

NDIA
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***Problem Reporting is not a
Problem, It's an Opportunity***

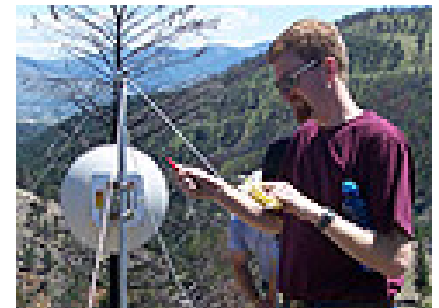
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Georgia Institute of Technology



Georgia Tech Research Institute (GTRI) Overview

- Unit of the Georgia Institute of Technology
- 1200+ employees
- 70% of research employees hold advanced degrees
- Wide variety of products
- Customers include federal and state government; and industry
- Competitively bid projects range greatly in size and duration
- More Info: <http://www.gtri.gatech.edu/>



Topics to Cover

- **What is a problem report**
- **What a problem report is not**
- **Why problem reports are a good thing**
- **How problem reports fit into your process**
- **Problem report lifecycle**
- **Types of information to collect**
- **Problem report metrics**
- **Tools and techniques**

What is a Problem Report?

- PR, SPCR, Bug, OCR, CR, EPR, ECR...
- Project requirement
- CMMI CM SP (2.1-1) Track Change Requests
- Creates a paper trail
- Documents changes at any point in development cycle
- Easy PM tool (How are we doing?)
- Part of release documentation
- Business development tool

What a Problem Report is Not

- Not optional
- Not a personal performance indicator
- Not a singular project tool
- Not a contest
- Not only for S/W
 - Documentation
 - Systems/Hardware
 - COTS
 - Subcontractors
 - Process

