Week 4 Quiz

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✔ **17/17** points
earned (100%)

✔ 1 / 1
points

1.

In the next 6 questions, indicate which specialist you'd seek out to help with each of the scenarios listed.

Refer to video 1 if you need a refresher!

You've just completed an analysis that reveals the importance of a few metrics that business leaders would like to see monthly. You need someone to help you productionalize and automate a monthly report containing those metrics.

Who should you talk to?

○ IT Infrastructure Resource

○ Application Developer

○ Data Architect

○ Database Administrator

○ ETL Developer

◉ BI Developer

Correct

○ Database Analyst

○

○ Data Analyst

○ Business Analyst

○ Modeler

○ Data Scientist

✓ 1 / 1 points

2.
You've arranged for an external partner to send you data each day. You need someone to help set up a file transfer process that will allow that partner to securely connect to your company through a firewall.

Who should you talk to?

◉ IT Infrastructure Resource

Correct

○ Application Developer

○ Data Architect

○ Database Administrator

○ ETL Developer

○ BI Developer

○ Database Analyst

○ Data Analyst

○ Business Analyst

○ Modeler

○ Data Scientist

✓ 1 / 1 points

3.

To ensure that the results of a data analysis can be placed into context, you need someone who can examine how certain business processes work and help you map them out.

Who should you talk to?

○ IT Infrastructure Resource

○ Application Developer

○ Data Architect

○ Database Administrator

○ ETL Developer

○ BI Developer

○ Database Analyst

○ Data Analyst

◉ Business Analyst

Correct

○ Modeler

○ Data Scientist

✓ 1 / 1 points

4.

You've done a descriptive analysis that seems to show a correlation between customer defection and several customer characteristics, but you think that a formal statistical procedure would yield more powerful results that can predict churn. You need someone who knows how to do this.

Who should you talk to?

○ IT Infrastructure Resource

○ Application Developer

○ Data Architect

○ Database Administrator

○ ETL Developer

○ BI Developer

○ Database Analyst

○ Data Analyst

○ Business Analyst

◉ Modeler

Correct

○ Data Scientist

✔ 1 / 1 points

5.
You know that a new product is coming online and you'd like to understand how measurements around that product will be represented in the database model.

Who should you talk to?

○ IT Infrastructure Resource

○

Application Developer

⊙ Data Architect

Correct

○ Database Administrator

○ ETL Developer

○ BI Developer

○ Database Analyst

○ Data Analyst

○ Business Analyst

○ Modeler

○ Data Scientist

✔ 1 / 1
points

6.
You're finding that the SQL queries you are writing against your data warehouse are taking a long time to run. You need someone who can help you determine if your queries are written in the best way. Who should you talk to?

○ IT Infrastructure Resource

○ Application Developer

○ Data Architect

⊙ Database Administrator

Correct

○

ETL Developer

○ BI Developer

○ Database Analyst

○ Data Analyst

○ Business Analyst

○ Modeler

○ Data Scientist

✔ 1 / 1
points

7.
Consider the following structure for analytic organizations. Pick which structure would fit best in each scenario.

Refer to video 2 if you need a refresher!

Your company is functionally organized. The data sources and analytical techniques tend to be pretty similar across functions, and most resources are located in a headquarters building in downtown Chicago. The executive team gets along, but are very protective of their teams and work product.

○ Allocated Model

○ Centralized Model

○ Distributed Model

◉ Coordinated Model

Correct
Most elements of this situation would suggest a Centralized or Allocated Model. However, the strong beliefs of the executive team may necessitate a Coordinated model.

✓ 1 / 1 points

8.

Your company is a multinational organization that operates in a number of distinct industries. Each industry uses its own methods and tends to hire somewhat different types of people into analytical organizations.

Which structure would best fit this scenario?

○ Allocated Model

○ Centralized Model

◉ Distributed Model

Correct

Just about everything in this case suggests that a Distributed Model would be appropriate.
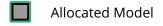
○ Coordinated Model

✓ 1 / 1 points

9.

Your company is organized by customer groups, which are mostly distinct but have some limited overlaps. Analyses vary in similarity - some are very similar, but others are quite different. They do, however use most of the same data sources. Currently resources are located within each customer group organization, but it's pretty typical for there to be only one or two analysts in each area.

Which structure would best fit this scenario?

