



# Why automated code quality reviews are indispensable?



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# About AstraZeneca

**\$26B**

**Total Revenue**

**\$23B**

**Product Sales**

**\$6.1B**

**Invested in R&D across 5 countries**

**167**

**Projects in clinical trial; 8 in late-stage trials**

**70K**

**Employees**

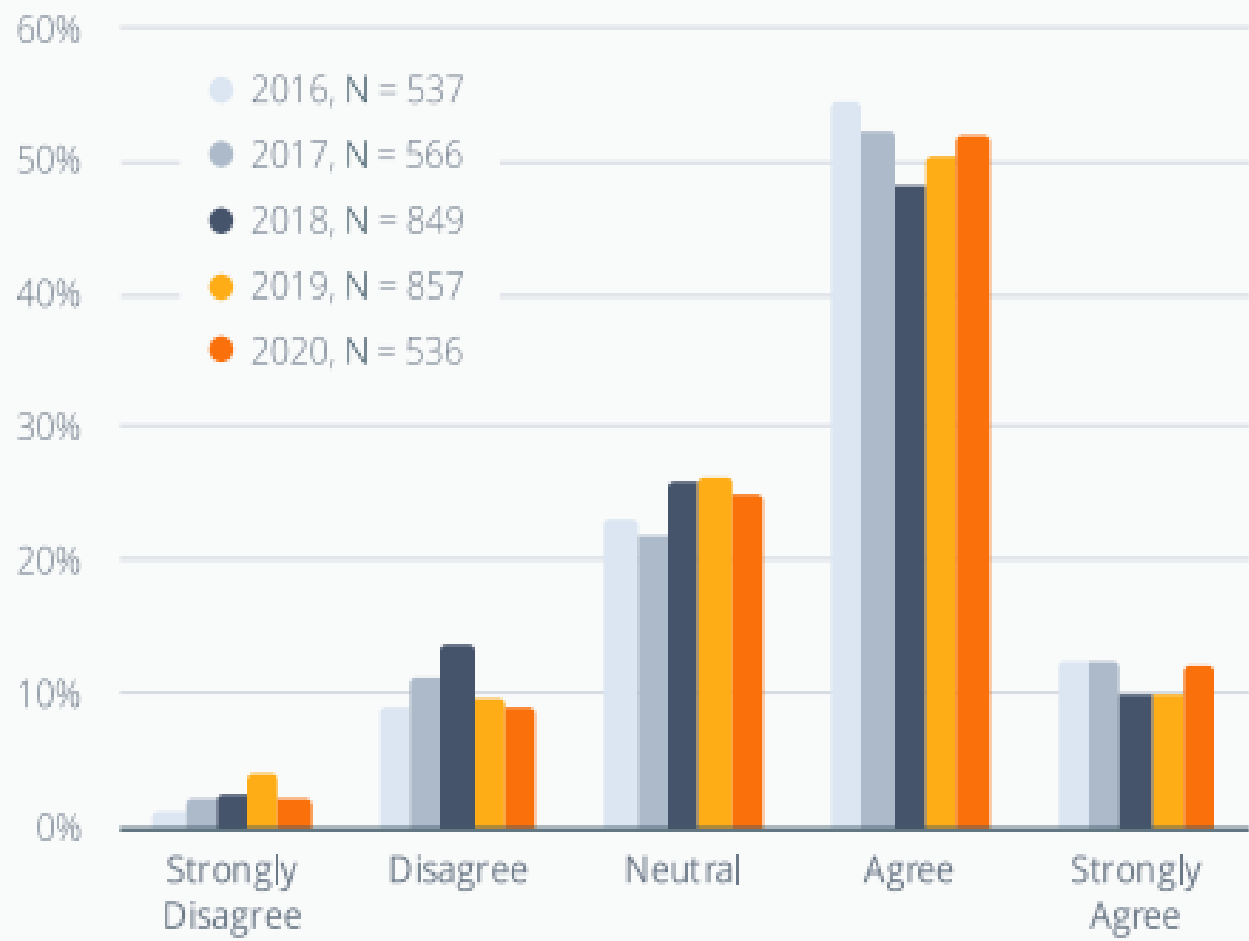
**45%**

**Senior roles filled by women**

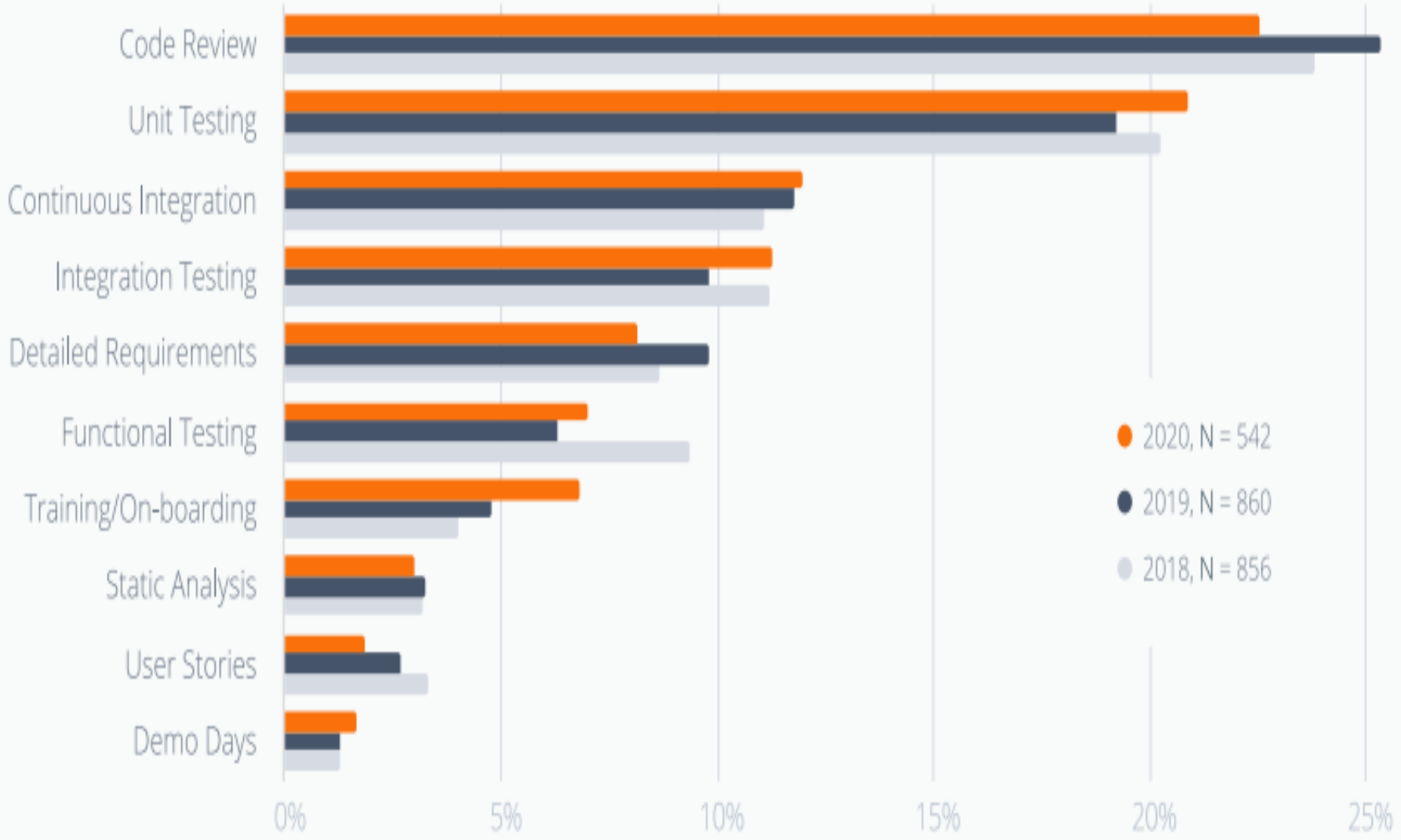
# State of Code Review 2020

I am satisfied with the overall quality of the software I help deliver (specifically regarding performance, bugs, etc.)

