



*Para ser relevante.*



**CHANGE MANAGEMENT – a case study**

**E-LEADER CONFERENCE, BRNO/CZECH REPUBLIC**

**Prof. Dr. Léo Bruno | June 5, 2019**

## ABSTRACT

The study sought to develop, implement, and evaluate an organizational renewal of the quality function in a large scale production in a small domestic appliances factory. In order to evaluate the impact of the change process involving the existing quality system, a change process was implemented following the causal cycle composed of several stages, as follows: environment conduciveness, psychological pain, new mythology, precipitating agent, chaos, and re-establishing the order. The first stage involved the definition of two vital quality performance indicators to sense the evolution of the effectiveness of the intervention. The second stage was to prove via facts and data that is better the face the effort of change than run the risk of keeping the status quo. The third stage involved the definition of a vision of the future to be pursued by the team. The fourth stage involved a diagnosis of the existing situation and the definition of an improvement plan. The fifth stage, called chaos, involved the implementation of the improvement plan. The last stage was the re-establishment of the order by implementing new rules and norms. The composed quality indicator involving conformance and reliability has shown an improvement of 140%, particularly the field call-rate, that involves the image of the organization, improved 430%.

## INTRODUCTION

Although change is a fact of life, if managers are to be effective, they can no longer be content to let change occur as it will. They must be able to develop strategies to plan, direct, and control change. The most general lesson to be learned from the more successful cases is that the change process goes through a series of phases that, in total, usually require a considerable length of time (Lippitt, 1973). Skipping steps creates only the illusion of speed and never produces a satisfying result. A second very general lesson is that critical mistakes in any of the phases can have a devastating impact, slowing momentum and negating hard-won gains (Kotter, 1995).

## INTRODUCTION (cont.)

A very important aspect in the present changing process – Renewal of the Quality Function, is to consider the concept of Quality Costs which consider three categories:

- Prevention: all efforts done by the company during the design phase of the product or service,
- Appraisal: all efforts done by the company during the process of materialization of the product or service,
- Failures: a) internal – non-conformances that occurs during the internal processes, and b) external – non-conformances that occurs in the field during the warranty period.

# PHASES OF THE CHANGE PROCESS



*Neil Smelser*

## PHASES OF THE CHANGE PROCESS

### Phase I – Environment Conduciveness

- Clearly define the change purpose: Renewal of the Quality Function,
- Personal commitment to the change by the top management, and
- Select few Key Performance Indicators to follow up the change process with short-term goals to meet and celebrate (short-term wins). Two quality indicators were selected: a) defect rate at the assembly lines, and b) field call-rate (movable annual total

## PHASES OF THE CHANGE PROCESS

### Phase II – Psychological Pain

- Firm, relentless, and indisputable communication of the impossibility of maintaining the status quo,
- Stablishing a sense of urgency, and
- Using facts and data. An international data gathering was conducted and presented to the managers.

