

# Game Changing Quality Strategies

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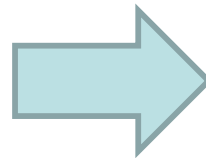
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# Quality - Past

- **Focus on parts:**
  - Conformance to requirements
  - Defects / deficiencies
  - Within specifications
- **The Goal was customer acceptance**



# Quality – Present

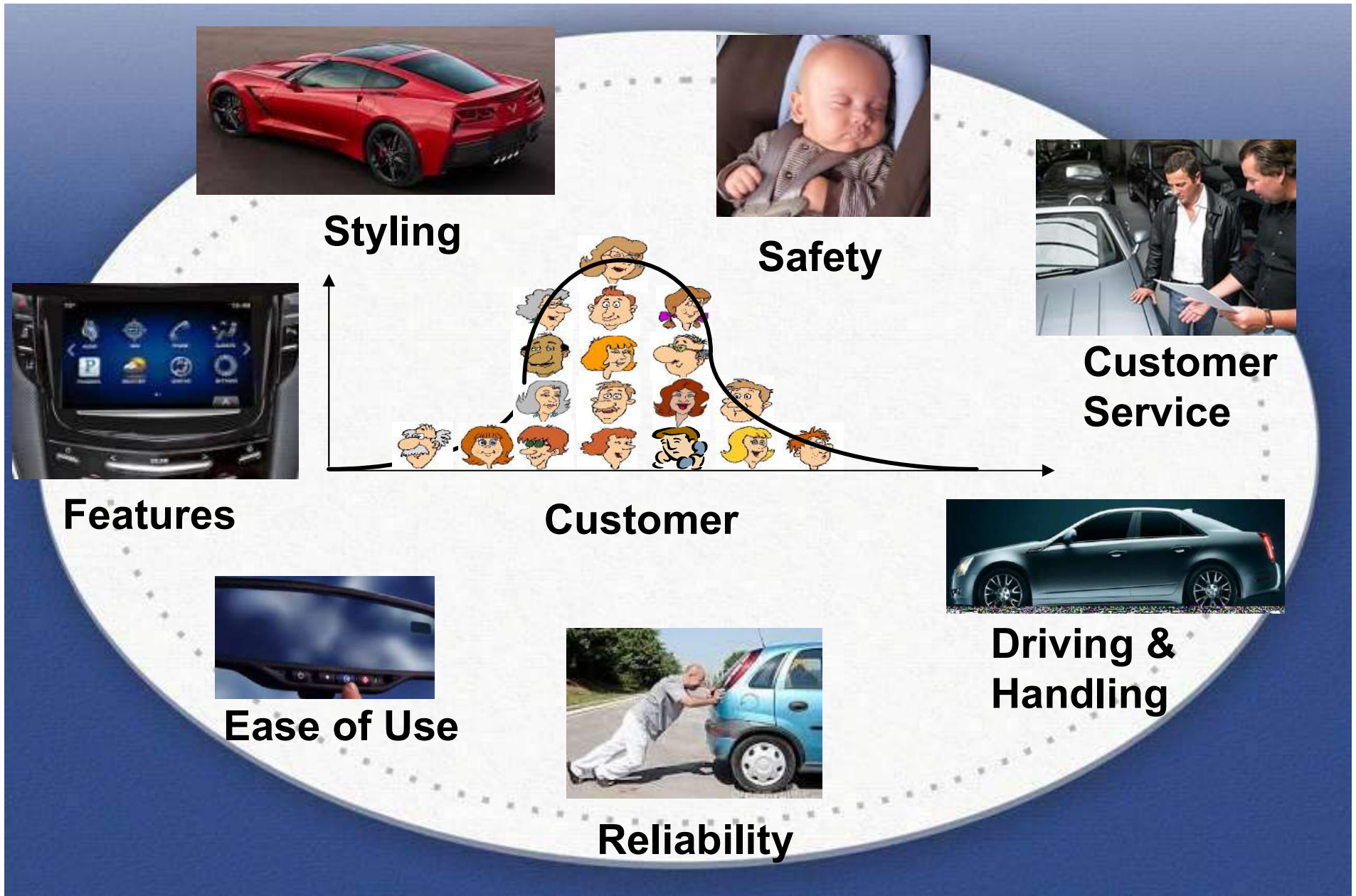
- Today, the Customer assumes all parts will work as a given
- Less than 50% of issues reported by the customer are hard failures
- **The Goal is to surpass customer expectations without unpleasant surprises**



