avoiding inconsistencies and errors in calculations. This enhances the integrity of the data and the accuracy of DAX calculations.
2. Simplified Formula Creation: With a clear data model, you can easily identify the relevant tables and columns required for your calculations. This simplifies the process of creating DAX formulas by providing a logical structure and making it easier to locate the necessary data.
3. Enhanced Readability and Maintenance: A well-structured data model improves the overall readability and understandability of the DAX expressions. It allows you to use intuitive column and table names, making the formulas more self-explanatory. Additionally, when the data model is designed properly, it becomes easier to maintain and update the DAX calculations as the report evolves.
4. Optimal Performance: A well-optimized data model ensures efficient query execution and improves the performance of DAX calculations. By leveraging relationships and using appropriate filtering techniques, you can minimize the processing time required for complex calculations.

In summary, a well-designed data model provides a solid foundation for writing DAX expressions in Power BI, leading to improved data integrity, simplified formula creation, enhanced readability, and optimal performance.

Sprocket Central Pty Ltd is a medium-sized organization in Australia specializing in bikes and cycling accessories. They have obtained a new list of 1000 potential customers with their demographics and attributes. The marketing team believes that analyzing this data can reveal valuable customer insights to optimize targeted marketing efforts and improve overall performance by focusing on high-value customers.

**Insights**

. Among the wealth segments, mass customers accounted for 50.97% of the total value, followed by high net worth customers with 25.27% and affluent customers with 23.76%.

. In terms of bike-related purchases in the last three years, mass customers made 25,115 purchases, high-net-worth customers made 12,716 purchases, and affluent customers made 12,005 purchases.

. In terms of bike-related purchases by state, residents of New South Wales made 25,409 purchases, followed by residents of Victoria with 12,676 purchases, and residents of Queensland with 11,751 purchases.

. Customers with unspecified job titles made the highest number of bike-related purchases, followed by Cost Accountants with 793 purchases and VIP Quality Control with 755 purchases.

. Rockwell Markson made the highest number of bike-related purchases in the past three years with a total of 94, followed by Chickie Brister with 86 purchases.

. The financial services industry had the highest number of purchases in the past three years with 10,564, followed by the manufacturing industry with 9,562 purchases.

. Middle-aged adults accounted for 50.76% of bike-related purchases, followed by old adults with 34.37% and young adults with 14.87%.

**Recommendation**

Based on the insights from the Sprocket Central bike sales analysis, the following recommendations can be made:

. Target Mass Customers: Since mass customers represent the largest portion of the customer base and contribute the highest value, it is advisable to focus marketing efforts on this segment. By understanding their preferences and needs, personalized marketing campaigns can be designed to maximize their engagement and loyalty.

. Tap into High Net Worth Customers: Although high net worth customers contribute a smaller portion of the value, they still hold significant potential for generating revenue. Targeted marketing strategies, such as exclusive offers or premium services, can be implemented to cater to their specific needs and enhance their overall customer experience.

. Expand Presence in New South Wales: Considering the highest number of bike-related purchases in the last three years occurred in New South Wales, it would be beneficial for Sprocket Central to strengthen its presence in this region. This can be done by increasing marketing efforts, establishing partnerships with local retailers, or organizing promotional events to attract more customers.

. Leverage Job Title Data: By analyzing the job titles of customers, valuable insights can be gained regarding their purchasing behavior. Sprocket Central can tailor marketing campaigns or create targeted product offerings based on the preferences and needs of different job categories. For example, specific campaigns can be designed for Cost Accountants or VIP Quality Control professionals to cater to their specific interests.

. Foster Customer Loyalty: Identifying and rewarding top customers like Rockwell Markson, who made the most bike-related purchases, can help build customer loyalty and encourage repeat business. Implementing a customer loyalty program or offering exclusive benefits can incentivize customers to continue their association with Sprocket Central.

. Explore Partnerships in the Financial Services and Manufacturing Industries: Given that the financial services and manufacturing industries have shown significant engagement in bike-related purchases, Sprocket Central can consider forming strategic partnerships or collaborations with companies in these sectors. This can lead to mutually beneficial opportunities for cross-promotion and reaching a wider customer base.

. Tailor Marketing Strategies for Different Age Groups: Understanding the purchasing behavior of different age groups can help create targeted marketing campaigns. Since middle-aged adults account for the majority of bike-related purchases, marketing efforts should be tailored to their preferences and needs. However, it is important not to neglect the younger and older adult segments and design strategies that appeal to their specific demographics.

By implementing these recommendations, Sprocket Central can optimize their marketing and growth strategies, enhance customer engagement, and drive overall business performance.

I am excited to share that I have just completed the prestigious KPMG Data Analytics Consulting Virtual Internship offered by Forage! 🎉

During this immersive program, I had the privilege to dive deep into the world of data analytics and gain practical experience in solving real-world business challenges. From analyzing complex datasets to delivering data-driven insights, the internship equipped me with invaluable skills and knowledge.

I am incredibly grateful for the opportunity to work on industry-relevant projects and learn from experienced professionals in the field. This internship has not only expanded my technical expertise in data analytics but also provided me with a broader perspective on the power of data in driving strategic decision-making.

I am now more confident in my ability to tackle complex data problems and contribute meaningfully to organizations seeking data-driven solutions. I look forward to applying my newly acquired skills and knowledge in future endeavors and making a positive impact in the field of data analytics.

Thank you to KPMG and Forage for this incredible opportunity and for helping me take a significant step forward in my data analytics journey! #KPMG #DataAnalytics #VirtualInternship #Forage