

# Who is the Customer of Testing ?

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# Heard at various Testing Conferences

## Testers are Bearers of Bad News

- Do testers delay the delivery of the product ?
- Or is it the poor quality of the developers ?
- Is there a 'gap' between developers and testers ?

# Who is the (main) customer of Testing and QA ?

- **Deming:**
  - Quality comes not from testing, but from *improvement of the development process*
  - Testing does *not* improve quality, nor guarantee quality
  - It's too late
  - The quality, good or bad, is already in the product
  - You cannot test quality into a product
- **Who is the main customer of Testing and QA ?**
- **What do we have to deliver to these customers ?**  
*What are they waiting for ?*

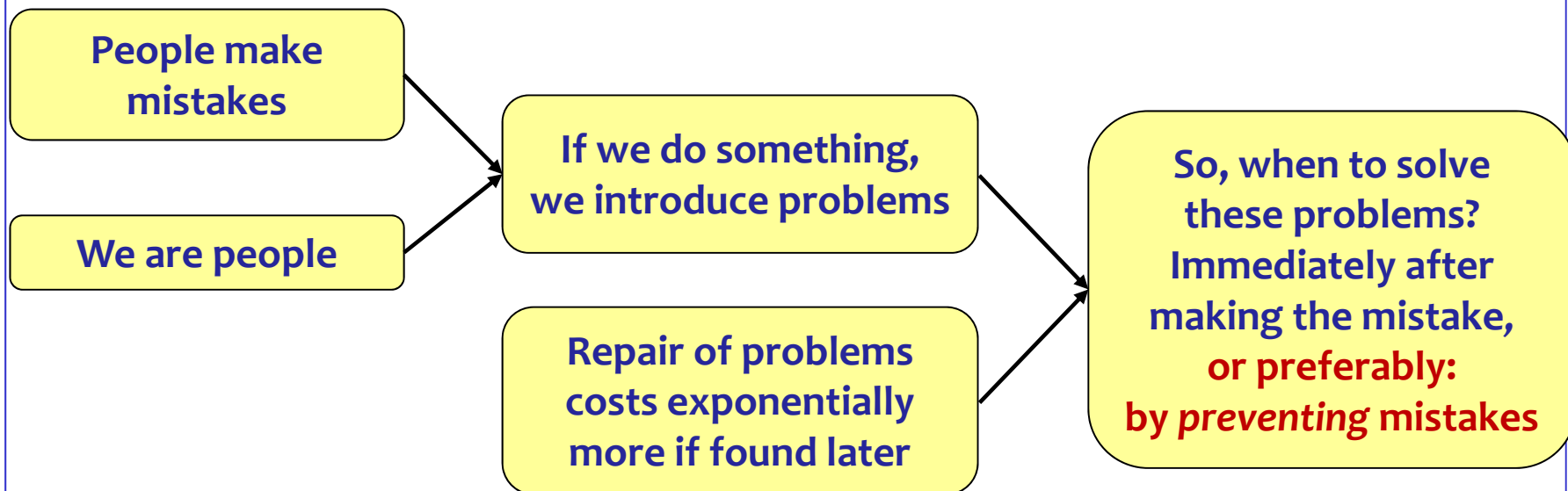
# Ultimate Goal of a What We Do

**Delivering the Right Result at the Right Time,  
wasting as little time as possible (= efficiently)**

**Quality on Time**

- **Providing the customer with**
  - what he needs
  - at the time he needs it
  - to be satisfied
  - to be more successful than he was without it
- **Constrained by (win - win)**
  - what the customer can afford
  - what we mutually beneficially and satisfactorily can deliver
  - in a reasonable period of time

