

when quality really matters

The Organizational Transformation Module

Organizational Transformation

Transformation Defined

- Transformation:

**Evolving to a higher
level of sustained
performance**

Objective Problem Solving

- **“Black and White”**
- **$1 + 1 = 2$**
- **Computerized equipment has automated objective problem solving.**

Objective Problem Solving

- **As a society we have become very efficient at solving objective problems.**
- **Objective problem solving has subjective problem “spin off”.**
- **If you argue about a properly solved objective problem you will lose credibility.**

Objective Problem Solving

- **Practitioners of objective problem solving are engineers, scientists, mathematicians, etc.**

Subjective Problem Solving

- **To solve subjective problems we argue about them. Sometimes these arguments are constructive and sometimes they are destructive.**
- **As a society we do not solve subjective problems as efficiently as we do objective problems.**

Subjective Problem Solving

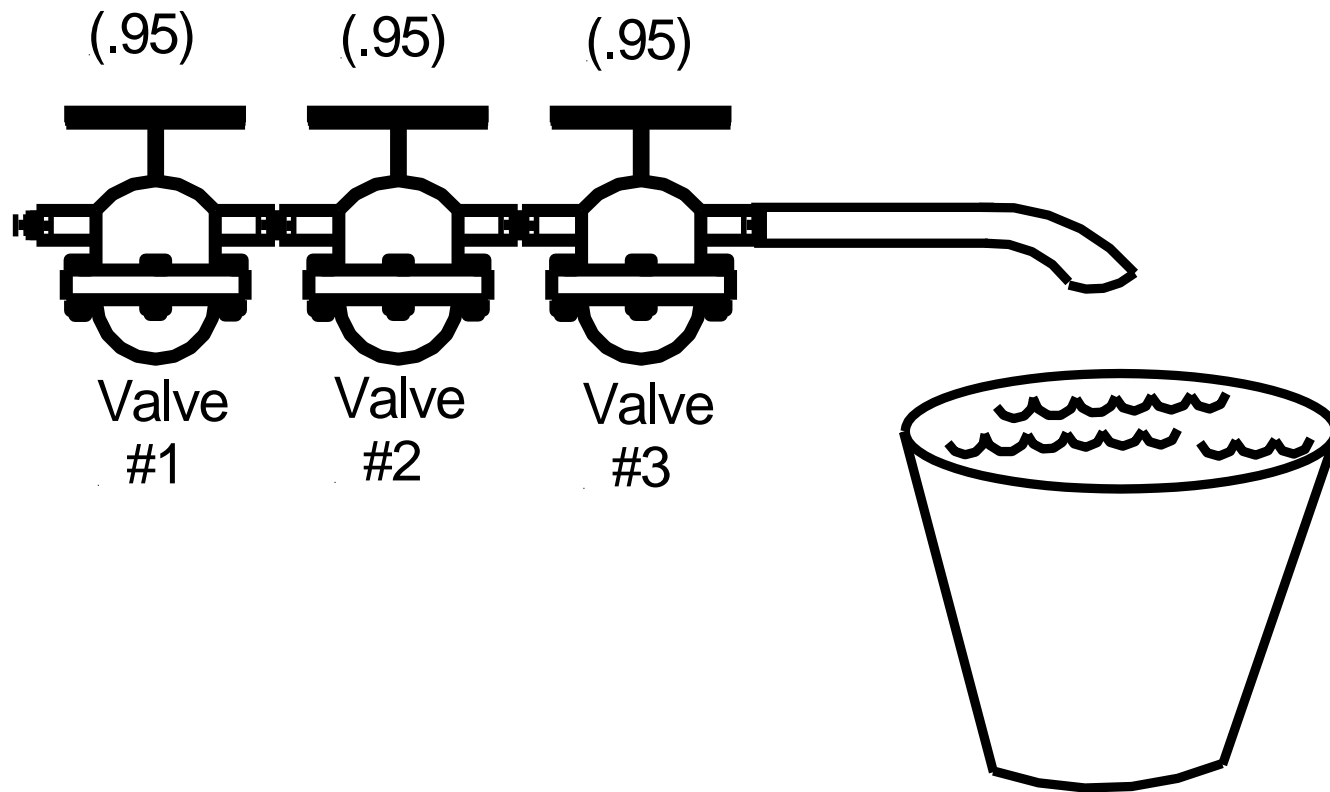
- **An individual with adequate authority is necessary in solving “higher level” subjective problems.**
- **Practitioners of subjective problem solving are lawyers, judges, politicians, etc.**
- **As an organization it is dangerous if we allow subjective problems to backlog.**

Converting Subjective Problems into Objective Problems

- **Because our society solves objective problems more efficiently than subjective problems it creates wealth when we convert subjective problems into objective problems.**

The Normal Distribution

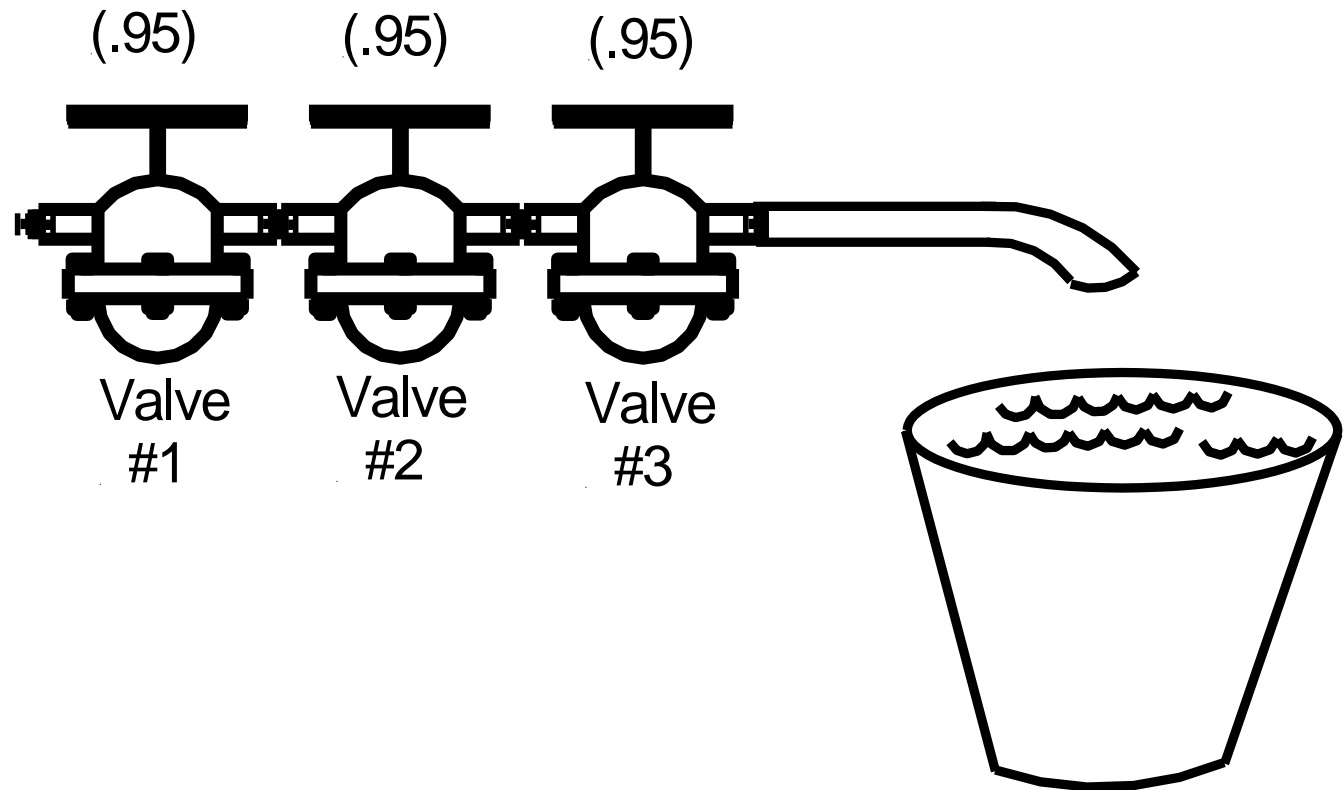
Why is Transformation Necessary?



Organizational Transformation

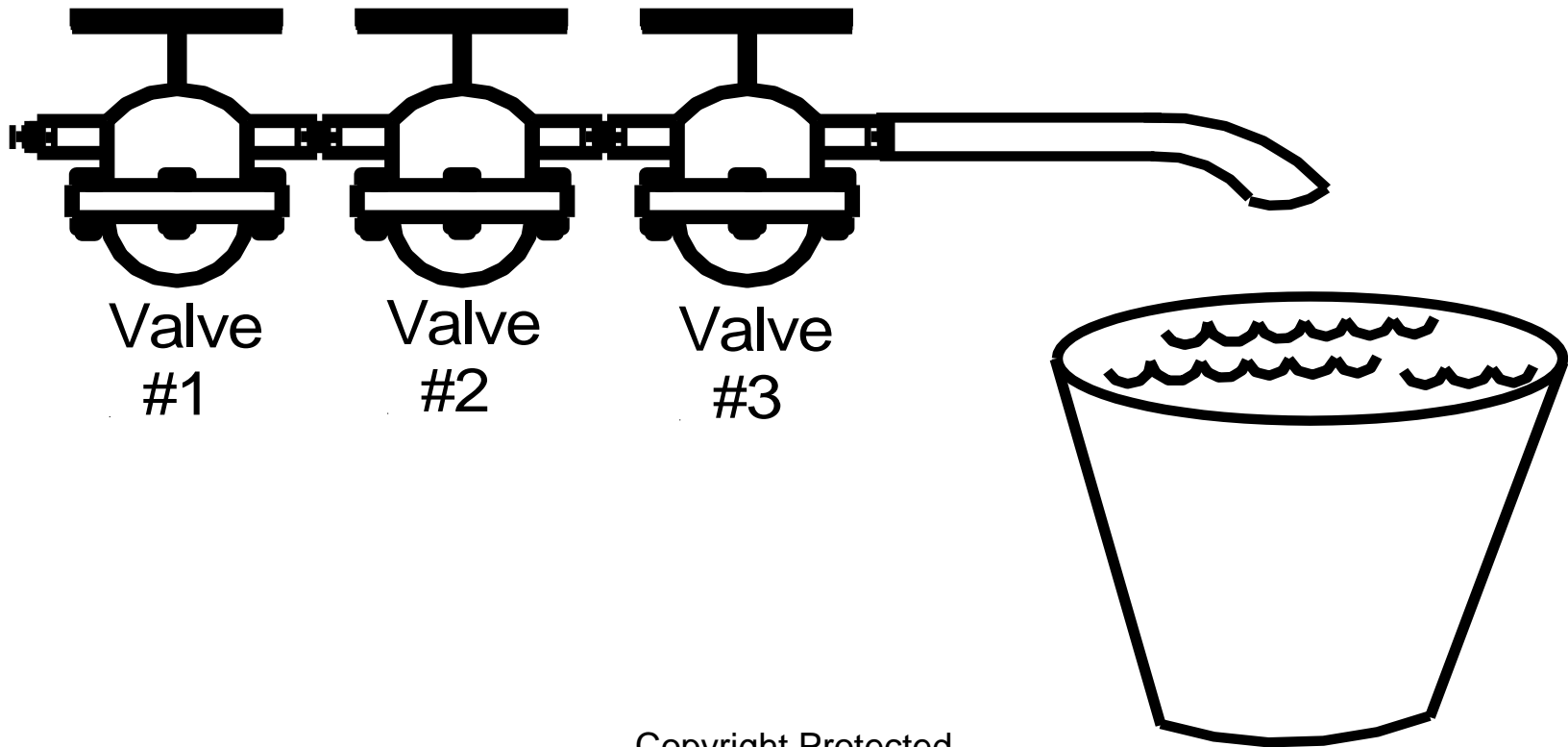
In probability statistics there are two general statements:

“and”
“or”

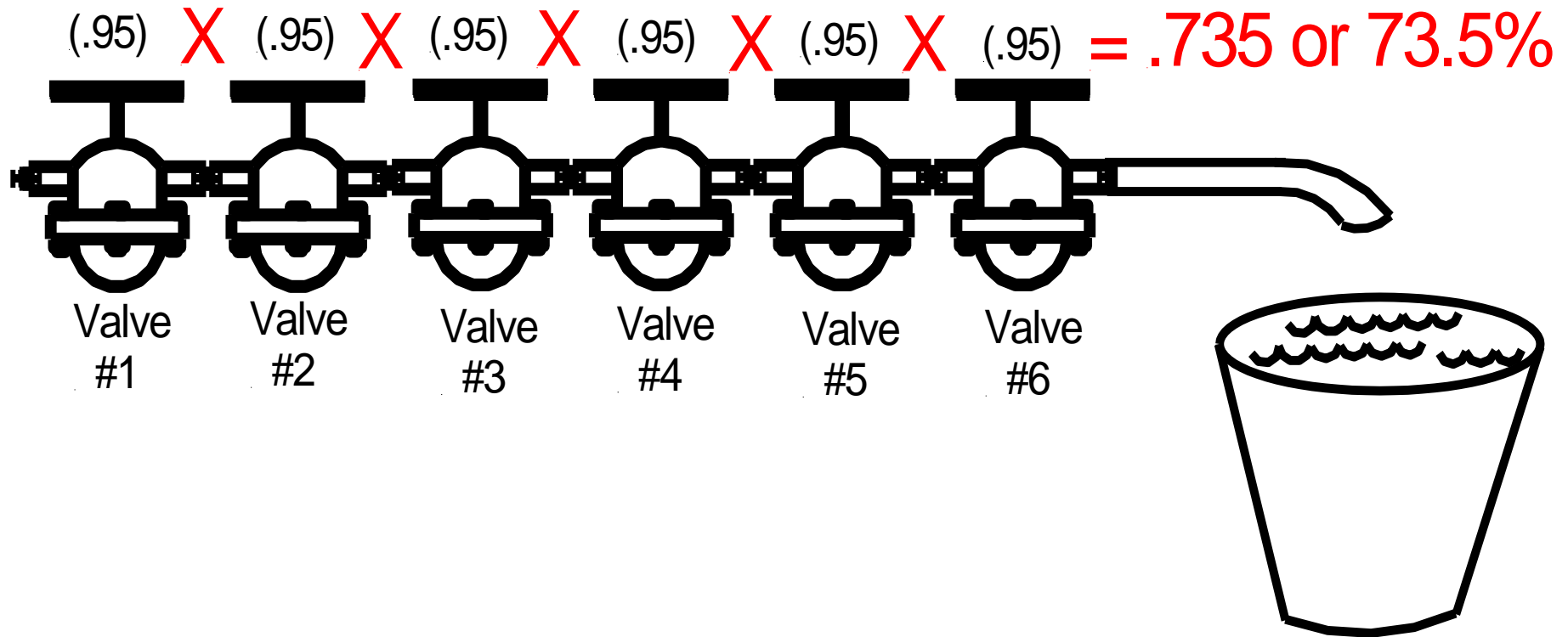


“and”

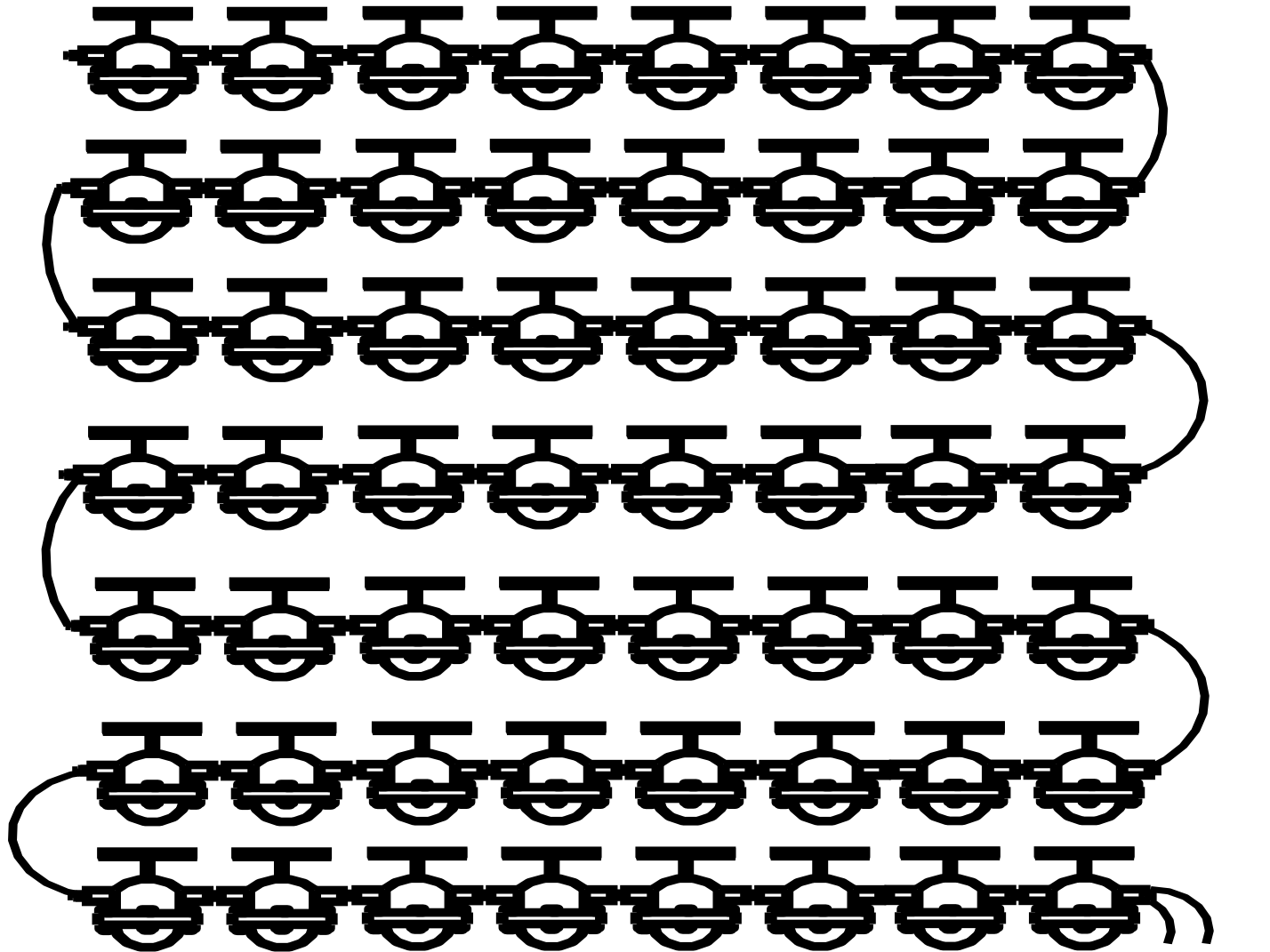
$$(.95) \times (.95) \times (.95) = .857 \text{ or } 85.7\%$$



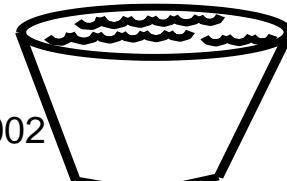
6 “and” Statements



10,000 “and” Statements



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10,000 “and” Statements at 95%

$$(.95)^{10,000} = 0$$

(actually there are 222 zero's and then the number 1.72!)

10,000 “and” Statements
at 99.73%

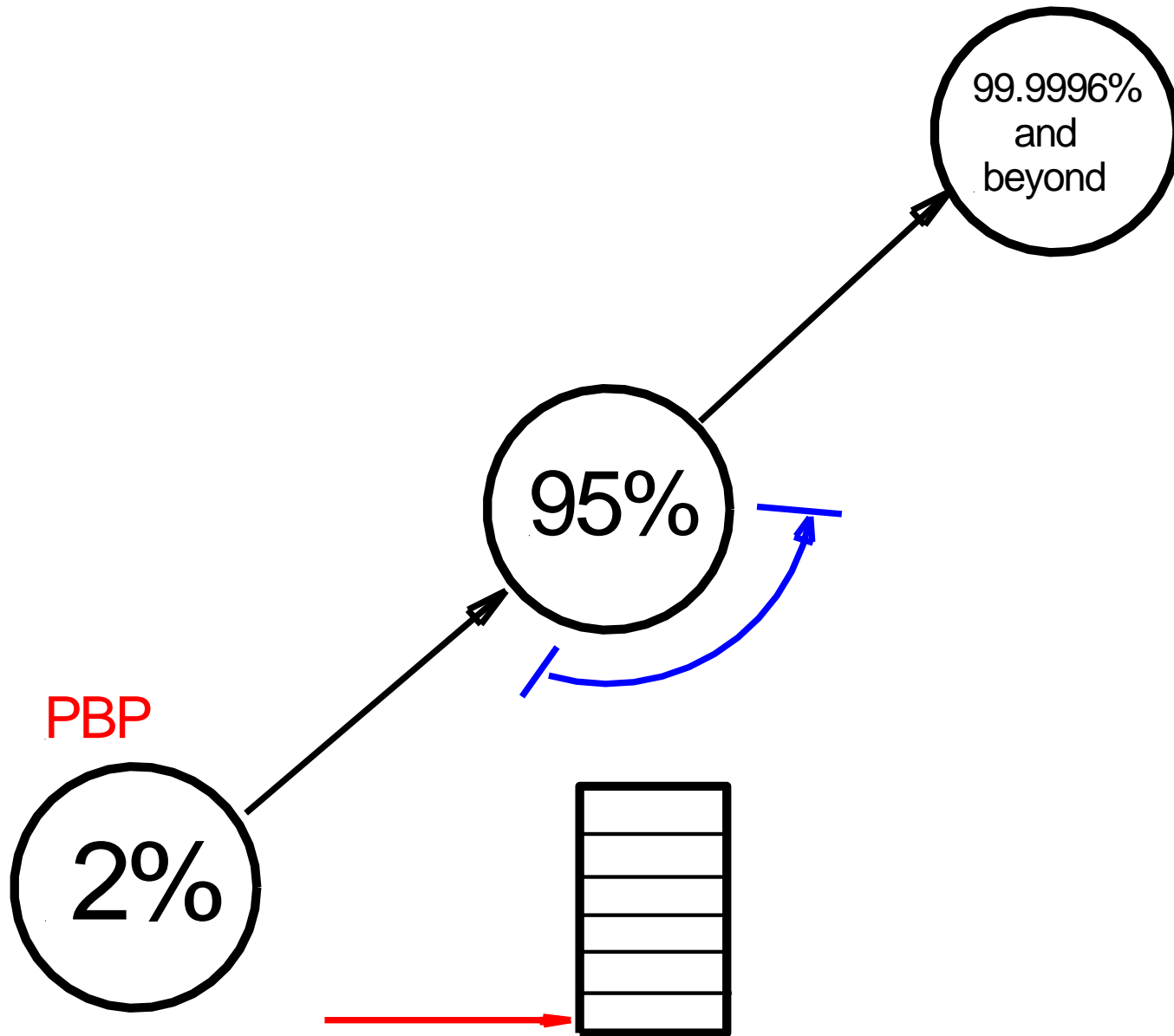
$$(.9973)^{10,000} = 0$$

(actually there are 11 zero's and then the number 1.81!)

