**WIDENER UNIVERSITY**

BUS665: Managing Business Processes

**Process Mapping Project**

**Directions**

Read the case study, [Body Scans and Bottlenecks: Optimizing Hospital CT Process Flows](https://hbr.org/product/body-scans-and-bottlenecks-optimizing-hospital-ct-process-flows/KEL592-PDF-ENG), published by the Kellogg School of Management at Northwestern University and draft a PROFESSIONAL case analysis. Refer to the accompanying Excel workbook – *Process Mapping Project* – posted to Canvas when completing calculations.

You have been hired by Dr. Steve Foster as a Business Process Management consultant to address the following:

**IMPORTANT ASSUMPTION**: Assume 1 set of staff (nurse and technologist) assigned to each machine, and the full scanning process is completed before moving on to another patient.

1. Create a swim-lane diagram of the current process with value stream elements.
   * How many scans can be completed in a 12-hour shift? What are the costs associated with each scan? How much profit is made on CT scans in a 12-hour shift? Where is there waste in the current process? **[ESTIMATES]**
2. Update the swim-lane diagram with the value stream elements of the new scanners.
   * If there are no other changes, how many scans can be completed in a 12-hour shift (**critical path**)? What are the costs associated with each scan? How much profit is made on CT scans in a 12-hour shift? Has it gone up or down? Does waste still exist in the process? **[ESTIMATES]**
3. Make recommendations to improve the efficiency of the process (I am not concerned with feasibility but with the appropriateness of your suggestions to address the identified wastes):
   * Where could time be saved in non-scanning parts of the process (non-value added steps)? What changes in the physical layout would be necessary? Would it be possible to make previously sequential tasks parallel, or to centralize certain tasks? Does it make sense to redistribute tasks across the nurse and technologist roles?
4. Create a new swim-lane diagram of your recommended process with value stream elements.
   * How does this improve profitability? How long before the hospital breaks even on its investment (assume CT scanners run at full capacity)? **[ESTIMATES]**

Write a **professional report** detailing your findings – with any tables, charts, figures included in an appendix (and referenced in the text).