## PHASES OF THE CHANGE PROCESS

### Phase II – Psychological Pain

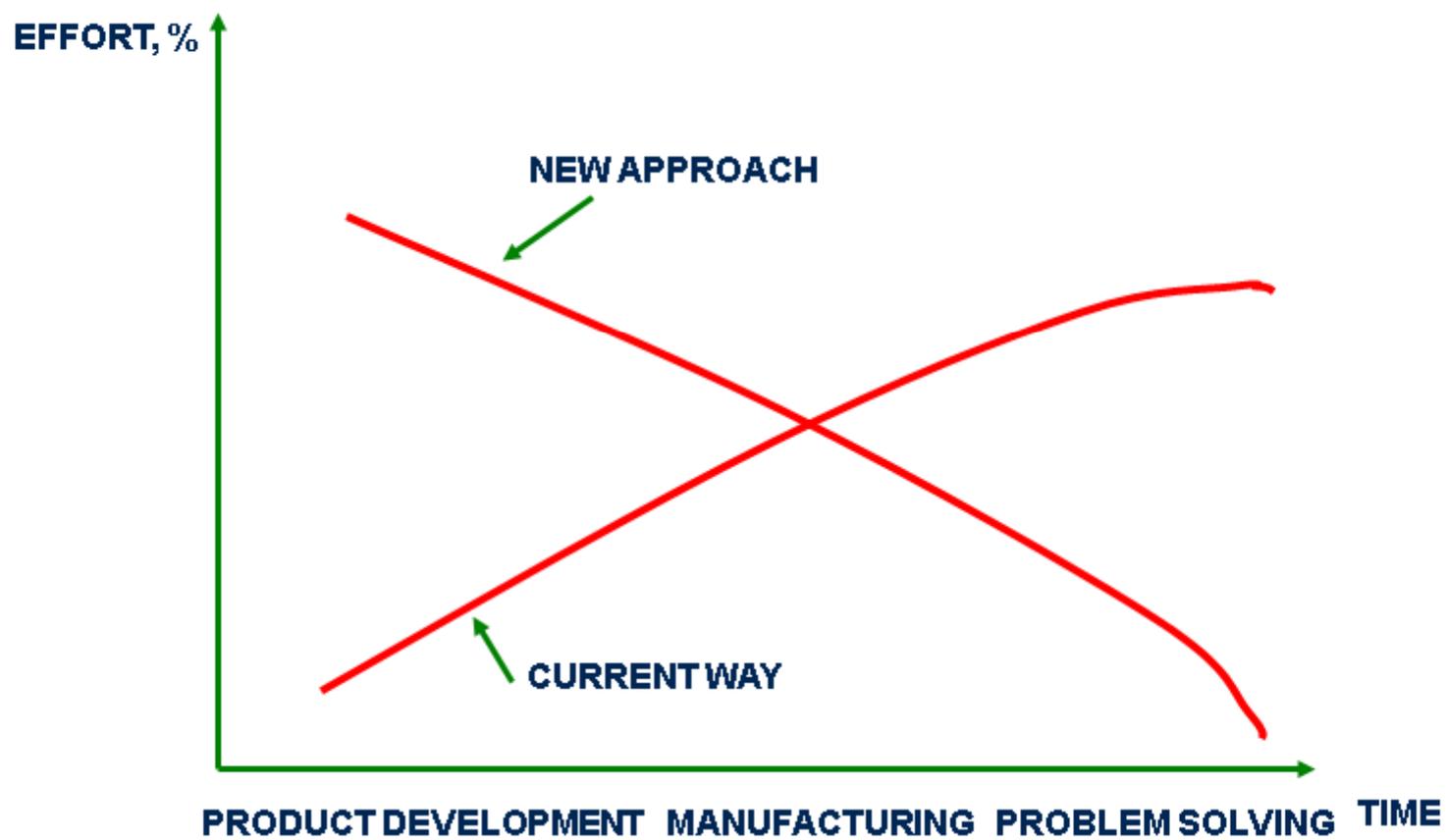
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## PHASES OF THE CHANGE PROCESS

### **Phase III – New Mythology**

- Creating a vision to help direct the change effort, as shown in Figure 2.
- Communicating the vision, and
- Developing strategies to achieve that vision.

## NEW STRATEGY

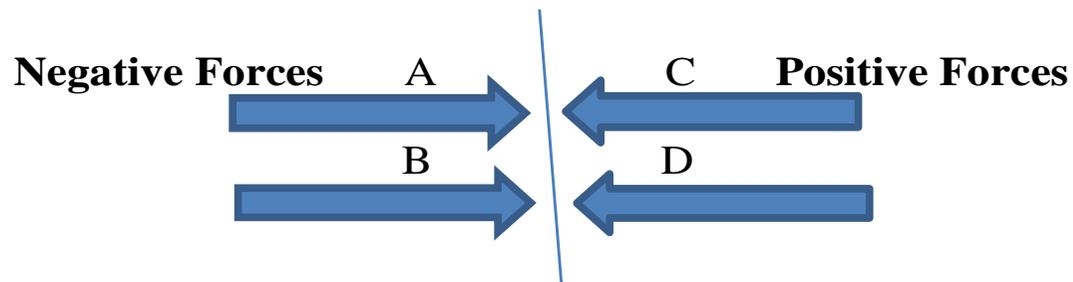


# PHASES OF THE CHANGE PROCESS

**Dimensions: Reliability, Functionality, Manufacturing Conditions, Process Planning, Quality Planning, Machinery and Equipment, Tools and Jigs, Manpower, Materials' Quality, Handling and Quality Consciousness.**

