Week 1 Quiz

Back to Week 1

12/12 points earned (100%)

Quiz passed!

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1 / 1 points

1.
What statement below best describes why we do data analytics in business?

Refer to the following video for a refresher: video 1.

- Analytics improve our understanding of how the business works
- We must show a return on the investment we make in data & analytical resources
- We need specific insights to make business decisions

Correct
The primary reason we do analytics in business is to enable specific decisions to be made.

- We have to calculate & report financial results to owners / shareholders

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1 / 1 points

2.

What should you consider as you approach an analytical problem and in which order? Identify correct order for the following ideas / steps.

For example, if you think they are already in the correct order, correct answer would be ABCDEF.

A. Sourcing Data

B. Analysis Outputs

C. Execute Analysis

D. Analysis Methods

E. Define Decision

F. Data Needs

Refer to the following video for a refresher: video 1.

- ABCDEF:

  A. Sourcing Data

  B. Analysis Outputs

  C. Execute Analysis

  D. Analysis Methods

  E. Define Decision

  F. Data Needs

- EBDAFC

  E. Define Decision

  B. Analysis Outputs

  D. Analysis Methods

  A. Sourcing Data

  F. Data Needs

  C. Execute Analysis

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EBDFAC

E. Define Decision

B. Analysis Outputs

D. Analysis Methods

F. Data Needs

A. Sourcing Data

C. Execute Analysis

Correct

Correct! When we think backwards about analytical problems, we start with the decision to be made, consider the analysis outputs needed to make that decision, determine the type of analysis required, identify the data needed, find sources for the data, and THEN execute the analysis.

BDFACE

B. Analysis Outputs

D. Analysis Methods

F. Data Needs

A. Sourcing Data

C. Execute Analysis

E. Define Decision

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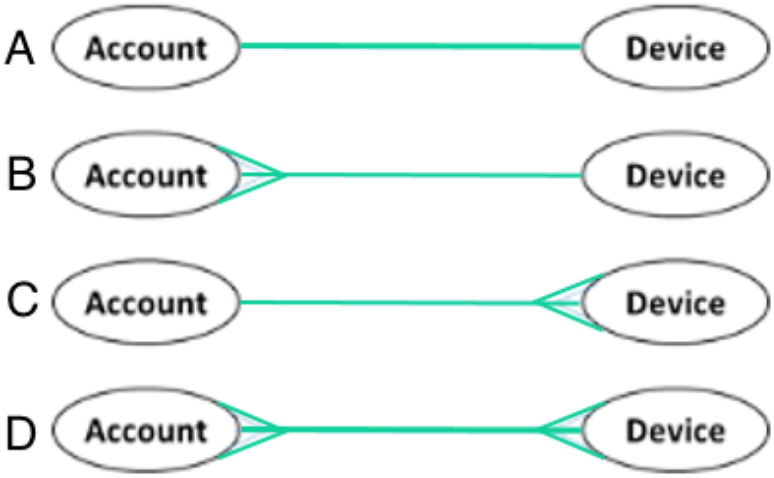
1 / 1 points

3.

What diagram below best describes the relationship between a mobile wireless carrier account holder and devices at a point in time?



A - shows oval with account connected to oval with device by straight line

B - shows oval with account connected to oval with device by straight line – forked end on Account side

C - shows oval with account connected to oval with device by straight line – forked end on Device side

D - shows oval with account connected to oval with device by straight line – forked end on both sides

Refer to the following video for a refresher: video 2.

- ○ A
- ○ B
- ◉ C

Correct
Typically one account can have many devices, so the diagram with the forked end on the device side, which indicates a one to many relationship, is most appropriate.

- ○ D

1 / 1
points

4.
For the next 5 questions that describe types of metrics, select a source that best describes where the following data might come from:

The average temperature of a turbine bearing over the last 8 hours

Refer to the following video for a refresher: video 1.

