C1_W1 Quiz

1/ Which of the following is **NOT** an example of a business metric?

- The average time visitors remain on the company's web site
- The percentage of returning customers at a chain restaurant
- Sales revenues for three brands of baby formula for a month
- The New York State sales tax rate

2/ Which of the following business metrics is an example of a **revenue** metric?

- **Rental prices** of apartment leases by locations
- Average days inventory
- Customer satisfaction with a product
- Percent defective items from an assembly line

Correct: The Video, *Distinguishing Revenue, Profitability, and Risk Metrics* at 0:28-2:02, defines "Revenue Metrics" as outward-facing metrics that have to do either with sales (for example, revenue and unit sales by time interval, customer, or geographic region, the "funnel" of qualified leads for enterprise sales) or marketing (for example, response rates to advertisements or email campaigns).

3/ Which of the following business metrics is an example of a **profitability** metric?

- Total annual costs of goods sold of an office product store
- The annual sales record of a company that makes phone apps
- A grocery store's tracking record of customers' fish purchases
- How many fresh baked cakes have to **be thrown away** at the end of the day unsold

4/ Which of the following business metrics is an example of a **risk** metric?

- Winter jacket sales during summer time
- Days inventory of computers in an electronics store
- Monthly **negative cash** flow for a start-up
- The loss due to unsold fresh fruits each year at a grocery store

Correct: The Video, *Distinguishing Revenue, Profitability, and Risk Metrics* at 3:33-5:02, defines "Risk Metrics" as those relating to "potential dangers a company faces…Net cash out is always the most important [risk] metric to track. How many months can the company survive at the present burn rate?"

5/ Identify which category the following business metric belongs to: **Units sales** segmented by new and recurring customer

- **Revenue** metric
- Profitability metric

Risk metric

6/ **The amount** an airline **spends** on aviation fuel each month is what type of metric?

Revenue metric

Profitability metric

Risk metric

Correct: The Video, *Distinguishing Revenue, Profitability, and Risk Metrics* at 2:02-3:33, defines profitability metrics to include "how much is spent on variable costs [such as] raw materials and labor." Cost of aviation fuel is at least *partially* under the Company's control, as it could make changes in equipment or routes that would improve cost per passenger seat mile, or use options to guarantee future fuel prices.

7/ An airline's daily flight from Phoenix to New York is usually full, except for flights on Tuesdays and Wednesdays. What is the first change the airline should try?

Decrease flight crews on Tuesdays and Wednesdays.

Offer discounts for Tuesday and Wednesday flights to customers.

Make advertisements about traveling on Tuesdays and Wednesdays to encourage more people travel on these two days.

Increase the number of flights per day on Mondays, Thursdays, Fridays, Saturdays and Sundays.

Correct: The Video *Profitability/Efficiency Metrics - Hotel Room Occupancy Optimization* explores in detail how to increase efficiency when managing time-sensitive inventory. The first change to introduce when faced with excess inventory that is subject to complete wastage is variable pricing. Variable pricing means that the same service is selectively offered at lower prices when demand is lower (and higher prices when demand is higher). Although the example given is hotel rooms, the same reasoning would apply to airline seats.

8/ The case above (Question 7) is an example of a _____ metric.

Revenue

Profitability

Risk

Correct: The Video *Profitability/Efficiency Metrics: Inventory Management* at 3:53-4:22 includes the special case of "hotel rooms and airline seats" as products "whose value as inventory goes to zero" if they are not sold before they "expire."

9/ One online shopping business found that 20% of shoppers quit during the checkout process without buying anything. A good next step would be:

When the reason that shoppers are dropping out of an online checkout is unknown, concluding that shoppers don't understand the process well enough, are having second thoughts because prices are too high, or are simply irritated and need an apology, would be nothing more than a guess. A much better approach is to determine the real factors influencing dropout rates. This can be done through randomized experiments known as "A/B" Testing.
Shoppers are randomly assigned to one of two groups: a group using the current process, and a group where minor changes are made to the process which may improve customer retention. Changes that result in significant improvement are kept, and others discarded. The video, *Revenue Metrics: Amazon.com as a Leading Example of the Use of Dynamic Metrics – Part 2* at 3:23-4:46 discusses Amazon as an example of the sophisticated use of A/B testing for revenue optimization.