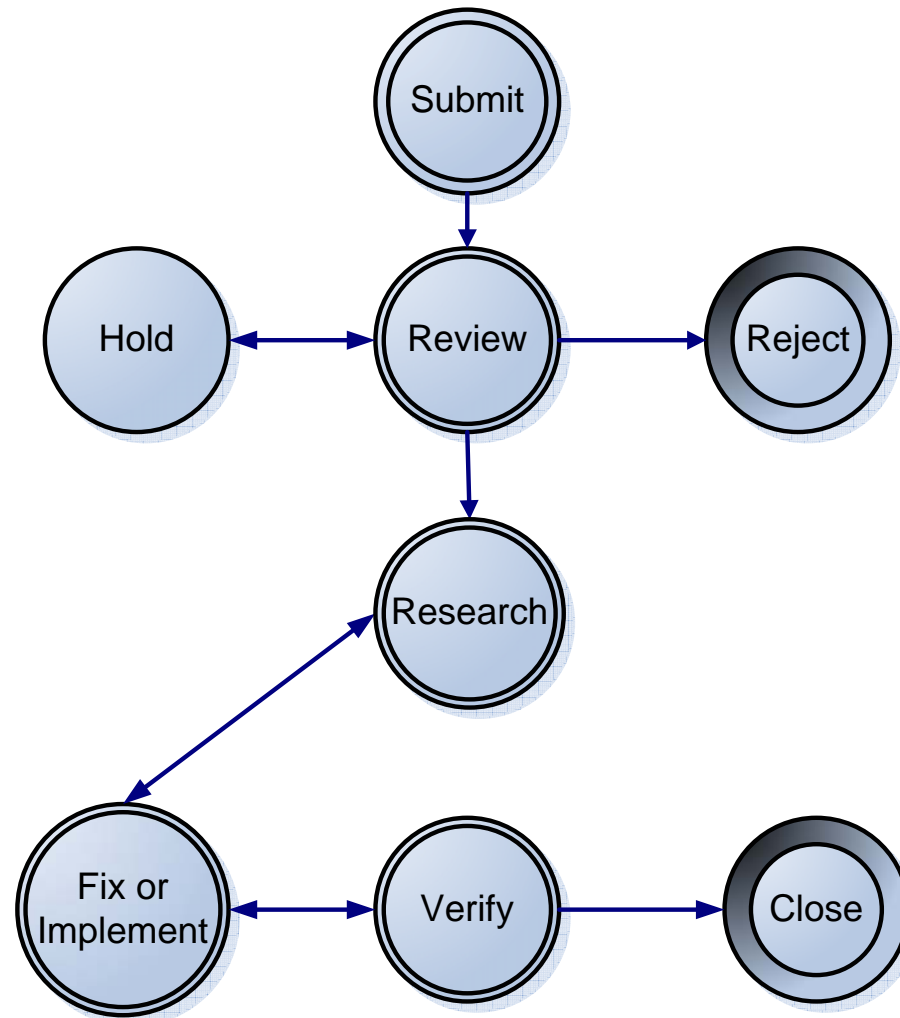
Why Problem Reports are a Good Thing

- **Great communications tool**
- **Provide a status snapshot**
- **Manage clients and subcontractors**
- **Issues don't get lost**
- **Help control the product**
- **Bring new hires up to speed**
- **Business development**