- Billing System
- Usage Tracking System
- Customer Relationship Management System
- Machine Data System

Correct

- Enterprise Resource Planning System
- Ticketing / Workflow System

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1 / 1
points

5.
Select a source that best describes where the following data might come from:

The number of developers allocated to a company software project

- Billing System
- Usage Tracking System
- Customer Relationship Management System
- Machine Data System

- [x] Enterprise Resource Planning System

Correct

- [ ] Ticketing / Workflow System

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1 / 1 points

6.
Select a source that best describes where the following data might come from:

Household water consumption by month

- [ ] Billing System
- [x] Usage Tracking System

Correct

- [ ] Customer Relationship Management System
- [ ] Machine Data System
- [ ] Enterprise Resource Planning System
- [ ] Ticketing / Workflow System

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1 / 1 points

7.
Select a source that best describes where the following data might come from:

The dollar amount of unpaid invoices at the end of a month

- [x] Billing System

Correct

- Usage Tracking System
- Customer Relationship Management System
- Machine Data System
- Enterprise Resource Planning System
- Ticketing / Workflow System

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1 / 1 points

8.
Select a source that best describes where the following data might come from:

The average age of customers in Madison, Wisconsin

- Billing System
- Usage Tracking System
- Customer Relationship Management System

Correct

- Machine Data System
- Enterprise Resource Planning System
- Ticketing / Workflow System

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1 / 1 points

9.
Why is it important for data analysts to understand the value-chain (process) associated with information and the analytical process?

Refer to the following videos for a refresher: videos 3 and 4

The more you understand about the way the business works and how information flows through business systems, the better prepared you will be to both execute and interpret your analysis. Also, the more skill you have in finding and accessing data, the more productive and valuable you will be as an analyst!

Thank you for your response.

The short answer to this question is that the more you understand about the way the business works and how information flows through business systems, the better prepared you will be to both execute and interpret your analysis. Also, the more skill you have in finding and accessing data, the more productive and valuable you will be as an analyst!

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1 / 1 points

10.

Identify correct order of steps in the Information-Action Value Chain.

Refer to the following videos for a refresher: videos 3 and 4.

- ABCDEFGHI

  A. Develop Strategy & Plan

  B. Deliver the Pitch

  C. Events & Characteristics in the Real World

  D. Take Action

  E. Data Capture by Source Systems

  F. Data Extraction

  G. Data Storage

  H. Analytical Methods

  I. Summarize & Interpret Results

CEFGHIABD

C. Events & Characteristics in the Real World

E. Data Capture by Source Systems

F. Data Extraction

G. Data Storage

H. Analytical Methods

I. Summarize & Interpret Results

A. Develop Strategy & Plan

B. Deliver the Pitch

D. Take Action

CEGFHIABD

C. Events & Characteristics in the Real World

E. Data Capture by Source Systems

G. Data Storage

F. Data Extraction

H. Analytical Methods

I. Summarize & Interpret Results

A. Develop Strategy & Plan

B. Deliver the Pitch

D. Take Action

Correct

Correct! CEGFHIABD is the correct order.

C. Events & Characteristics in the Real World

G. Data Storage

E. Data Capture by Source Systems

F. Data Extraction

H. Analytical Methods

I. Summarize & Interpret Results

A. Develop Strategy & Plan

B. Deliver the Pitch

D. Take Action

○ CEGFHIBAD

C. Events & Characteristics in the Real World

E. Data Capture by Source Systems

G. Data Storage

F. Data Extraction

H. Analytical Methods

I. Summarize & Interpret Results

B. Deliver the Pitch

A. Develop Strategy & Plan

D. Take Action

✔ 1 / 1 points

11.
Why do we bring data together into a common location (select all that apply)?

Refer to the following video for a refresher: video 3.

☐ We can establish relationships among data sources

Correct
Correct! When we bring data together in one location, it makes it easier to establish relationships and link data together in a meaningful way.

- [x] It's more convenient for extraction to have data in one place

Correct
Correct! Generally it's easier to get access to data when you only have to go to one place versus accessing each source system independently

- [x] Sometimes we can't access source systems directly

Correct
Sometimes it is the case that we don't want analysts to access data directly, particularly when they are critical to business

- [x] Source data may be unstructured or not formatted for analysis

Correct
Correct! It is sometimes the case that the way a source system stores data makes it hard to analyze directly, so we modify it and bring it to a common location for access

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1 / 1 points

12.
What type of analytics would you use to determine the best way to route delivery trucks to minimize miles driven or gasoline consumed?

Refer to the following video for a refresher: video 4.

- ○ Descriptive
- ○ Predictive
- ○ Transitive

- Cognitive
- Prescriptive

Correct

Prescriptive analytics gives us insights into how we should do something. This optimization problem is an example of prescriptive analytics.