Using Technical Testers

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Agenda

Theory

- Definitions
- Practical examples

Practice

- Use of Technical Testers @ Turn10
- Hiring Technical Testers
- Final Thoughts

Definitions

Standard testers

- Interact with the game like a consumer
- Minimal knowledge of how the game is created
- “Black box”

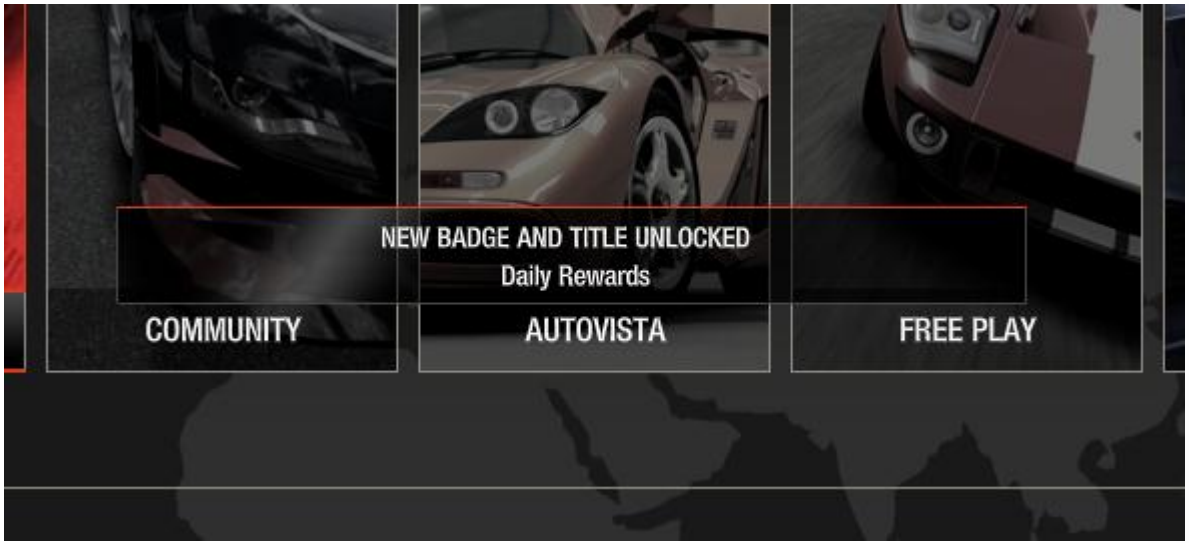
Technical testers

- Interact at both component and consumer levels
- Uses same skills as feature and content creators
- “White box” or “Grey box”