- **Help make informed decisions**

How Problem Reports Fit Into the Development Cycle

- At what point during the process should problem reports be written
- Who should see problem reports

Problem Report Lifecycle



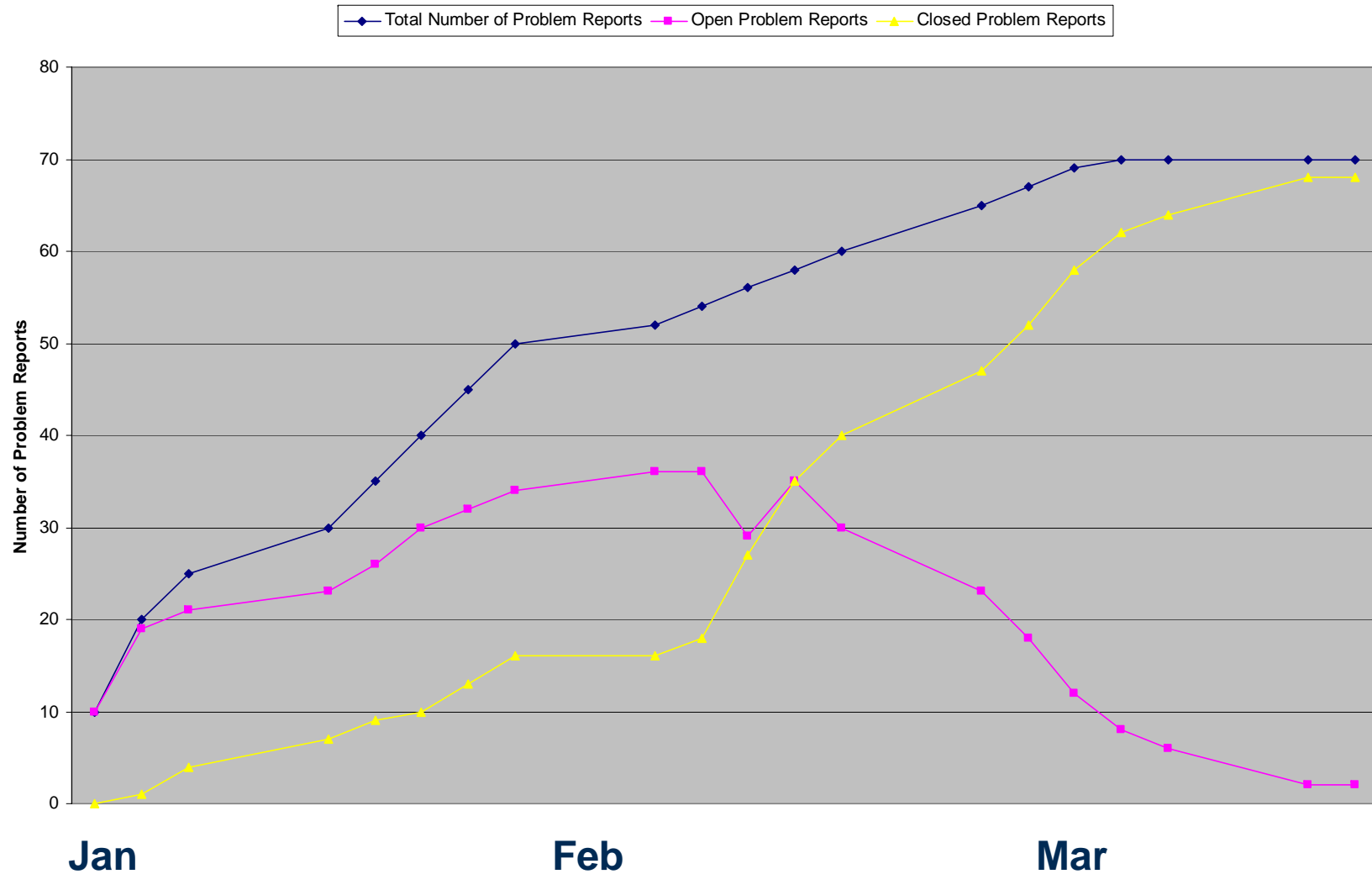
Some Problem Report Information to Collect

