1. You have just been promoted to manager of the Customer Service department. Your first assignment is to determine the appropriate staffing level for your team. Your business hours are 8:00 AM – 5:00 PM, but your group takes a 1-hour lunch and 2 breaks at 20 minutes each. You anticipate an average of 545 calls each day. Your average customer service representative can handle a call in 7 minutes. How many representatives do you need on your team?

9 8-5 is 9 hours. take 1 hour and 40 minutes off for the breaks. 7 hours 20 mins. thats 440 minutes. 545 times 7 divided by 440 is 8.6 and since you can't have .6 of a person. 9

2. I claim that the structure of university faculty is very disjointed and inefficient. Since we are grouped into functional units, your teachers rarely discuss the overall goals of your degree program. Describe what a Product layout might look like and how faculty members might communicate and operate differently.

If MTSU was laid out in a product layout system, students would be like a part on an assembly line. Faculty would have to make sure students completed one part at a time, like a car going through a system. Before students could move on to Chemistry, for example, they would have to be able to function using basic math. Faculty would have to test students before they moved on, or they would not be able to function in the next station. Students may get through faster in some cases, but bottlenecks may occur throughout various parts of the system. This may work well within departments, but not for general requirement courses.

3. I often mention my consulting business in class. Using the Product/Process Matrix, how would you characterize this Process? Justify your response by ranking the dimensions of the matrix.

Your consulting business would be batch:
variety is moderate
process flexibility is moderate
unit cost is moderate
output volume is moderate

4. A 4 person team is building small angle iron frames. There are 4 members on the team. They have divided work in the following manner.
<table>
<thead>
<tr>
<th>Person</th>
<th>Tasks</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Randy</td>
<td>Saw pieces</td>
<td>12 minutes</td>
</tr>
<tr>
<td>Jerry</td>
<td>Assemble &amp; Weld</td>
<td>2 minutes</td>
</tr>
<tr>
<td></td>
<td></td>
<td>9 minutes</td>
</tr>
<tr>
<td>Rich</td>
<td>Grind Welds</td>
<td>15 minutes</td>
</tr>
<tr>
<td>Sharon</td>
<td>Touch up paint, Wrap,</td>
<td>4 minutes</td>
</tr>
<tr>
<td></td>
<td>Package</td>
<td>2 minutes</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3 minutes</td>
</tr>
</tbody>
</table>

a) What is the maximum throughput of this system (frames per hour), once all stations have product to work with? Minimum cycle time = 15 minutes, output = 2/hour

b) Who is the bottleneck? Rich, Grind Welds

c) What is the affect on the throughput of the system if I develop tooling/jigs that will reduce the saw time to 8 minutes? 12 minutes minimum cycle time, output = 5/hour

d) In order to increase production, if they add another employee to the team, who should receive additional help? Rich, in grind welds

e) If one additional person is added to the current bottleneck station, who will be the new bottleneck? Randy, 12 minutes

f) What will the throughput of the system be when using 5 employees (assuming I do not implement the improvements discussed in part c of this question)? Depends on in which section the employee works.

5. While representing your company on a business trip to another country, you notice that the managers scream at, reprimand, and embarrass their employees in public. How might the various Sources of Ethics influence your evaluation on whether you view this as morally right or wrong? Societal ethics, influenced by where you grow up and how you are brought up may influence this. Societal standards vary among cultures and groups of people around the world. Individual ethics, or personal standards and values, could also affect how the person acts around other people and how another person views how that person acts. Organizational ethics also may influence a person; each company has their own views towards employees and others.

6. General Mills, Inc (retail food marketer of brands such as Betty Crocker, Cheerios, Wheaties, Pillsbury, etc.) is ranked #2 on the 2009 CRO’s Best 100 Corporate Citizens. Some investors and analyst criticize their level of corporate social responsibility. Why would they criticize General Mills efforts to help the community? Some people may criticize General Mills’ efforts to help the community because of the cost the company puts into the effort. The cost may be seen as a drain on the company resources rather than an obligation to humanity. Additionally, others may
feel that it is simply not the responsibility or the place of the company to work with social responsibility and charities. GM executives in charge of social responsibility may argue that the efforts help build the company’s reputation and increase the quality of life. Some people may have an obstructionist view of social responsibility; rather than doing things the “right” way, they chose to make a better profit while behaving in an unethical and possibly illegal way. GM seems to act in a proactive way regarding social responsibility; they go out of their way to help and make sure that things are done the appropriate way. This may cost more, but their image I retained and lauded.

