

Six Sigma Black Belt Certification

1. SWOT is an acronym for:

A. strengths, weaknesses, opportunities, threats

B. statistics without tables

C. sensory Weibull ordinal tools

D. success yields optimal teams E. none of the above

Answer(s): A

2. Perform a risk analysis to determine the expected profit or (loss) from a project which has four possible disjoint outcomes: Outcome A shows a profit of \$340,000 and has a probability of 0.25 Outcome B shows a profit of \$120,000 and has a probability of 0.40 Outcome C shows a loss of \$40,000 and has a probability of 0.10 Outcome D shows a profit of \$100,000 and has a probability of 0.25

A. \$130,000

B. \$520,000

C. \$154,000

D. (\$168,000)

E. none of the above

Answer(s): C

3. The leader in the quality movement who recommended that organizations “eliminate numerical quotas for the work force and numerical goals for management.” :

A. Juran

B. Ishikawa

C. Crosby

D. Feigenbaum

E. Taguchi

F. none of the above

Answer(s): F

4. The quality leader responsible for the term Total Quality Management (TQM):

A. Juran

B. Ishikawa

C. Crosby

D. Feigenbaum

E. Taguchi

F. none of the above

Answer(s): D

5. The quality leader most associated with the concept of robustness:

A. Juran

B. Ishikawa

C. Crosby

D. Feigenbaum

E. Taguchi

F. none of the above

Answer(s): E

6. The support for an important quality initiative was lacking in congress until Reagan's Secretary of Commerce was killed in a horseback riding accident in 1987. That initiative was:

A. assigning National Institute for Standards and Technology (NIST) quality oversight duties

B. "consensus of the House" proclamation for Deming's 14 points

C. changing National Bureau of Standards to NIST.

D. authorizing the American National Standards Institute (ANSI) to join with the International Standards Organization (ISO) to promulgate standards.

E. none of the above.

Answer(s): E

7. A quality leader who did extensive work with Japanese industry is:

A. Juran

B. Ishikawa

C. Deming

D. Ohno

E. Taguchi

F. all of the above

G. none of the above

Answer(s): F

8. In a series of linked processes and associated feedback loops the product or service flows _____ and the information flows _____.

A. rapidly, slower

B. downstream, upstream

C. evenly, digitally

D. sooner, later

E. to the customer, from the supplier

F. none of the above

Answer(s): B

9. Causes in a cause and effect diagram often include management, measurement systems, Mother Nature and the four standard causes:

A. man, material, methods, machines

B. man, manufacturing, methods, material

C. marketing, methods, material, machines

D. man, material, millennium, machines

E. none of the above

Answer(s): A

10. The word “champion” in the context of Six Sigma projects refers to:

A. the team that has had the most impact on the bottom line.

B. the person who has coordinated teams most effectively

C. the individual who has outpaced all others in six sigma knowledge

D. none of the above

Answer(s): D

11. George is an employee of Black, Inc. John is George’s internal customer. Which statement is true?

A. John is employed by Black, Inc.

B. John is employed by another company that supplies material to Black, Inc.

C. John is employed by a company that purchases material from black, Inc.

D. John is employed by another company that has a fiduciary agreement with Black, Inc.

E. John is employed by another company as an internal auditor.

Answer(s): A

12. A team has been asked to reduce the cycle time for a process. The team decides to collect baseline data. It will do this by:

A. seeking ideas for improvement from all stakeholders

B. researching cycle times for similar processes within the organization

C. obtaining accurate cycle times for the process as it currently runs

D. benchmarking similar processes outside the organization

Answer(s): C

13. Customer segmentation refers to:

A. dividing a particular customer into parts that are more easily understood

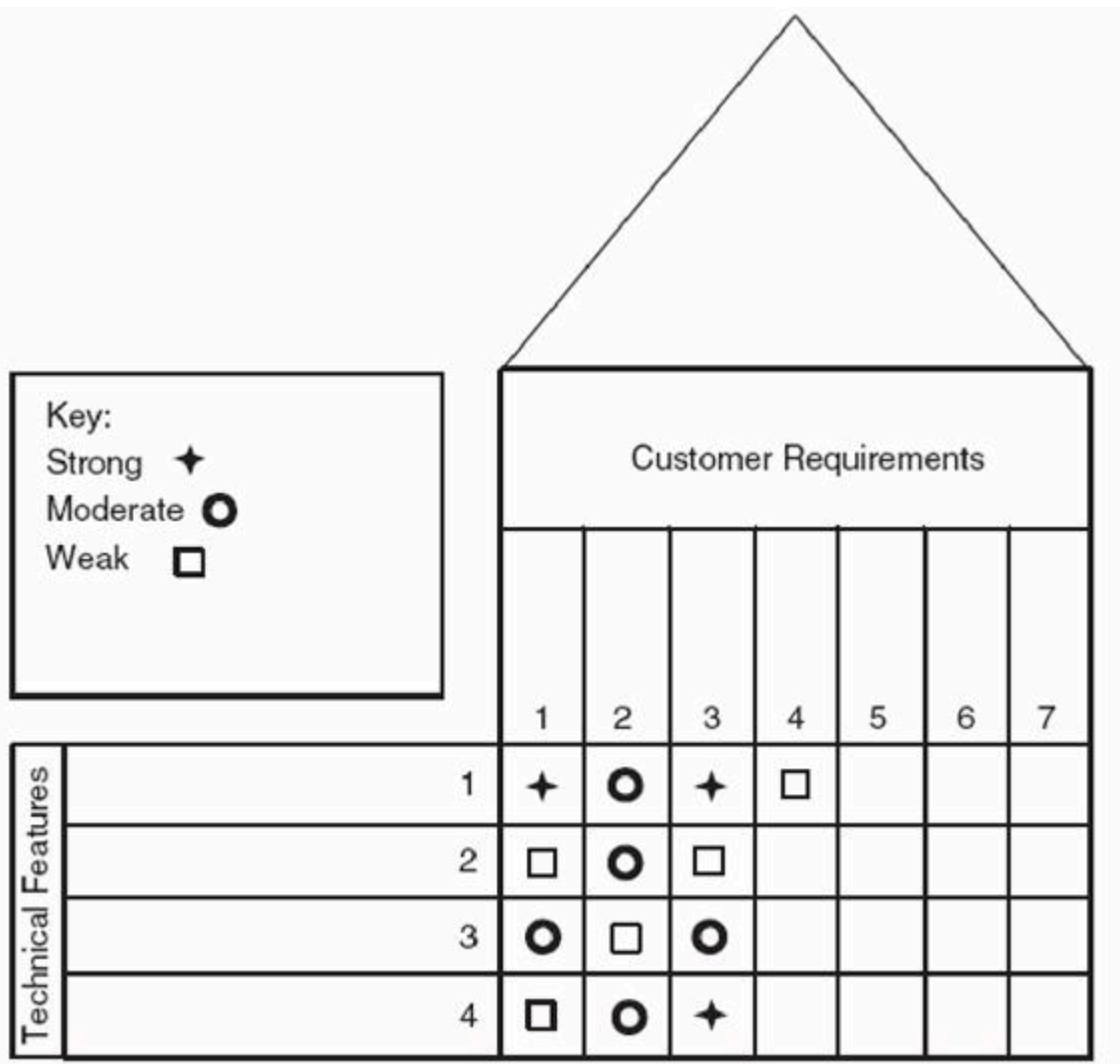
B. grouping customers by one or more criteria

C. maintaining secure customer listings to minimize communication among them

D. eliminating or "cutting off" customers with poor credit history

Answer(s): B

14.



This is an example of part of a:

A. QFD Matrix

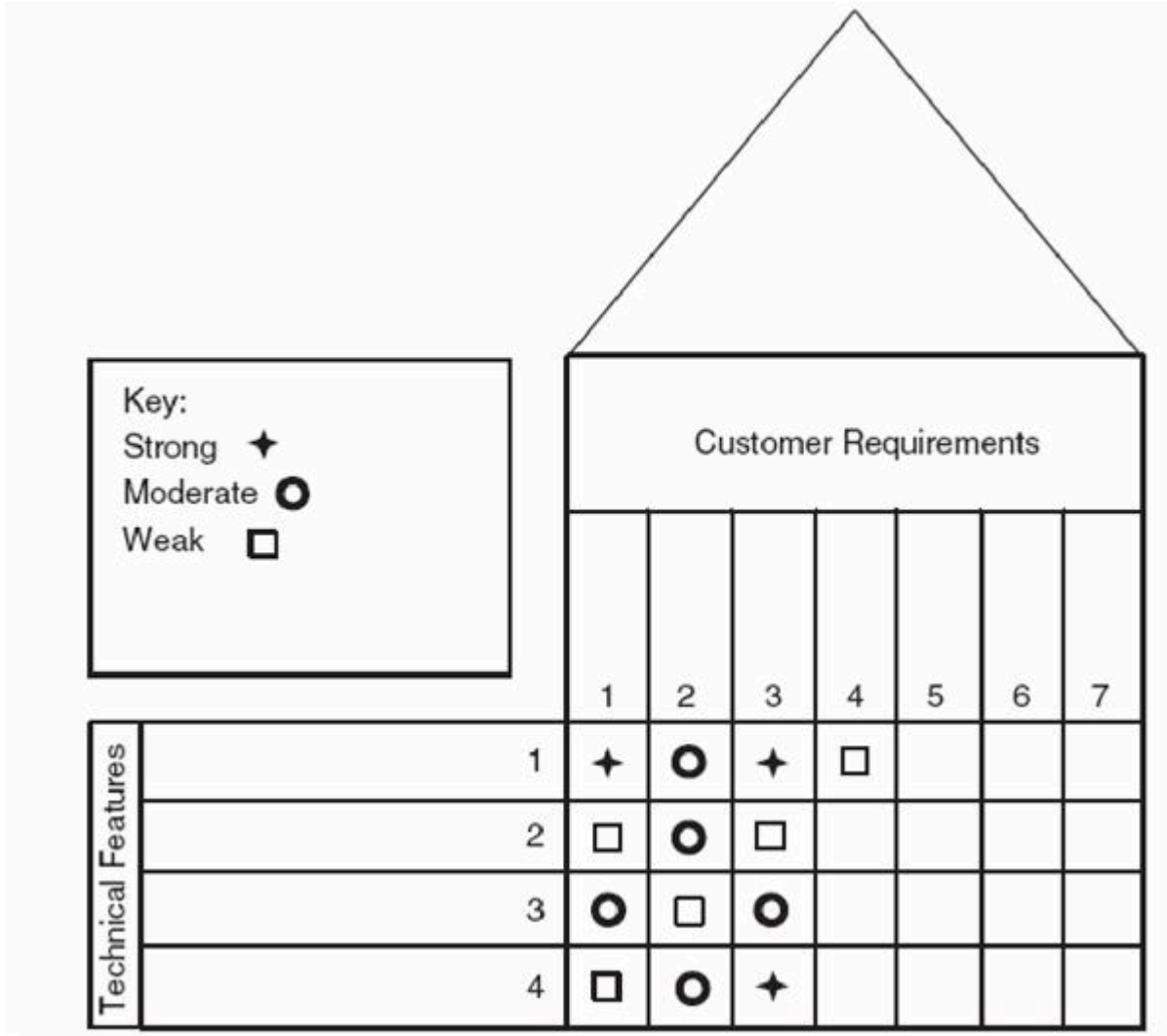
B. Activity Network Diagram

C. Interrelationship Diagram

D. Affinity Diagram

Answer(s): A

15. Customer requirement #3 has a _____ relationship with technical feature #3.



A. strong

B. moderate

C. weak

Answer(s): B

16. There are 14 different defects that can occur on a completed time card. The payroll department collects 328 cards and finds a total of 87 defects. DPU =

A. $87 \div 328$

B. $87 \div (328 \times 14)$

C. $14 \div 87$

D. $87 \div 14$

E. $328 \div 87$

F. $87 \times 1,000,000 \div (14 \times 328)$

Answer(s): A

17. There are 14 different defects that can occur on a completed time card. The payroll department collects 328 cards and finds a total of 87 defects. DPMO =:

A. $87 \div 328$

B. $87 \div (328 \times 14)$

C. $14 \div 87$

D. $87 \div 14 \times 1,000,000$

E. $328 \div 87$

F. $87 \times 1,000,000 \div (14 \times 328)$

Answer(s): F

18. A random sample of 2500 printed brochures is found to have a total of three ink splashes. The rate of ink splashes in PPM is:

A. $1,000,000 \div 2500 \times 3$

B. $2500 \div 1,000,000 \times 3$

C. $3 \div 2500 \times 1,000,000$

D. $3 \times 2500 \div 1,000,000$

Answer(s): C

19. If DPU = 0.022, the RTU is approximately:

A. 0.022

B. 0.078

C. 0.0022

D. 0.98

E. 0.098

F. 0.0098

Answer(s): D

20. A project activity not on the critical path has required 20% longer than the time originally allocated. The project team should:

A. inform all concerned that the entire project will be delayed by 20%

B. inform all concerned that the entire project will be delayed but by less than 20%

C. study the effect this will have on other activities because the project may still be on schedule

Answer(s): C