# Game Changing Strategies

1. Customer-Centered Approach to Quality
2. Enterprisewide Engagement
3. Disciplined Problem Solving
4. Risk Management
5. Integrated Approach to Data Analytics
6. Closed Loop Learning
7. Innovation

# 1. Customer-Centric Approach to Quality



## 2. Enterprise-wide Engagement



**Engineering**



**Supplier**



**Manufacturing**



**Design**



**Sales & Service**



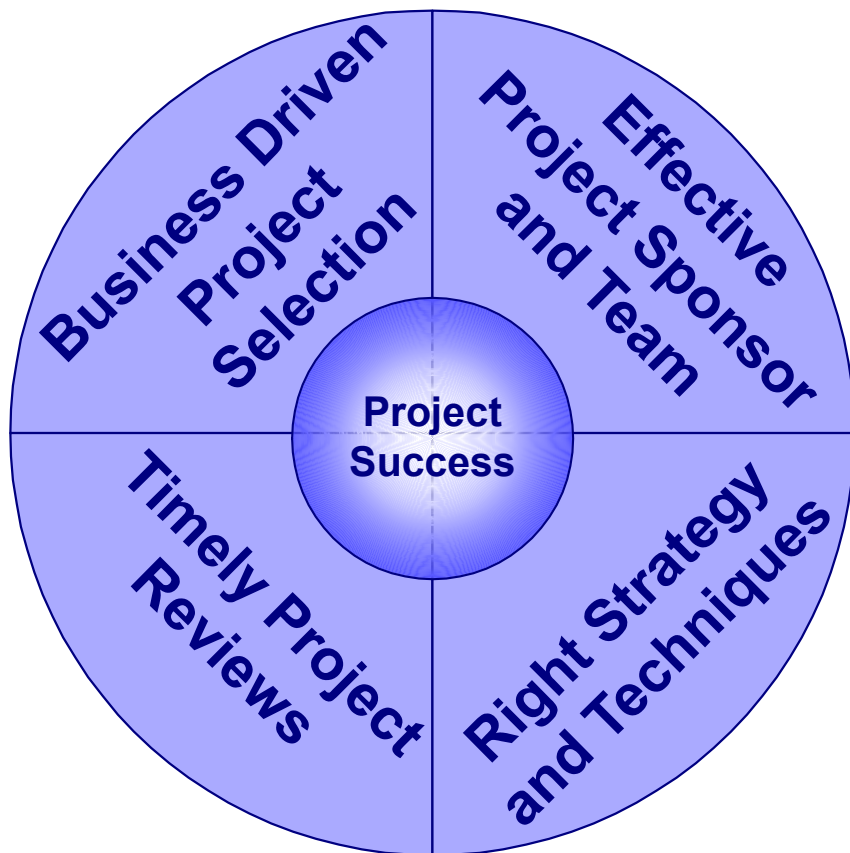
**Concept**



**Field  
Performance**

# 3. Disciplined Problem Solving

## Critical Elements of Problem Solving



# 4. Risk Management – Proactive vs. Reactive

## PROACTIVE APPROACH

### Problem Prevention:

High Leverage  
Low Visibility  
Low Cost  
Customer Enthusiasm  
Difficult to Measure Performance

## REACTIVE APPROACH

### Problem Solving:

Low Leverage  
High Visibility  
High Cost  
Customer Dissatisfaction  
Easy to Measure Performance



