



INVICTA

Self-Directed Learning (Topic 1)

Document No.: MS418/969

Date: 14th November 2016

Revision: 1.0

TOPIC 1 – SELF-DIRECTED LEARNING MATERIAL

Questions

Please provide the answers for the following questions.

- 1.) What problems are commonly seen with Lean?
- 2.) What problems are commonly seen with Six Sigma?
- 3.) What problems are commonly seen with business process re-engineering?
- 4.) What problems are commonly seen with EFQM?
- 5.) When an organization needs to use re-engineer for an already existing business process, what is the most important thing to do?
- 6.) Which are the principles of Lean?
- 7.) Which are the principles of Six Sigma?
- 8.) Which are the principles of BPR?
- 9.) Which are the principles of EFQM?
- 10.) Which methodology do you prefer? And would you consider combining more than one?
- 11.) Outline which are the applications of re-engineering and further explain those by providing real life examples (business vision, process objectives, re-designing processes, measuring existing processes, IT levels, prototypes of processes)
- 12.) What is the history, methodology and some of the criticism of BPR ?
- 13.) What is the history and methodology of Six Sigma?
- 14.) What role does IT play in the BPR cycle (Transactional, Geographical, Automatic, Analytical, Informational, Sequential)?
- 15.) What is the history and methodology of Lean?
- 16.) What is the history and methodology of EFQM?
- 17.) Prevention costs are considered a cost of quality?



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Multiple Choice Questions (Please choose the correct answer for each). Based on [1].

18.) Which statement reflects the influence of sequential life cycle models on improvement context?

- A) Test process improvement models are intended for use with sequential life cycle models only.
- B) The main opportunity for test process improvement is at the end of the project.
- C) Improvement activities focus mostly on process conformance issues (not limited to just process conformance).
- D) There is more opportunity to address organizational improvements.

19.) Which of the following is the lowest risk, least extent of change?

- a) Business process automation
- b) Discontinuous change.
- c) Business process improvement
- d) Business process re-engineering
- e) None of the above

20.) Lean/ Six Sigma is an approach to quality that requires minimal resources to achieve results

- A) True
- B) False

21.) It is important to tie Six Sigma projects to organizational strategy.

- A) True
- B) False

22.) Which test strategy would support a test improvement approach centered around tools?

- A) Dynamic
- B) Methodical
- C) Model-based
- D) Regression averse

23.) A commonly used structure for continuous improvement is known as

- A) The principle of quality
- B) The quality improvement story
- C) Benchmarking
- D) The Kano model



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24.) DMADV indicates

- | | |
|---------------------------|-------------------------------------|
| a) Design of new products | b) ISO 9000 2000 certification |
| c) The Baldrige award | d) Improvement of existing products |

25.) ROQ means:

- | | |
|--------------------------------------------------------------|-------------------------------------------------------|
| a) Assessing the financial return of investments in quality. | b) Evaluating rates of improvement in service quality |
| c) Evaluating defect rates in manufacturing processes | d) None of these |

Additional Resources

- [1] OPERATIONS NOW (2016) *Multiple Choice Quiz*. Available at:
http://highered.mheducation.com/sites/0073124494/student_view0/chapter6/multiple_choice_quiz.html (Accessed: 13 November 2016).
- [2] ELITE TRAINING (2015) *Continuous Improvement*. Available at:
<https://www.elitetraining.co.uk/continuous-improvement/continuous-improvement> (Accessed: 4 November 2016).
- [3] SIX SIGMA (2016) *Icebreakers Training Exercises*. Available at:
<https://www.isixsigma.com/topic/icebreakers-training-exercises/> (Accessed: 4 November 2016).
- [4] BUSINESS DICTIONARY (2016) *What is Process Improvement?* In Business Dictionary. Available at: <http://www.businessdictionary.com/definition/process-improvement.html> (Accessed: 4 November 2016).
- [5] DEPT OF TRADE & INDUSTRY (UK) *Process Understanding & Improvement*. Available at: http://www.businessballs.com/dtiresources/TQM_process_management.pdf (Accessed: 4 November 2016).