Practical Examples

Code

Practical Examples
Code



Practical Examples
Code

Standard testers

- Do the steps in the achievement
- Try to speed up the process

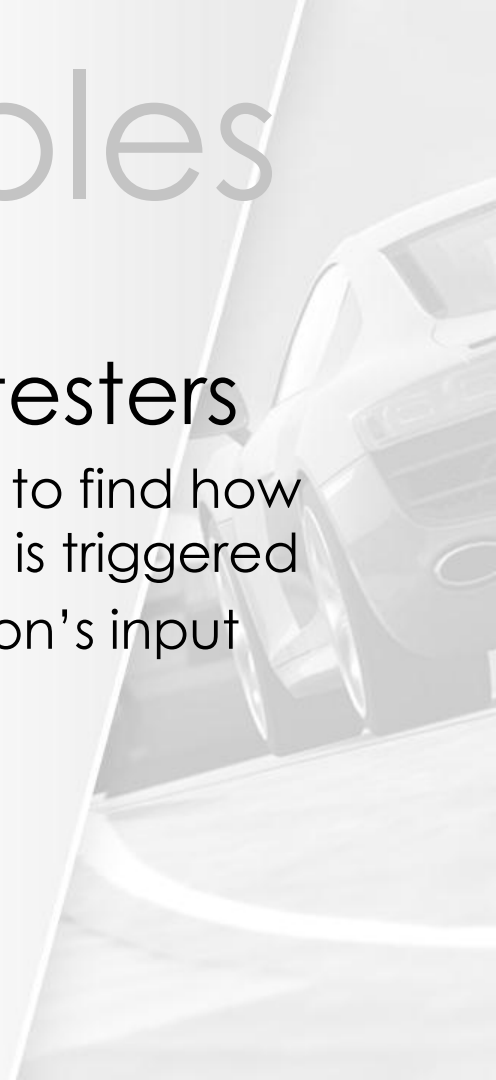
Practical Examples
Code

Standard testers

- Do the steps in the achievement
- Try to speed up the process

Technical testers

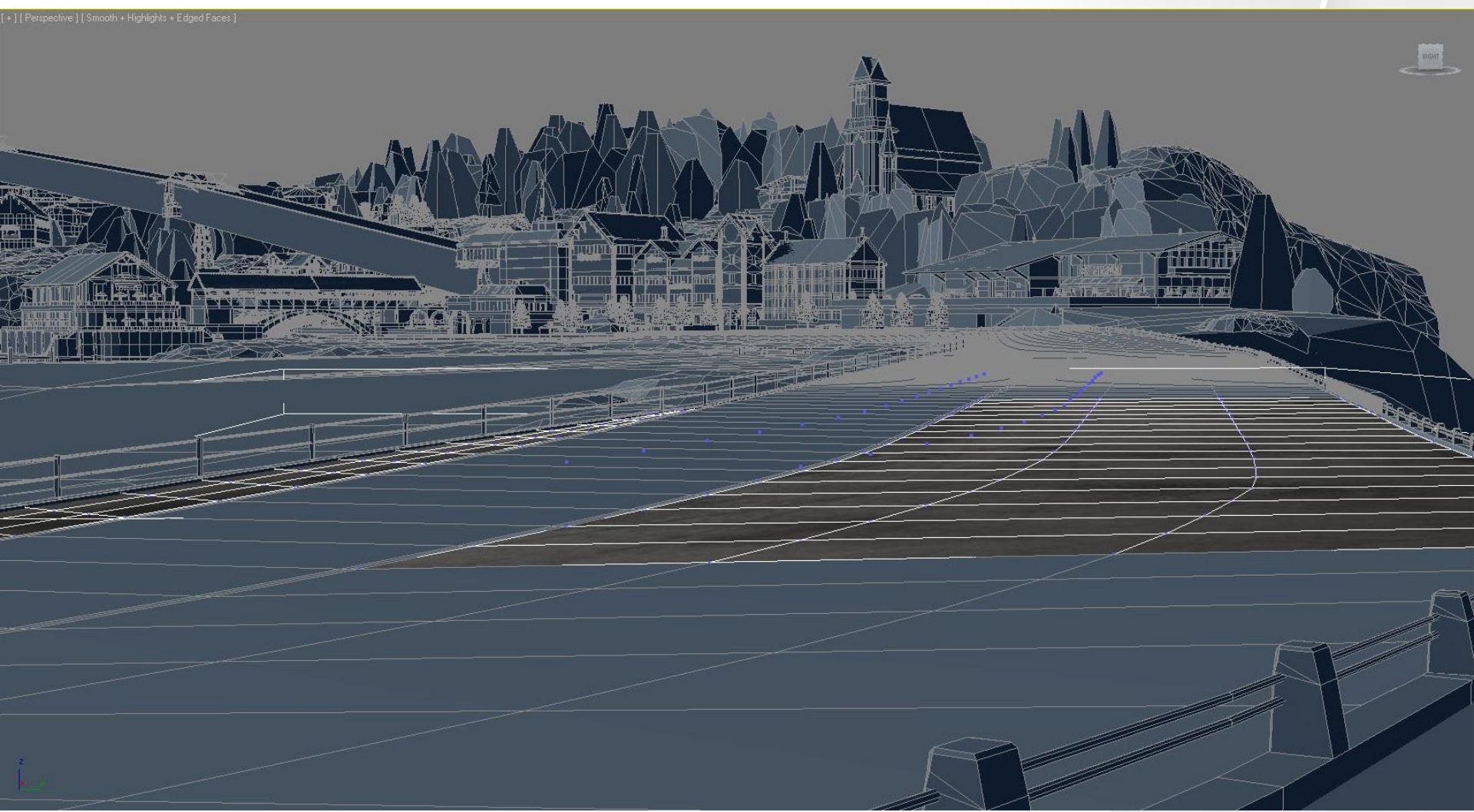
- Inspect code to find how achievement is triggered
- Modify function's input



