Software testing under a microscope

FINANCIAL SOFTWARE TESTING

Me

My name is Jean-Paul Varwijk

I started testing in 1998 as a user, testing the Euro, the millennium bug etc. Became a fulltime tester in 2004

I spent part of my spare time on testing by writing about testing, giving presentations or doing workshops.

Intro

The presentation will show how I see Financial Software Testing

I will start with testing in general by using ISTQB as a reference

How I think it could be

Then how Financial Software Testing is different

I will finish with how this worked for me

ISTQB

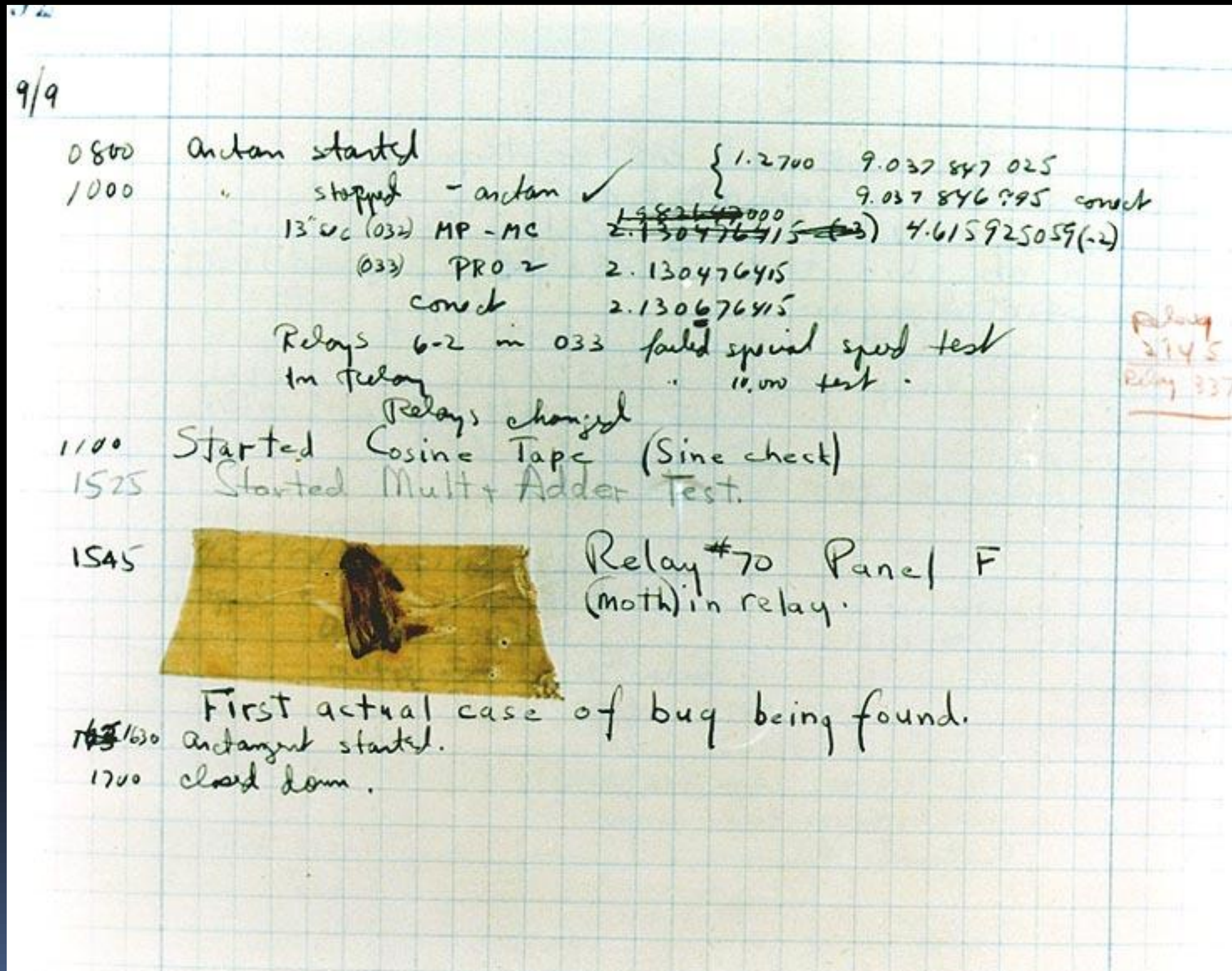
I will use a part of the ISTQB syllabi as a reference to explain my approach