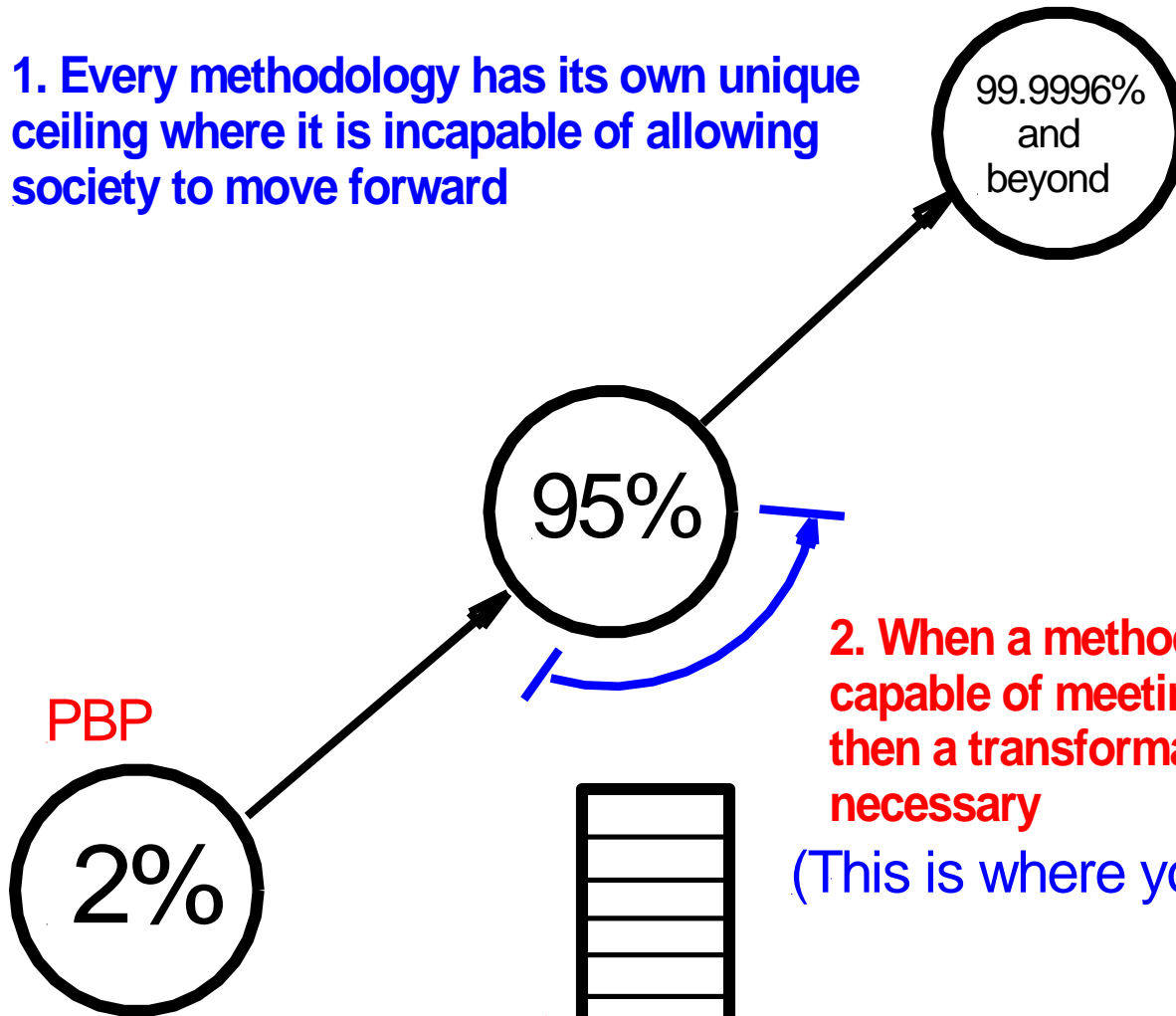
**10,000 “and” Statements
at 99.9996%**

**$(.9999964)^{10,000} = .965$
or 96.5%**

Organizational Transformation



1. Every methodology has its own unique ceiling where it is incapable of allowing society to move forward



PBP

2%

95%

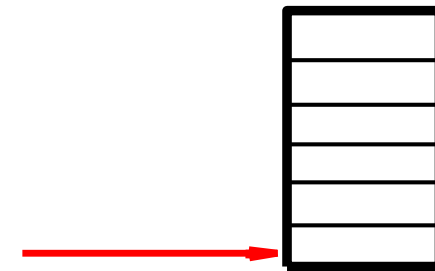
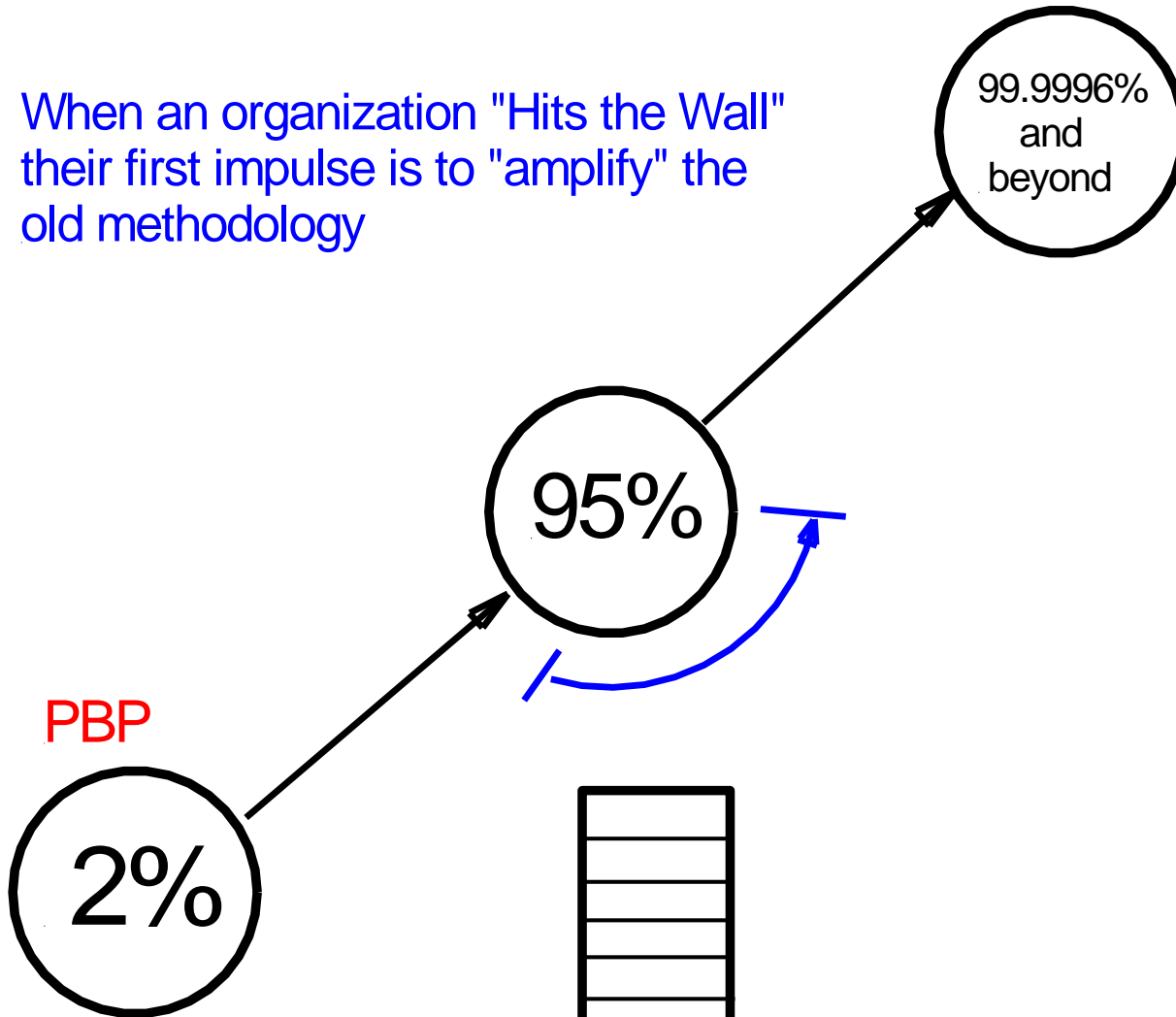
99.9996%
and
beyond

2. When a methodology is no longer capable of meeting societies needs then a transformation becomes necessary

(This is where you "Hit the Wall")

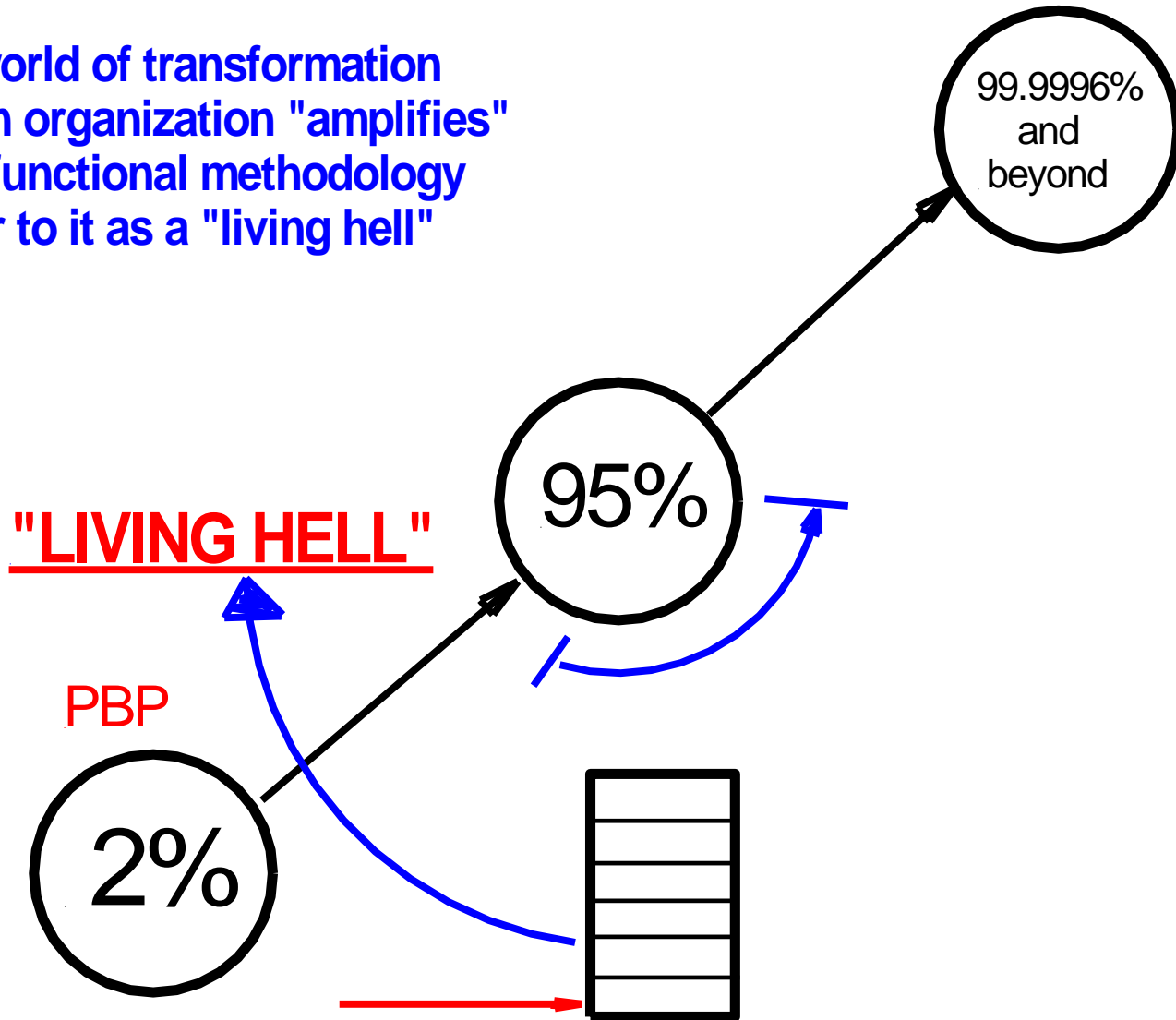
PBP Methodology
not capable of meeting
societies needs
(too many "and" statements)