fig.1

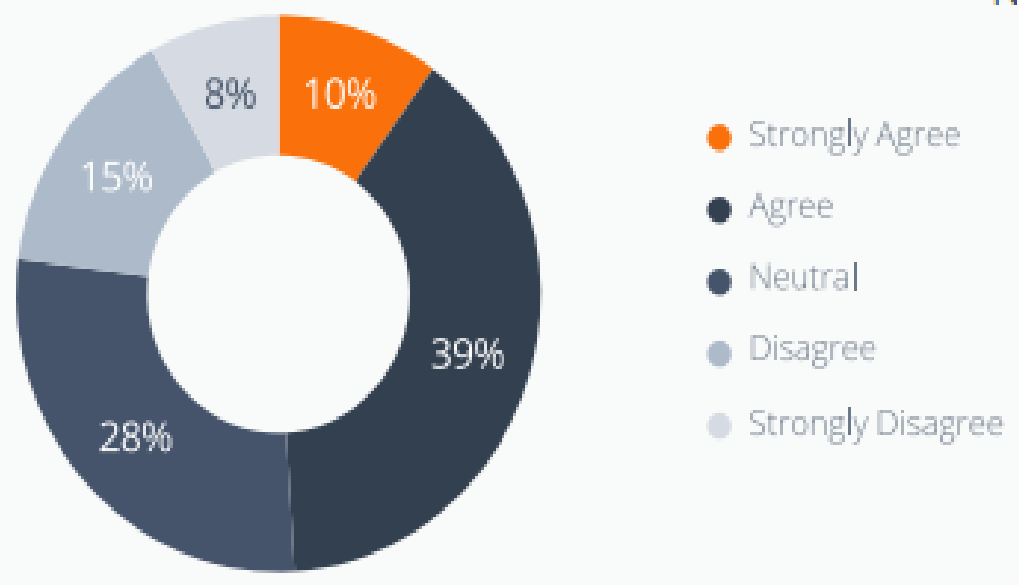


What is the number one thing a company can do to improve code quality? fig.4

