# **DP201 - Designing an Azure Data Platform Solution**

## Lab 1 – Azure Architecture Considerations

Use the table below to document the security, performance, scalability, availability, recoverability, and efficiency and operations requirements as identified from the AdventureWorks case study.

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| **Exercise** | **Requirement** | **Requirement type** |
| 1 | Business Reporting – database: access must be restricted  Connected Bicycle – information retrieved by the microcomputer: must ensure security secure connectivity and storage of data  Ordering system – database must be secure | Security |
| 2 | Ordering system - database (could be Azure SQL DB or Cosmos DB) and website: particularly during the months of November and December, the demand for bikes grow ahead of the holiday period | Scalability |
| 2 | Business Reporting – database and data load: they need to process the reporting data in a timely manner  Business Reporting – text analytics engine: must be performant | Performance |
| 3 | AdventureWorks Website - images storage: must have high availability  Ordering system – database (could be Azure SQL DB or Cosmos DB) and website: global availability of its application and data sales and ordering purposes  Business Reporting – text analytics engine: must be resilient  Customer Service – track fraudulent claims: must be done in real-time  Customer Service – chatbot: respond in real-time regardless of where the customer is located  Social Media Analysis – track any hashtag of any time  Connected Bicycle – information retrieved by the microcomputer: 1st party and 3rd party applications must have access to the information and in real time | Availability |
| 3 | Business Reporting - database: holds historical data  Customer Service – chatbot: must store conversation history | Recoverability |
| 4 | Customer Service – chat bot: give custom recommendations  Business Reporting – text analytics engine: use predictive analytics  Customer Service – check status on current orders  Customer Service – track fraudulent claims: system to autodetect frauds  Connected Bicycle – locking of features of the bicycle: must be automatic | Automation |