## **Phase IV – Precipitating Agent**

- Diagnoses:
  - Models and instruments (quantify using a scale),
  - Group discussions (critical mass) - Delphi Technique, and
  - Force Field Analysis - minimize or eliminate negative forces and enhance or create positive forces.



- Planning the change (what, who, and when).

# STAGES OF ORGANIZATIONAL DEVELOPMENT INSTRUMENT BUILDING (G. Lippitt)



DEVELOPMENT STAGE CRITICAL CONCERN		KEY ISSUES	MARKETING	FINANCIAL AND PHYSICAL RESOURCES
BIRTH	1 Create a new organization	What to risk	Consciousness and conviction that the products and services have acceptance.	Adequated resources to compensate the initial investments.
	2 To survive as a viable system	What to sacrifice	Sufficient sales to compensate current expenses.	Adequated resources to assure a healthy cash flow.
YOUTH	3 To gain stability	How to organize	Maintenance of position in the market.	Permanent financial planning system and cost control.
	4 To gain reputation and develop pride	How to review and evaluate	Recognized by offering quality products and services.	Financial behavior creates trust among the stakeholders..
MATURITY	5 To achieve uniqueness/ adaptability	Whether and how to change	Conquer of specific segments of the market which need and value the products and services.	Resources to conduct internal studies and possible organizational changes.
	6 To contribute to society	Whether and how to share	Looking for relations with competitors aiming at aggregate value to the society.	Resources used for helping communities or countries to develop economical and social well-being.

## AGREED SCORES FOR ACTUAL AND FUTURE SITUATION PER DIMENSION

DIMENSION	ACTUAL	FUTURE	“GAP”
1. Reliability	3,5	5	1,5
2. Functionality	3	4	1
3. Manufacturing Conditions	2	3	1
4. Quality Planning	3	5	2
5. Process Planning	3	5	2
6. Machinery and Equipment	3	4	1
7. Tools and Jigs	3	4	1
8. Manpower	3	4	1
9. Materials' Quality	3,5	4,5	1
10. Handling	3	5	2
11. Quality Consciousness	2,5	4,5	2

## PHASES OF THE CHANGE PROCESS

### **Phase V – Chaos**

- Regenerative chaos, putting into action the planned actions.

## PHASES OF THE CHANGE PROCESS

### **Phase VI – Re-establishing the order**

- Implement reward and recognition systems,
- Training and development of people, and
- Implementation of new procedures and norms.

