

# Traceability is critical

cg 7/08 (based upon Villanova classes material)

## Definition of BA Role

- A business analyst works as a **liaison** among stakeholders in order to elicit, analyze, communicate and validate requirements for changes to business processes, policies and information systems.
- The business analyst understands business **problems and opportunities** in the **context of the requirements** and **recommends solutions** that **enable the organization to achieve** its goals.

## Effective Requirements Practices

Benefits include:

- A **clear understanding** of the needs of users, customers and stakeholders
- A **collaborative relationship** between the users, customers and stakeholders and the technical team
- A **strong commitment** of the requirements development team members to project objectives
- Use of a **repeatable requirements process** that is continuously improved
- A **system architecture** that supports the users, customers and stakeholders current and planned needs

Traceability is critical – a reason for every test and where the reason comes from – the source of the need for testing. “Every time we run a test we know the reasons for it requirements or other source. If a test fails, we know exactly which requirement or requirements are in danger. If a requirement changes, we know exactly which test cases are affected. Traceability documentation allows for reviews and early discovery of errors.

Test basis is all the documentation and other things by which we can infer how the system works. The source could be from risk analysis or Use Cases. Even without all the above, the reason for running the test should be documented. Traceability documents decisions made as to Risk Analysis. How do we make the decision for running this test or that test? Use traceability to document the reasons for the choices made in risk analysis. Prioritize the list of possible test cases.

Testers alone can't make the call – developers, marketers, etc., all need to participate. Chapter six discusses the subject. This is an organizational thing!

## Handling Project Risks

- Mitigation: Reduce the likelihood through preventive steps
- Contingency: Have a plan in place to reduce the impact
- Transfer: Get some other party to accept the consequences (blame some one else 😊)
- Ignore: Do nothing about it (best if both likelihood and impact are low!)
- React: The John Wayne syndrome: do something...anything...right now!

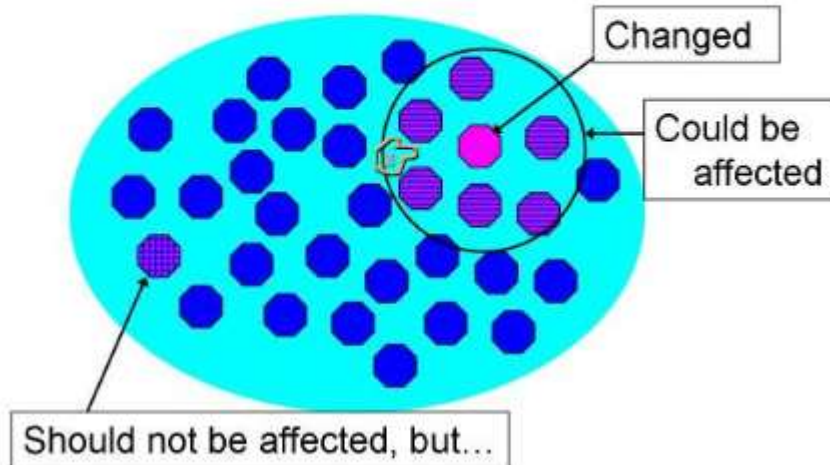
Maintenance testing – regression testing – confirmation testing – was bug fixed?

## Regression vs. Confirmation

- Regression testing checks the side effects of changes
- Confirmation/Retesting testing checks to be sure the change is actually in the release and fixes the target problem
- Which is more important?

“Fault masking” one defect hides another

# Regression Testing



Regression testing should (hopefully) uncover this. Software is very complex and often fixes to one thing can introduce a multitude of other problems. Regression bugs are usually the most expensive and many times this testing is not done on a regular basis.

Our job is to reduce the bugs found in the field. Not doing regression testing is a big risk!

## Impact Analysis

- How does impact analysis help target regression testing?
  - Does it matter to us?
  - Why would you use it?

Used to point out most important regression tests – *it is an economy thing.*