I chose ISTQB because even if you do not use it yourself their content is widely known and regularly used in some form or another

Testing objectives

According to the ISTQB foundation syllabus, testing has the four following objectives:

- Finding defects
- Gaining confidence about the level-of-quality
- Providing information for decision making
- Preventing defects


9/9
0800 Arctan started
1000 " stopped - arctan ✓
9.037 847 025
13" sec (032) MP - MC 4.615925059(-2)
(033) PRO 2 2.130476415
correct 2.130676415
Relays 6-2 in 033 failed special speed test
11,000 test
Relays changed
1100 Started Cosine Tape (Sine check)
1525 Started Mult + Adder Test.
1545 Relay #70 Panel F
(moth) in relay.
First actual case of bug being found.
1630 Arctangent started.
1700 closed down.

ISTQB on defects

Presence, removal or absence expresses quality

Numbers found, fixed and duration measures quality *(of the testing process)*

Broken down by severity and priority

Analysis at the end of the project

(to determine process improvement possibilities)

!=

Me on defects

Information about the product

Something to investigate

Information about impact on the value of the product

Should be persuasive

ISTQB on confidence

Confirmation of requirements

Acceptance, readiness for deployment

Subjective

Qualitative value


Me
ISTQB

Me on confidence

I also show that I tested it right

I more want to show that I tested the right it

Confirmation of needs

Relative rule:
For any abstract X,
X is X to some person, at some time


DECISION
RIGHT
WRONG

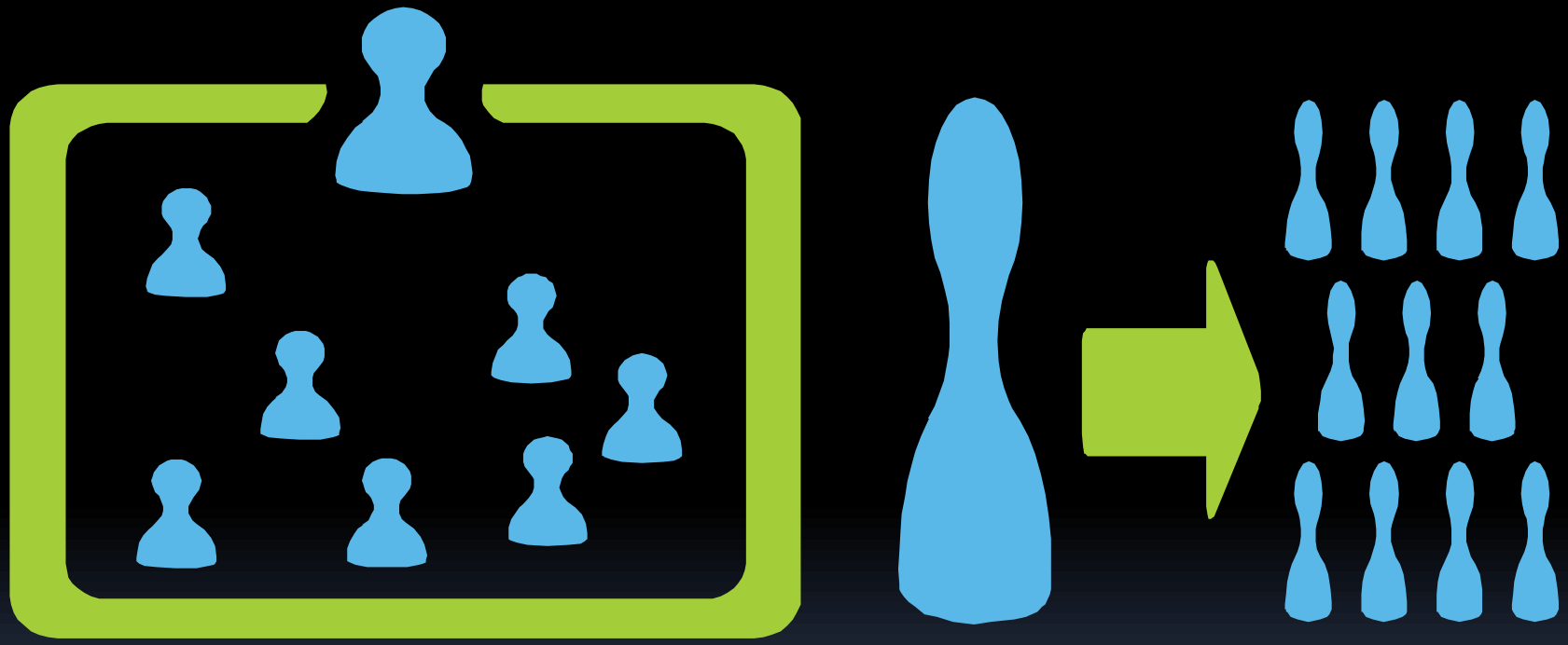
ISTQB on information

Should be adequate

Used for controlling the process

Used to report about the test process

Focused towards (delivery of) the project



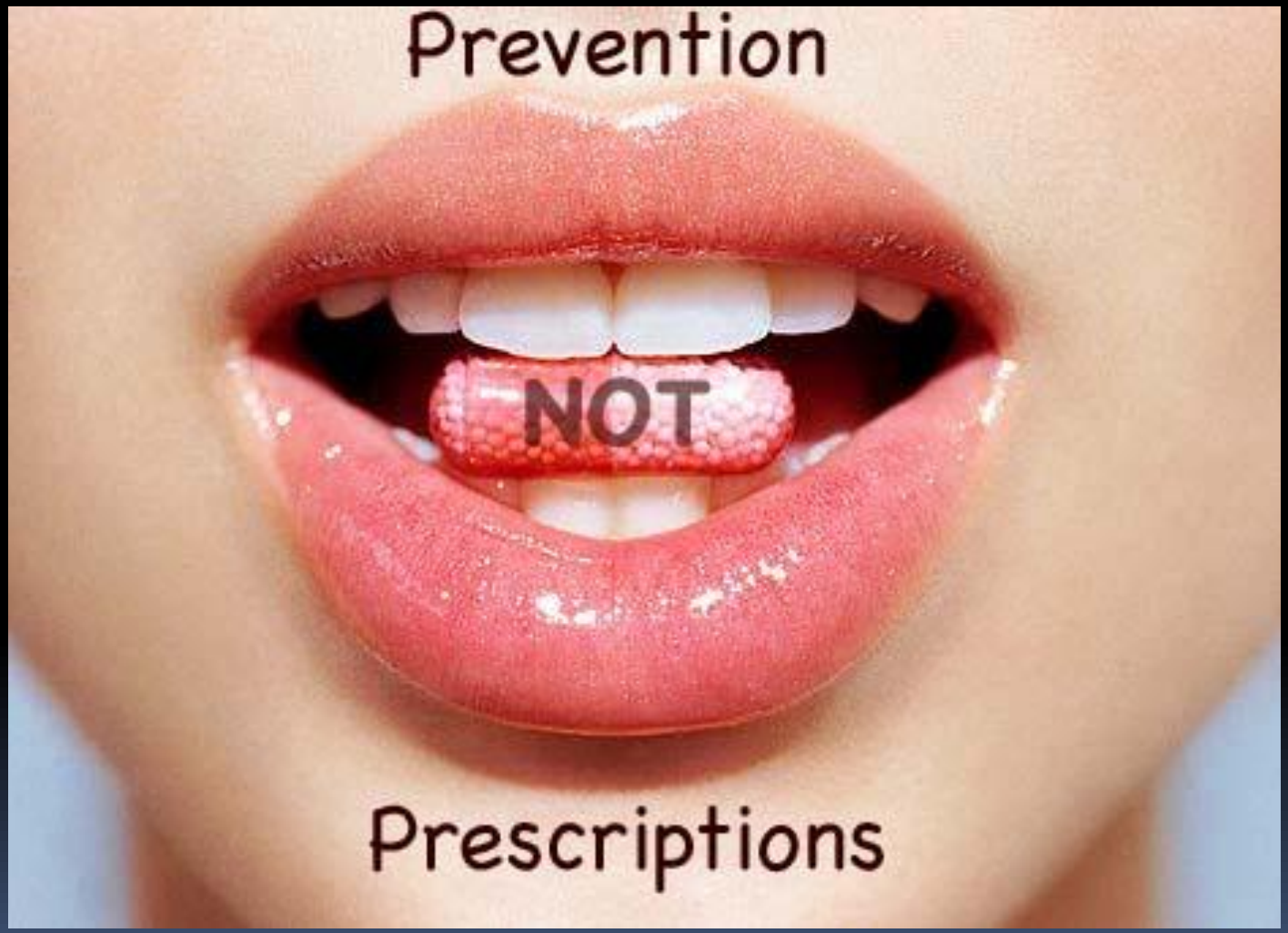
Me on information

Should be relevant

Used to develop the right product right

Used to evaluate the product

Focuses towards the stakeholders


Prevention
NOT
Prescriptions

ISTQB on prevention

Setting up the process

Getting complete and correct requirements

Review

Design and script test cases (upfront)