When an organization "Hits the Wall"
their first impulse is to "amplify" the
old methodology



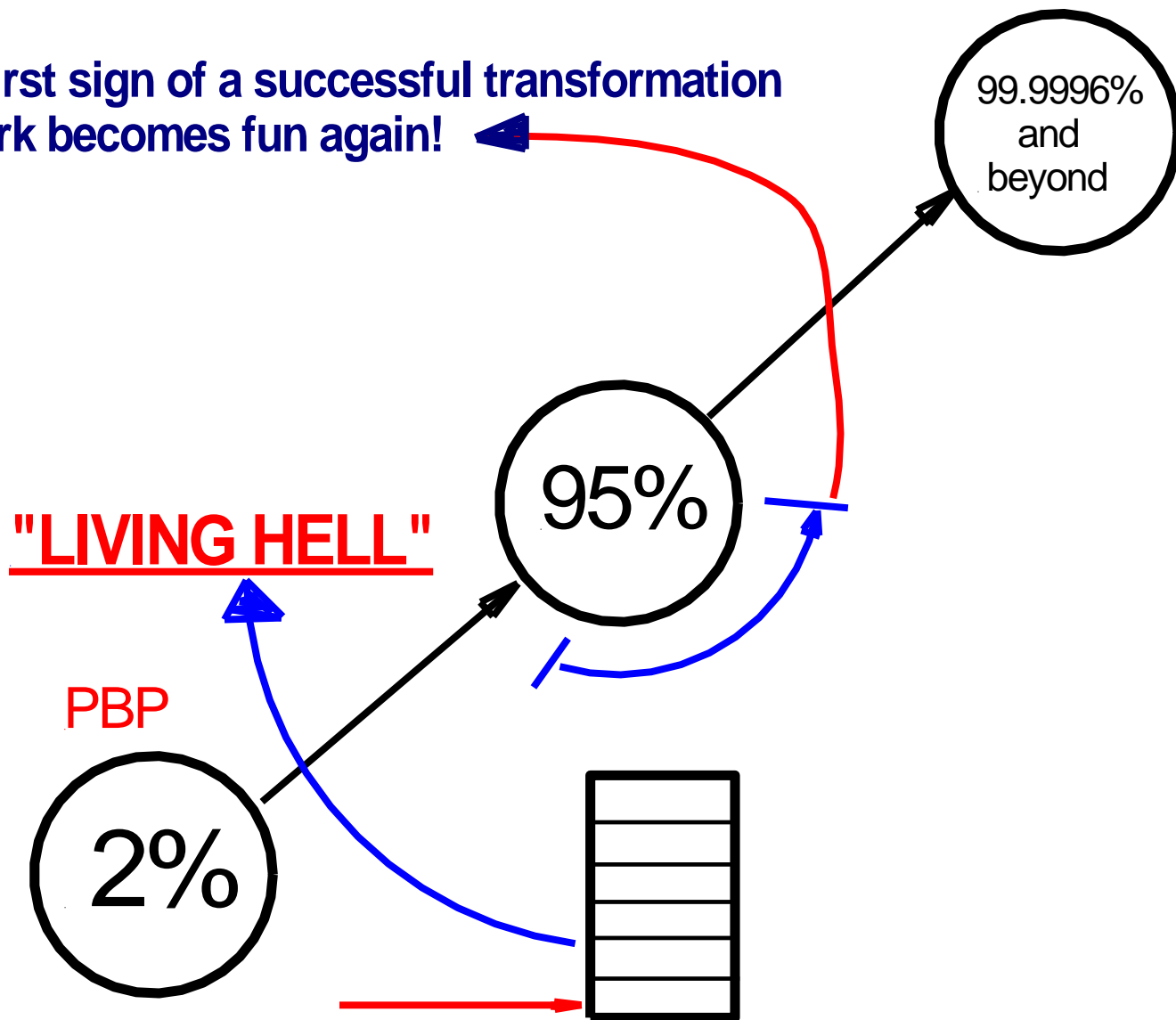
PBP Methodology
not capable of meeting
societies needs
(too many "and" statements)

In the world of transformation
when an organization "amplifies"
it's dysfunctional methodology
we refer to it as a "living hell"



PBP Methodology
not capable of meeting
societies needs
(too many "and" statements)

The first sign of a successful transformation is work becomes fun again!



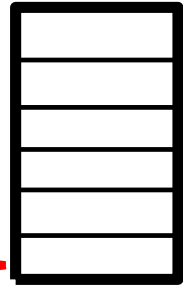
"LIVING HELL"

PBP

2%

95%

99.9996%
and
beyond



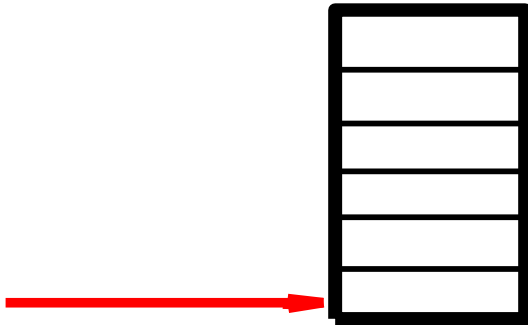
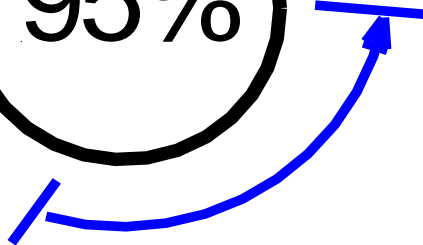
PBP Methodology
not capable of meeting
societies needs
(too many "and" statements)

Success is FUN!!

Fun Effective
and
Efficient Work Place

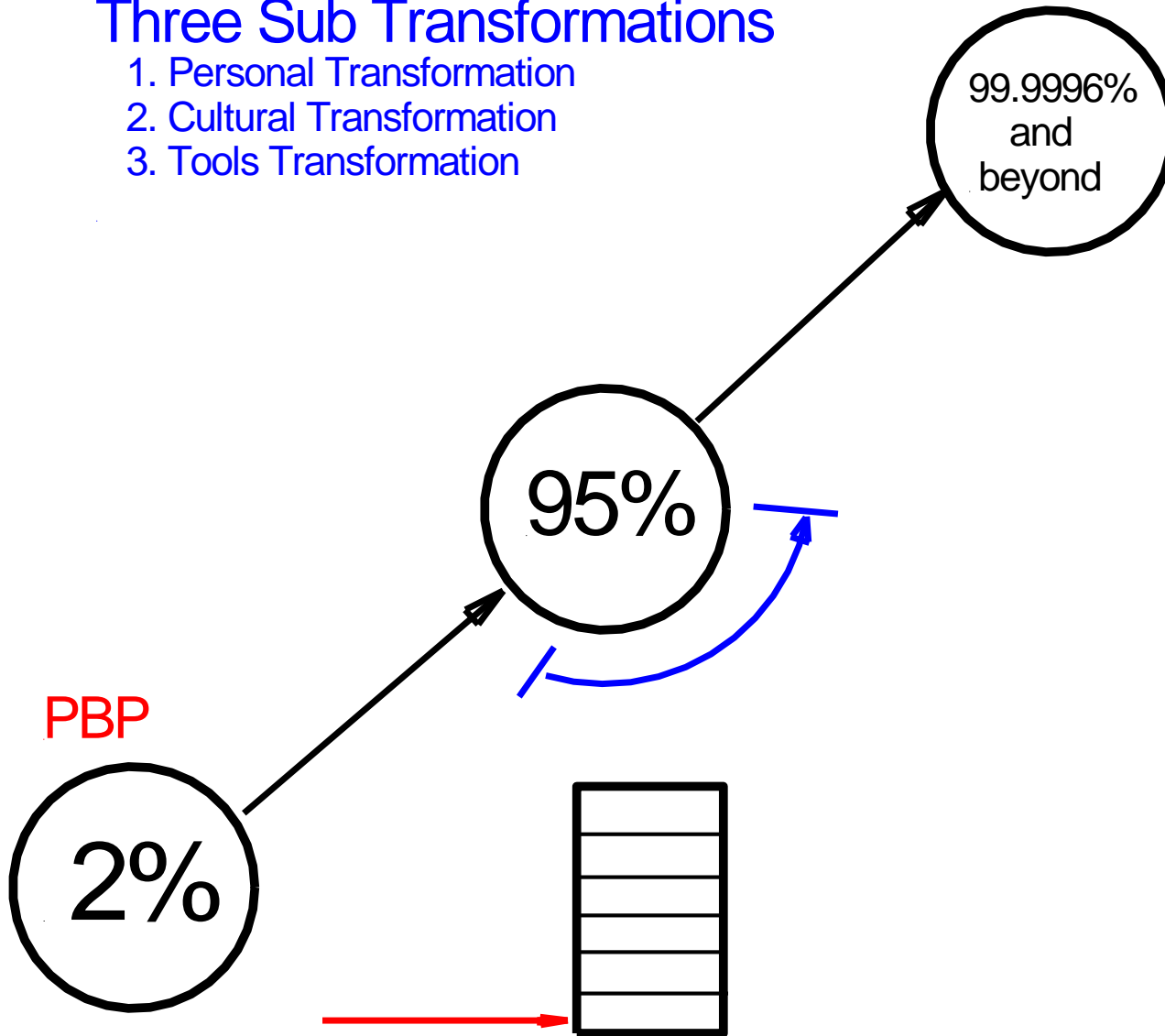
95%

"Living Hell"