Practical Examples

Content

Screenshot removed


[+] [Perspective] [Smooth + Highlights + Edged Faces]
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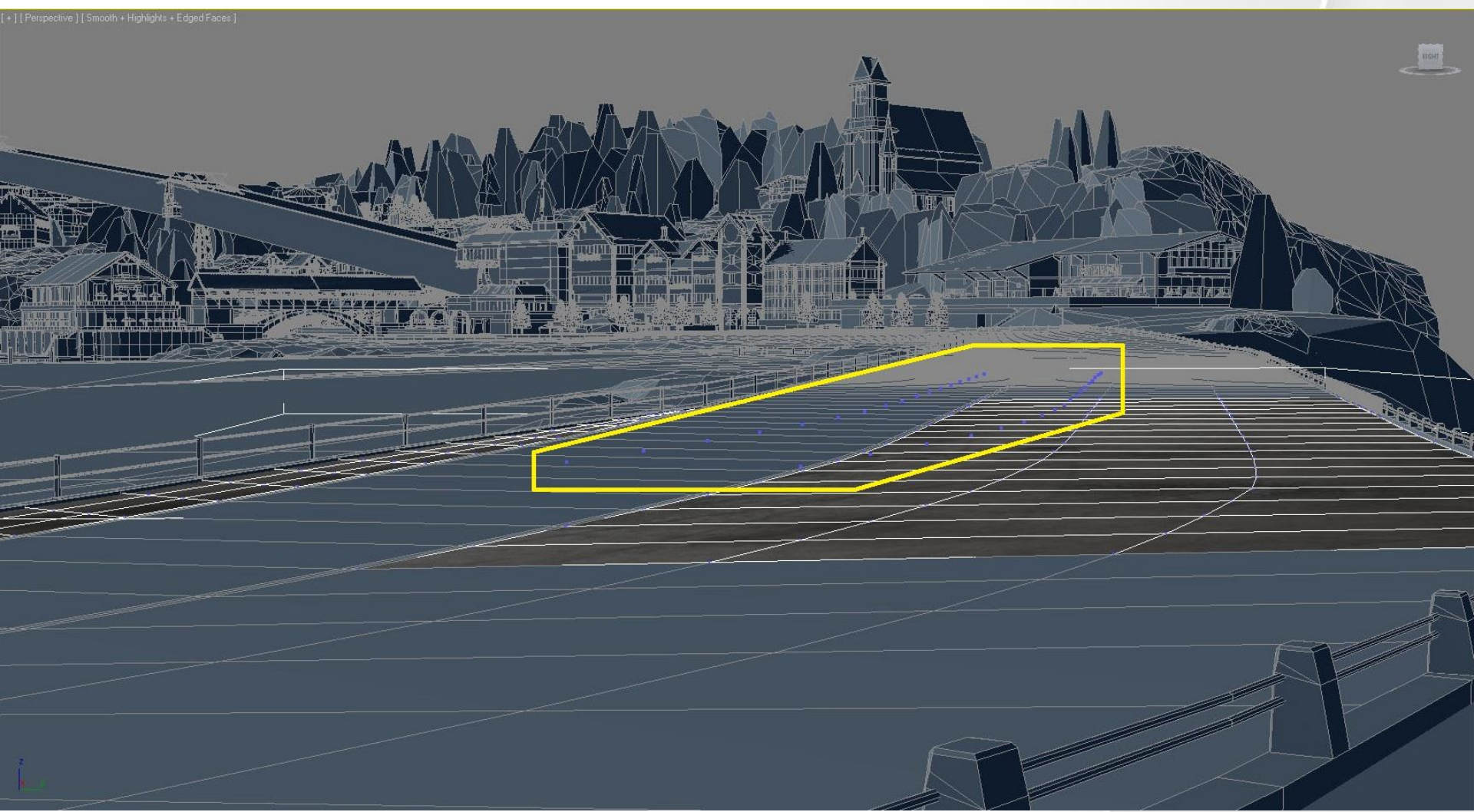
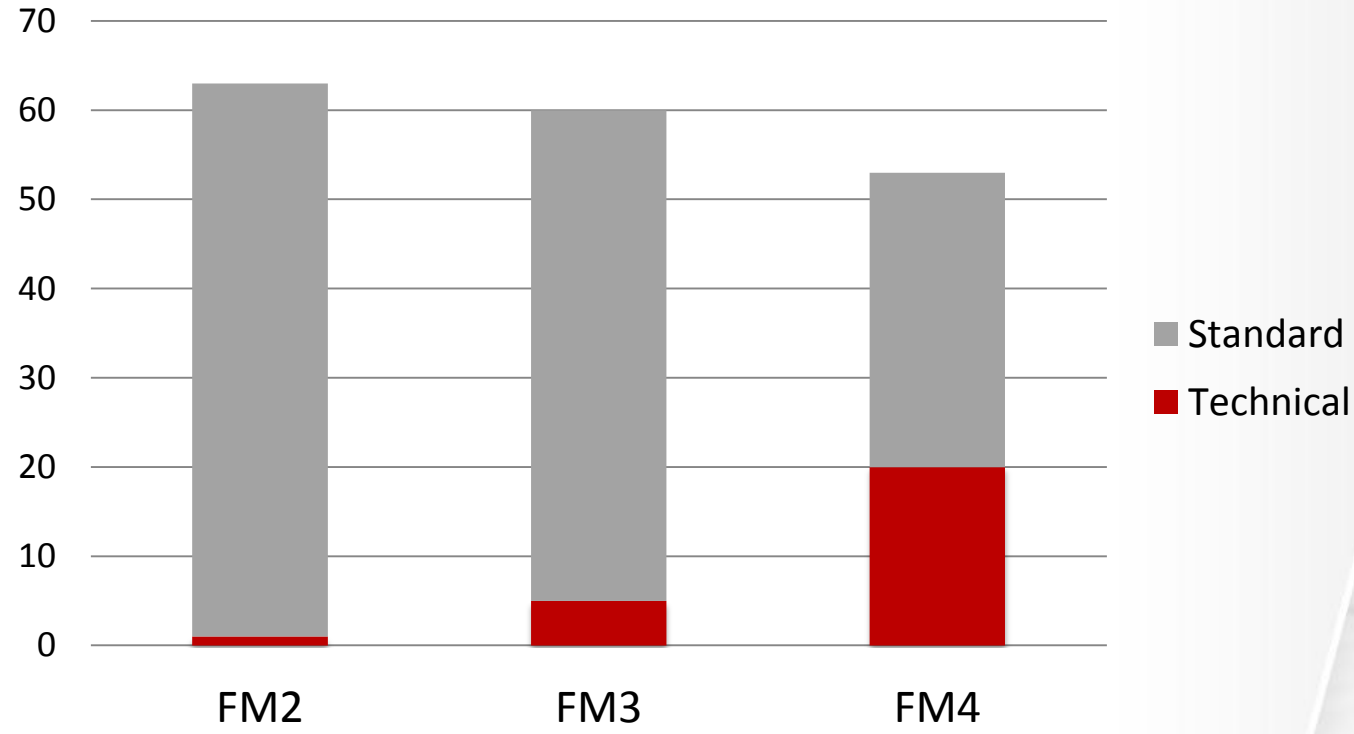