- Unique ID
- Description
- State of problem report
- Functionality or application
- Where in the process it was written
- Severity
- Priority
- Dates
- Estimations

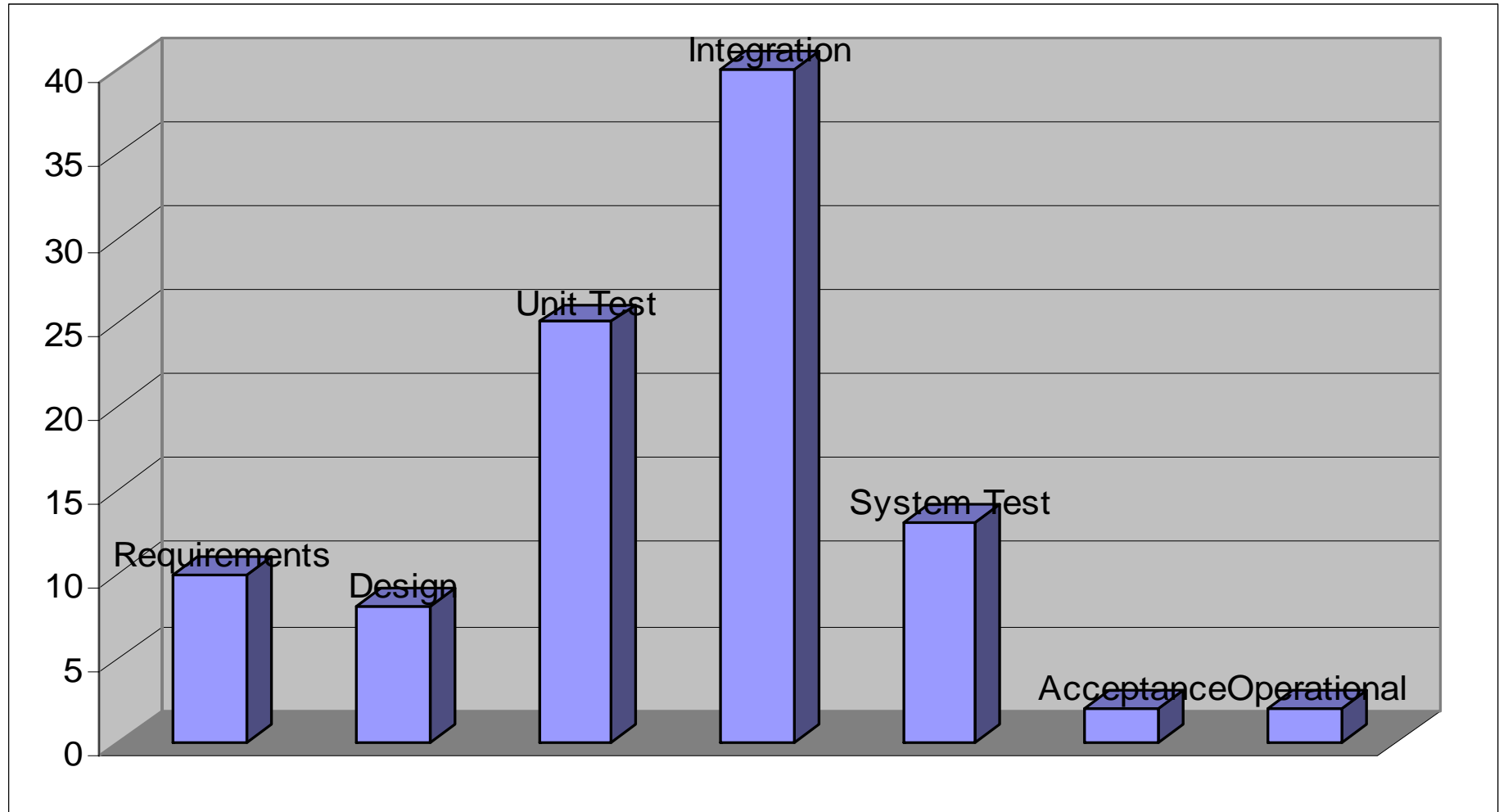
Problem Report Metrics

- **Open vs. closed**
- **Where defects are introduced**
- **Closure rate**
- **Days to verify**
- **Open per function or application**
- **When defects are found**