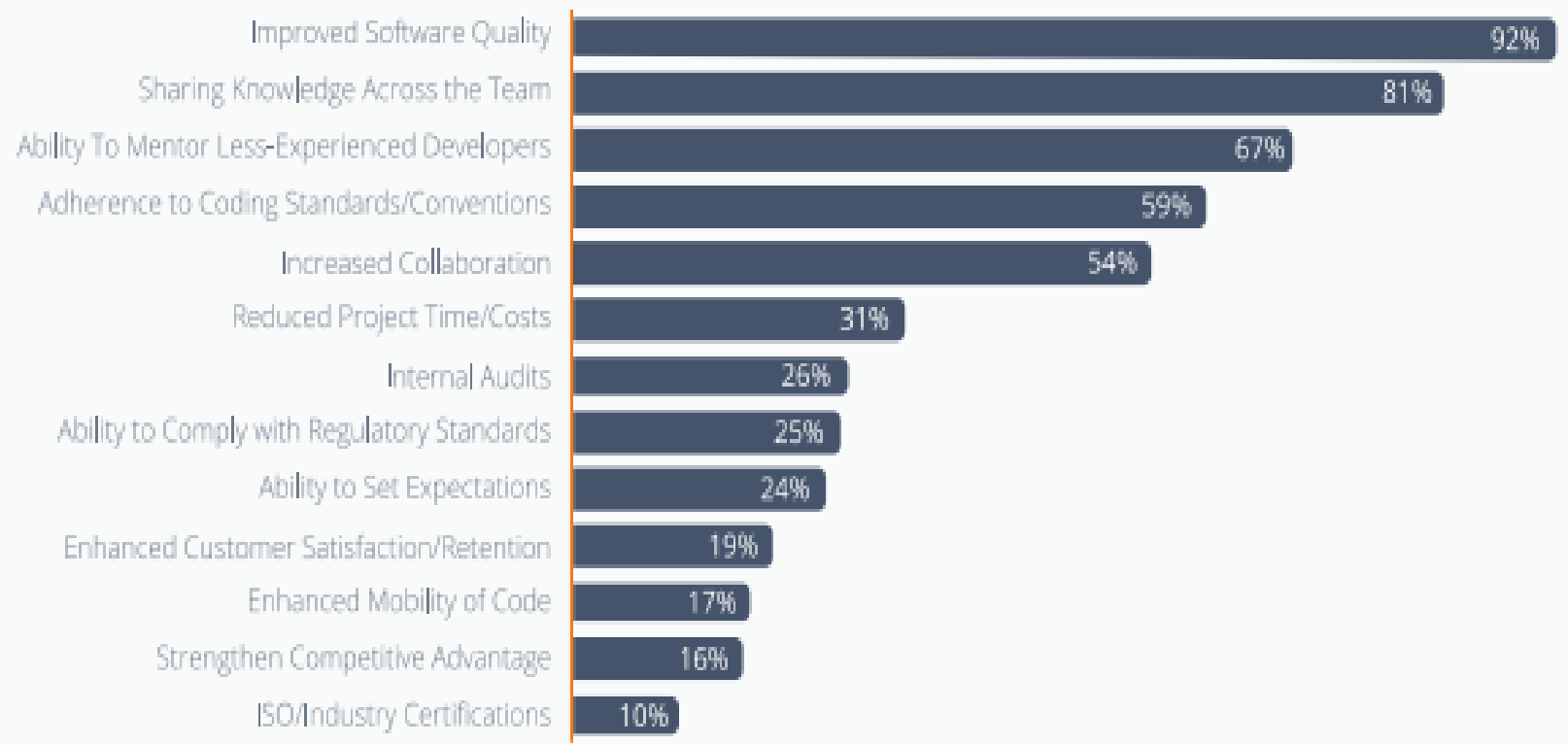


# State of Code Review 2020

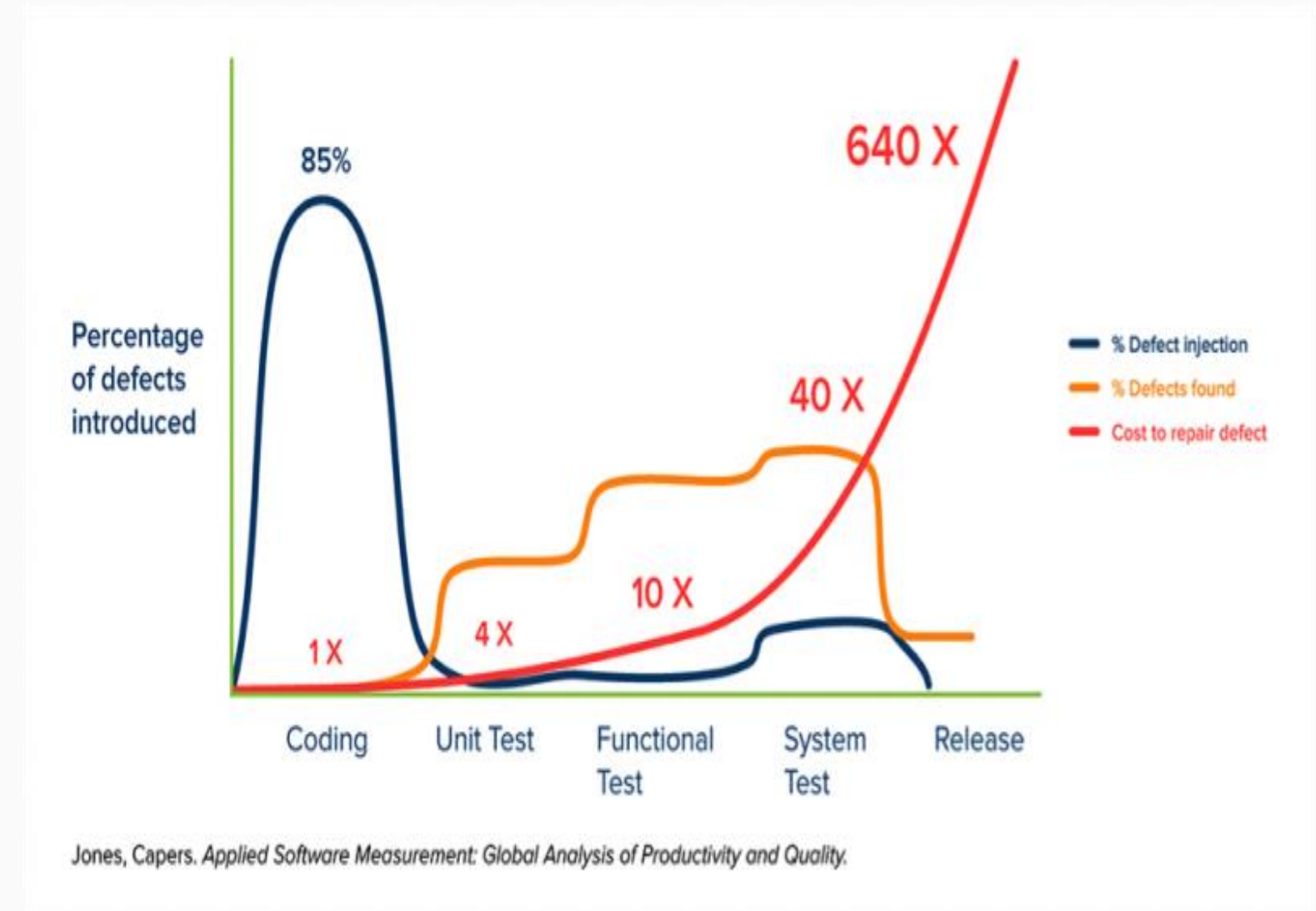