[+] [Perspective] [Smooth + Highlights + Edged Faces]

Technical Testing
@ Turn10

- Conscious effort moving to Technical Testers
- Able to evaluate changes over many versions
- Not all data is conclusive
  - Some gaps filled by interviews/team knowledge

Staffing Levels



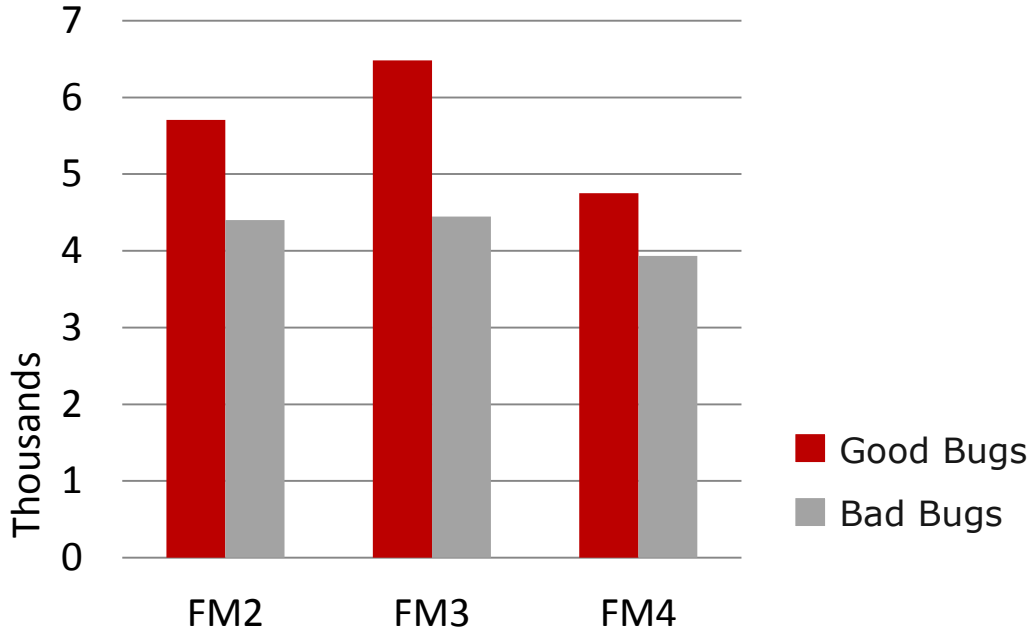
End-Game

	Full Test Pass	Shutdown Time
FM3	6 weeks	15 weeks
FM4	5 weeks	13 weeks

Effectiveness

Effectiveness

Code Bugs



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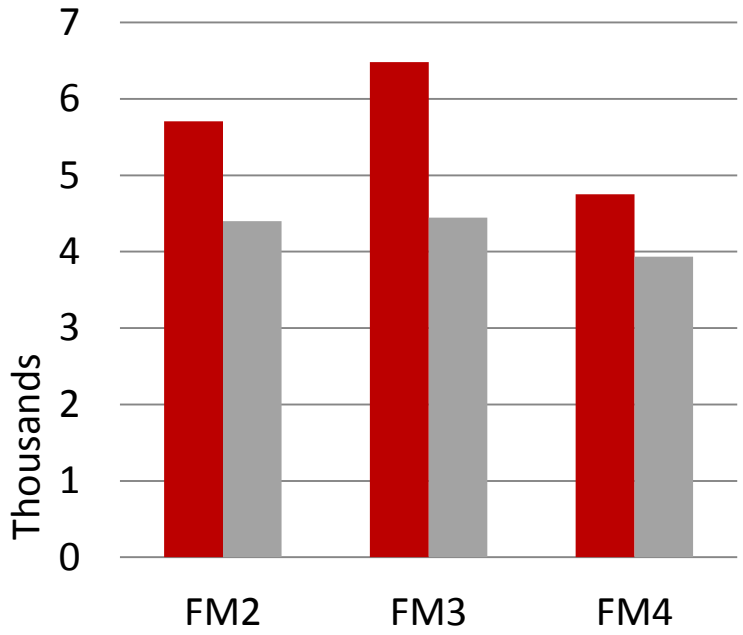
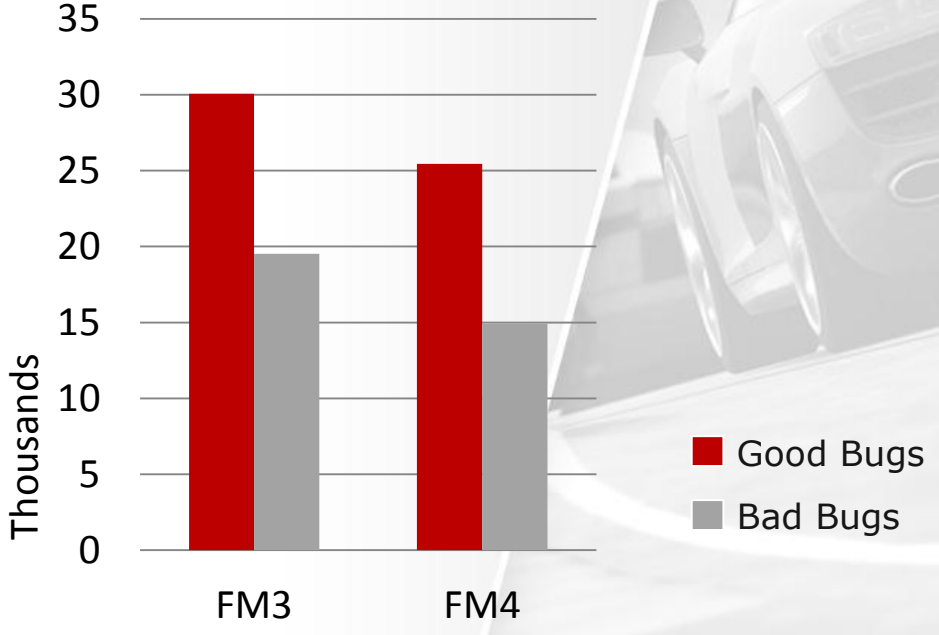