**Organizations that are always putting out fires will eventually get burned.**

# 4. Risk Management

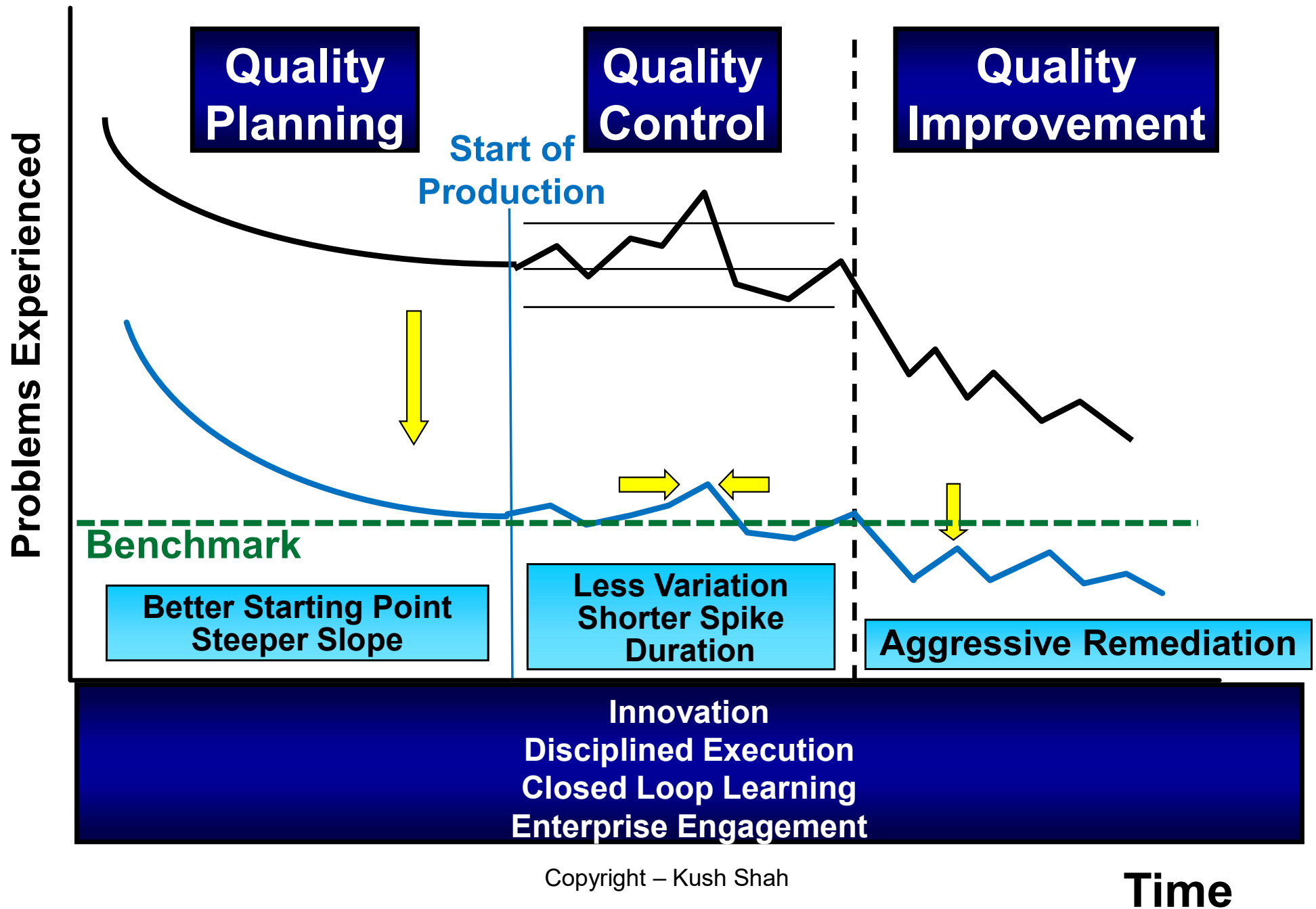
- **Risk Identification**
  - Identification significant risks based on organization's risk appetite
- **Risk Analysis**
  - Measure risks consistently with respect to enterprise objectives
  - Prioritization and quantification
  - Assignment of specific responsibility for controls to mitigate risks
- **Risk Response**
  - Scenario development
  - Action Plan Implementation
- **Risk Control**
  - Hold the gains through monitoring and controls