# Inevitable consequence



**Prevention costs much less than inject → find (?) → repair (?)**

**Quality is free ... Quality is cheaper**

## Dijkstra (1972)

**It is a usual technique to make a program and then to test it**

**However:**

**Program testing can be a very effective way to show the presence of defects**

**but it is hopelessly inadequate for showing their absence**

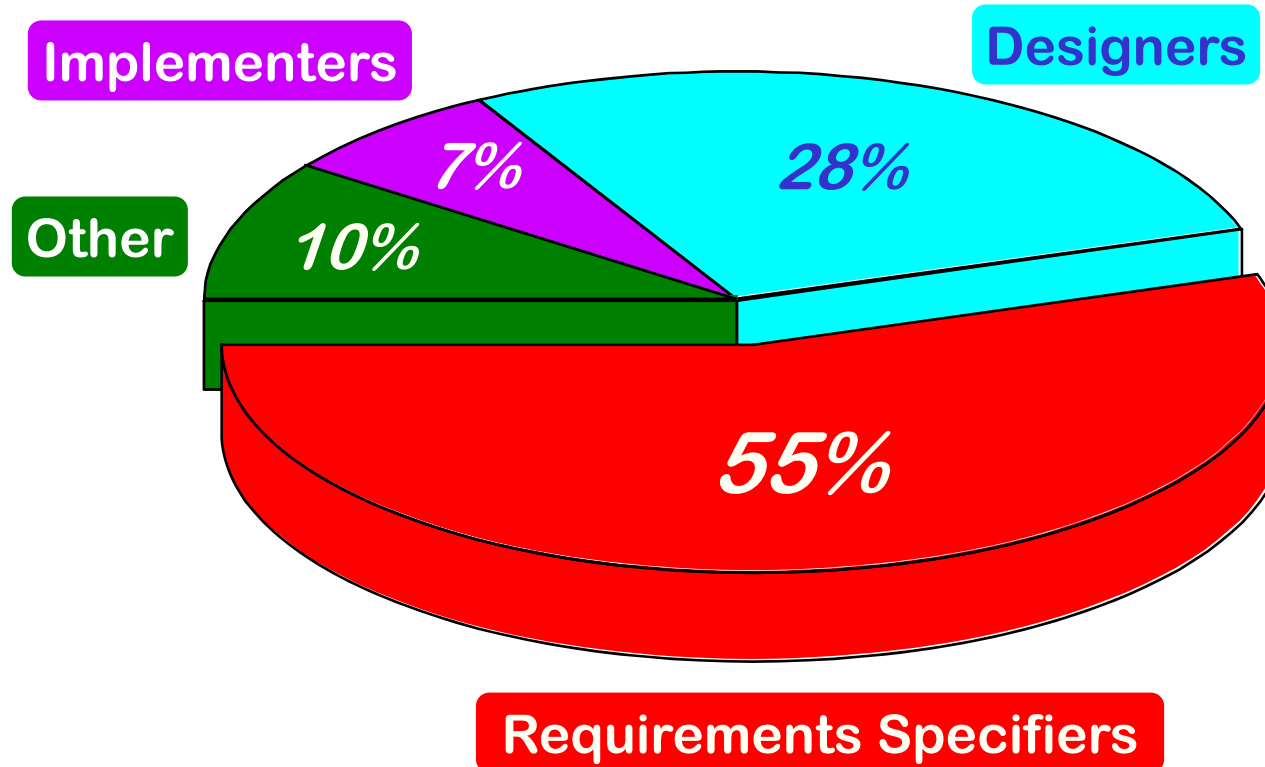
**Conventional testing:**

- Pursuing the very effective way to show the presence of defects

**The challenge is, however:**

- Making sure that there are no defects (development)
- How to show their absence if they're not there (testing?)

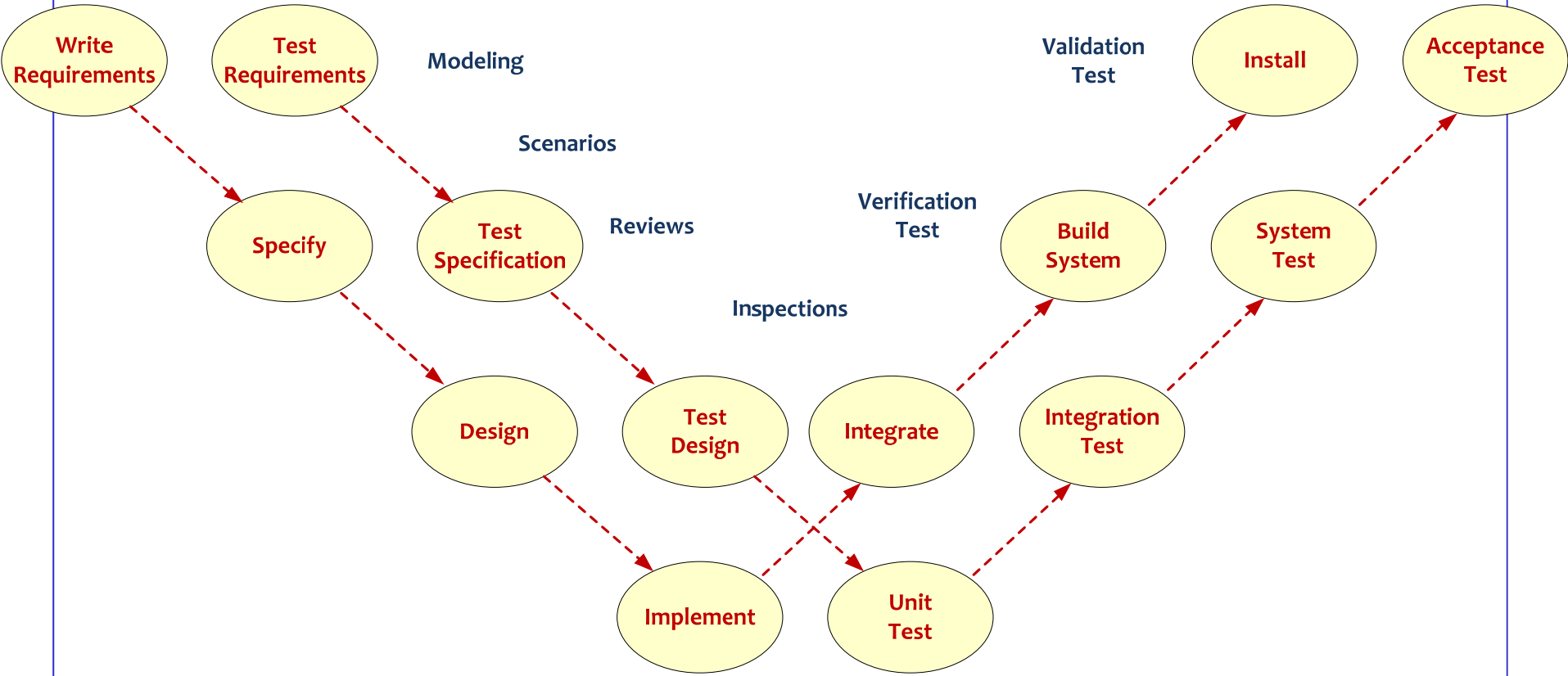
## Typical Defect Injectors (cost breakdown)



