QUIZ ONE – DMIT2507 Business Intelligence Name:\_\_\_\_\_Rio Casanova

1. In order for an organization to have success, effective decision making must occur at:
   1. CEO level
   2. CFO level and Vice President level
   3. Line manager and departmental level
   4. Individual employee level regardless of title
2. What is an effective decision?  
     
   An effective decision is a decision that aids in the progress towards a specific goal
3. What are three key factors for making effective decisions?
4. To set a specific collection of goals to strive to accomplish
5. A method to measure ones progress towards those set goals or away from the goals
6. Information based on the collected measurements to be given to the right people as quick as the decision makers need it.
7. Explain foundation VS feedback information.  
     
   Foundation information is the information that is used in the basis or “foundation” for making a decision and Feedback information is an evaluation of how effective that decision was.
8. What does the term “Business Intelligence” mean?  
     
     
   The acquisition of correct information to the right people within an appropriate window of time to assist decision making.
9. Explain the difference between “Layout-led” and “Data-led” discovery.  
     
     
   Layout-led discovery is knowing what questions to ask and knowing where the answer can be found.

Data-led discovery is more “scenario based” meaning that there are instances where information that is collected leads us in the direction of where our answer can be found but it is not obvious at the first observance. This is knowing the question but not sure where the answer can be found, therefore needing the leverage of data to discover the answer or solution. This method is less common than layout-led and requires a “drill-down” mechanism of sorts to sift through data to find the answer we seek.

1. Explain what “Data mining” is?  
     
   Data mining is about the unknown unknown. Data mining is the observance of obscure patterns or correlation and extracting information to leverage in business. It may not even be clear what the question or answer is but the information tells a story that a business can use to its advantage

1. Upper management is concerned with what type of goals?
   1. Day-to-day
   2. Short term
   3. Long term
   4. Non-measurable
2. Middle management is concerned with what type of goals?
   1. Day-to-day
   2. Short term
   3. Long term
   4. Non-measurable
3. Forepersons, managers, and group leaders are concerned with what type of goals?
   1. Day-to-day
   2. Short term
   3. Long term
   4. Non-measurable
4. Highly summarized measures are most likely to be used by?
   1. Upper management
   2. Mid-level management
   3. Forepersons, line managers, and group leaders
5. List at least two common data sources where data for a BI solution may be located.  
     
   The first is the organizations existing OLTP Database,

And the second would be Spreadsheets (EXCEL). There is also XML text files, simple text files, log files, and paper documents.

1. Explain “latency of Business Intelligence”.  
     
     
   Latency would be the time that it takes to receive Foundation and Feedback information. For example: Lower levels of management need a low level of latency because their goals are day-to-day and require almost immediate feedback and foundational data by the end of the day to determine if they are hitting their daily, weekly, or even monthly goals.

Compare that with the highest level of management that plans years in advance, they wont know how effective their decisions were until a couple of quarters in, or a year has gone by. Latency in all cases is how long it takes for the data to come back to decision makers that help them evaluate their past decisions and what decisions to make next.

1. Summarized measure with drilldown are most likely to be required by?
   1. Upper management
   2. Mid-level management
   3. Forepersons, line managers, and group leaders
2. Low latency is likely required by?
   1. Upper management
   2. Mid-level management
   3. Forepersons, line managers, and group leaders
3. Explain what the ETL process is and identify what tool is used in addition to SQL programming to help simplify the process.  
     
   ETL stands for Extraction Transform & Load – this is exactly what takes place when moving data from a standard database like OLTP to a data warehouse. SSIS is used to assist with this – it stands for SQL Server Integration Services.
4. Data- led discovery is generally provided by what BI solution component?  
     
   I believe the Cubes (OLAP) that are created are the most effective at data mining. Cubes can acquire data mining results and turn them into reports. But this can also be done using a Relational Database. This is the SSAS (SQL Server Analysis Services) portion of the BI solution.
5. Identify at least 2 reasons for not wanting to do BI directly from an OLTP.  
     
   OLTP Databases aren’t designed for that kind of usage, they are good at collecting and storing data but not moving large batches of data around. An OLTP database will have a tough time storing old data and needs to be routinely wiped of old data every now and then to the keep system from getting bogged down. OLTP also doesn’t have the openness that other data solutions can provide.
6. After creating a basic outline of the BI solution, the data is located. Identify at least 2 places you might find the data.  
     
   *(If I understand the question correctly)*

The data that is being used to create the BI Solution can be found within an excel document that will be reviewed with the client for approval and will act as a blueprint for the project. One could also use a word or text document to create a blueprint for the solution, but this is informal and will not be presented to the client. We would also want to store our “blueprint” somewhere our collaborators would be able to access it easily.

1. What are 2 ways you can approach building a BI solution?  
     
     
   You can either start from the top down or the bottom up. In the top-down approach the company’s needs are determined with the goal of meeting the needs of all users once the BI solution is completed. In the bottom-up, it is about building the solution around a business process that can be refined over time. The BI solution isn’t the only thing impacting the decisions of the organization, which differs from top down that relies almost solely on the information from the BI Solution. The top-down approach requires the entire solution to be complete before it begins being useful, whereas the bottom-up only requires partial completion before it starts going to work.