☑ Allocated Model

Correct

Either a Centralized or Allocated Model would work best in this situation, primarily due to the small community of analysts that need to be leveraged across the organization. Having those resources distributed limits skill development and overall efficiency.

☑ Centralized Model

Correct

Either a Centralized or Allocated Model would work best in this situation, primarily due to the small community of analysts that need to be leveraged across the organization. Having those resources distributed limits skill development and overall efficiency.

☐ Distributed Model

Un-selected is correct

☐ Coordinated Model

Un-selected is correct

✔ 1 / 1 points

10.

What term best describes the process of identifying and standardizing an organization's most critical data?

Refer to the following video if you need a refresher: video 3.

○ SOX Compliance

○ Metadata Management

◉ Master Data Management

Correct

All of these terms are involved in Data Governance, but Master Data Management, or MDM, best describes this process.

○ Data Governance

○

○ Data Stewardship

✓ 1 / 1
points

11.
Who is responsible for making sure that a data domain is correctly represented and used within an organization?

Refer to the following video if you need a refresher: video 3.

⦿ Data Steward

▲

Correct
The Data Steward has responsibility for a specific data domain. The Data Governance council will have broader responsibilities, and other roles have different responsibilities.

○ Data Architect

○ Data Governance Council

○ SOX Compliance Auditor

○ ETL Developer

✓ 1 / 1
points

12.
A large drugstore chain wants to use prescription data from its pharmacy to make complementary relevant offers to specific customers via custom coupon books, delivered via direct mail.

What is the most limiting standard that might be relevant in this case?

Refer to the following video if you need a refresher: video 4.

○ Policy Standards

⦿ Legal Standards

▲

Correct

A person's prescription data is generally Protected Health Information (PHI) covered under HIPPA, so there would likely be legal prohibitions to this type of activity.

○ Good Judgement

○ Ethical Standards

✓ 1 / 1
points

13.

A Mobile Phone Company wants to construct and sell 'profiles' of customers based on a combination of internet sites visited and location data.

What are the most limiting standards that might be relevant in this case? (select all that apply)

Refer to the following video if you need a refresher: video 4.

☑ Policy Standards

Correct

There are really no hard legal or ethical standards that prevent this type of activity. Some companies may have policies that prevent it, but it's much more likely that the only barrier to this approach is good judgement, which would be applied on a case basis.

☐ Legal Standards

Un-selected is correct

☑ Good Judgement

Correct

There are really no hard legal or ethical standards that prevent this type of activity. Some companies may have policies that prevent it, but it's much more likely that the only barrier to this approach is good judgement, which would be applied on a case basis.

☐ Ethical Standards

✓ 1 / 1 points

14.

Consider the following aspects of Data Quality. Indicate which is the dominant issue in each case below.

Refer to video 5 if you need a refresher!

A few years ago your company acquired another company and merged summary financial data into a key database. The data looks complete but there are some peculiarities we can't explain.

○ Completeness / Uniqueness

○ Accuracy / Consistency

○ Conformance / Validity

○ Timeliness

◉ Provenance

Correct

One primary issue is that we don't have complete insight into how the summary data for the acquisition was calculated. This a provenance issue.

✓ 1 / 1 points

15.

Your company wants a mobile application that allows certain purchases to be made via the application. However, those transaction use the date / time of the user's device as the timestamp of the transaction that is stored in the purchase database.

○ Completeness / Uniqueness

◉ Accuracy / Consistency

Correct

User devices may be in different time zones and are not likely synced to any common clock - this an accuracy AND consistency issue.

○ Conformance / Validity

○ Timeliness

○ Provenance

✓ 1 / 1
points

16.
We notice that when we join data from two different tables we need to be careful to convert the time zone in one table from Central Standard Time (CST) to Universal Coordinated Time (UTC) to match the second table, even though the company standard it UTC.

○ Completeness / Uniqueness

○ Accuracy / Consistency

◉ Conformance / Validity

Correct

The data in this case is correct but it doesn't conform to the company standard of UTC.

○ Timeliness

○ Provenance

✔ 1 / 1
points

17.
On your company's website, a customer can accidentally click a purchase button twice, which results in two purchase records being generated. Luckily, these purchases are filtered by the credit card payment processing system and removed from the company's general ledger. However, those records are not removed from the analytical data warehouse.

⬤ Completeness / Uniqueness

▲

Correct
This is primarily a uniqueness issue.

◯ Accuracy / Consistency

◯ Conformance / Validity

◯ Timeliness

◯ Provenance