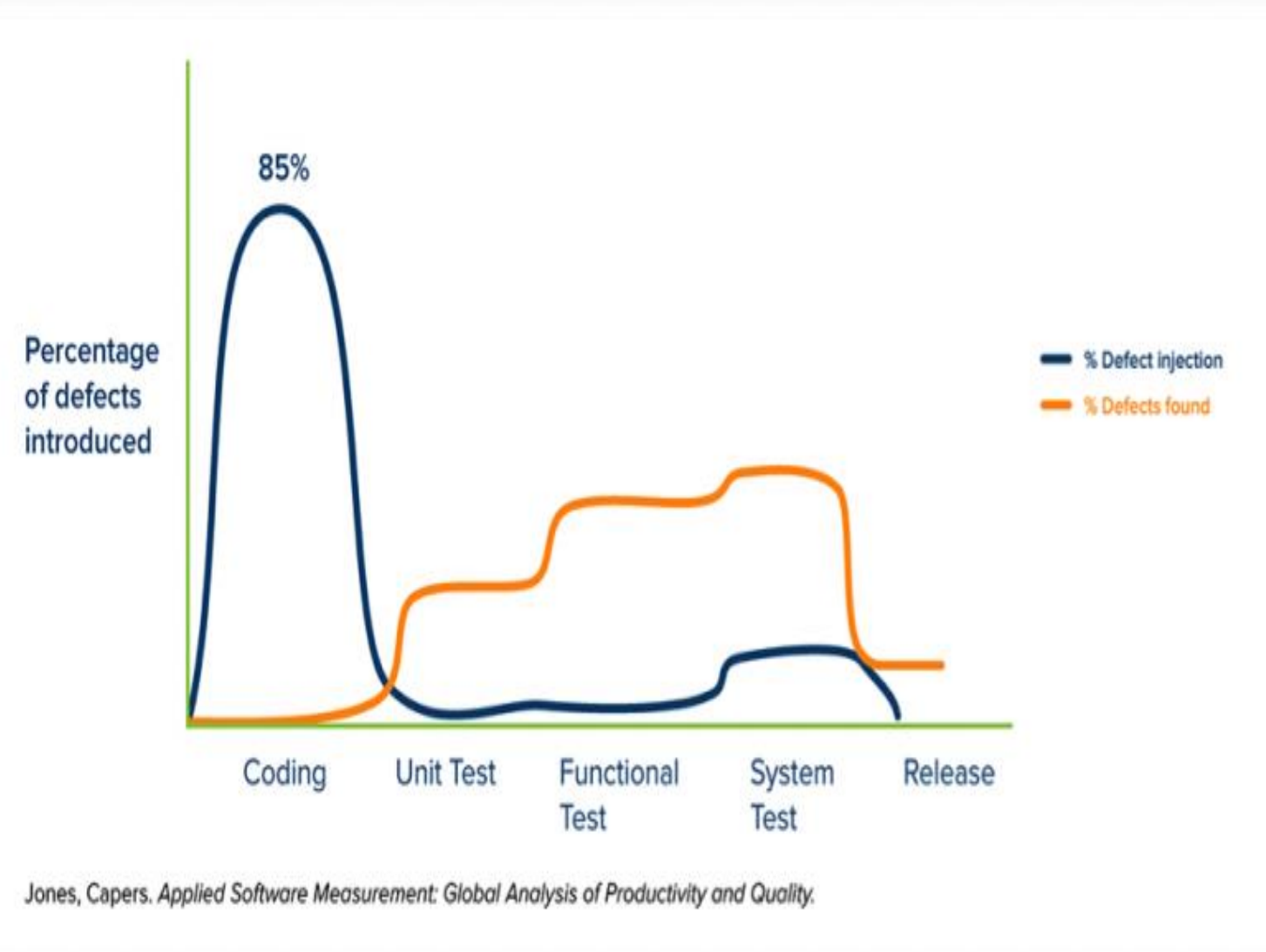
I am satisfied with my team's current code review process. *fig.3* N = 669



