

CASE TWO ANALYSIS

BMGT2258 Operations Management
Columbus State Community College

Instructions: Please see detailed instructions on Blackboard including submission format and the data set in an Excel spreadsheet.

2MOVE LLC CASE SCENARIO:

Megan has set up a new company called **2MOVE** which designed a cost-effective smart balancing electric skateboard (see pictures) based on the Segway concept. She wants to move to full production and has investigated options to set up an assembly facility at one of three possible sites. Megan plans to be at full operation by January 2019 to meet back to school and Christmas orders for next year. She has secured contracts with 4 major retailers and developed a monthly forecast based off her contracts. She also has developed the assembly process and secured suppliers for all the component parts. She plans to run the operation 8 hours per day during weekdays.



Megan needs help in several operational areas to make the best decisions:

- **LINE BALANCING & WORK STATION EFFICIENCY:** Based on the precedent chart for the new assembly process:
 - What is the Process Cycle Time of the overall system? (**Hint:** Sum of all task times)
 - What is her bottleneck?
 - What is her demand's Takt Time?
 - How many work stations/employees will be needed if the process operates 8 hours per day based on the available weekdays per month?
 - How should the tasks be organized to:
 - Minimize idle time
 - Not violate the precedent chart
 - Megan would like to see a visual chart showing the layout of work stations and task assignments.
 - What is her idle time & assembly efficiency?
 - What is her overall station bottleneck time after line balancing?
- **INVENTORY ISSUES:** The assembly process will operate 8 hours per day.
 - With the available work time & a standardized assembly process, how many units will be produced each month & for the year? (**Note:** Round units produced to nearest whole number. Use station bottleneck to determine output.)
 - Will Megan have enough inventory each month to fulfill the orders? If not, what could she do?
- **LOCATION CHOICE:** Three location choices are available to Megan.
 - What are the crossover points comparing each set of locations?
 - Which location choice is best for the number of units she expects to produce?
- **PROFITABILITY:** How much profit should she expect to earn?

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GRADING RUBRIC

AREA GRADED:	TOTAL POINT VALUE
Cycle Time, Takt Time & Work Station Analysis	15
Line Balancing Diagram & Idle Time	15
Monthly Inventory Analysis	15
Location Break Even Analysis	15
Executive Summary:	
• Strong Discussion of Decision Rationale & Suggestions	30
Professionally Prepared	10