Content Bugs



Effectiveness

Code Bugs

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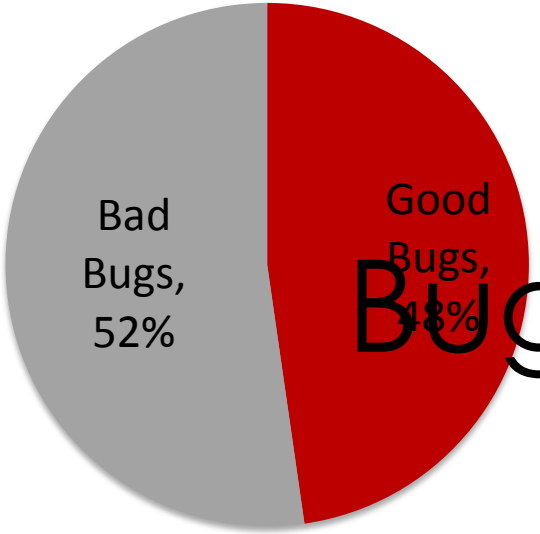
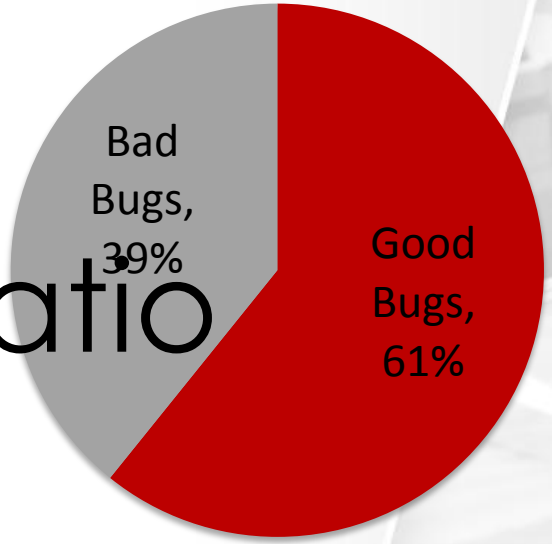


0.5:1

Bug find ratio

Technical Testers



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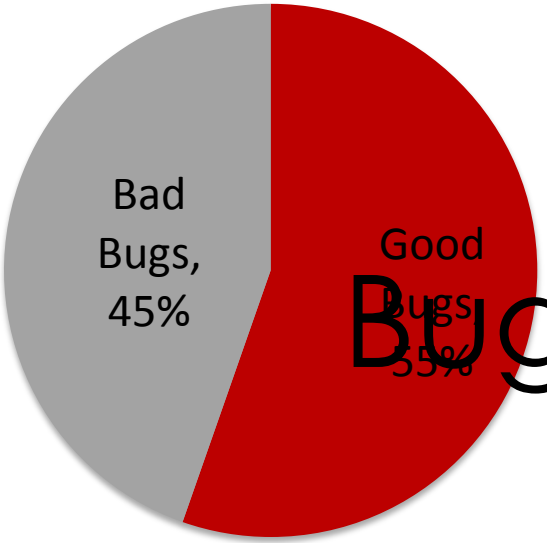
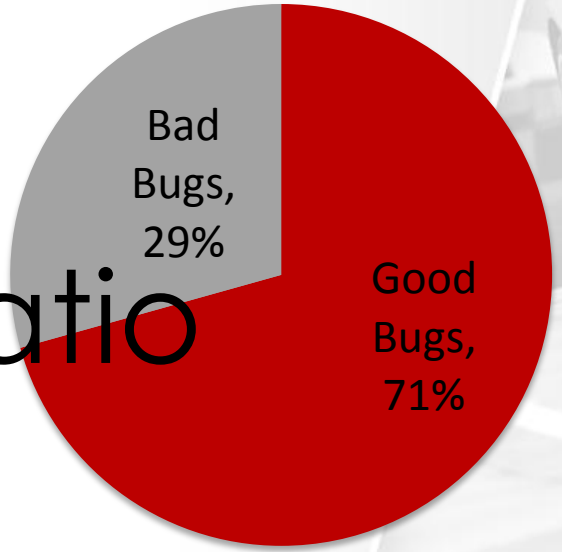