- Offer discounts to the 80% of customers who complete checkout as an encouragement for their patience.
- Add a small pop-up window on the checkout page with the texts “We are sorry if you are having trouble when checking out. We will fix it later.”
- Send those customers a letter, email, or text with detailed instructions on how to use the checkout feature.

10/ The average number of days inventory is held should be minimized for **ALL** of the following reasons **EXCEPT** _____.

- (•) Customers are frustrated if something they want is not in stock
- The longer a product stays in inventory, the less likely it will be purchased
- It costs money to store the products
- The longer the negative float, the more interest a business has to pay
- Some products will be wasted completely if they don’t get purchased by a certain time

Correct
The Video *Profitability/Efficiency Metrics: Inventory Management* at 1:13 to 5:04 gives four reasons to minimize time in inventory. They include: negative float, cost of storage, risk of complete wastage, and product obsolescence.

Customer frustration when a product is not available immediately in their local store is discussed in the same video at 8:43-10:00, but this problem has a different solution that needs to be balanced *against* average time in inventory. Seasonal and regional shifts in inventory can ensure products are available when wanted and won’t sit on the shelf.

11/ What is the estimated days inventory of Company X based on the information below?

Company X’s annual report listed a year-end inventory of $35.4 million, and annual cost of goods sold of $137.9 million.

- (•) 93.7 days ← ($35.4/ $137.9)* 365 days
- 67.2 days
- 3.9 days
- 94.3 days

Correct
The math formula for calculating days inventory from annual cost of goods sold, and value of year-end inventory, is given and explained in the Video *Profitability/Efficiency Metrics: Inventory Management* at 5:04-7:08.

12/ A company sells its services “Net 60.” If it delivers the goods and provides an invoice in March, when can the company expect to be paid?

- March
- April
- (•) May
- June

- July

Correct: The contract term “Net 60” for receiving payment after delivery of a good or service is defined and discussed, and contrasted with the contract term “COD” or “Cash on Delivery,” in the Video *Egger’s Roast Coffee Case Study Part 1* at 4:46-5:50.

13/ The primary reason Egger's Roast Coffee ran out of cash was:

- Rapid growth
- Inefficient production
- Unsold inventory
- Lack of innovation

Correct: The Video *Egger’s Roast Coffee Case Study – Part 1* at 2:30 explains that “one of the most common triggers” for profitable companies to run out of cash is “uncontrolled or unplanned sales growth.” *Egger’s Roast Coffee Case Study Part 2* explains in detail – through a tragic example - the mechanics of how this can happen.

14/ To be a best-seller on Amazon, your book needs to...

- Be popular and have good reviews
- Be one of the top selling books in its Amazon topic subcategories
- Be sold all over the world
- Be one of the 1,000 best-selling books on Amazon

Correct: The video lecture, "Revenue Metrics - Amazon.com as a Leading Example of Use of Dynamic Metrics - Part 1 at 6:52-7:09 explains that Amazon defines its “best-sellers” as books that are selling at the highest rates when compared only to recent sale of other books in the same Amazon-defined subject area categories.

15/ Amazon’s “frequently bought with” feature _____.

- Offers discounts if you buy two books
- Tells you how frequently the two books are bought together
- Is optimized to maximize Amazon’s revenues
- Is customized for your search terms

Correct: The subtleties of Amazon’s “frequently bought with” feature (at least as implemented in July 2015) are explained in the video Revenue Metrics - Amazon.com as a Leading Example of Use of Dynamic Metrics - Part 2 at 1:17-4:46.