After Bender Associates, 1996

- Where is our focus ?
- Where should our focus be ?

# W-model





# What techniques do testers have to do their job properly ?

- **What was their job ?** (just checking)
- **Is what Testers do right for doing their proper job ?**
  - Focus on what's necessary to reach the goal
  - Even if that's not what you've been told before
  - Don't believe anything I say

# Let's move

Let's move from

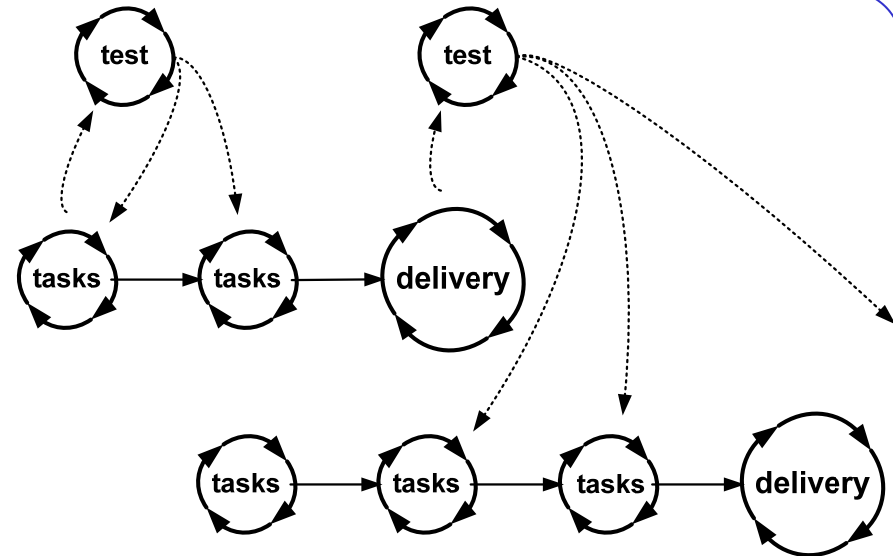
Fixation to Fix

to

Attention to Prevention

- If we don't deal with the root, we (and 'they') will keep making the same mistakes over and over
- Toyota Production System: "Stop the Line"
- Without feedback, we won't even know
- Only with *quick feedback* we can put the repetition to a halt

## Organizing it



- **Developers organize their work in weekly TaskCycles**
- **Testers organize their work in weekly TaskCycles**
- **Testers *know* what they are supposed to test**  
Because they *know* what the developers are doing and will deliver
- **Testers conclude their work in sync with developers**
- **Testers check work in progress *even before* it is finished**

# The aim of Testing

- **Being done as soon as the development is done**
- **Well, almost**
- **Excuses, excuses, excuses**
  - **The developers are always late**  
(Developers should live up to their promises)
  - **The developers don't take us seriously**  
(Developers should ask testers for help)
  - **The developers don't inject enough defects**  
(Now testing becomes a real challenge)
  - **We are the bearers of bad news**  
(find out what you're *really* supposed to do)
- **Helping development to be successful**

