**READING: CHOCOLATE FROM START TO FINISH**

***Directions:*** *Read the article and complete the chart at the end of the article. Assignment is worth* ***100 points.***

e $41 billion dollar firm Uber Technology, Inc., is unsettling

the traditional taxi business. In over 40 countries and 240 mar-

kets around the world, Uber and similar companies are chal-

lenging the existing taxi business model. Uber and its growing

list of competitors, Lyft, Sidecar, and Flywheel in America, and

fledging rivals in Europe, Asia, and India, think their smart

phone apps can provide a new and improved way to call a taxi.

This disruptive business model uses an app to arrange rides

between riders and cars, theoretically a nearby car, which is

tracked by the app. The Uber system also provides a history of

rides, routes, and fees as well as automatic billing. In addition,

driver and rider are also allowed to evaluate each other. The

services are increasingly popular, worrying established taxi ser-

vices in cities from New York to Berlin, and from Rio de Janeiro

to Bangkok. In many markets, Uber has proven to be the best,

fastest, and most reliable way to find a ride. Consumers world-

wide are endorsing the system as a replacement for the usual

taxi ride. As the most established competitor in the field, Uber

is putting more cars on the road, meaning faster pickup times,

which should attract even more riders, which in turn attracts

even more drivers, and so on. This growth cycle may speed the

demise of the existing taxi businesses as well as provide sub-

stantial competition for firms with a technology-oriented model

similar to Uber’s.

 The Uber business model initially attempts to bypass a

number of regulations and at the same time offer better service

and lower fees than traditional taxis. However, the traditional

taxi industry is fighting back, and regulations are mounting.

The regulations vary by country and city, but increasingly spe-

cial licensing, testing, and inspections are being imposed. Part

of the fee charged to riders does not go to the driver, but to

Uber, as there are real overhead costs. Uber’s costs, depending

on the locale, may include insurance, background checks for

drivers, vetting of vehicles, software development and mainte-

nance, and centralized billing. How these overhead costs com-

pare to traditional taxi costs is yet to be determined. Therefore,

improved efficiency may not be immediately obvious, and

contract provisions are significant (see

www.uber.com/legal/

usa/terms

).

 In addition to growing regulations, a complicating factor in

the model is finding volunteer drivers at inopportune times. A

sober driver and a clean car at 1:00 a.m. New Year’s Eve does

cost more. Consequently, Uber has introduced “surge” pricing.

Surge pricing means a higher price, sometimes much higher, than

normal. Surge pricing has proven necessary to ensure that cars

and drivers are available at unusual times. These higher surge

prices can be a shock to riders, making the “surge price” a conten-

tious issue.

 Discussion Questions

 1. The market has decided that Uber and its immediate competi-

tors are adding efficiency to our society. How is Uber providing

that added efficiency?

 2. Do you think the Uber model will work in the trucking

industry?

 3. In what other areas/industries might the Uber model be used?

 Sources: Wall Street Journal (January 2, 2015), B3, and (Dec. 18, 2014), D1;

and www.bloombergview.com/articles/2014-12-11/can-uber-rule-the-world .

Most of us think of chocolate making as an **assembly-line process**—large machines plopping candies onto **conveyor belts** whizzing around a large factory. And while that is part of the story of the chocolate bar, it is but the final chapter in a much longer book. All chocolate starts from the **seed pod** of a tropical rainforest plant, the **cacao**. **Farmers harvest** the seed pod, scoop out the pulp-covered cacao seeds, and **dry them in the sun** before shipping them off to markets for sale to major chocolate makers. The process from tree to market requires great amounts of human labor, including farmers tending to the plants, **workers** harvesting each pod with machetes, and **laborers** drying and preparing the seeds for transport.

Once the seeds have arrived at the **chocolate-making factory**, they are converted into chocolate in a complex, multi-step process. **Seeds are sorted** according to type, cleaned, and then carefully weighed so they can eventually be blended according to **special formulas** created by each **manufacturer**. Next, the beans are roasted in **large rotating ovens** for anywhere from 30 minutes to 2 hours, depending upon the variety of seed.

After roasting, seeds are milled—crushed by heavy steel discs, generating enough friction and heat to liquefy them into a thick paste, called **chocolate liquor**. The liquor then goes through one of two separate processes, depending upon what it is used for in the final stage of manufacturing. Some of it is placed in huge hydraulic presses that squeeze out the cocoa butter. The remaining unpressed liquor is blended with **condensed milk**, sugar, and extra cocoa butter to form chocolate. This more refined chocolate is cooled and warmed repeatedly in a process called tempering. Tempered chocolate is then shipped in a liquid state to other food manufacturers that use the flavoring in cookies and ice cream, or to make chocolate bars.

The process of turning the tempered chocolate into the solid bar form that most of us know takes both man and machine. Hershey’s Chocolate, for example, uses **automated machines** to pour the tempered chocolate into molds to make **candy bars** of either pure chocolate or bars mixed with **nuts or dried fruit**. The molds cool in **large refrigeration units** and then move to **wrapping and labeling machines**. After this, the bars are boxed and distributed to the final points of sale. In small-scale **chocolatiers**, machines are a critical part of the production process, but the chocolatier often remains hands on. In many cases, this includes **adding final design touches** and hand-molding designer creations for special events. With either operation, the goal is identical: to make the finished products that we find on the shelves of our local markets and in the display cases of our local chocolate shop

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**Directions**:

After reading “***Chocolate from Start to Finish***,” apply what you have learned in this lesson to properly categorize each bolded term in its correct factor of production category—land, labor, capital, or entrepreneur. Some terms may be a combination of factors. The boxes below present the bolded terms in their order of appearance in the reading. Be sure to think about the defining characteristics of each factor of production and how the person, place, thing, or action described in the reading fits those characteristics. Also, consider the category of entrepreneurship. Would you consider any of the people described here to be practicing entrepreneurship? Examples are provided for each factor.

**Grade:**  Reading is a homework grade worth **22 points.**

|  |  |  |  |
| --- | --- | --- | --- |
| Bolded Term | Factor of Production | Bolded Term | Factor of Production |
| Assembly-line process | *Labor and Capital* | **Manufacturer** | *Entrepreneur* |
| Conveyor Belts |  | **Large rotating ovens** |  |
| Seed Pod |  | **Chocolate liquor** |  |
| Cacao |  | **Condensed milk** |  |
| Farmers harvest |  | **Automated machines** |  |
| Dry them in the sun |  | **Candy bars** |  |
| Workers |  | **Nuts or dried fruit** |  |
| Laborers |  | **Large refrigeration units** |  |
| Chocolate-making factories |  | **Wrapping and labeling machines** |  |
| Seeds are sorted |  | **Chocolatier** |  |
| Special formulas |  | **Adding final design touches** | *Labor* |