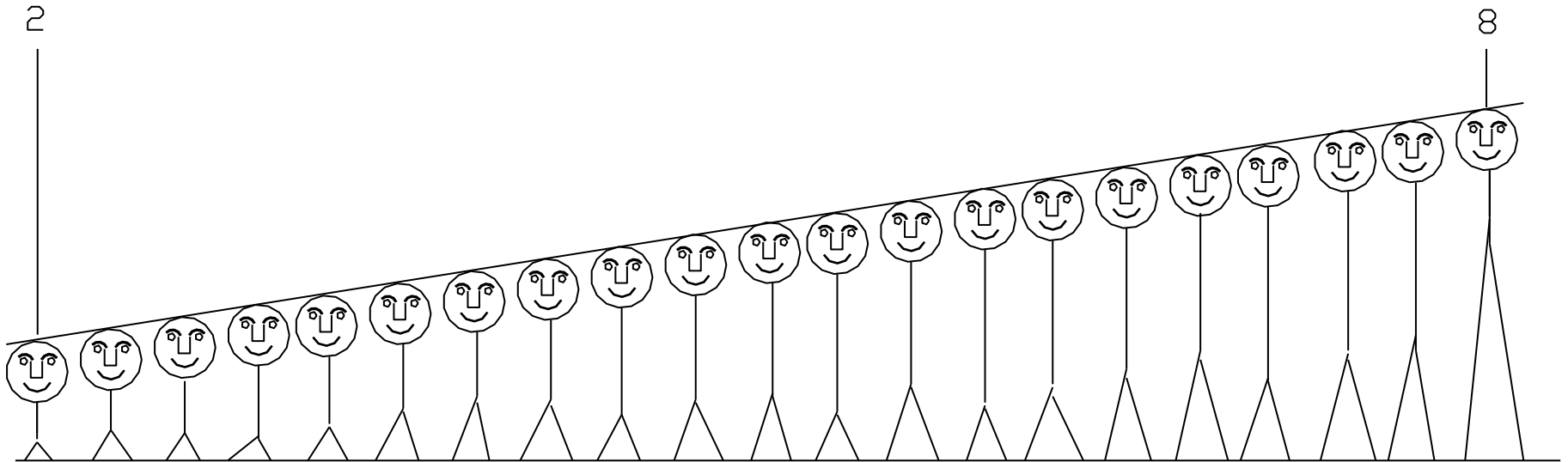


Three Sub Transformations

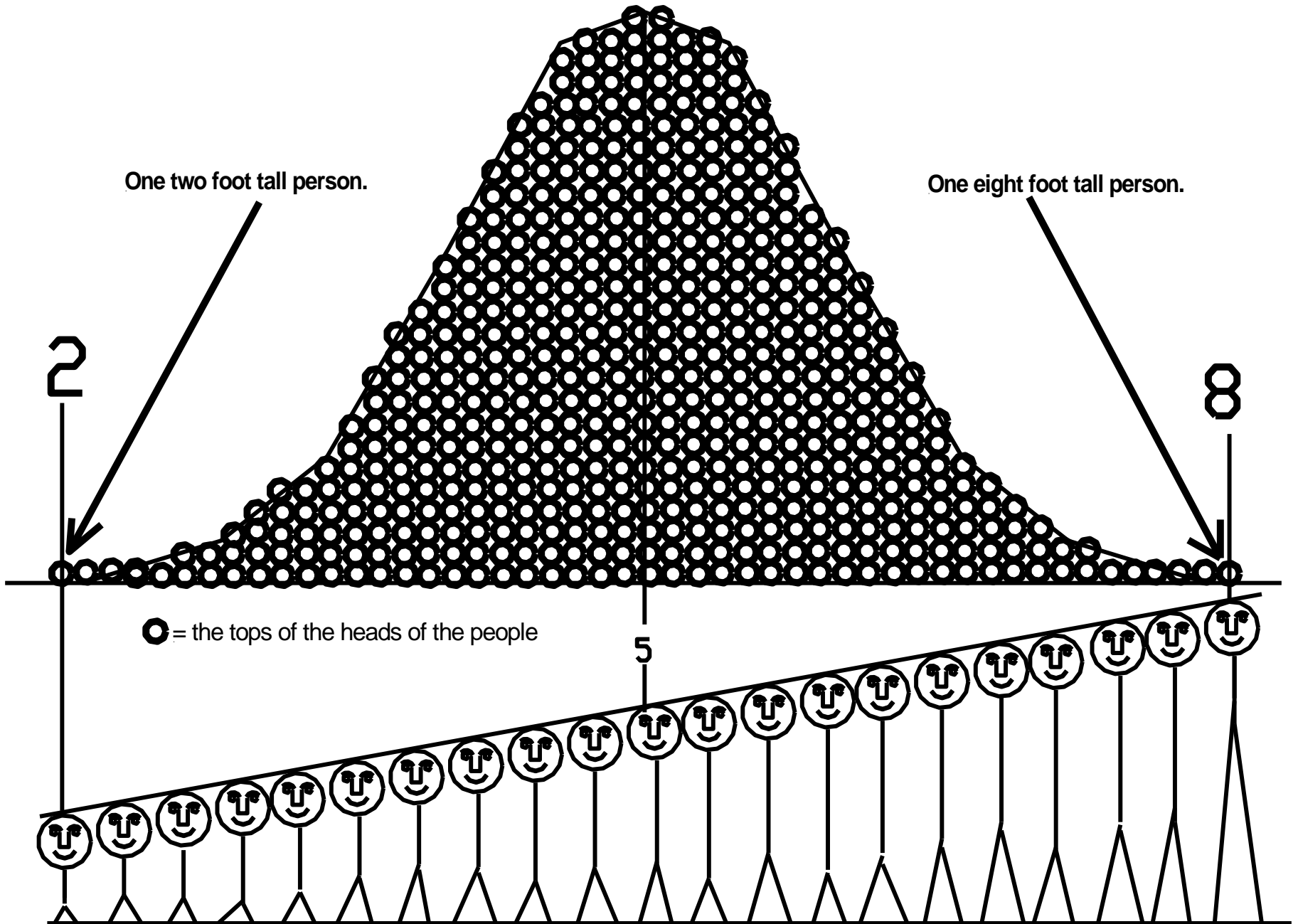
1. Personal Transformation
2. Cultural Transformation
3. Tools Transformation



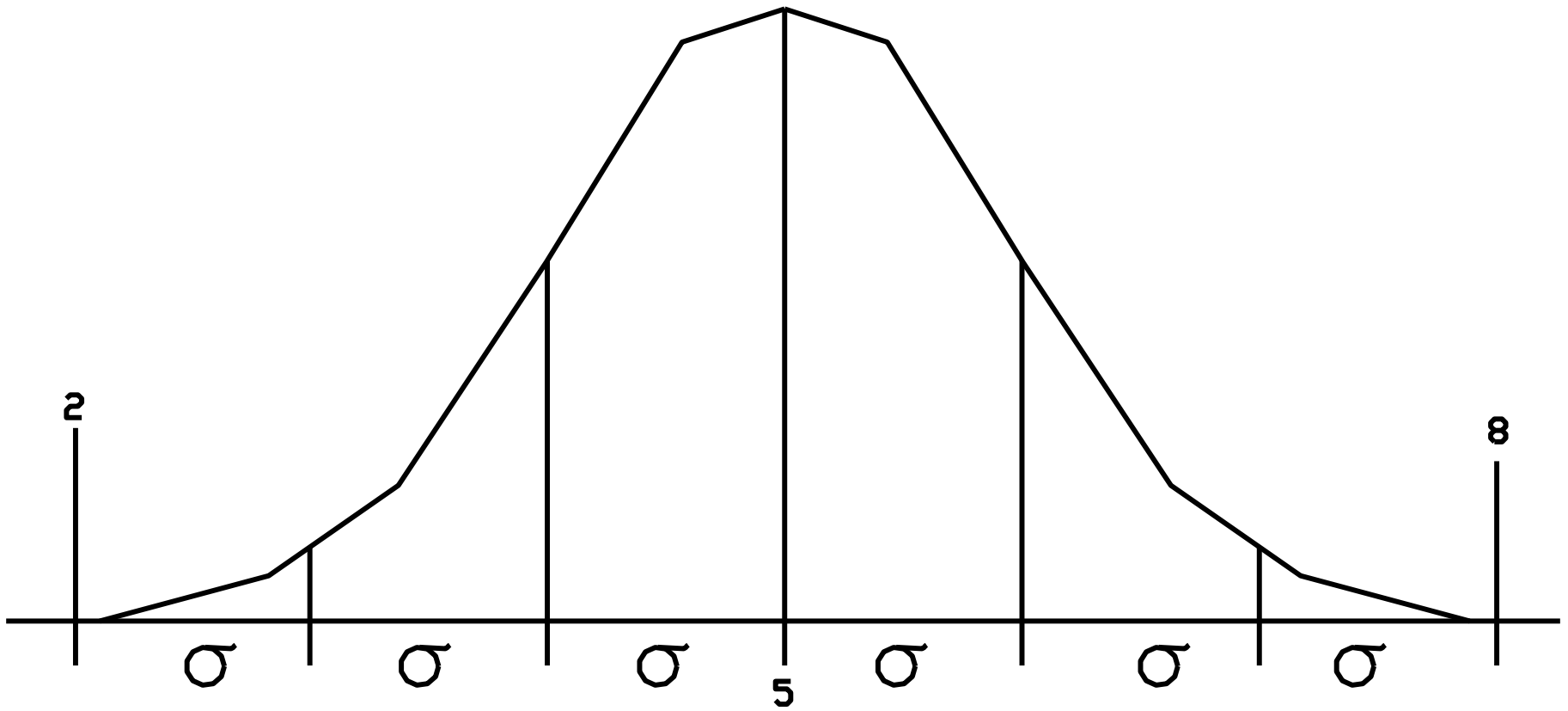
The Normal Distribution



The longest line is the five foot tall line, which means the most frequent height in the population is five foot tall.



The Normal Distribution



Divide curve into six equal lengths

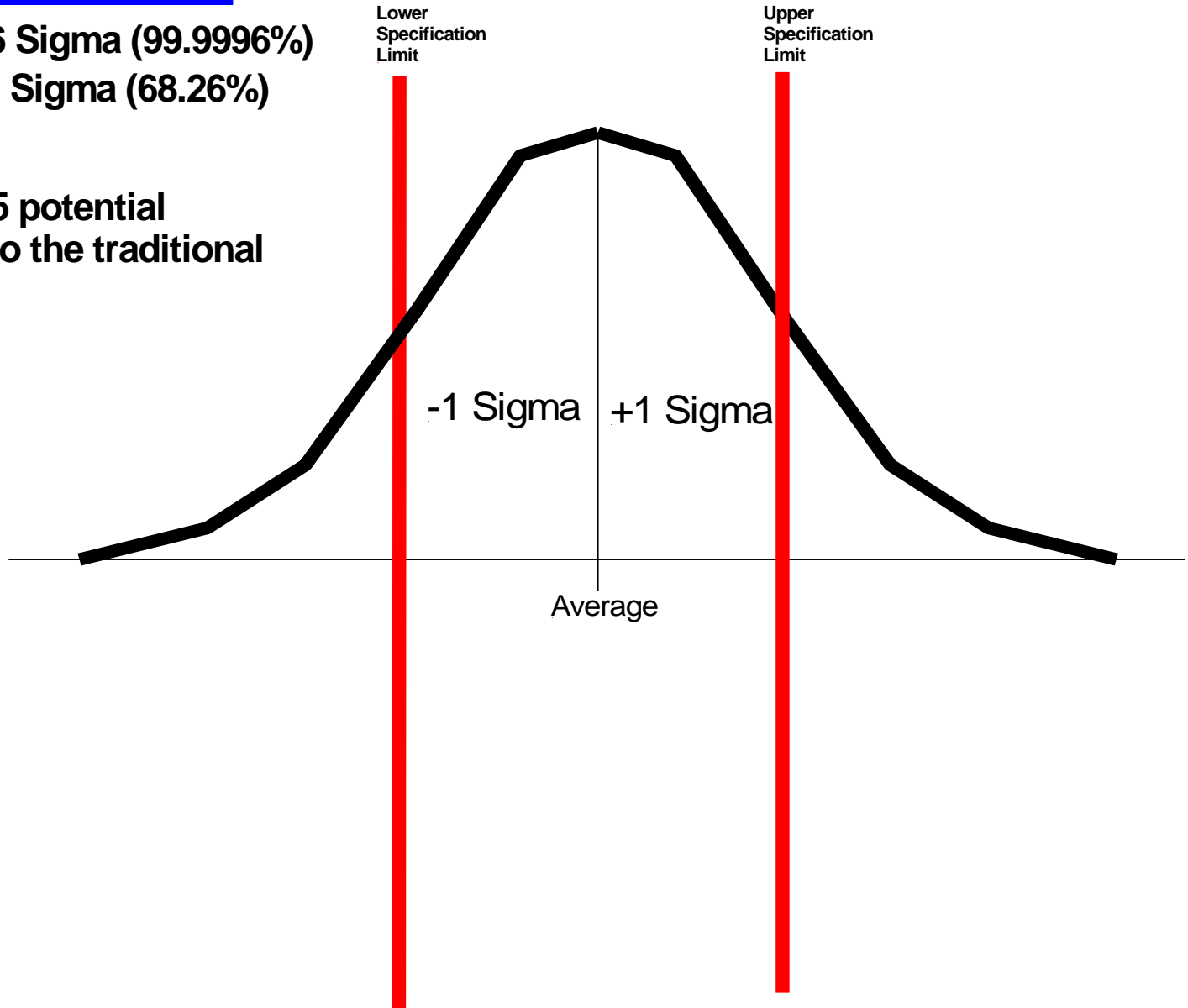
Each of these unit lengths is called a Standard Deviation

Traditional Problem

Standard = 6 Sigma (99.9996%)

Actual = 1 Sigma (68.26%)

There are 5 potential solutions to the traditional problem.

