## MSIT 3820 BUSINESS INTELLIGENCE

## **BI PROJECT – FIRST DRAFT**

## **GROUP 8**

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### 1. What are some of the problems that the company has?

The company is currently facing several key challenges. Firstly, they are struggling with shipping delays, which can be caused by various factors such as not having enough products in stock, their warehouses being in inconvenient locations, and encountering issues with the delivery companies they work with. Secondly, they are finding it difficult to manage their inventory efficiently across different locations, especially considering the various methods they use for shipping their products. Lastly, they are striving to keep their customers satisfied, but this is proving to be a challenge due to the potential delays in deliveries, frequent stock availability issues, and concerns about the lack of transparency in their shipping processes. Maintaining a positive customer experience is essential, but these obstacles are currently making it harder for the company to achieve this goal.

### 2. What are the company's overall goals?

The company wants to make things better for their customers and how they work. They want to deliver their products on time to all their customers in different places and make sure the customers are happy with what they get. They also want to be better at managing their things and the way they send out their products so that everything happens quicker and smoother. They promise to be open and honest about how they send things, so the customers can trust them more. They believe that if they can make their customers happy and trust them, then the customers will be happy to work with them again.

### 3. How could Business Intelligence help the company to solve the problems?

Using Business Intelligence is like having a special tool that helps the company understand why sometimes things take a long time to reach customers. It also helps them figure out how to send things faster and manage their products better. By looking at what happened before and what customers have said, they can guess how much of their stuff they might need in the future and try to make customers happier. With these tools, they can even see where their things are while they're being sent, so they can tell customers what's going on and try to fix things before they become a big problem.

### 4. What software does the company utilize? (e.g. Excel, SQL, Python, Tableau, etc.)

The company may use various software programs, but utilizing Tableau could offer the best solution for their needs. Tableau is a user-friendly tool that can help them understand their data better. Its interactive dashboards and features can provide valuable insights, making it easier for the company to make important decisions and improve their overall performance. Using Tableau could simplify their data analysis and help them address their challenges more effectively, ultimately contributing to the achievement of their goals.

# 5. What are the logical components of the star schema? Or, if they do not have a Business Intelligence system in place, what would the components be to analyze data that is useful in solving the problems?

The company can use a special way to organize their information. They can keep the details about how they send things in one place. This includes things like how long it takes to process an order, how long it takes for things to be delivered, and if there were any problems with the delivery.

They can also keep all the important details about their customers, the products they sell, where they send things from and to, and when everything happens. Another place can store information about how much of their products they have, when they need to get more, and how much they can keep in stock. They can even keep track of how well they are doing with sending things out, like if they are doing it fast enough and if their customers are happy. By using all of these ways to organize their data and using the special tools to understand it better, the company can make sending things easier, keep their products managed well, and make their customers happier with their service.

#### 6. What are the sources of data?

In TEMU, we gather crucial information from various sources to keep our operations smooth. Our order processing system provides insights into processing times, while the shipping and delivery system captures data on delivery times and potential delays. The inventory management system stores details about stock levels and restocking needs. Customer feedback guides us in understanding satisfaction levels, and sales records detail our product journey. These sources paint a vivid picture of TEMU's operations, guiding continuous improvement and ensuring customer delight.

### 7. What is the frequency of the data?

At TEMU, their order processing is like the heartbeat, always giving us updates on each order in real-time. It's how we stay in tune with what our customers want. Imagine our shipping and delivery as a watchful eye, keeping track of each package's journey and sending us reports to warn of any issues. Our inventory data is like our memory, updating regularly based on sales and

restocking needs. Customer feedback is like having a chat with our community, learning from their experiences and suggestions. And our sales records are like the stories of our business, with real-time recordings capturing the essence of every sale and guiding us on our journey forward.

# 8. What else can you do to help the company achieve their goals? (E.g., Increase sales? Lower costs? Increase organizational efficiency? Provide better decision-making capacity?)

At TEMU, they always trying new things to make our customers happy. they use supersmart technology to figure out what they might want in the future and make sure we have just the right amount of everything. they also keep them in the loop about their orders in real-time, so their shopping is smooth and fun. To be smart with our money, they are finding faster and cheaper ways to deliver packages. They are working hard to make sure our team can work together seamlessly, so when you order something, we can get it to you quickly and without any problems. Moreover, we'll be using Tableau visualizations to derive insights about regions where there is a higher number of regular customers and construct new warehouses in those regions for faster and reliable delivery. Our goal is to make everything easy, fast, and enjoyable for everyone at TEMU!

### 9. Who is/are the consumer(s) of the Business Intelligence insights?

The primary consumers of Business Intelligence insights at TEMU are the Marketing, Operations and Logistics teams working behind the scenes to ensure product readiness, the customer service team on the front lines enhancing overall experiences, and the creative minds in sales and marketing using insights to present products in an exciting way. These teams collectively work as a close-knit unit to make TEMU a fantastic experience for customers.

# 10. What might you recommend the company do in order to improve their Business Intelligence systems?

To make our Business Intelligence (BI) systems work even better, we suggest a few things. First, let's regularly check our BI tools to make sure they keep up with how our business is growing. We should see if they are still useful, easy for everyone to use, and can give us the important information we need. Next, let's help our team become experts in using these tools by giving them special training. It's like giving them a treasure map to find all the valuable information in our data. We also need to make sure our BI and IT teams work closely together so that all our data fits well together, helping us make smart decisions. Keeping our data safe is super important, so we should regularly update the security measures. And as our business grows, let's check if our BI systems can handle more data and more people using them. Finally, let's ask our team for their thoughts on how easy and useful our BI tools are. Their feedback can help us make things even better based on what they need. By doing these things, we can make sure our BI systems stay helpful, easy to use, and really important for our business goals.