



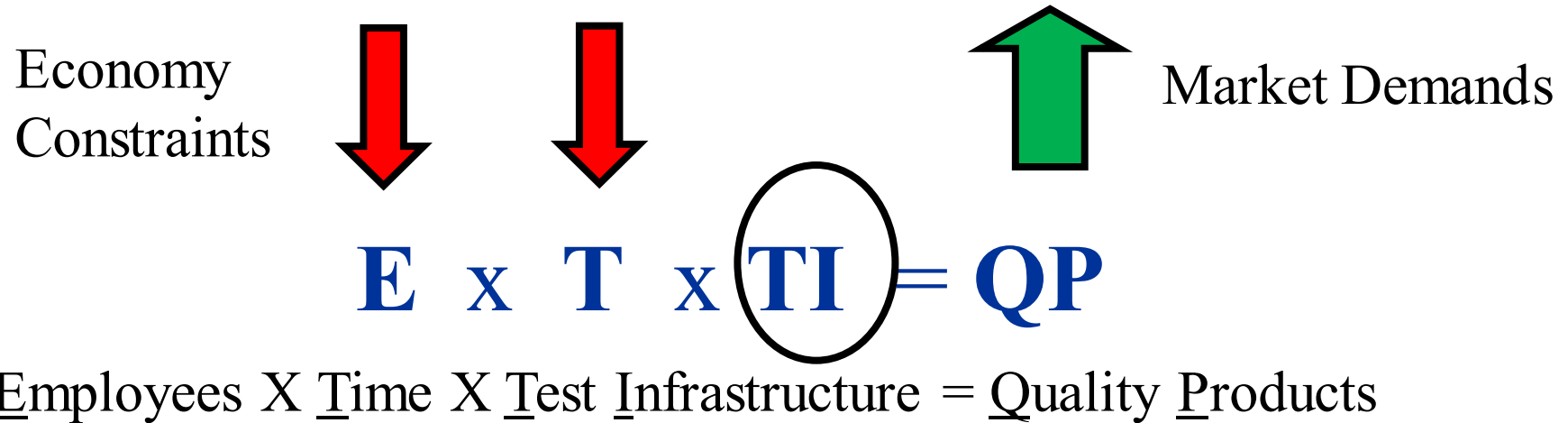
POLYCOM®

***QA Tools to the rescue in crunch times***

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SIGiST 2009 – Oct 21<sup>st</sup>

# Reality check (at least mine...)



**To achieve a quantum leap in your performance and business results it is required to implement the right methods and tools for improvement**

And now in QA words...

*Test Automation!!!*



source: <http://www.lucidcg.com/images/services.jpg>

# Automation approach - context

- ▶ Two major components determine whether product is ready for release:
  - Features testing (aka “Progression”)
  - Regression testing
- ▶ Assumption: If one or both components can be fully automated great efficiency is achieved