## 5. Integrated Approach to Data Analytics

- Types of business data – Sales, Marketing, Operational, Quality, Service, HR
- Benefits of integrated approach of data analytics:
  - Better understanding of customer
  - Make faster and more confident decisions
  - Proactively drive improvement projects
  - Unprecedented resolution of field reliability
  - Influence the design for next generation of products
- Factors to be Considered in Big Data Analysis:
  - **Automation** - Analysis and complex computations
  - **Reproducibility** - Analysis results can be reproduced
  - **Flexibility** - Data repository can organically expand and extend
  - **Robustness** - Less error prone

# 6. Closed Loop Learning



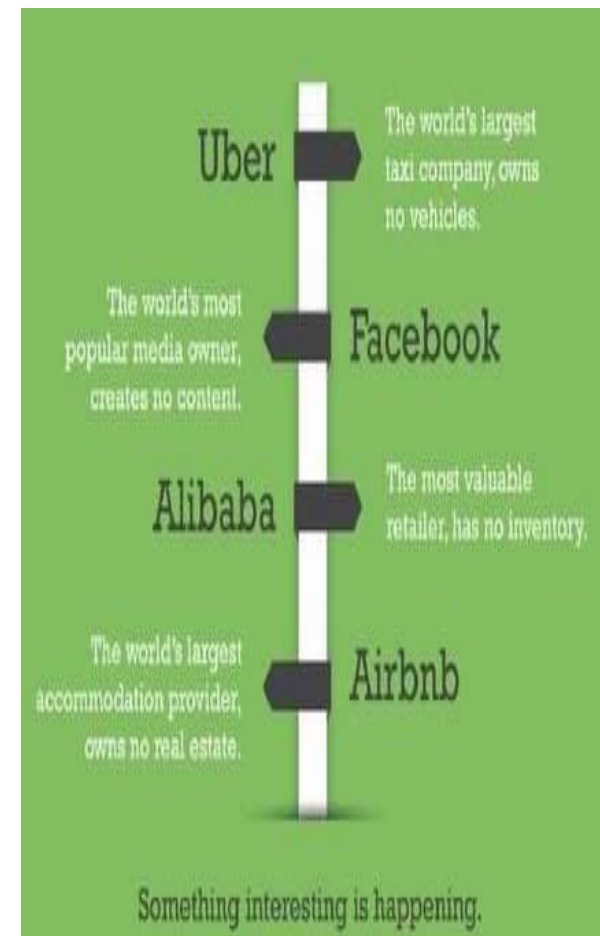
# 7. Innovation

**“Research** is the transformation of money into knowledge.  
**Innovation** is the transformation of knowledge into money.”

Dr. Geoffrey Nicholson, 3M  
(inventor of the Post-It note)

## Top Innovation Factors in an Organization:

- Culture (employee attitudes & participation)
- Senior Leadership Support (risk/long-term results)
- Capabilities (workforce talent, training, & experience)
- Strategy (alignment to profitable growth & business goals)
- Process (effective methods & tools)



# Summary – Game Changing Strategies

1. Customer-Centered Approach to Quality
2. Enterprisewide Engagement
3. Disciplined Problem Solving
4. Risk Management
5. Integrated Approach to Data Analytics
6. Closed Loop Learning
7. Innovation

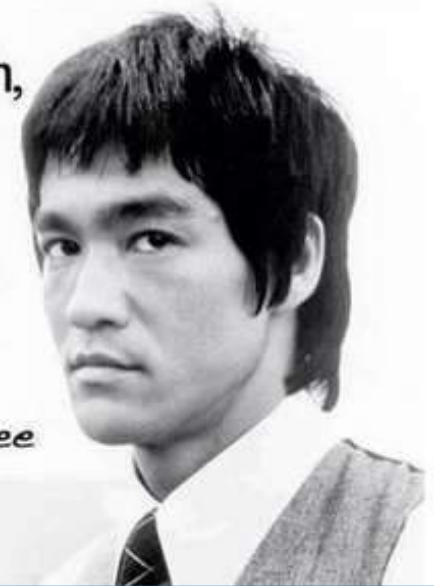
Knowing is not enough,

**We must APPLY.**

Willing is not enough,

**We must DO.**

*- Bruce Lee*





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Talks about #coaching, #designthinking, #problemsolving, #continuousimprovement, and #organizationalexcellence

General Motors  
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