

Dr W. Edwards Deming's 14 Principles - in full

1. **Constancy of purpose:** Create constancy of purpose for continual improvement of products and service to society, allocating resources to provide for long range needs rather than only short term profitability, with a plan to become competitive, to stay in business, and to provide jobs.
2. **The new philosophy:** Adopt the new philosophy. We are in a new economic age, created in Japan. We can no longer live with commonly accepted levels of delays, mistakes, defective materials and defective workmanship. Transformation of Western management style is necessary to halt the continued decline of business and industry.
3. **Cease dependence on mass inspection:** Eliminate the need for mass inspection as the way of life to achieve quality by building quality into the product in the first place. Require statistical evidence of built in quality in both manufacturing and purchasing functions.
4. **End lowest tender contracts:** End the practice of awarding business solely on the basis of price tag. Instead require meaningful measures of quality along with price. Reduce the number of suppliers for the same item by eliminating those that do not qualify with statistical and other evidence of quality. The aim is to minimize total cost, not merely initial cost, by minimizing variation. This may be achieved by moving toward a single supplier for any one item, on a long term relationship of loyalty and trust. Purchasing managers have a new job, and must learn it.
5. **Improve every process:** Improve constantly and forever every process for planning, production, and service. Search continually for problems in order to improve every activity in the company, to improve quality and productivity, and thus to constantly decrease costs. Institute innovation and constant improvement of product, service, and process. It is management's job to work continually on the system (design, incoming materials, maintenance, improvement of machines, supervision, training, retraining).
6. **Institute training on the job:** Institute modern methods of training on the job for all, including management, to make better use of every employee. New skills are required to keep up with changes in materials, methods, product and service design, machinery, techniques, and service.
7. **Institute leadership:** Adopt and institute leadership aimed at helping people do a better job. The responsibility of managers and supervisors must be changed from sheer numbers to quality. Improvement of quality will automatically improve productivity. Management must ensure that immediate action is taken on reports of inherited defects, maintenance requirements, poor tools, fuzzy operational definitions, and all conditions detrimental to quality.
8. **Drive out fear:** Encourage effective two way communication and other means to drive out fear throughout the organization so that everybody may work effectively and more productively for the company.
9. **Break down barriers:** Break down barriers between departments and staff areas. People in different areas, such as Leasing, Maintenance, Administration, must work in teams to tackle problems that may be encountered with products or service.
10. **Eliminate exhortations:** Eliminate the use of slogans, posters and exhortations for the work force, demanding Zero Defects and new levels of productivity, without providing methods. Such exhortations only create adversarial relationships; the bulk of the causes of low quality and low productivity belong to the system, and thus lie beyond the power of the work force.

11. **Eliminate arbitrary numerical targets:** Eliminate work standards that prescribe quotas for the work force and numerical goals for people in management. Substitute aids and helpful leadership in order to achieve continual improvement of quality and productivity.
12. **Permit pride of workmanship:** Remove the barriers that rob hourly workers, and people in management, of their right to pride of workmanship. This implies, among other things, abolition of the annual merit rating (appraisal of performance) and of Management by Objective. Again, the responsibility of managers, supervisors, foremen must be changed from sheer numbers to quality.
13. **Encourage education:** Institute a vigorous program of education, and encourage self improvement for everyone. What an organization needs is not just good people; it needs people that are improving with education. Advances in competitive position will have their roots in knowledge.
14. **Top management commitment and action:** Clearly define top management's permanent commitment to ever improving quality and productivity, and their obligation to implement all of these principles. Indeed, it is not enough that top management commit themselves for life to quality and productivity. They must know what it is that they are committed to-that is, what they must do. Create a structure in top management that will push every day on the preceding 13 Points, and take action in order to accomplish the transformation. Support is not enough: action is required!

- W. Edwards Deming