# Test automation Take 1



# Initial automation status

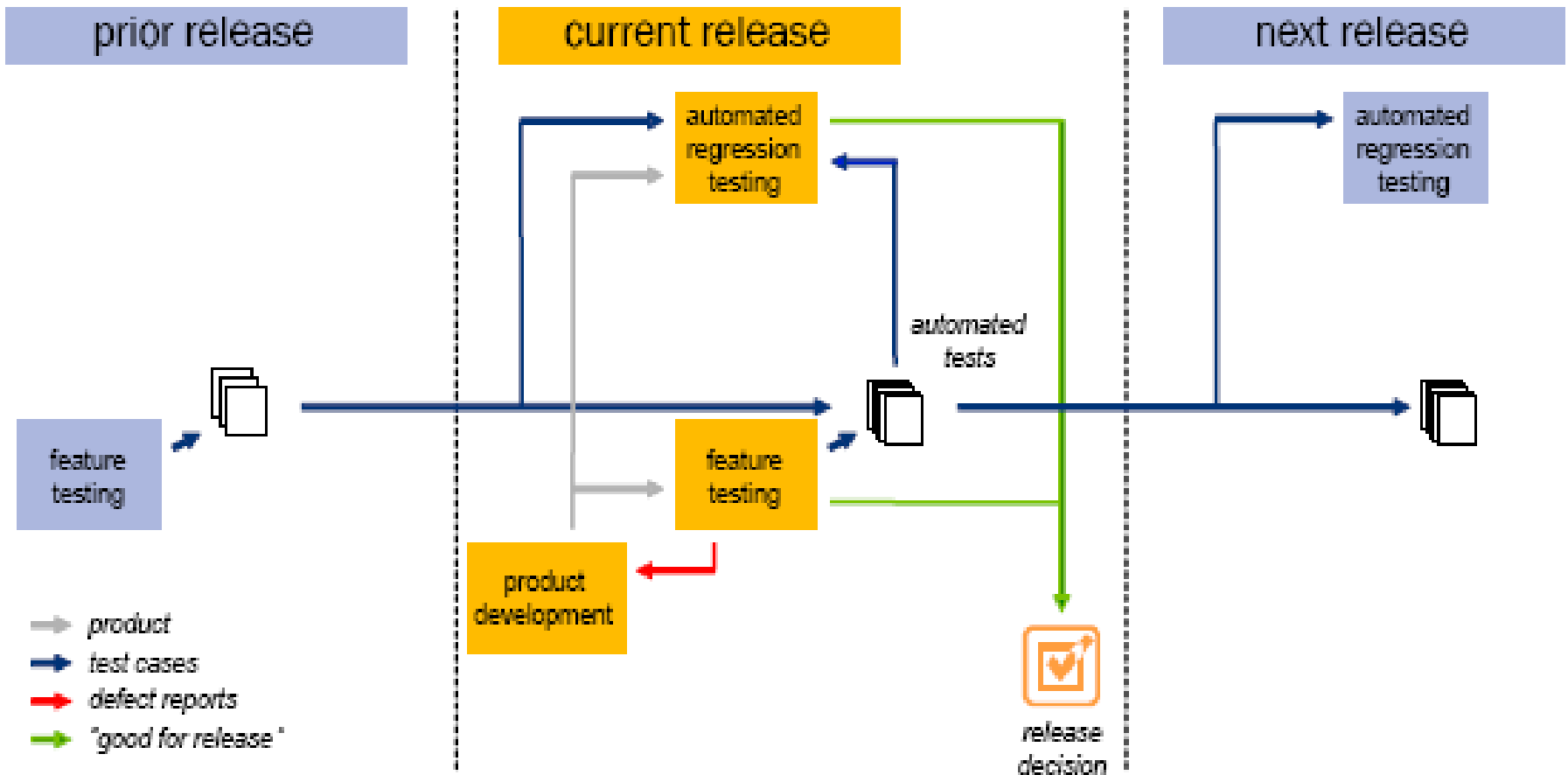
## ▶ Feature testing

- All manual

## ▶ Regression testing

- Performance - partial automation based on of the shelf tools
- Functionality – none

# Desired view of release testing process



Source: FanfareSVT

# EasyTester – The Revolution

- ▶ The Easy-Tester is a test framework composed by set of tools which create full functionality test solution
- ▶ This is actually single, unified platform that would allow a test engineer to execute test cases that exercises multiple interfaces simultaneously.
- ▶ By using simple scripting language, any test engineer can create a test and run it through the QC or manually



# Test Automation Vision with EasyTester

- ▶ Feature testing process produces automated test cases rather than manual test cases
- ▶ The result is an overall testing process that is both simpler and more comprehensive:
  - Manual regression testing is eliminated
  - Higher coverage of regression testing is achieved
  - Bug fix verification is automated
  - Full regression testing becomes possible also for maintenance versions

# How does it work?

1. Establish the sequence of actions
2. Record the actions
3. Define the timing of the actions
4. Schedule regular execution
5. Review the test results

# Take 1 – end game results

## ▶ Performance

- Full automation achieved based on EasyTester and of the shelf tools with DDT approach

## ▶ Functionality

- Partial automation based on EasyTester

## ▶ Main challenges:

- Limited development infrastructure (assembler like)
- Hard to script with
- Hard to maintain
- Not reliable
- Not scalable

# Test automation Take 2



# Redefine solution requirements

- ▶ Easy scripting and execution
- ▶ Fast conversion of manual tests to be automated
- ▶ Enables fast coverage
- ▶ Easy to maintain and update
- ▶ Reliable
- ▶ Scalable
- ▶ Enhance current tools

# Solution - home made .NET API

- ▶ API infrastructure written by SQA developers and being used for scripting by SQA engineers on top of .NET API
- ▶ Advantages:
  - Enables full control and flexibility
  - Based on standard environment
  - Fast implementation

# Achievements in 3 months

## ▶ Build verification testing

- Test harness for all engineering groups for build verification testing to be executed every night
- Tools involved: Quality Center, Clear Case, Build Forge, own grown call generator
- High quality builds into QA and Field
- Less regression bugs

## ▶ Automated sanity regression

- Fully automated functional test suite for sanity testing

# Challenges and next steps

## ▶ Main Challenges

- Requires development knowledge
- Turn good TE to developers

## ▶ Next steps

- Assess similar off the shelf/turn key solutions to eliminate the above challenges (or continue to pay the price if ROI is shown)
- Turn feature testing to be automated



# DEMO

# Thank You

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