1.25 : 1

Bug find ratio

Technical Testers



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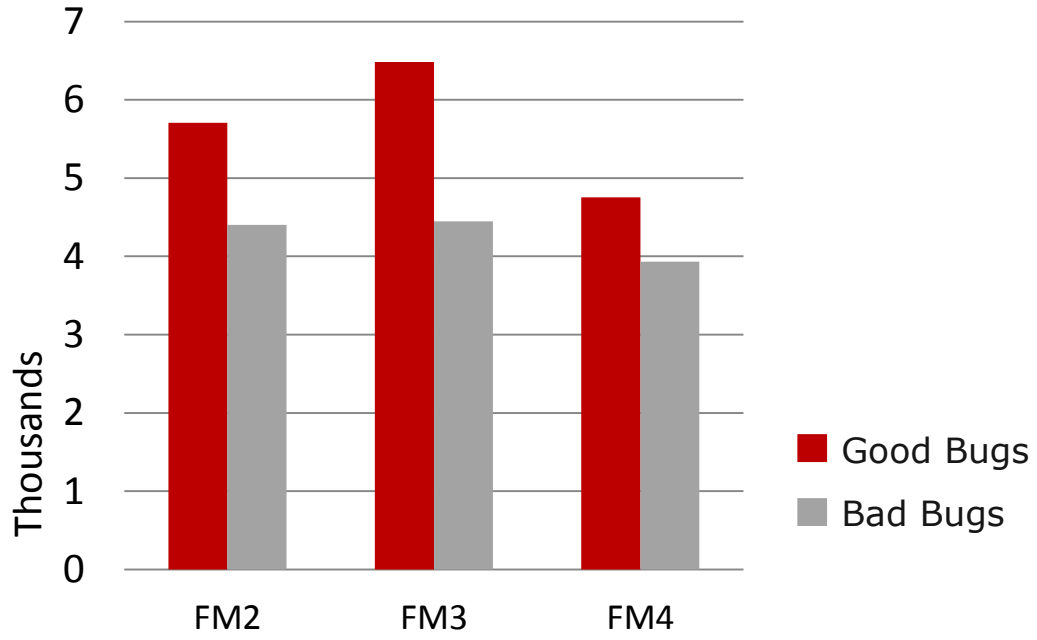

Cost Implications

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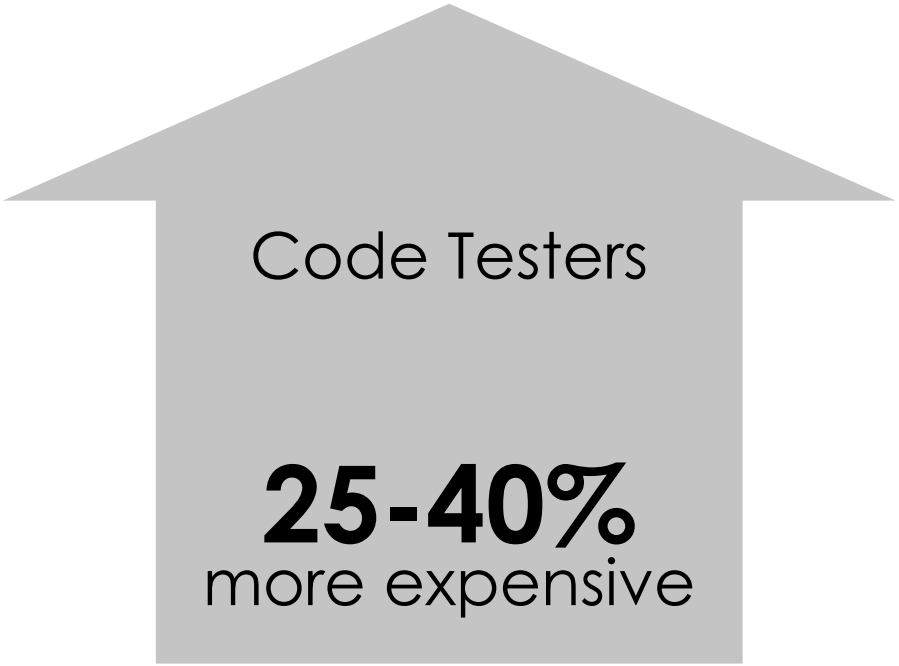
Cost for standard vs. technical testers