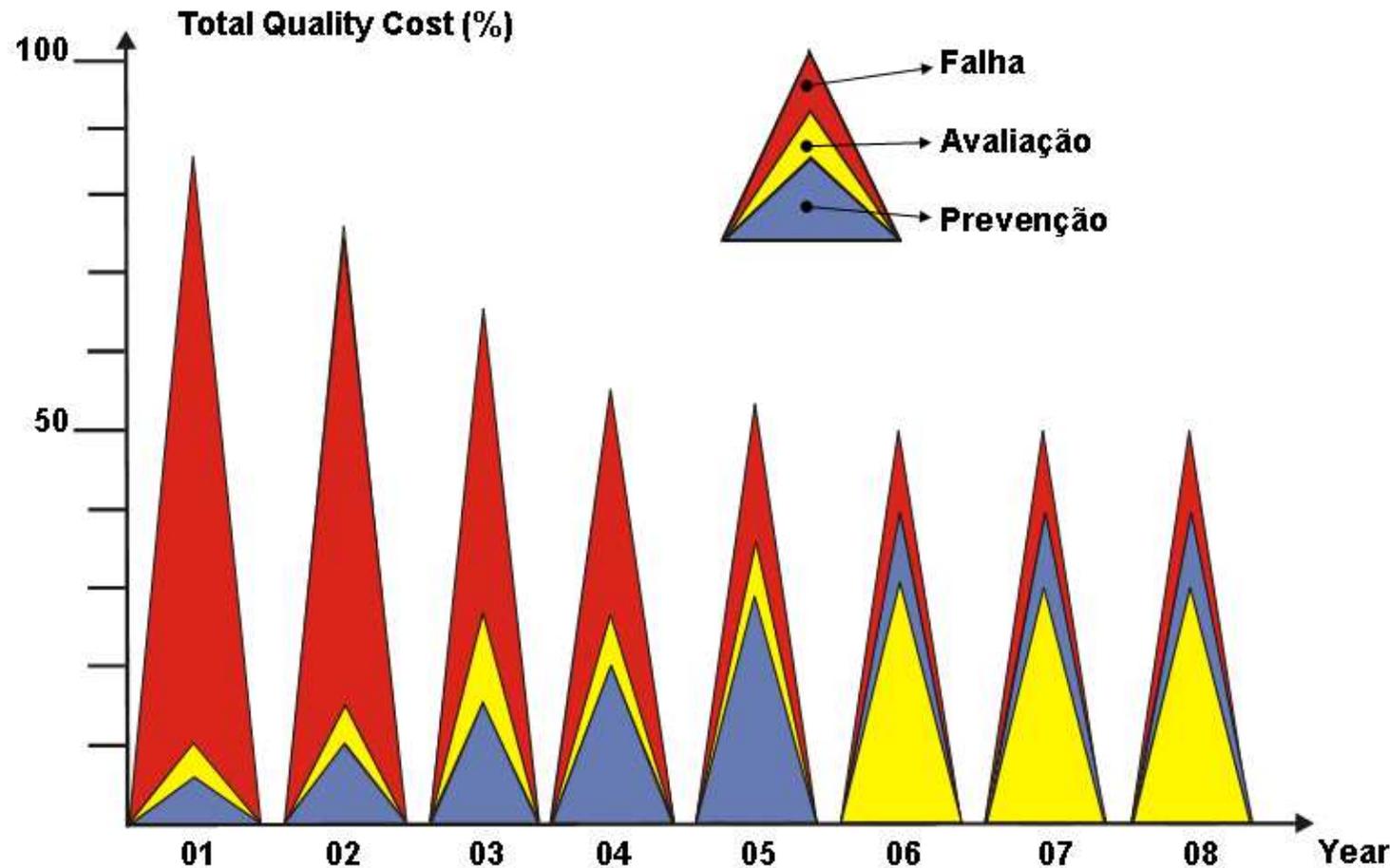
## Background – the factors which led to the changes

- The present case study involved one Small Domestic Appliance company, located in Brazil, producing at the time of the experiment around four million units per year, net sales of US\$ 120 million, and employing 1,400 persons.
- When the experiment started, quality control practices were in the conventional way emphasizing appraisal, very few prevention activities were conducted, therefore quality figures were very poor and with high variability, that means the processes were not under control, and facing problems originated in the design phase. The personnel were tense and there were latent feelings of dissatisfaction. The costs of Failures (internal plus external) were around 4.5% of net sales (US\$ 5.4 million).

