

Independent Testing of Commodity Exchange System

About Customer

Client was one of the initial national level commodity exchanges in India. The technology platform and business was new in India. We were appointed for Functional testing (we used to call it Software Audit) and automation of testing process.

Client had screen based commodity exchange platform with great depth of transparency in market depth. Client application was built using state of the art technology by one of the leading exchange software manufacturer, Financial Technologies Ltd.

The Business Challenges

The business challenges were daunting and uncertain. Few of them includes,

- Consistent changes in requirement during development cycle
- Fierce competition from other exchanges resulting into stretched timelines
- To reap the early mover advantage, business guys wanted to push maximum products and features in live environment at earliest possible time
- Client being exchange, the platform was expected to run fault free with 99.99% up time

Our Solution

- Besides routine testing challenges, we were expected to help in going live with defect free product within timelines with maximum features. Hence we identified following as Key Success Factors (KSF).
 - Release coming from development team should have minimum defects
 - The first round of test report must not have any functional gap in the release
 - Release should pass through testing in one round of regression
 - Fatal errors (system crash) and accuracy errors must not pass to live environment

- Few highlighting points of our integrated quality management solution included,
- Implementation of incremental model of STLC (Software testing life cycle) for each release, build or patch.
- Involving quality team into early stage of software development, i.e. requirement documentation and finalization phase. This involvement leaves sufficient time for quality team to plan, prepare and expect a release
- Designing of 'Acceptance Criteria' by quality team. The early involvement of quality team enabled quality team to design acceptance criteria. These acceptance criteria were given to development team. Development team need to ensure that the patch, release or build which would be delivered to quality team meets the acceptance criteria. This ensured drastic reduction in functional gaps in releases and reduced test regression cycles between development team and quality team.
- Early involvement of quality team enabled them to prepare 'impact document'. This impact document was also shared with development team. Independent impact document prepared by quality team provided third party view to development team. This reduced impact errors drastically.
- Automation of regression library. This reduced overall testing time, since regression library was automated.

Major Benefits

- 99.99% uptime from software defects perspective
- The purpose of 'Go Live Within Time Without Bugs' achieved
- Reusable automated libraries reduced the team size of testing team
- Contribution to competitive advantage of robust exchange platform
- Overnight regression testing through automated suite was achieved

About AQM

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