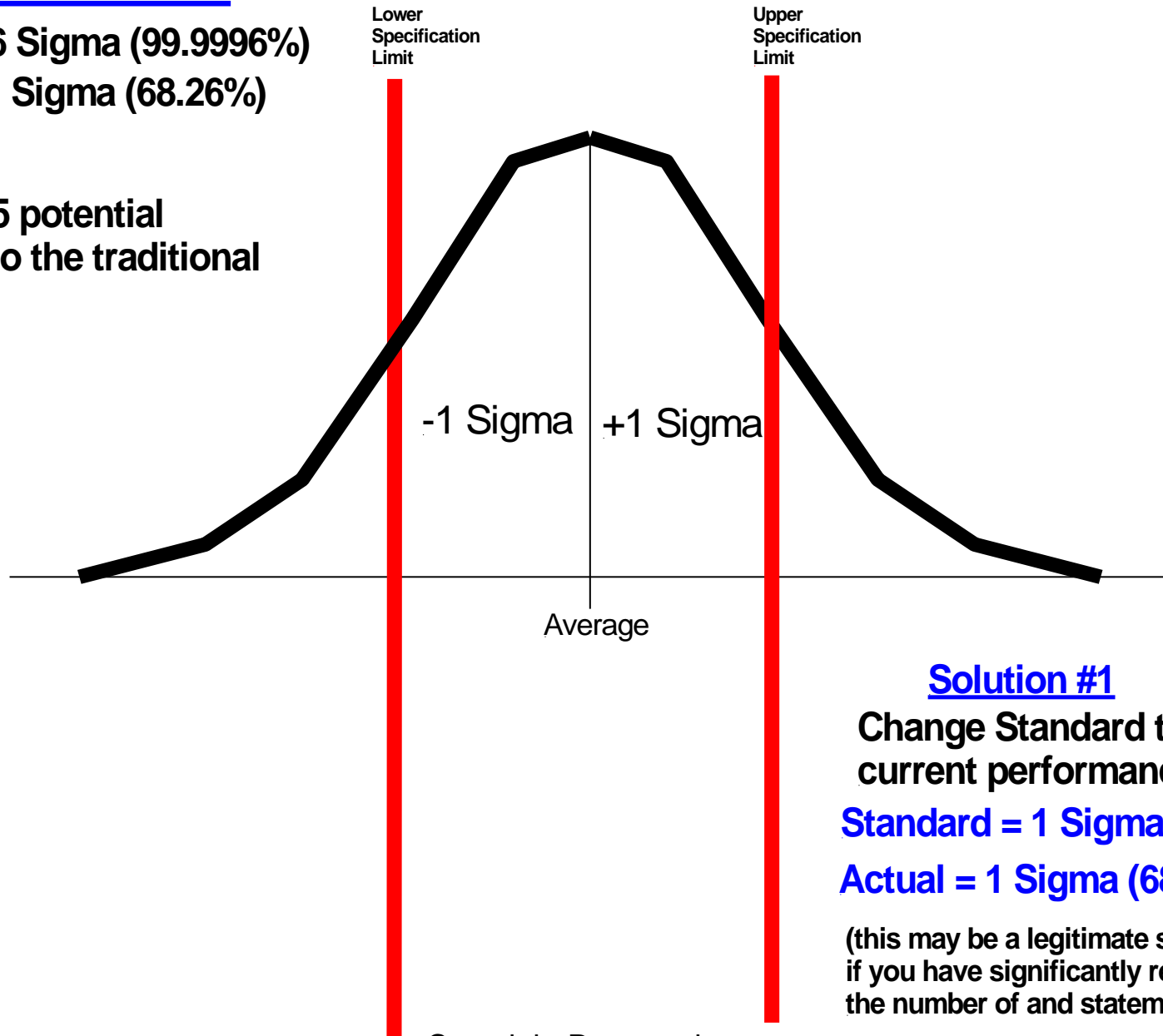


Traditional Problem

Standard = 6 Sigma (99.9996%)

Actual = 1 Sigma (68.26%)

There are 5 potential solutions to the traditional problem.



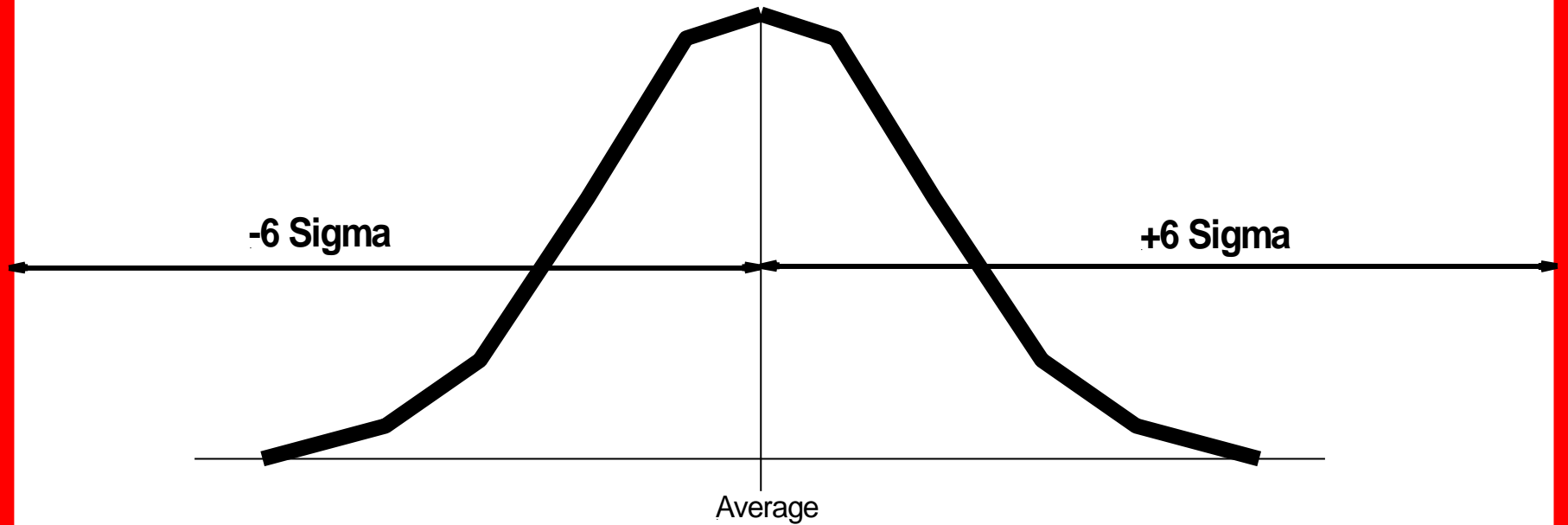
Solution #1

Change Standard to match current performance level

Standard = 1 Sigma (68.26%)

Actual = 1 Sigma (68.26%)

(this may be a legitimate solution if you have significantly reduced the number of and statements)



Traditional Problem

Standard = 6 Sigma (99.9996%)
Actual = 1 Sigma (68.26%)

There are 5 potential solutions to the traditional problem.

Solution #2

Move Specifications out 6 Sigma
Standard = 6 Sigma (99.9996%)
Actual = 6 Sigma (99.9996%)

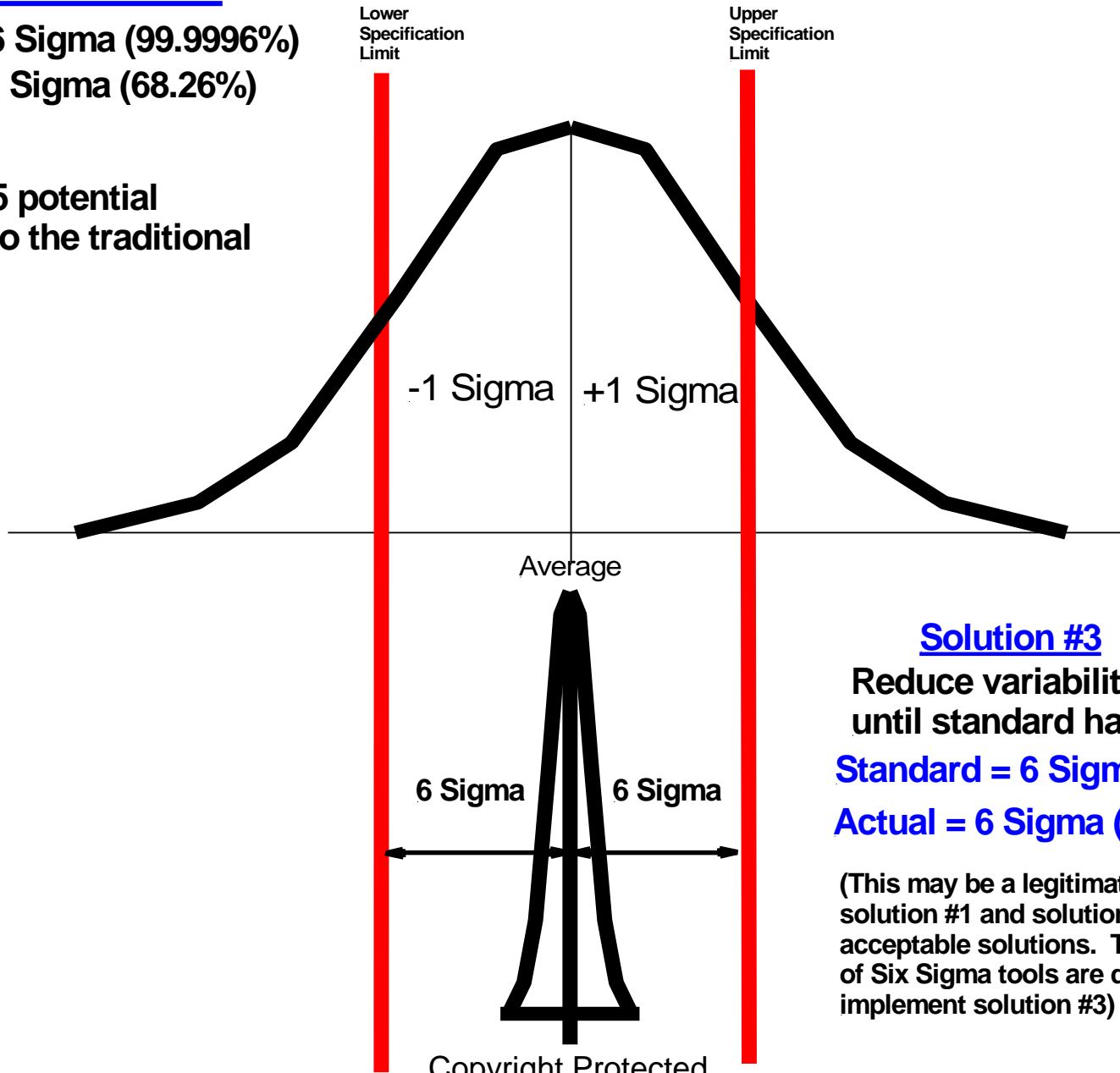
(this may be a legitimate solution if original specifications were set tighter than than they needed to be)

Traditional Problem

Standard = 6 Sigma (99.9996%)

Actual = 1 Sigma (68.26%)

There are 5 potential solutions to the traditional problem.