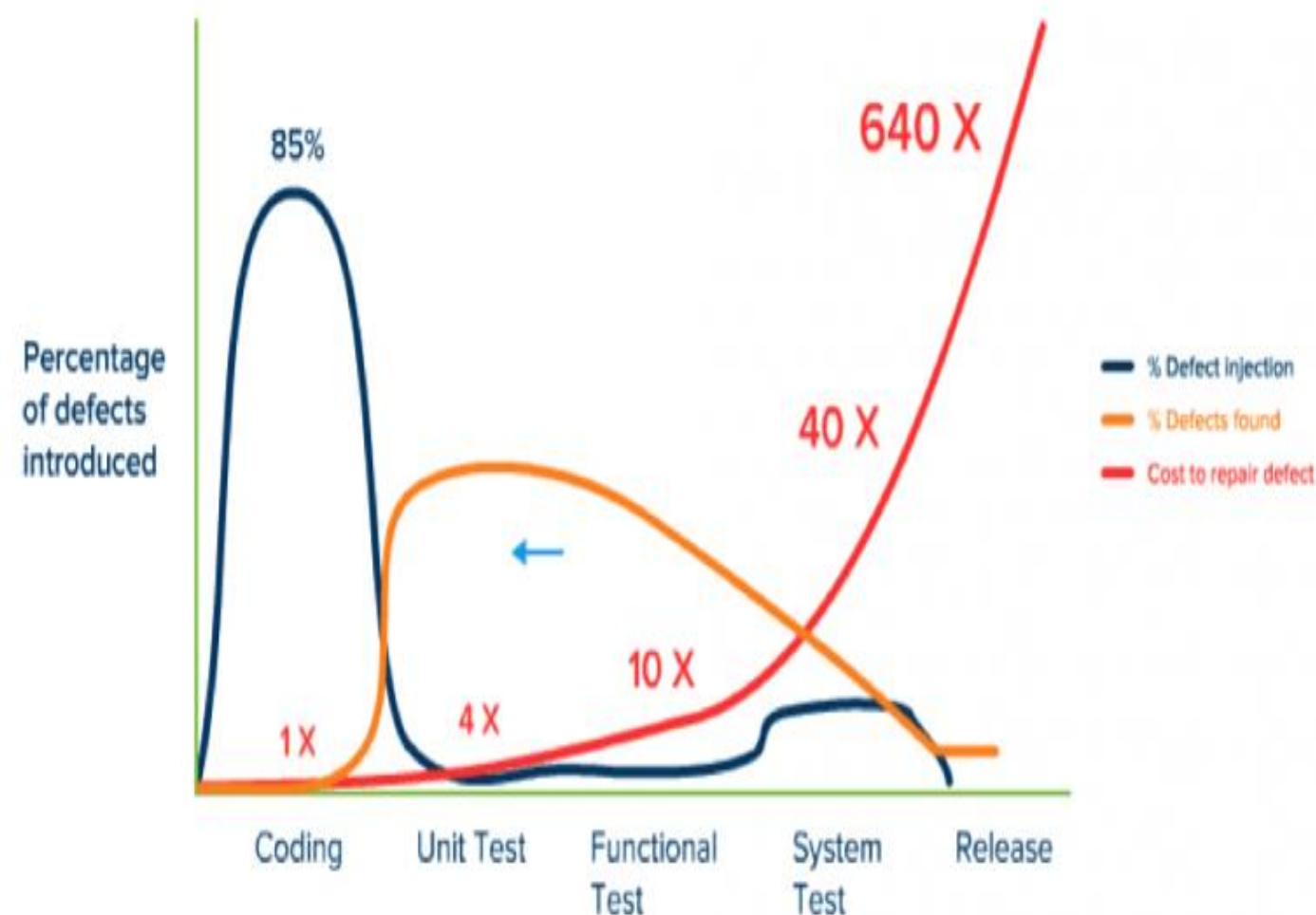
What do you think are the most important benefits of code review? *Select all that apply fig.9* N = 735



