Business Benefits of Reviews – Data and facts

1. Solving defects is significantly more expensive on defects found late in development

- The effort to correct defect during inspections in 25% of effect during test [1, page 49].
- Finding and fixing a severe software problem after delivery is often 100 times more expensive than finding and fixing it during the requirements and design phase Finding and fixing non-severe software defects after delivery is about twice as expensive as finding these defects predelivery. [2].
- The median downstream cost of not finding the majors would have been 9.3 hours (range up to 80 hours) [6, page 90].

2. Reviews find a significant amount of defects, which reduces testing

- Reviews catch more than half of a product's defects regardless of the domain, level of maturity of the organization, or lifecycle phase during which they were applied. [2].
- Formal Inspection have a success rate of over 90%. [3, page 22].
- Reviews can find 30% - 55% of the defects in a documents (Median) [3, page 46].
- Reviews find between 51% - 70% of the defects in documents (Median) [4, page 6].
- Requirements and design checking tend to have an effectiveness ranging between 30% and 80% or more. [6, page 90]
- Code inspections find an average of 3.6 defects per inspection hour [5, page 7]

3. Reviews save money and time

- On average every hour spend in inspection saves 2,3 hours in system test [1, page 48].
- Inspections have a mean productivity increase of 193,5%, mean ROI of 6,84 [1, page 50].

4. Reviews reduce the number of defects reported by customers significantly

- The combination of reviews and testing can find 97% of the defects before release [3, page 46].

References

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