Solution #3

Reduce variability (sigma)
until standard has been met

Standard = 6 Sigma (99.9996%)

Actual = 6 Sigma (99.9996%)

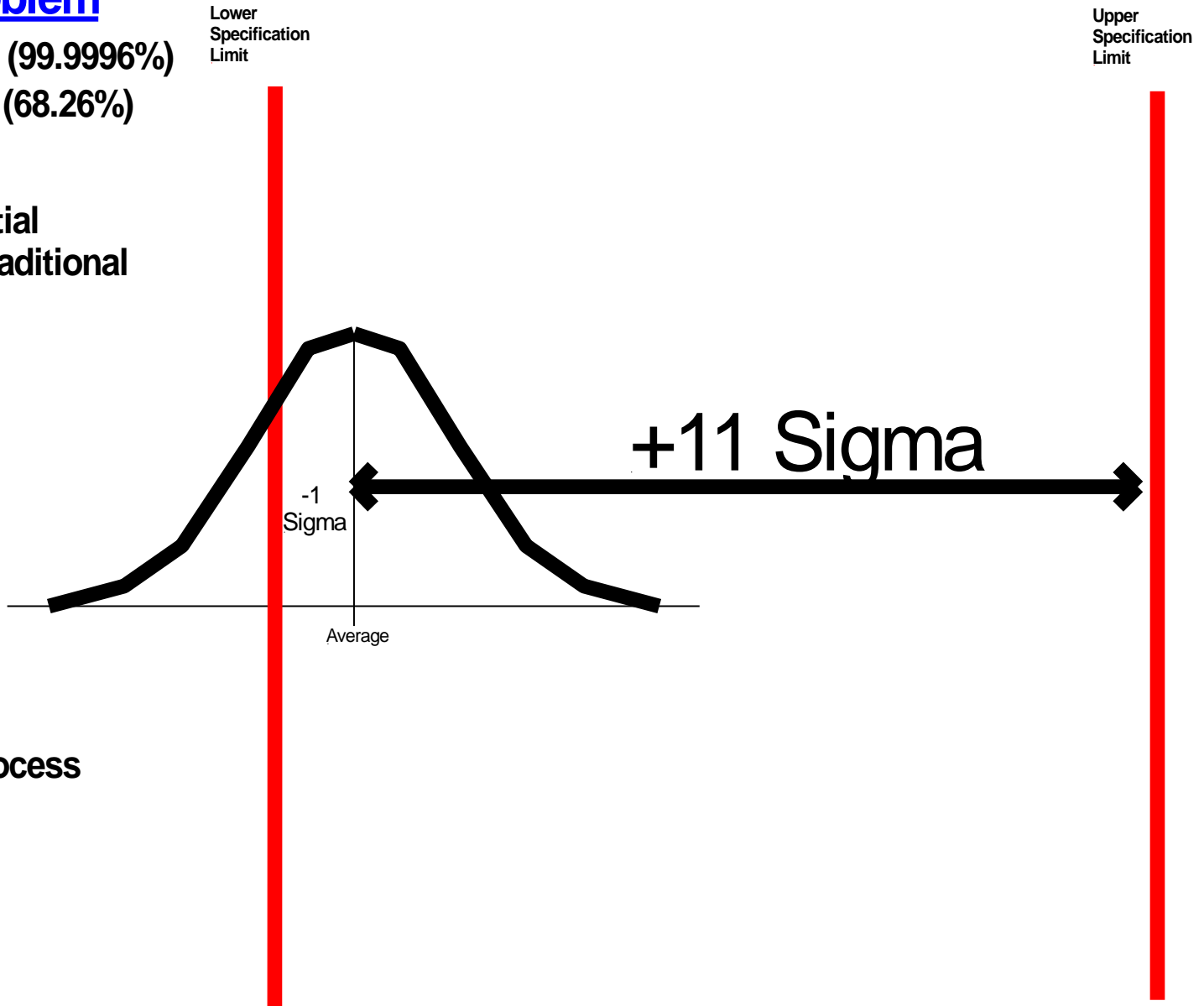
(This may be a legitimate solution if solution #1 and solution #2 are not acceptable solutions. The vast majority of Six Sigma tools are designed to implement solution #3)

Traditional Problem

Standard = 6 Sigma (99.9996%)

Actual = 1 Sigma (68.26%)

There are 5 potential solutions to the traditional problem.



Solution #4

Center the Process

Traditional Problem

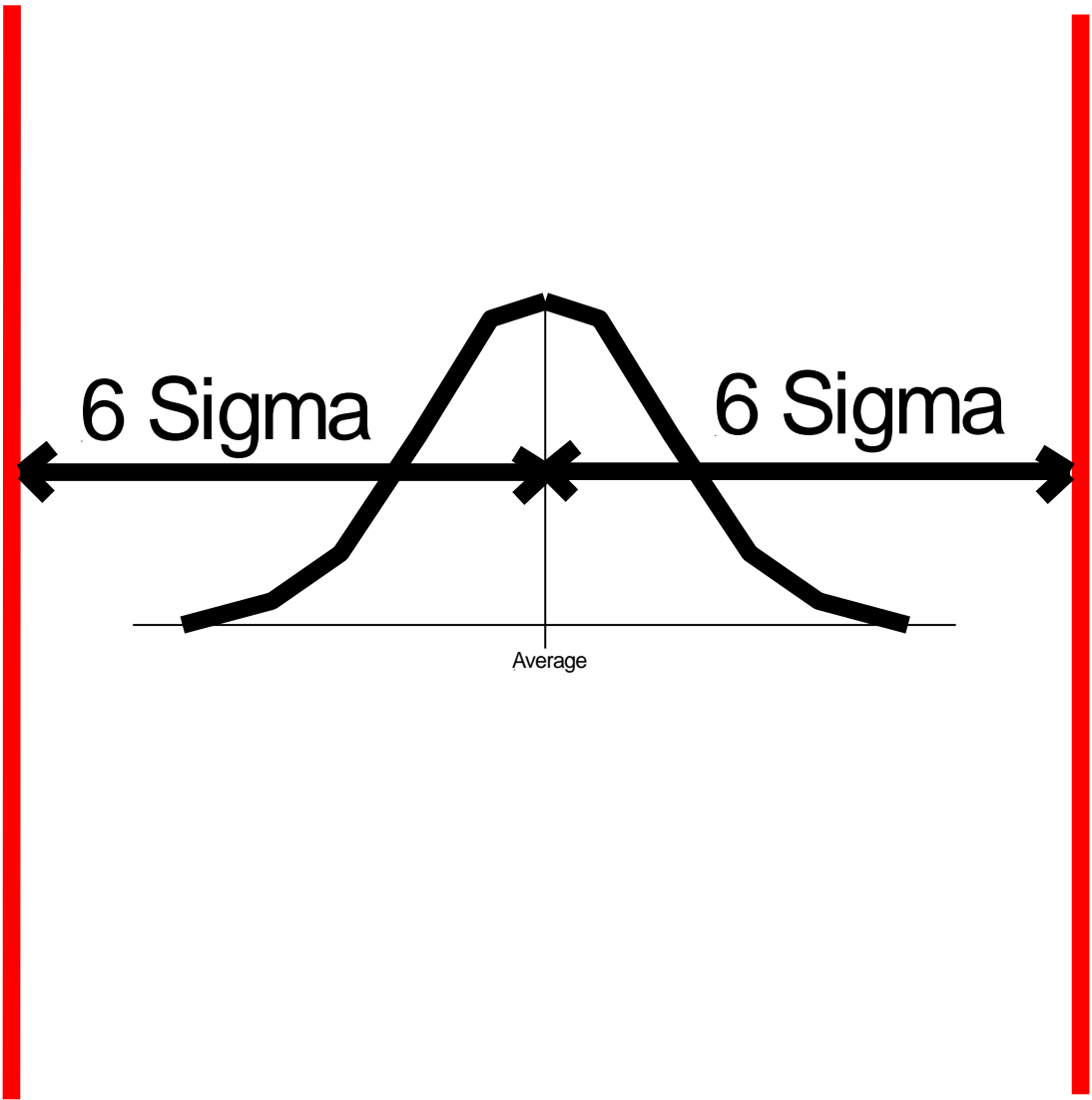
Standard = 6 Sigma (99.9996%)

Actual = 6 Sigma (68.26%)

There are 5 potential solutions to the traditional problem.