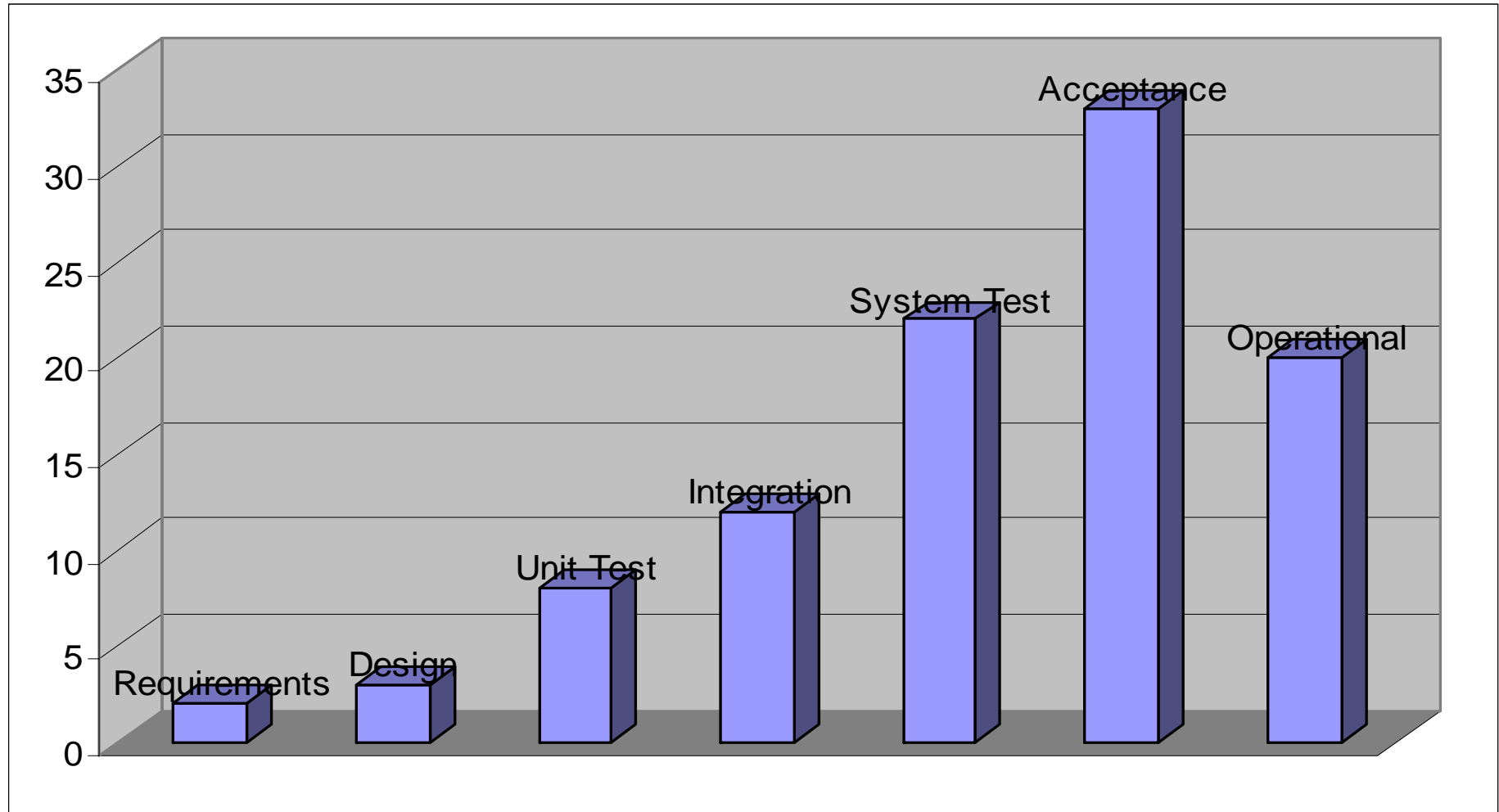
Problem Report Closure Rate



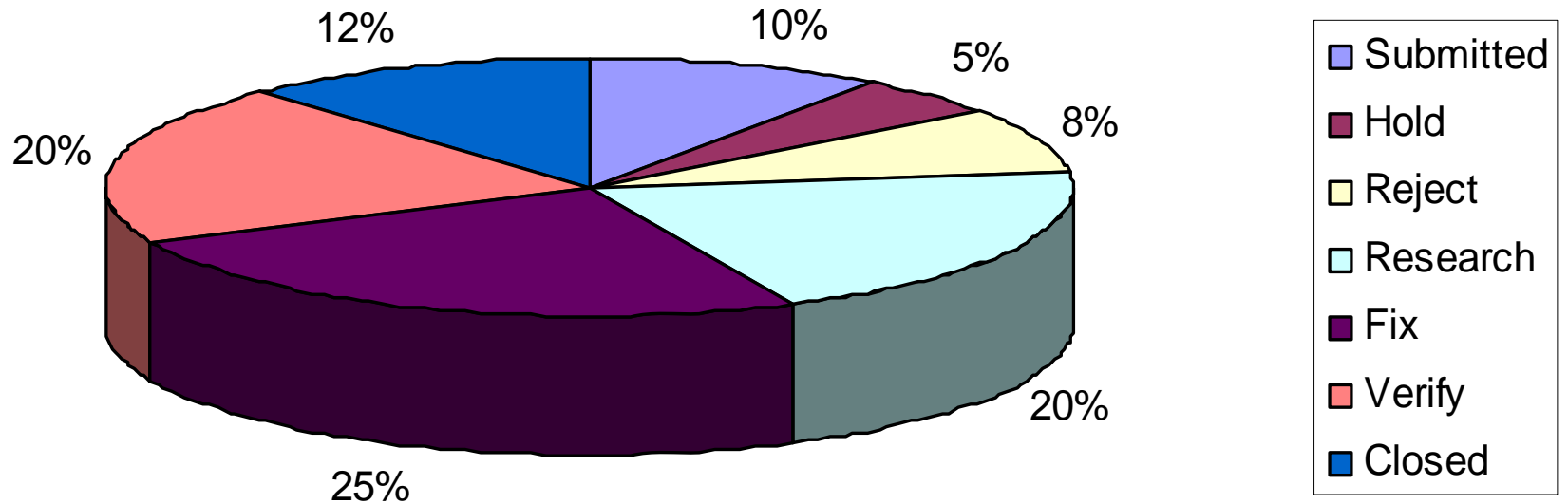
Problem Report Graphs - Where Found



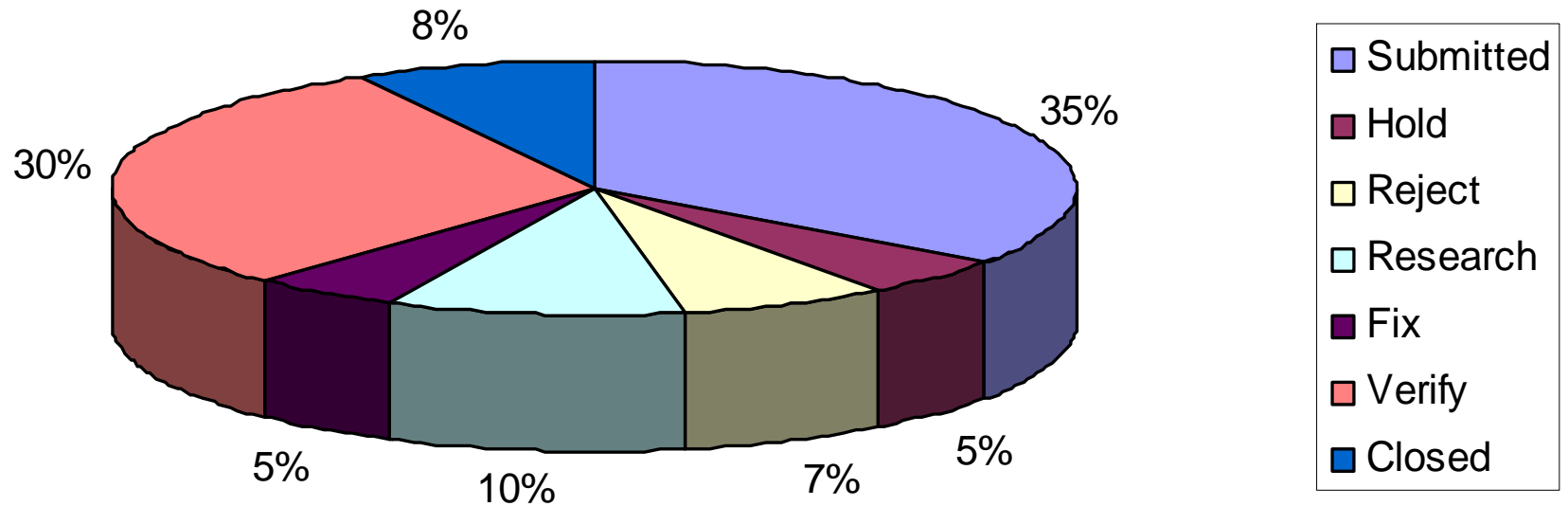
Problem Report Graphs - Where Found



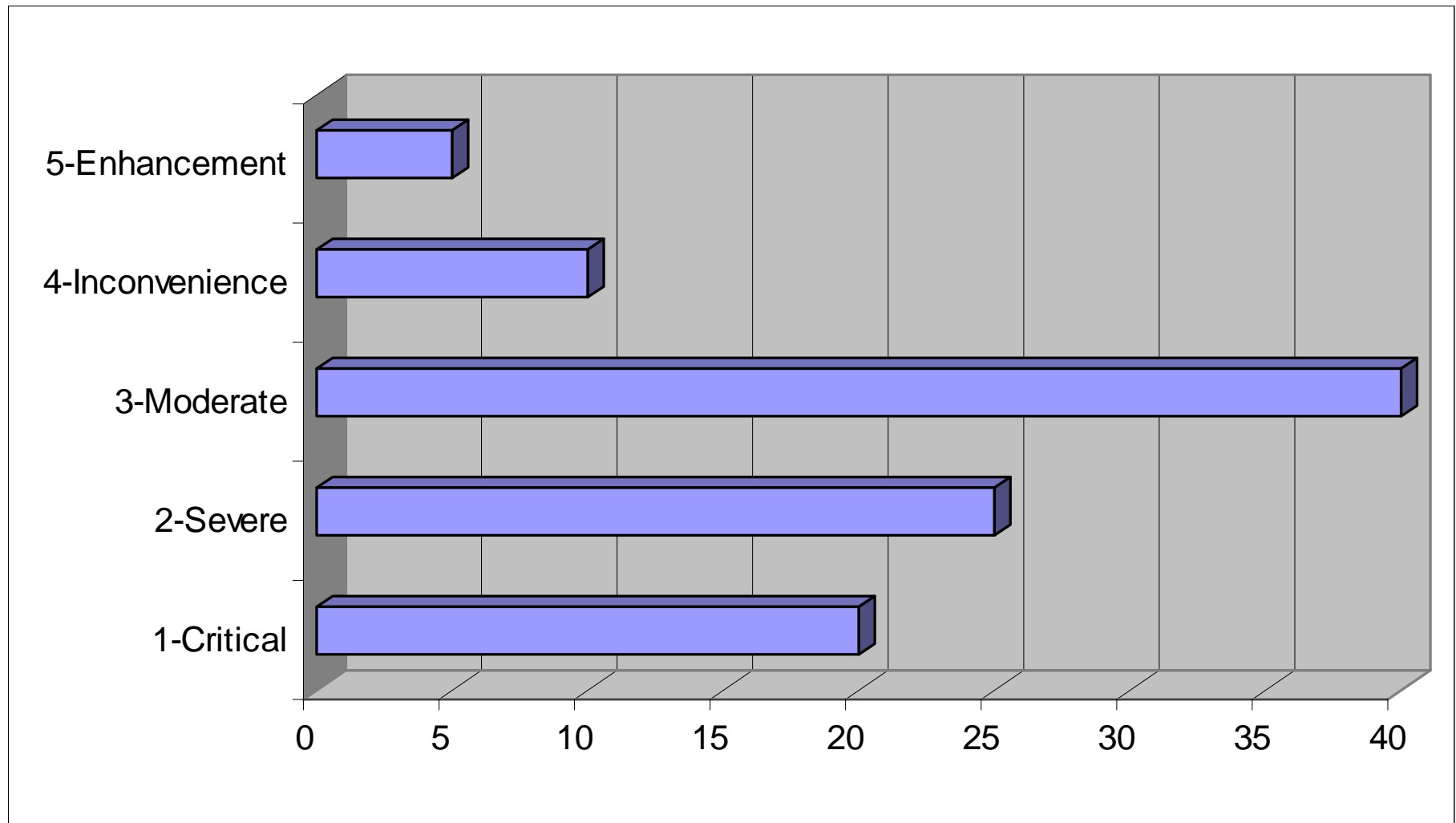
Problem Report Graphs – Status