ZONE


ZONE

Me on prevention

Agree mostly on requirements and review and partially on process

Setting up communication

Getting the correct deliverables

Create test cases both upfront and as needed


BANK of ENGLAND
£10
20
5

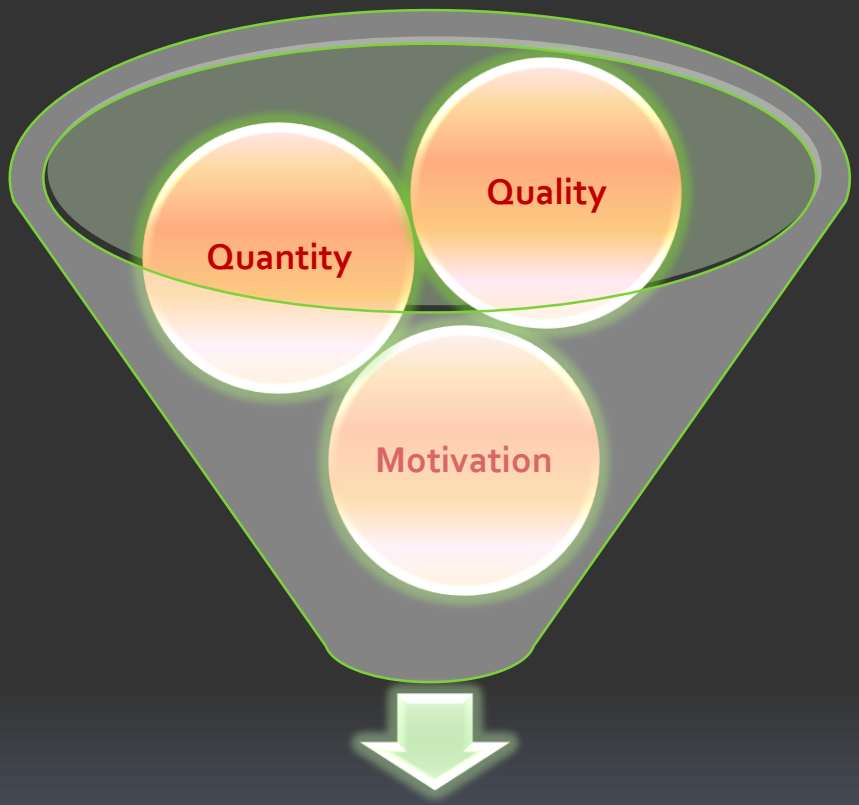
Testing & Finance

Testing = Testing

Direct banking, ATM are similar

Many back office or internal systems are different

Different playing field – Different demands



Product Value Mix

Testing deliverables

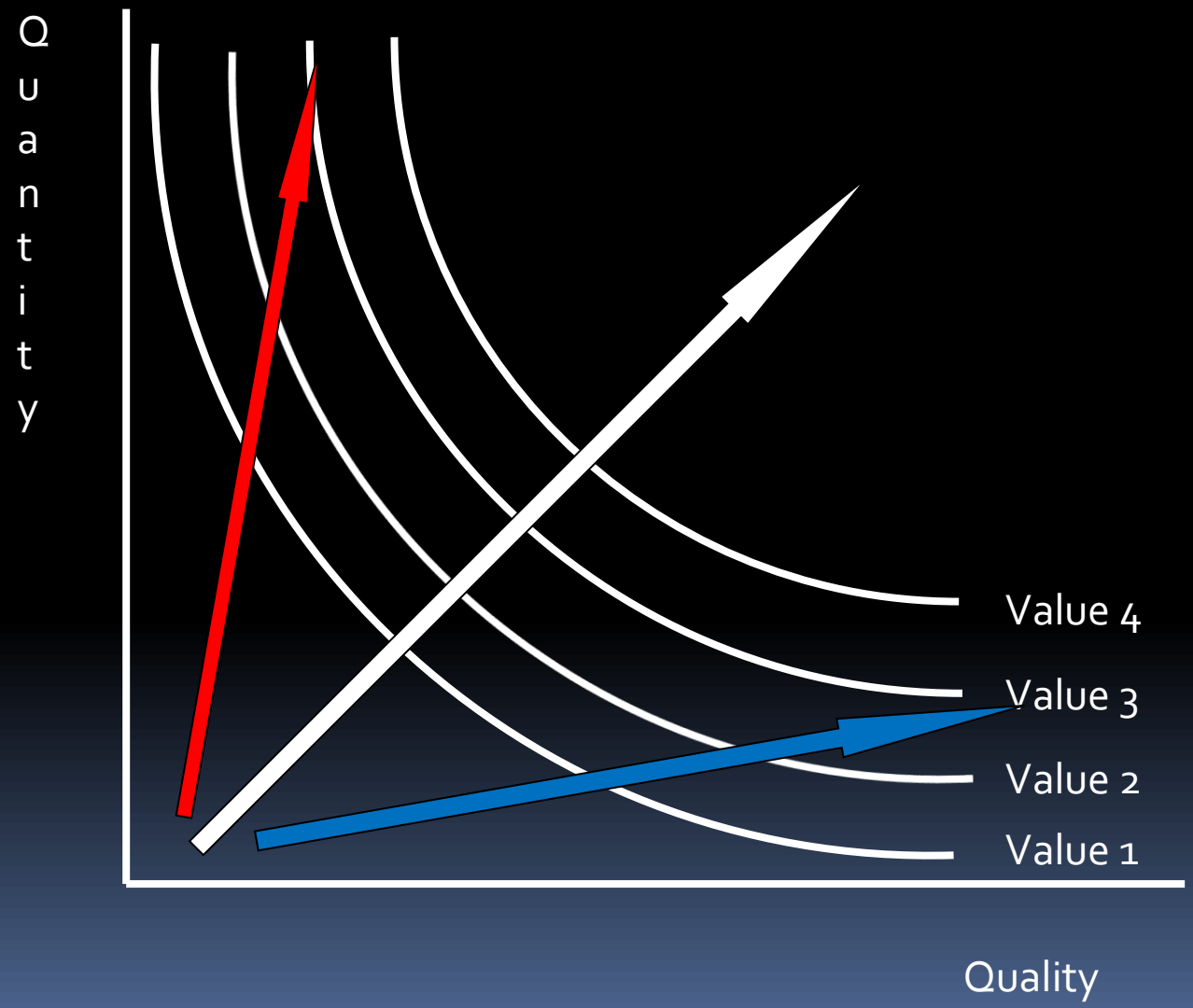
Process information

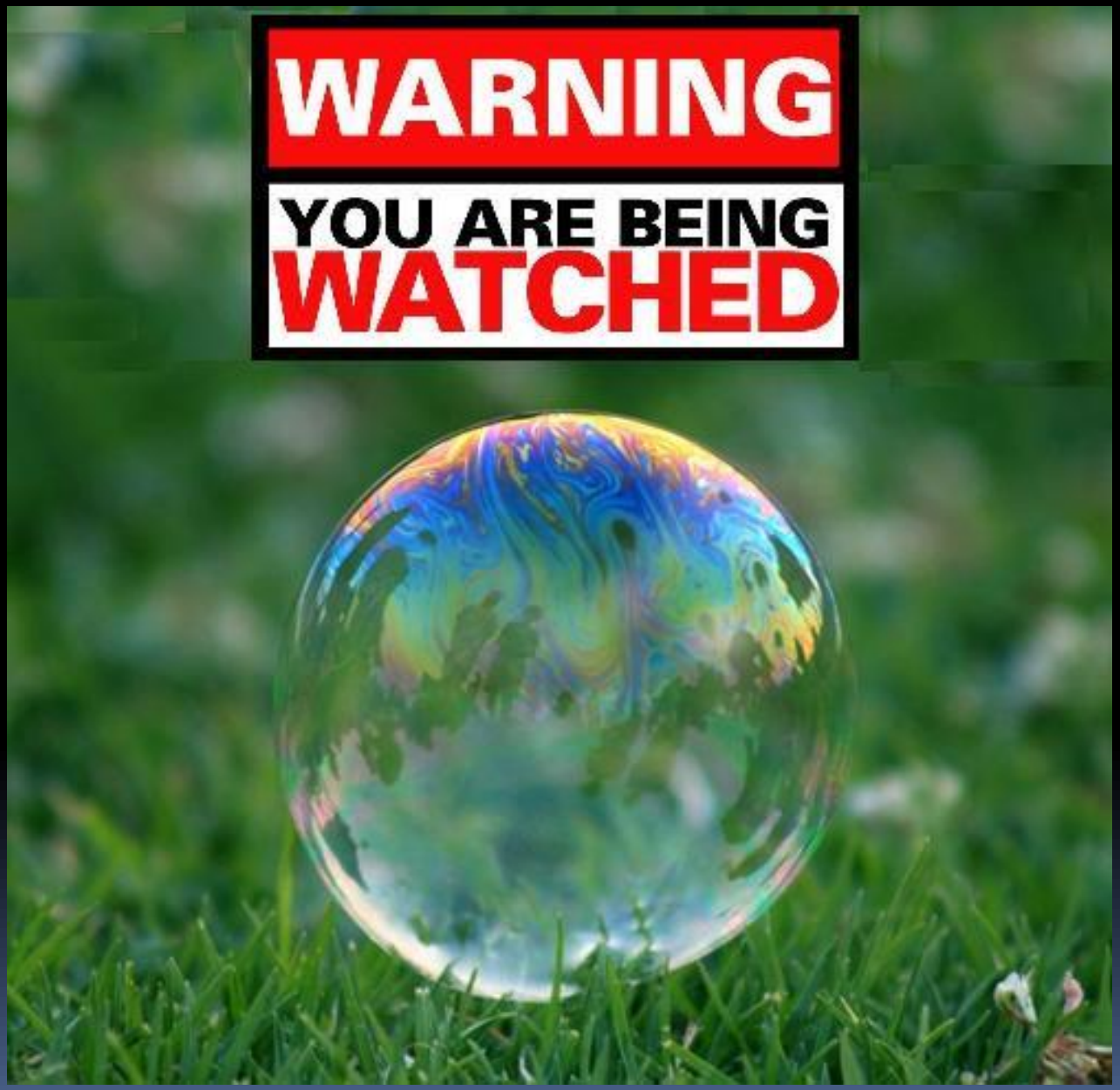
Product information

Financial information

Quantity vs. Quality?

Product Value Mix




WARNING
YOU ARE BEING
WATCHED

Me and SOx

SOx has a typical information objective

It requires information on all changes within the financial institution that have an impact on the annual balance

It specifically is concerned with changes in financial (risk) models

IT and SOx

No financial organization applies or changes these models without the usage of software

The typical response for this is to create change management processes with strict standards, procedures, deliverables and controls

Sounds a bit like ISTQB…

SOx and me

Contacted the SOx team directly

Checked interest in the process

Asked for deliverables and what should go into them

Agreed on the timeline

Result

Before delivery to production:

Identify test objects to cover functionality

Log tests and test results for each object

Link tests and test objects to the existing structure used for change management

If tests have not passed either there is a logged defect

or other recorded decision by the stakeholder

Request

Please evaluate the presentations and use for this the evaluation booklets which you can find in your conference zip folio.

Thank you!