Lower
Specification
Limit

Upper
Specification
Limit



Solution #4

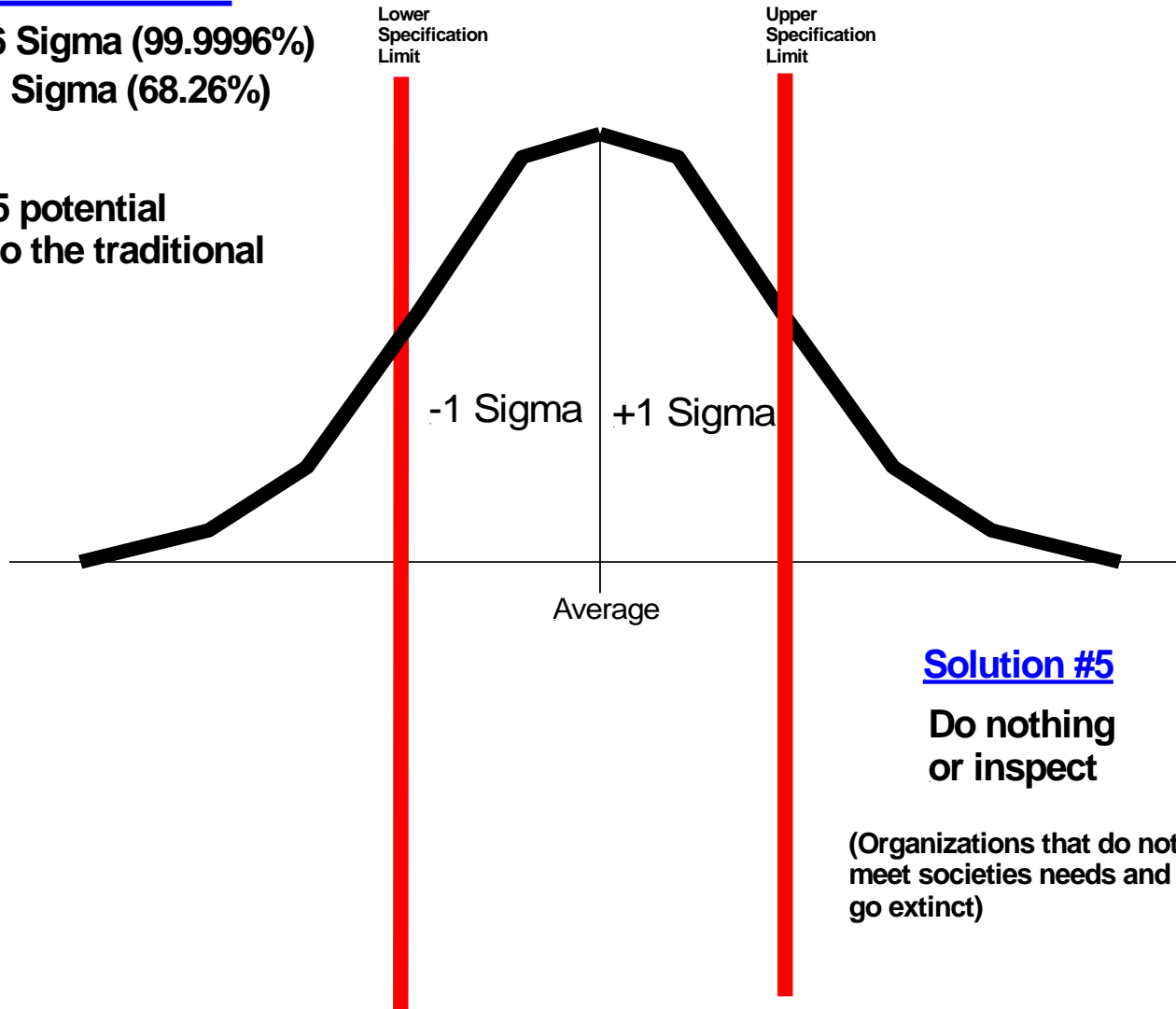
Center the Process

Traditional Problem

Standard = 6 Sigma (99.9996%)

Actual = 1 Sigma (68.26%)

There are 5 potential solutions to the traditional problem.



Solution #5

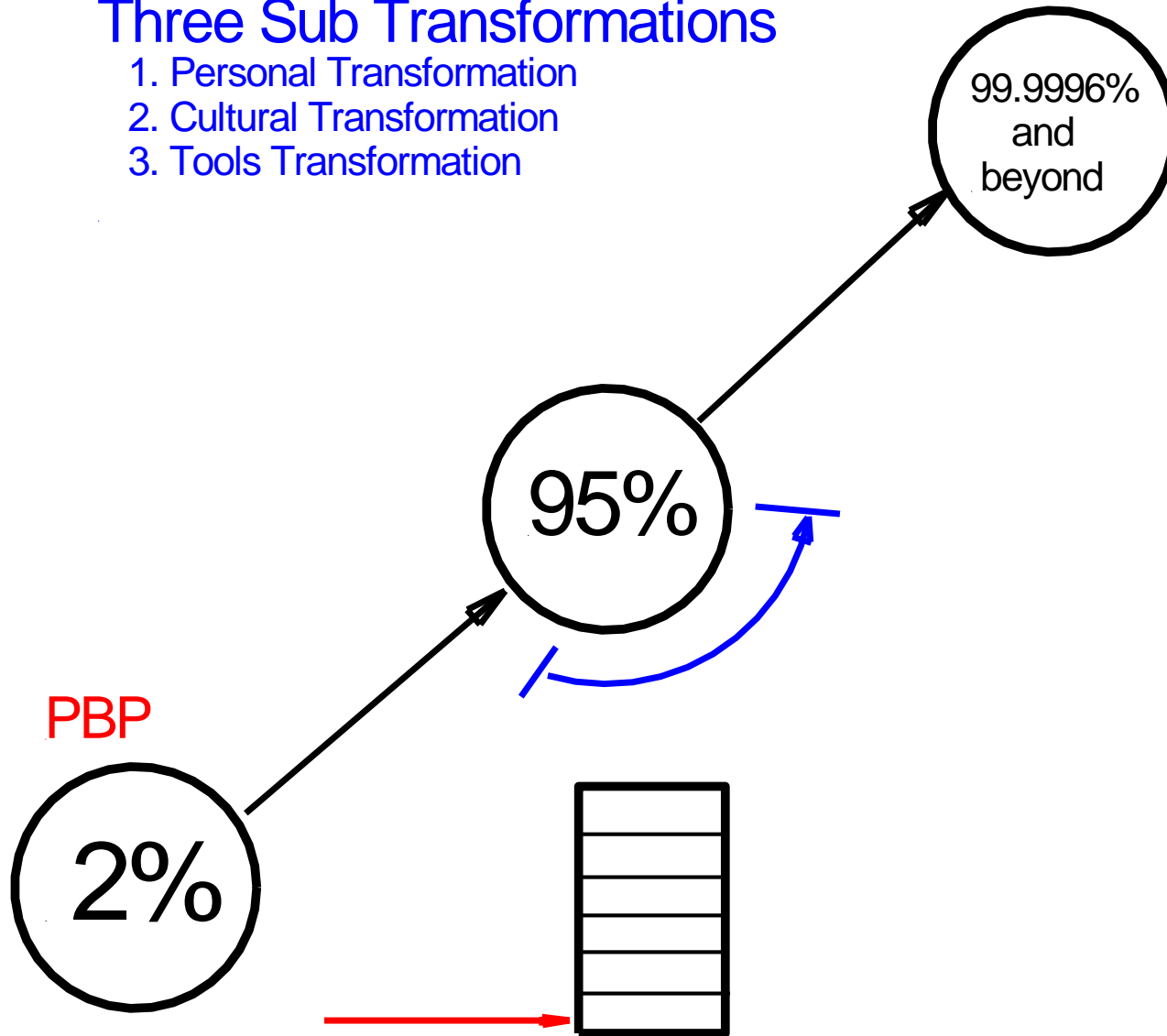
**Do nothing
or inspect**

(Organizations that do not change to meet societies needs and expectations go extinct)

Organizational Transformation

Three Sub Transformations

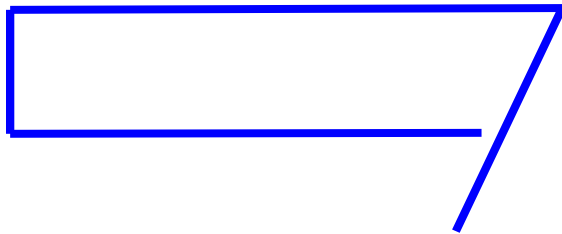
1. Personal Transformation
2. Cultural Transformation
3. Tools Transformation



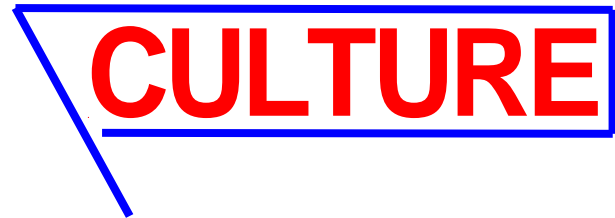
TOOLS



CULTURE



TOOLS



TOOLS must be supported
by organizational culture
or the tools will not work!!

Deming's 14 points are listed below:

- 1. Create constancy of purpose toward improvement of product and service, with the aim to become competitive and stay in business and to provide jobs.**

- 2. Adopt the **new philosophy**.**
We are in a new economic age. Western management must awaken to the challenge, must learn their responsibilities, and take on **leadership for change.**

- 3. Cease dependence on inspection to achieve quality. Eliminate the need for inspection on a mass basis by building quality into the product in the first place.**

4. **End the practice of awarding business on the basis of price tag. Instead, minimize total cost. Move toward a single supplier for any one item, on a long-term relationship of loyalty and trust.**

5. Improve constantly and forever the system of production and service, to improve quality and productivity, and thus constantly decrease costs.

6. Institute training on the job.

- 7. Institute leadership.** The aim of supervision should be to **help people and machines and gadgets to do a better job.** Supervision of management is in need of overhaul, as well as supervision of production workers.

8. Drive out fear, so that everyone may work effectively for the company.

9. Break down barriers between departments. People in research, design, sales, and production must work as a team to foresee problems of production and in use that may be encountered with the product or service.

10. Eliminate slogans, exhortations, and targets for the work force asking for zero defects and new levels of productivity. Such exhortations only create adversary relationships, as the bulk of the causes of low quality and low productivity belong to the system and thus lie beyond the power of the

- 11a. **Eliminate work standards** (quotas) on the factory floor. **Substitute leadership.**
- 11b. **Eliminate management by objective.** **Eliminate management by numbers, numerical goals. Substitute leadership.**

12a. Remove barriers that rob the hourly worker(s) of their right to pride of workmanship. The responsibility of supervisors must be changed from sheer numbers to quality.

12b. Remove barriers that rob people in management and in engineering of their right to pride of workmanship. This means, inter alias, abolishment of the annual or merit rating and of managing by objective.

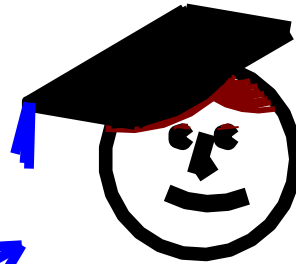
13. Institute a vigorous program of education and self-improvement.

14. Put everybody in the company to work to accomplish the transformation. The transformation is everybody's job.

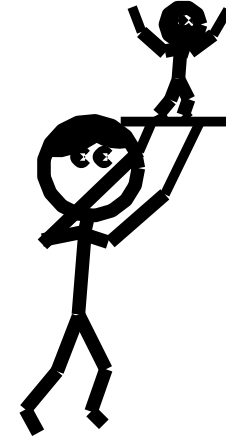
You will slide down to lower levels of behavior when the sacrifice demanded by Phase III behavior exceeds the amount of character you have achieved

**1c To lift up
2c Pure motives
3c Powerful enough to change culture**

**1b Respects skills and talents
2b Solves problems with skills and talents
3b Influential to a degree
4b Self recognition**

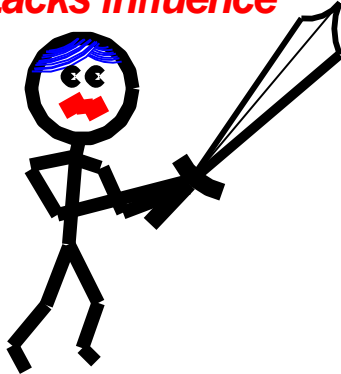


Phase II Behavior

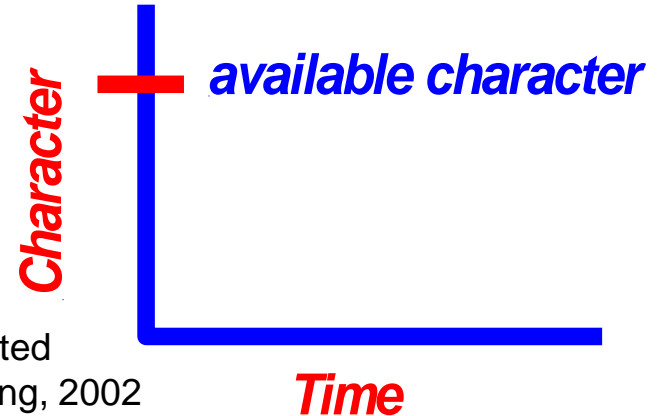


Phase III Behavior

**1a PBP
2a Motivated by fear
3a Lacks influence**



Phase I Behavior



Module Assignments

Complete Homework Assignment as Defined

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THE END