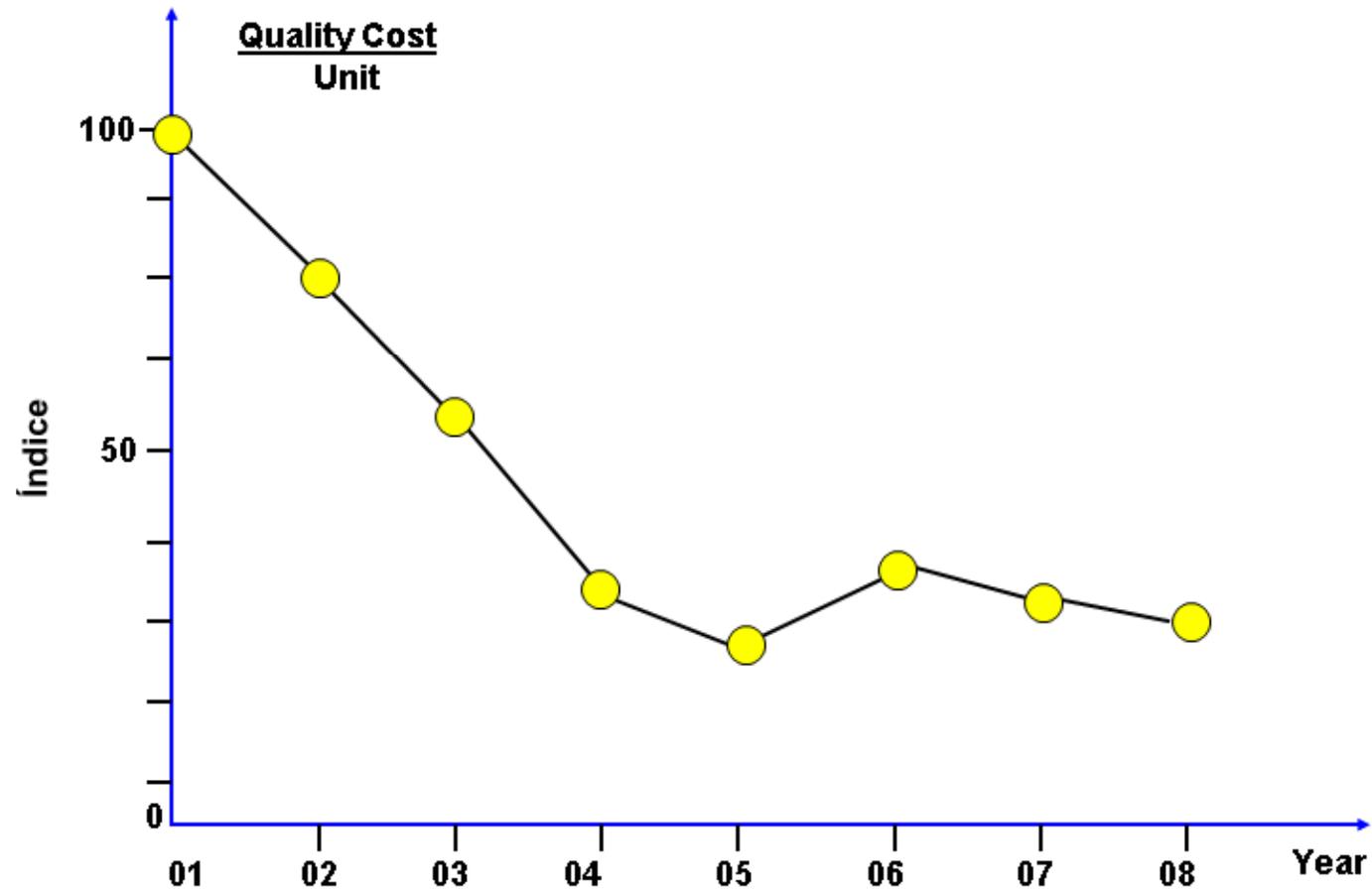
## Content of change

Inspired by the aircraft industry strategy, where prevention activities are mandatory by federal regulations, a Release Department were created, within the Quality Assurance Division structure, with the responsibility and authority of conducting the majority of preventive works, including the final recommendation for the Board of Directors regarding New Products launching.