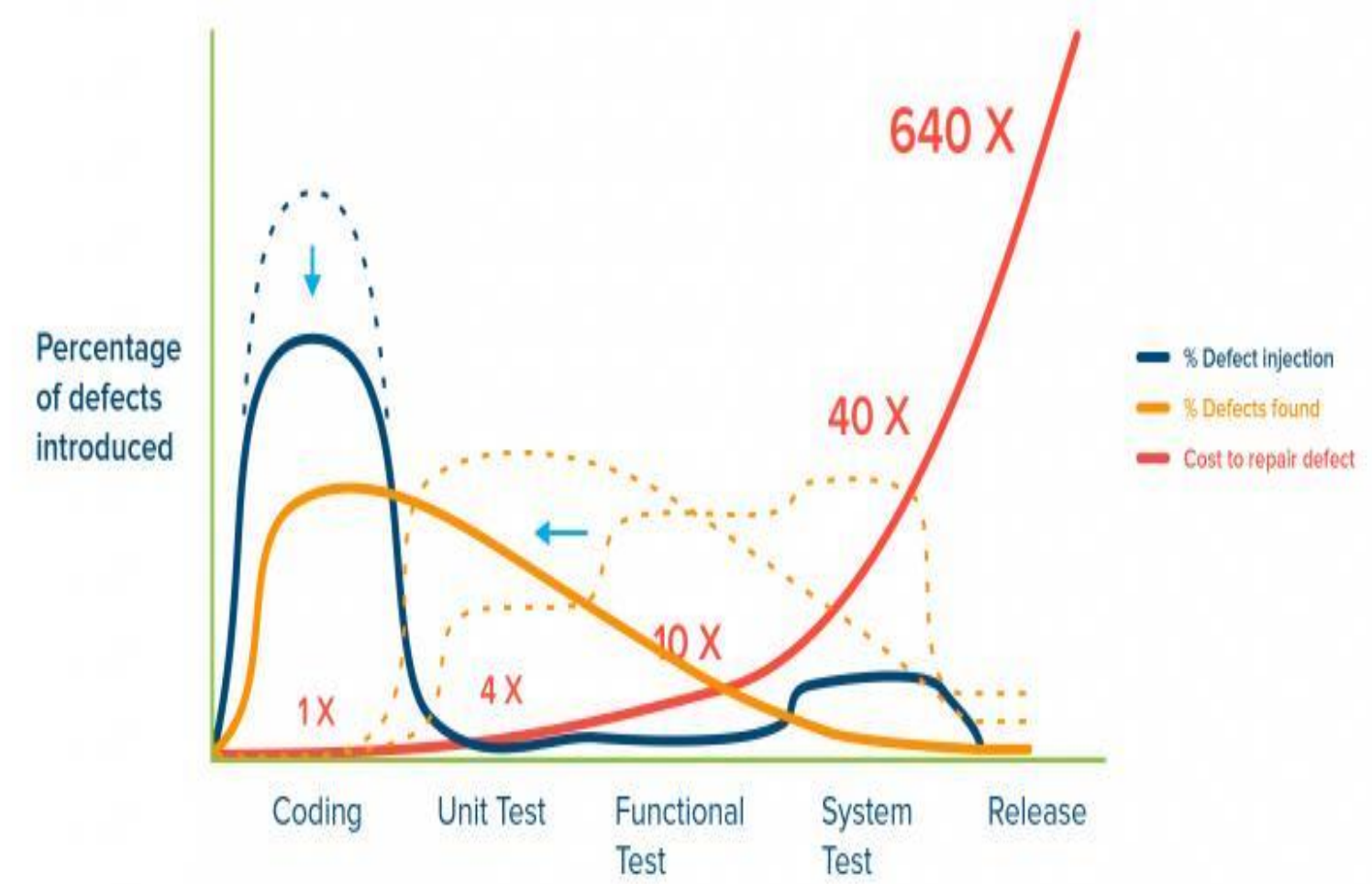
# How 'shift-left' approach for testing and automation of code reviews help?



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Jones, Capers. *Applied Software Measurement: Global Analysis of Productivity and Quality.*



