Open School

Using Change Concepts to Come Up with Ideas*

(To learn more, see *QI 102*: *How to Improve with the Model for Improvement.*)

Eliminating waste, improving workflow, optimizing inventory (1-27, 40-45, 71)

Enhancing producer-customer relationship and changing the work environment (28-40)

Better managing time (46–50)

Managing variation, designing systems to avoid mistakes (51-62)

Design of products and services (63-70, 72)

- Eliminate things that are not used
- 2. Eliminate multiple entries
- 3. Reduce or eliminate overkill
- 4. Reduce controls on the system
- Recycle or reuse
- 6. Use substitution
- 7. Reduce classifications
- 8. Remove intermediaries
- Match the amount to the need
- 10. Use sampling
- 11. Change targets or set points
- 12. Synchronize
- 13. Schedule into multiple processes
- 14. Minimize handoffs
- 15. Move steps in the process close together
- 16. Find and remove bottlenecks
- 17. Use automation
- 18. Smooth workflow
- 19. Do tasks in parallel

- 20. Consider people as in the same system
- 21. Use multiple processing units
- 22. Adjust to peak demand
- 23. Match inventory to predicted demand
- 24. Use pull systems
- 25. Reduce choice of features
- 26. Reduce multiple brands of the same item
- 27. Give people access to information
- 28. Use proper measurements
- 29. Take care of basics
- 30. Reduce demotivating aspects of the pay system
- 31. Conduct training
- 32. Implement cross-training
- 33. Invest more resources in improvement
- 34. Focus on core process and purpose
- 35. Share risks
- 36. Emphasize natural and logical consequences

- 37. Develop alliances and cooperative relationships
- 38. Listen to customers
- 39. Coach the customer to use a product/service
- 40. Focus on the outcome to a customer
- 41. Use a coordinator
- 42. Reach agreement on expectations
- 43. Outsource for "free"
- 44. Optimize level of inspection
- 45. Work with suppliers
- 46. Reduce setup or startup time
- 47. Set up timing to use discounts
- 48. Optimize maintenance
- 49. Extend specialist's time
- 50. Reduce wait time
- 51. Standardization (create a formal process)
- 52. Stop tampering
- 53. Develop operation definitions
- 54. Improve predictions

- 55. Develop contingency plans
- 56. Sort product into grades
- 57. Desensitize
- 58. Exploit variation
- 59. Use reminders
- 60. Use differentiation
- 61. Use constraints
- 62. Use affordances
- 63. Mass customize
- 64. Offer product/service anytime
- 65. Offer product/service anyplace
- 66. Emphasize intangibles
- 67. Influence or take advantage of fashion trends
- 68. Reduce the number of components
- 69. Disguise defects or problems
- 70. Differentiate product using quality dimensions
- 71. Change the order of process steps
- 72. Manage uncertainty not tasks

^{*}From: Langley GL, Moen R, Nolan KM, Nolan TW, Norman CL, Provost LP. *The Improvement Guide: A Practical Approach to Enhancing Organizational Performance*. 2nd ed. San Francisco, California: Jossey-Bass Publishers; 2009.