7. Text books often promote the practice of employee empowerment, however we still see limited applications where managers truly empower their subordinates. What are some of the causes of this situation? Though employee empowerment and job enrichment seem like good idea, there could be problems along with them. Employees may find new ways of doing their jobs, but managers must be sure guidelines are still followed and quality maintained. Also, if an employee develops new skills on the job, their previous skills may not be utilized, and the employee may not focus on the job they are supposed to be doing. Employees must be given some degree of freedom in most situations, but the manager must make sure that the freedoms aren’t abused or taken advantage of. The manager must have a large degree of trust in his or her employees to implement empowerment practices. In the real world, these things must be considered rather than just doing what the textbook or the course instructor said.

8. Caroline wants to start a career as a Logistics professional. She is a Jr. in the Management department at MTSU. The faculty members do not know why she does not put forth more effort. Caroline does not believe that a high GPA will help her get a job in her chosen field. Using Expectancy Theory, explain why Caroline is such a slacker (what is missing). Expectancy theory states that for motivation to be high a person must believe that high levels of effort will lead to high performance, and high performance will lead to the attainment of desired outcomes. The major factors that contribute to motivation are expectancy (effort = performance), instrumentality (performance = attainment of outcomes), and valence (desirability of outcomes). Caroline does not believe that her efforts or performance have an effect on her future, so she does not worry about her performance in classes, which affects her GPA.

9. Managing a classroom can be like managing a business department. Identify the following sources of power a professor can potentially have:

   a) Students follow your advice, because you have held managerial positions in industry and they perceive your management/analytical skills as superior to theirs. **Expert power**

   b) Students follow your advice, because you have a good sense of humor and they consider you a “cool guy.” **Referent power**
c) Students are respectful in class, because you are a member of the MTSU faculty. **Legitimate power**

d) Students participate in class discussions and spend time completing tests, because you are assigning grades. **Reward power**

e) Students refrain from text messaging during class, because they know if you catch them, you will embarrass them in front of the class. **Coercive power**

10. A company that produces and distributes valuable GPS equipment is considering implementing surveillance security on employees to prevent theft. How might a manager who follows the Moral Rights Rule of Ethics view this practice?

The Moral Rights Rule of Ethics states that the manager should choose “the decision that best maintains and protects the fundamental or inalienable rights and privileges of the people affected by it.” That manager may see the act of surveillance as a violation of the employees’ rights under the constitution. If employees were informed of the surveillance, this may become a more desirable process for that manager.

11. If a manager follows the Justice rule for Ethics and there is a 10% layoff planned for the company how would he recommend each department’s headcount be affected? Explain your answer.

The Justice Rule states that, “the decision that distributes benefits and harms among people and groups in a fair, equitable, or impartial way.” That manager would require that each department lose the same amount of people. Rather than choosing the departments that are more efficient and keeping people there and taking people out of the inefficient or over-staffed departments, each department would lose the same amount of people, to be fair.

A manager must decide between two location alternatives, Boston and Chicago. Boston would have annual fixed costs of $70,000, transportation costs of $60 per unit, and labor and material costs of $200 per unit. Chicago would have annual fixed costs of $90,000, transportation costs of $40 per unit, and labor and material costs of $170 per unit. Revenue will be $300 per unit.

