MMAS 801 In-Person:   
Assignment 2 (GL): Analytics Reflection/Assessment

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Introduction

In today’s data-driven world, utilizing analytics and artificial intelligence (AI) is essential for any organization to stay competitive. At TD Bank Enterprise Data & Analytics, I am a Business Intelligence Practitioner, who is excited for what is going to happen in the world of data analytics. Over the past five years, our focus on data in business banking has led us to collaborate closely with various teams, including Credit, Deposit, Cash Management, and Merchant Solutions. This collaboration has been pivotal in leveraging data to enhance decision-making and drive business outcomes.

Over the past five years in this role, I believe TD has been moving in a positive direction in its data analytics and AI journey, making data a high priority for practitioners to pull insights and make decisions with business partners. After reviewing the DELTA Self-Assessment scale, I would rate TD as a 4.05. Although TD is in the advanced stage of its data and analytics journey, it is rapidly progressing, and the demand for insights from business partners has been at all time high.

**How data is being used**

I believe the key to pull insights and understand the data is to have clean database. A good, clean integrated database is the foundation of insightful analytics, enabling business partners to make informed decisions and drive growth. Not only is this important for good insights but for quality, when pulling data especially when looking at it for the first time, it could be led with misinterpretation of columns and a data practitioner could be spending days trying to interpret each of the columns, making it difficult to tell a story.   
For TD, with data moving to cloud and housing it in a centralized area, it has given the opportunity to increase the quality of data. This has given the opportunity for data practitioners to be able to work with other divisions of the bank to collaborate and give insights. I would recommend TD to continue to centralize their data into cloud and keeping up with the quality of the data. This makes it easier for practitioners to gather insights as well as save time in the research phase of the analysis.

**Saving time for data practitioners with the right tools**

When working with business partners to provide them insights, time is the most precious resource. Therefore, having the right tools and data available are crucial for delivering a timely response. To tackle this, TD has prioritized this by giving practitioners access to Microsoft Azure Databricks. Databricks has been proven to be a significant advantage for practitioners, due to its efficiency in processing large datasets, create quick visualizations and ability to run AI models.

Looking back 5 years ago, the data we provided business partners was primarily in the form of Excel files, where business partners would create pivot tables to derive insights. Today, with tools like Tableau and Power BI, practitioners can collaboratively analyze data with business partners to derive insights. These tools have created a more interactive approach with data, with business partners being able to share insights with their leadership team. Dashboards and scorecards have also been used as an aid for the end-user to keep track and measure against their objective key results (OKRs).   
  
Below are some of the insights we have been able to create with business partners are:

1. Cross Sell Opportunities – Being able to look at a customer who are part of two different divisions and analyze the different products the customer has. This has given the opportunity to be able to deepen the understanding of the customer and the revenue they bring to the bank.
2. Market Share – Being able to understand where we are compared to other banks. Bringing data from other banks with the same product line and understand where we are in current environment. With this data it has given insights to see what is working and is not working.
3. Sales and Strategy – From an agent perspective to looking for clients/customers. With this data, we can answer some valuable questions like, how are your sales as an agent doing compared to your peers? As well as in the different levels geographically where are the customers located by their respective line of business. All this information is useful to for sales agents to be able to get and close leads.
4. Customer Journey – When a customer joins the bank, we can tell a story from when they submitted their application, to when an agent first contacts the possible customer, to when they get there first loan or deposit. This type of data is important because we can tell how long each part of the process takes. If the data step from applying for a loan to making contact takes 2-3 business days, those 2-3 days could be possible that the customer goes somewhere else. Leadership teams with this information would be looking into how we can shorten this gap and question why this is the case.

With the four examples listed above, we can collaborate with business partners to give insights to increase revenue and grow business, this is not possible to do with a good foundation of data and right visualization tool to be able to present the story.

When reviewing the Analytical Maturity Model, with Data being 3.75, Enterprise – 4.00, Leadership 3.25 and Analysts – 4.75. TD has been moving in the right direction of being able to give analysts the tools and data to be able to do their analysis. Data and tools are going to be important especially with the rise of artificial intelligence.

**AI Initiatives**

In the past year, the adoption of AI tools such as ChatGPT and Co-Pilot has revolutionized our operations. For instance, Co-Pilot has been instrumental in automating routine tasks, allowing data practitioners to focus on strategic initiatives. These time-savings from automating routine tasks and using AI to help with administrative tasks has reduce cost. Despite initial concerns about data security, integrating AI within our work environment has mitigated these risks, showcasing AI’s potential to transform our business practices.

Convincing business partners to embrace artificial intelligence in the workplace used to be challenging due to concerns about models producing incorrect outcomes. However, with the growing interest in AI and generative AI, business partners are beginning to see its value as a tool for aiding in the decision-making processes. This increasing demand has paved the way for innovative ideas on integrating AI and business knowledge into decision-making.

**Reflection:**

The integration of AI tools has been a significant time-saver, especially for data practitioners like me. I can now generate code templates without having to search the web or start from scratch. Additionally, the integration of Co-Pilot and Power BI has been phenomenal. These Large Language Models (LLMs) tools like Co-Pilot now understand internally used acronyms within our organization, allowing them to generate charts and summarize data based on a given prompt. This has not only benefited me but also our business partners. They can now collaborate more effectively with data practitioners to generate and execute ideas. This progress reassures me that we are moving in the right direction regarding data management and the use of artificial intelligence.

Conclusion

I believe that TD is in the mature stages of its data and analytics journey. With the bank’s target for their data practitioners to be able to focus more on providing insights which has been done with the migration to use the Microsoft Azure Suite. This is going to be even more important with the increasing demand in artificial intelligence.