Cost Implications

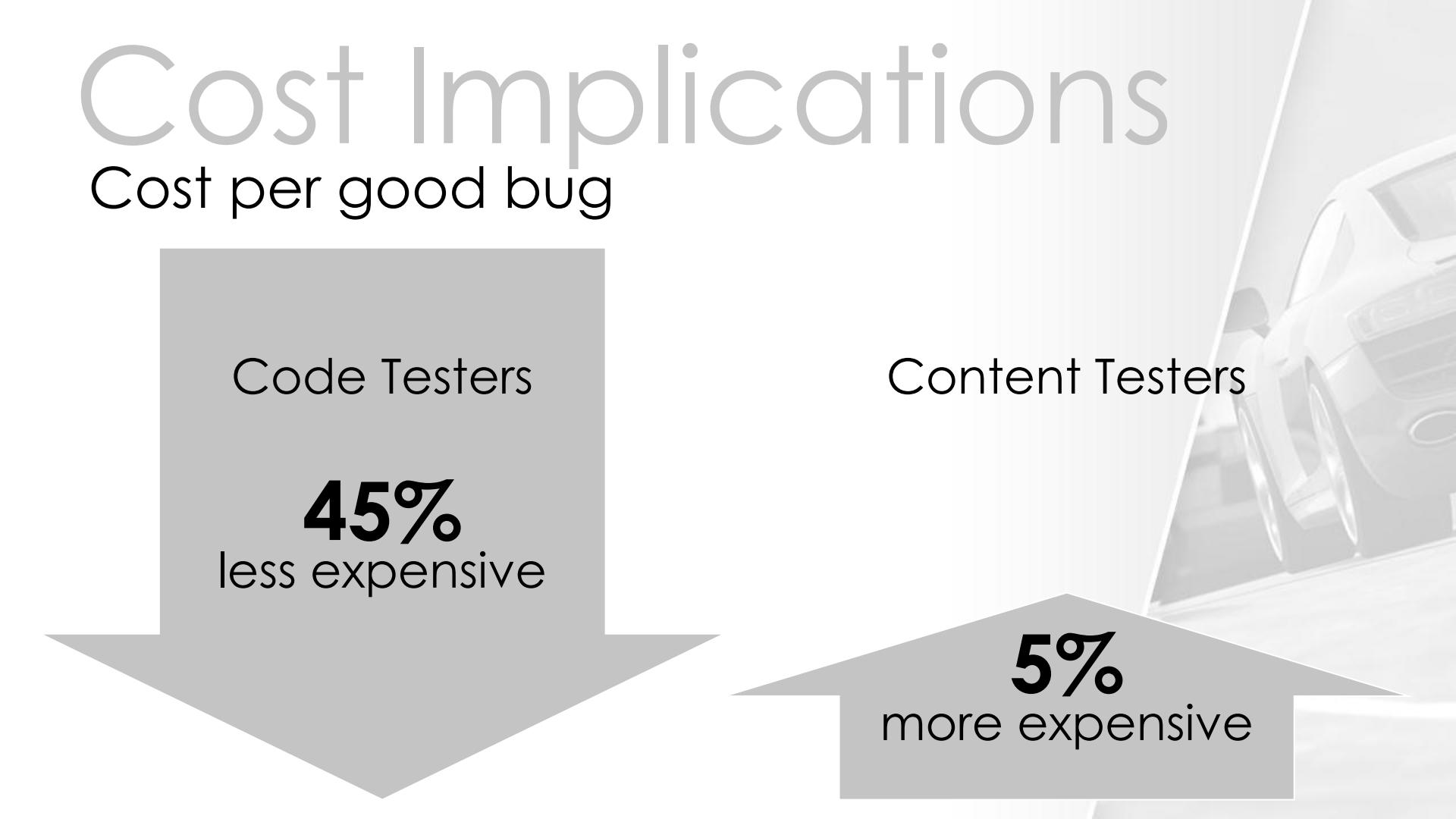
Cost per good bug

Code Testers

45%
less expensive

Content Testers

5%
more expensive



Changes @ Turn10

- Testing happens earlier
- Test is integrated into production process
- More predictable schedule
- Increased Dev/Art bandwidth

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- Have devs/artists and testers on your interviews
- Dev/producer/artist with a break-it mentality, or a need to make it "right"
  - Takes a broad view, rather than fine details
- Prepare your org

Thoughts

- Higher cost produces greater benefit than input
- Invest slowly at first
- Standard testers are still needed; Technical testers aren't an end-all be-all solution
- Don't discount the intangibles

Thank you

Q&A up front