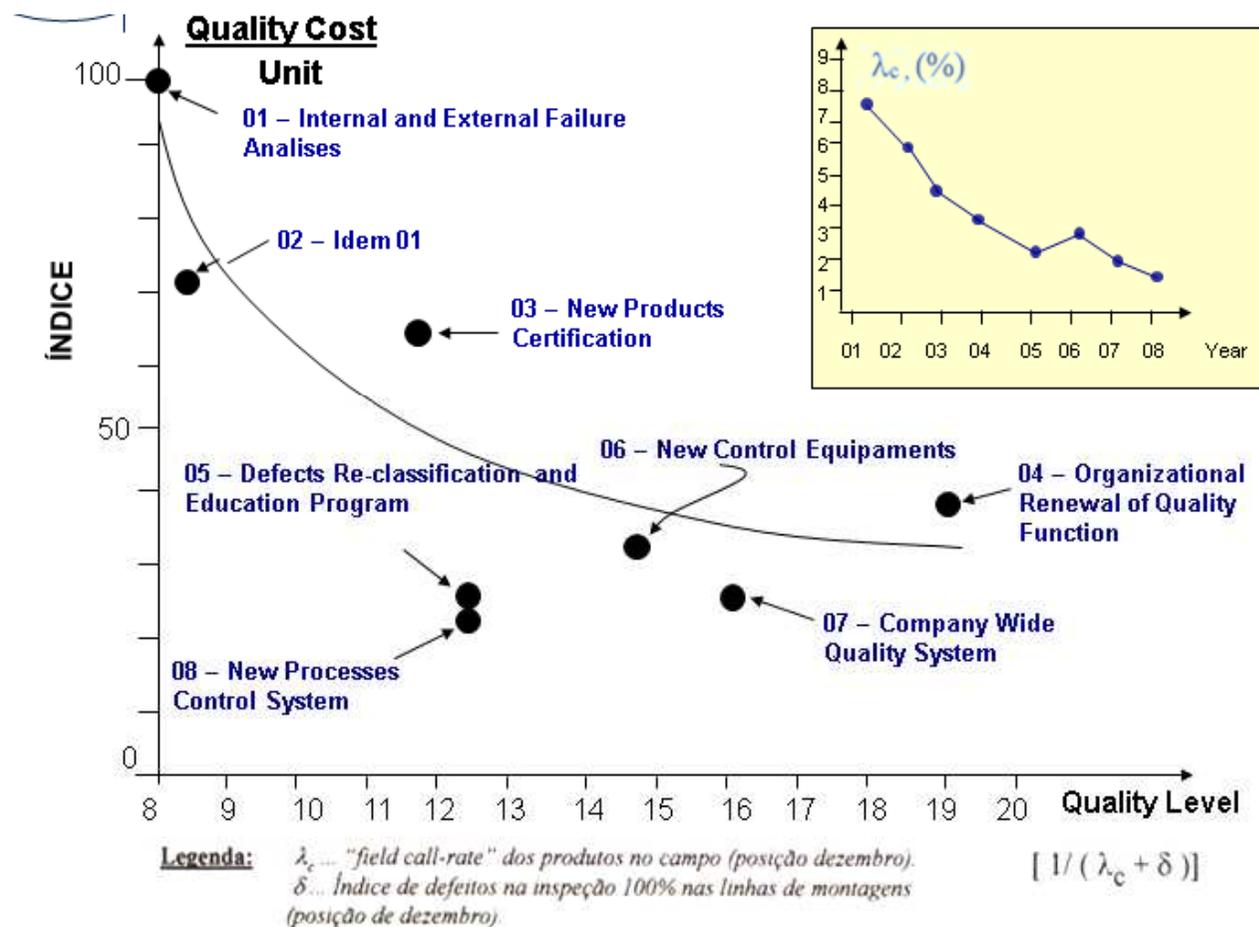
# RESULTS - Deployment of Quality Cost per Category (Prevention, Appraisal and Failures)



# Quality Cost per Unit Produced/Time



# Evolution of Total Quality Cost x Composed Quality Level



## CONCLUSIONS

The prevention-oriented strategy was of major importance to assure compliance with quality specifications and costs reductions. Inspired by the work structuring idea in order to implement the new strategy a new method of working with new products approval was introduced, and the Release Department was created, responsible for coming up with all the analyses related to the certification of a new product, e.g. life cycle simulation tests, internal and external (Suppliers Approval) processes capability analyses, safety analysis, key components evaluation, and feasibility of manufacturing. Additionally to that the Release Department started to co-ordinate all other investigations conducted by all involved areas considered in the Product Creation Process. This case study showed that participation was of essential importance for the success of the experiment.

**THANK YOU FOR YOUR ATTENTION**

leobruno@fdc.org.br