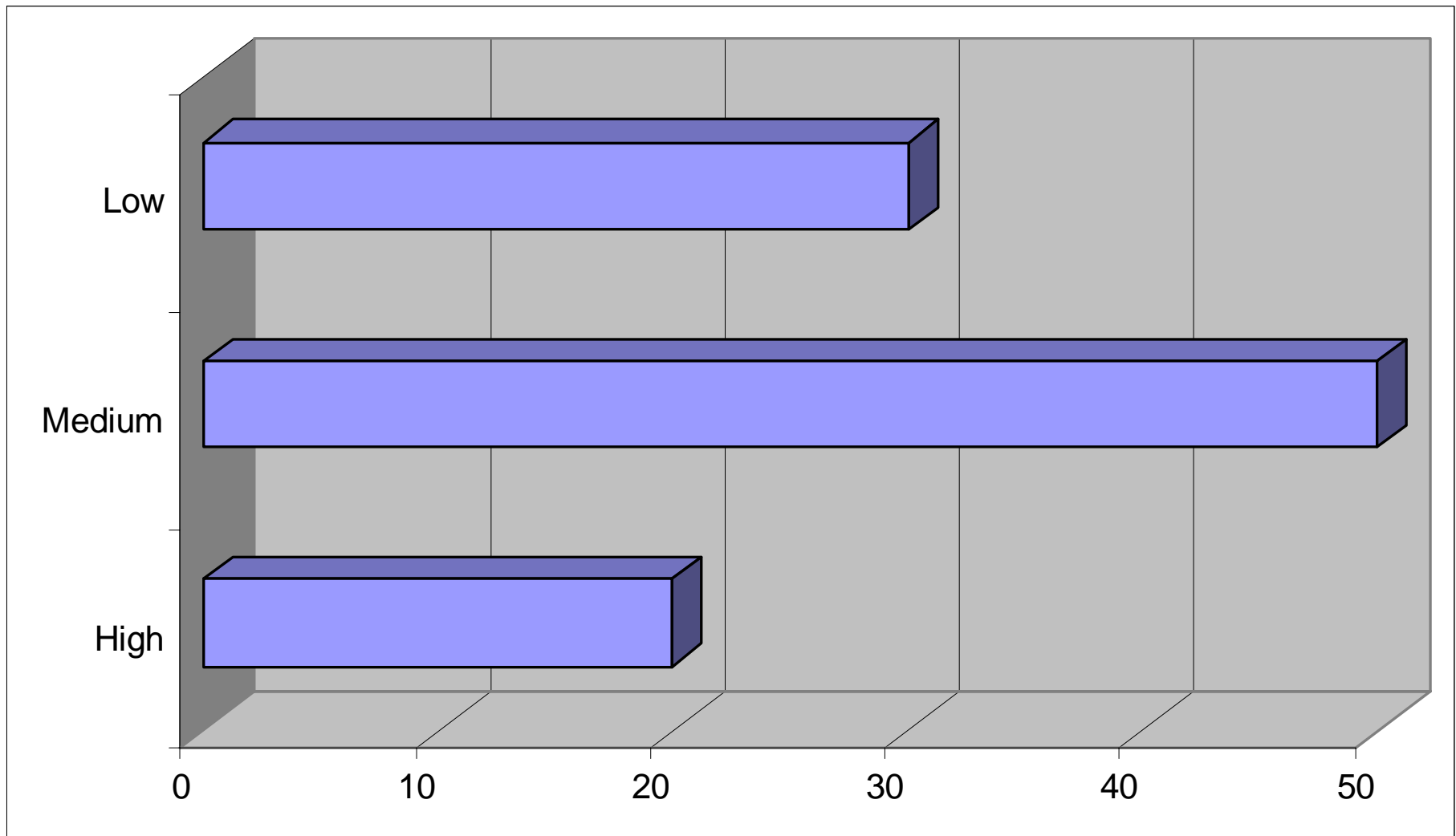
Problem Report Graphs – Status



Problem Report Graphs – Severity



Problem Report Graphs – Priority



Excuses

- **Takes more time to document the change than to actually make it.**
- **This will reflect poorly on my work.**
- **I don't want the customer to know what our problems are.**
- **Stop writing problem reports so we can release.**

Summary

- **Simple way to gain project insight and make informed decisions throughout**
- **Good project communications tool**
- **Helps keep things under control**
- **Don't misuse**
- **“Tool” should support your process and needs. Consider things like web interface, queries, report generation, customization or integration**

Questions?

Contact Information

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- **More Info about GTRI:**

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