PROJECT: VALUE STREAM MAPPING – AS IS AND TO BE PROCESSES

Objectives:

1. To gain experience collecting appropriate data to document an existing process as both a Value Stream Map and as a Value-Analysis / Time Value Map
2. To gain experience constructing and interpreting a Value Stream Map ("As Is" VSM)
3. To explore the ability to improve upon an existing process in a measurable way, and …
4. To demonstrate the ability to document the improved process appropriately ("To Be" VSM)

Practice:

A.) Use a computer program capable of creating pdf files, such as MS Excel, to create an "As-Is" Value Stream Map for the process of producing a homemade pizza:

1. The starting point for this process is deciding what goes on the pizza:
    a. Assume that three or more people will be choosing the toppings, crust, etc. What process will you use for coming to an agreement?
    b. Physically procure the ingredients and produce the pizza.
    c. Track and document the appropriate process steps and information flows
    d. Create and use appropriate symbols, and collect relevant process data on the VSM
    e. Include travel, storage space and material handling times, etc. that occurs between process steps as well (again, document with appropriate VSM symbols)

2. Include a Value-Analysis / Time Value Map on the bottom of the VSM, including the graphical tracking of :
    a. Value-Added time
    b. Business Non-Value-Added time (Auxiliary Work time)
    c. Non-Value-Added time

3. Compute the ratio of Non-Value-Added to Value Added (per slide 20, lecture 10)

4. The ending point for the process is when you start to chew on the pizza and assess the quality of the product.
    a. Format the completed document to read as a single page, in landscape format.
    b. Save the completed file as a pdf document, named "As Is VSM – "
        i. ***Add your name after the dash in the file name.***
        ii. ***Note the names of any other team members in your process at the top of your document.***

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B.) Use a computer program capable of creating pdf files, such as MS Excel, to create a "To-Be" Value Stream Map for the improved process of ***better producing*** a homemade pizza:

1. The starting point and ending point for this process is the same as in Part A (above)
    a. You DO NOT have to physically procure the ingredients and produce the pizza.
    b. You DO have to create and use appropriate VSM symbols to document the appropriate process steps and information flows, and appropriately show relevant process data on the "To-Be" VSM
    c. You DO have to estimate travel, storage space and material handling times, etc. that occurs between process steps as well (again, document with appropriate VSM symbols)

2. Include an expected Value-Analysis / Time Value Map on the bottom of the VSM, as before.

3. Compute the expected ratio of Non-Value-Added to Value Added (per slide 20, lecture 10)

4. The ending point is the same as before for the process:
    a. Format the completed document to read as a single page, in landscape format.
    b. Save the completed file as a pdf document, named "To Be VSM – "
        i. ***Add your name after the dash in the file name.***
        ii. ***Note the names of any other team members in your process at the top of your document.***

5. Submit both the As-Is and To-Be VSM documents as e-mail attachments to the Instructor:
    a. The Subject Line should read: IENG 452 Project – VSM
    b. The body of the e-mail should list (in order, one item per line):
        i. ***The course number and term***
        ii. ***Date of submission***
        iii. ***Your name***
        iv. ***The names of any team members***
    c. Attach both pdf documents and send to the Instructor by the due date:
        i. On-Campus Section due date is given on the course website Schedule Page.
        ii. Distance Section due date is before you request the Midterm Exam.