Closing the Loop On Quality Integrating Customer Feedback

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Speakers Qualifications

- **Gopal Jorapur**

  - Staff Engineer, Sun Java System Application Server, Quality Engineering organization at Sun Microsystems

  - Working with account teams that deal with customers

  - Worked on High Availability features of Application Server

  - Presented at Sales conferences

Presentation Goal

Lessons learned:

Integrating customer feedback into the quality process

Presentation Agenda

- Challenge

- Approach

  - Build a winning team

  - Feedback process

- Recommendations

- Takeaways

- Q&A

Challenge - Problem Definition

- Poor Installation Procedures/Process
- Problems with Upgrade/Migration path
- Unclear Configuration Issues
- Ease of Use
- Frustrating User Experience
- Unclear documentation/Ineffective tutorials
- Incomplete training

Challenge

- Poor Installation Procedures/Process
  - First impression of the product
  - Too many steps
  - Complicated and confusing steps
  - Dependency failures
  - No error message/No logs for failed installation

Challenge

- Problems with Upgrade/Migration path
    - Most critical to customers
    - Customer application/configuration not saved
        - Re-do of configuration/deployment is too costly for customers
        - Customer development/production schedule slip
    - Regressions, major issue

Challenge

- Unclear Configuration Issues
  - No straight forword steps
  - Too many documents to refer
  - No Quick start kind of guide/documentation
  - No error code/error message mapping
  - No troubleshooting info

Challenge

- Ease of Use
  - Tools are complicated
  - Too much documentation to be read
  - Technology expertise needed
  - No going back on configurations
  - Proper error messages for every Invalid syntax

Challenge

- Frustrating User experience
  - Tools take too much time to start
  - No information during background work, like starting servers
  - Deployment/Redeployment procedures complicated
  - No online help

Challenge

- Unclear Documentation/Ineffective Tutorials
  - Insufficient/Nonworking examples (examples does not relate to customer usage)
  - Broken links
  - Non working commands
  - Reference to old version technology

Challenge

- Unclear Documentation/Ineffective Tutorials
  - Cross references with no details anywhere
  - These are the only interfaces to the product, so need to be clear/precise and accurate
  - Technology not explained

Challenge

- Incomplete Training
  - Training document has flaws
  - Poor review of training materials
  - Old samples carried forword
  - New features not highlighted

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Approach

- Open a channel of communication

- The approach is two fold

    - Build a winning Team

        - Form a team involving all stake holders

    - The feedback process

        - Get technical issues and feedback about Documentation/Tutorial etc

Approach

- Build a winning Team
  - Sustaining Team
  - Sales engineers/Professional Service
  - Quality Engineering
  - Development engineering

Approach

- This team can take care of
    - Tracking the cases
    - The discussion on the issues
    - The resolution for the issue

- The issues can be quickly resolved by this team

Approach

- Sustaining Team
    - Experience in dealing critical and Time bound issues
    - Has data about overall customer issues
    - Needs collaboration with other teams

Approach

- Sales engineers/Professional Service (Field data)
  - Front end for customers
  - Has knowledge about real issues at customer place, Product usability issues with specific customer
  - Has data on User experience/Documentation issues

Approach

- Quality Engineering
  - First inhouse customer
  - Needs to simulate the real issues
  - Focus on Real life configurations (Topology/Upgrade/Migration testing)
  - Focus on most used areas
  - Get feedback from sustaining/Sales
  - Understand the feedback, design more test cases with respect to Top 10 complex customer scenarios

Approach

- Development engineering
  - Understand how their code is used outside
  - Help Sustianing to fix issues
  - Understand significance of Documentation/Training material
  - Improve design/implementation of subsequent product based on information gathered in this process

Approach

- The Feedback Process

  - Replicate customer issue

  - Build test cases around exposed test area

  - Focus on Documentation/Training docs

Approach

- Replicate customer issue
  - Customer configuration is typically complex
  - Extract the part of configuration/application that's cause of the issue
  - Simulate the customer scenario
  - Get Data from Sustaining engineering/Sales engineering
  - Help development in debugging by simulating customer environment

Approach

- Build test cases around exposed test area

    - Understand the overall customer escalations

    - Categorize them into modules

    - Increase test coverage for the module that has high number of escalations

    - Write test cases around the escalation

    - More number of escalation indicates need for more test development

Approach

- Focus on Documentation/Training docs
  - Get feedback about documents
  - Short list the high priority docs/components
  - Revisit the review process
  - Involve the right people for the review
    - QE, Engineering, Support

Approach

- Focus on Documentation/Training docs
  - Non technical people should also review, to know how easy to use the Product using the docs
  - Online survey about the documentation, every doc should have feedback section

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Recommendations

- Recruit Top 5 complex customers for the Beta program
    - Get Free testing done
    - Give incentives for them
- Get Top10 customer used scenarios and provide them as samples for next release

Recommendations

- Highlight important RFE's from customers feedback, provide them to Product Management

- Include escalation test cases in Regression Test suite for next release

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Takeaways

- Understand the Quality organization's role and importance in customer escalations.

- Customer view changes for cross-functional teams
  - QE, Development, Documentation, Sustaining

- Enhanced test coverage

- Improved customer satisfaction

- Management feedback on understaffed feature

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Q & A