12. Which location will be more profitable and what will the profit be at 3000 units?

First: 300-(60+200) = 40*3000 = 120000-70000 = 50000

Second: 300-(40+170) = 90*3000 = 270000-90000 = 180000

14. With four young daughters (ages 14, 12, 8, and 5) my house is a zoo. One problem we seem to consistently have is running out of food and toiletries. My girls do not tell me that we are out of something until they need it and we are out. I have tried buying in bulk (SAMS), but this only delays the problem. We still run out of items. I have tried to tell them to tell me when we are running low or keep a list on the refrigerator, but they
just forget. Is there a way I can better control my household? Tell me what you would recommend. Give me some specific examples of how your system would work.

A kanban system may help your daughters keep track of what needs to be bought. By using a visual aid, they may realize sooner that they are running low on a product. For example, buy 2 bottles of shampoo, and in the cabinet where the bottles are stored, draw a colored circle or area to keep the bottles. When one bottle is in the shower, the other will remain in the cabinet. Once that bottle in the shower is empty, they will see the empty circle and alert you when the bottle is taken out. Even though there is none in the cabinet, they will have a full bottle for the shower and you will have plenty of time to restock. A kanan job board may also be helpful, and maybe even fun. As items that you buy often (milk, bread, eggs, etc) are used, a magnet could be slid across the refrigerator across a chart that is green, yellow and red. Once the magnet is into the yellow, you should know that it is time to purchase more, before the magnet slides into the red. You may even purchase earlier if you know that they forget to slide the magnet each time!

15. Identify (3) Professional Careers where Job Simplification can be used to make someone more efficient. Describe the situation(s) and why job simplification makes them more effective.

   Lawyers are an example of professionals who are classified in particular specifications to better perform their jobs. Different lawyers specialize in trials, defense, litigation, divorce, or wrongful injury to name a few. Each concentration requires the lawyer to take different classes while in law school and then continue their training under a skilled lawyer in their classification. Another example is educators. When students are studying to become a teacher, they chose their specification. Examples of the different concentrations include elementary, secondary, or college levels teachers, and from there the teachers can chose to study how to teach a variety of subjects such as math, science, reading and literature, history, or languages. Without these specifications, teachers would be required to know an innumerable amount of subjects and ideas that would be overwhelming. Additionally, the program in which I am enrolled at MTSU holds examples of job simplification. Within the Public History department, PhD students can choose from one of four concentrations: Cultural Resource Management, Historic Preservation, Archives Management, or Museum Management. These narrow the field of study so students will have a greater understanding of the concentration they choose.

16. As a manager, you must find techniques to motivate your employees. Identify some of the techniques that you will use to motivate (intrinsic or extrinsic) your current/future staff.

   Positive reinforcement, such as pay raises, praise, promotions or attention are motivational techniques that work with some people. Conversely, some people do not want that attention and are embarrassed by it, so it depends on the person. Negative reinforcement is not really my style, but in some situations criticism, pay cuts, or suspension may be strong motivators, provided the type of person in question. Pay is also a great motivator, when the pay is a significant amount.
Bonuses may also be a great way to motivate employees; as a one-time benefit, the cost will likely not be as exorbitant as a pay raise. My personal favorite way to motivate people (and myself) is free food! At my previous jobs, I baked at least once a month and people are generally nicer and more willing to work when there are brownies involved.

17. What is the break-even quantity for the following situation? Taste of Texas is selling Mesquite smoked beef ribs. The meat, energy, wood, and sauce cost $1.25 per pound. On average there are 4 ribs per pound or ¼ pound per rib. The labor to tend the smoker is $0.75 per pound. Rent on the building is $500 per week and managers’ salaries are $700 per week. Ribs are sold for $6 per pound (these a big, country style longhorn ribs).

\[ 500 + 700 = 1200, \quad 1.25 + 0.75 = 2, \quad 6 - 2 = 4, \quad 4n - 1200 = 0 \]

solve for \( n \)

300 per week

18. The process of identifying other organizations that are best at some facet of your operations, and then modeling your organization after them is known as: benchmarking

19. Your manager has asked you to develop a plan for Risk Mitigation. He/She wants to know what could possibly go wrong, how bad would it be, and what you can do to prevent it. A process improvement technique that might help with this assignment is: cause and effect diagram, process mapping or DMAIC.