

CHAPTER VI

CONCLUSION AND SUGGESTION

6.1. Conclusion

Based on the research results, the conclusion as follow:

In order to be able to develop SSBI system using Microsoft Power BI, there are several steps to do such as preparing the data sources. This data sources are very essential because it will be used as a guidance or raw data. In this research, it only uses single data source and it was stored in Microsoft SQL Server database. The data source that used in this research is Adventure Works 2017 include sales transaction data. After preparing the data sources, then the business users need to identify their objectives of implementing BI solutions, such as what kind of analysis needs to be performed. What are the Key Performance Indicators (KPI's) of the analysis or system performance. In this research, the scenario is the analysis of B2C model (business to customers) that focused on sales analysis. After identifying the objectives of the solution, then the developers of SSBI solution should do data warehousing process. Data warehousing process is started from identifying the requirement dimension and fact table, as well as the measures. Specific data warehousing was implemented in this research. There are several dimension tables that was created such as product, sales territory, location, date, and customer. One fact table is fact all sales table. After the business user able to identify the requirement table, then the next is to perform Extract, Transform, and Load (ETL) process. The ETL process is started by extracting the data from data sources. After choosing the required table from data sources, then the next step is performing transform process that was executed using Power Query Editor and Data View designer in Microsoft Power BI. After that, the data should be loaded to the Power BI model and relationship of the dimensions and fact table is created. Lastly, several dashboards or analysis can be created to explore the data and get the insights. There are 3 default proposed dashboards in this research such as product

sales analysis, sales analysis by location, and sales by customer. In addition, this research shows that the business users can get deeper exploration by creating customized analysis such as creating new customized dashboard in order to get their desired insights. The example of this customized analysis exploration is creating new dashboard to shows the difference of customer profile between top 5 products vs bottom 5 products by margin.

6.2. Suggestion

Based on the research result, the researcher has several recommendations:

1. The next researcher can develop Self-Service BI system using OLTP data from the real company.
2. The next researcher can combine Microsoft Power BI with Azure Machine Learning and R so that it will be very beneficial for predictive analytics.
3. The next researcher can compare the development of Self-Service BI system using Microsoft BI Tools and other tools available in the marketplace.