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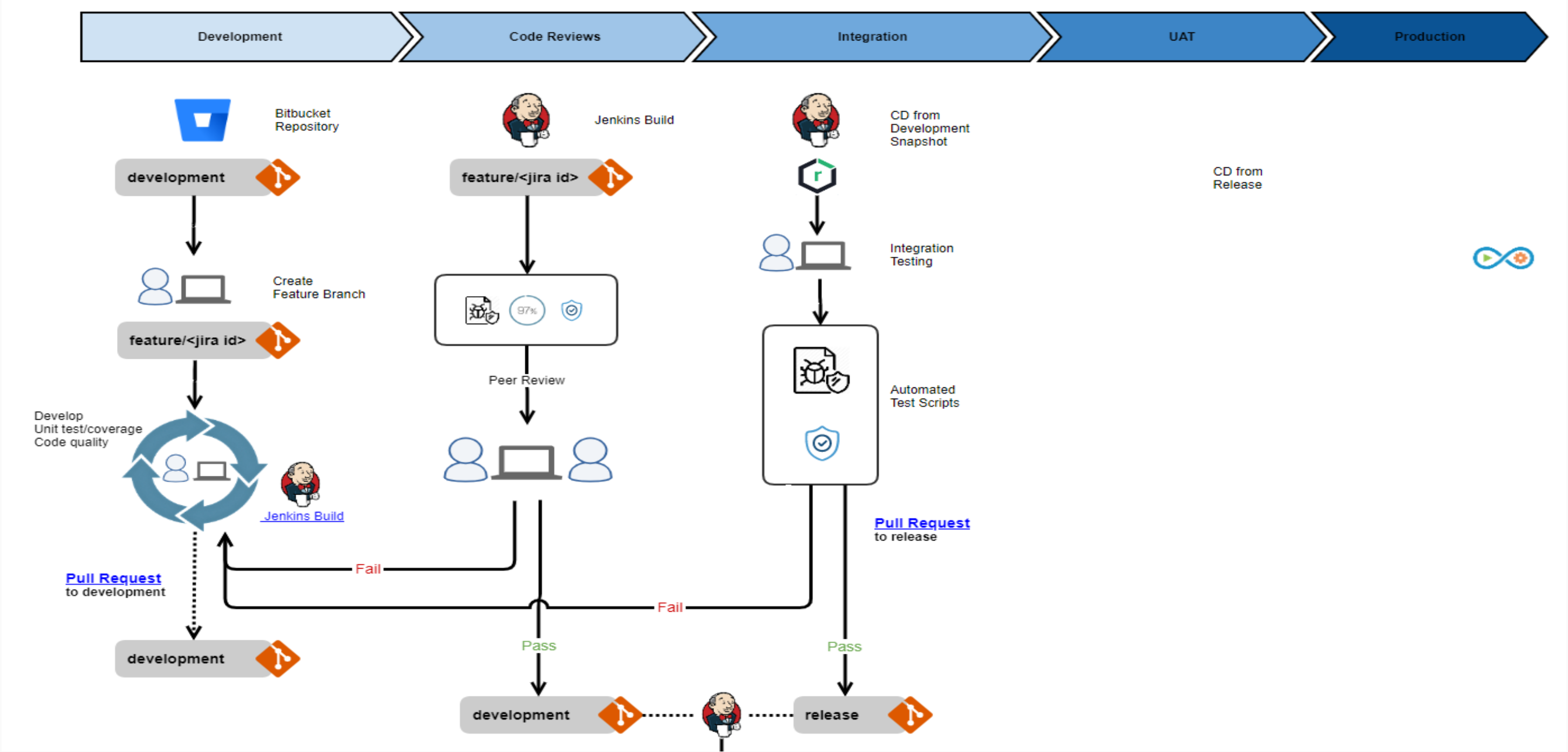


# Code Quality: Challenges

- Highly reliant on Manual code quality checks which are prone to errors, inefficient and transparency
- No centralized checks to enforce Organization-wide standards
- Latent defect discovery of error, bugs and code smells resulting into Project delays and cost overruns
- Lack of skillsets in designers and developers



# How we use it?



# Automated code quality reviews: Benefits

- ✓ Enhanced code quality by 70%+ which helped significant reduction in project timeline
- ✓ End-to-end interoperability helping development process seamless
- ✓ Easy custom rules creation which automated routine tasks
- ✓ Drive resources towards productive tasks



# 73% Cost savings with IZ Analyzer

Project Metrics		
Team Size	3	2 Developers + 1 Lead
Average number of Hours per day on Manual reviews	3	1 Hour saved by each resource
Average rate/person per hour	\$83	2 Developers @ \$75 per hour and 1 Lead at \$100 per hour
Total spent per day	\$249	\$83 x 3
Total spent per month	\$5478	22 working days

Cost Savings	
Cost of Manual Code Reviews Annually	\$65,736
IZ Analyzer	\$18,000
<b>Total Savings</b>	<b>\$47,736</b>



# Q&A



**Thank You**

