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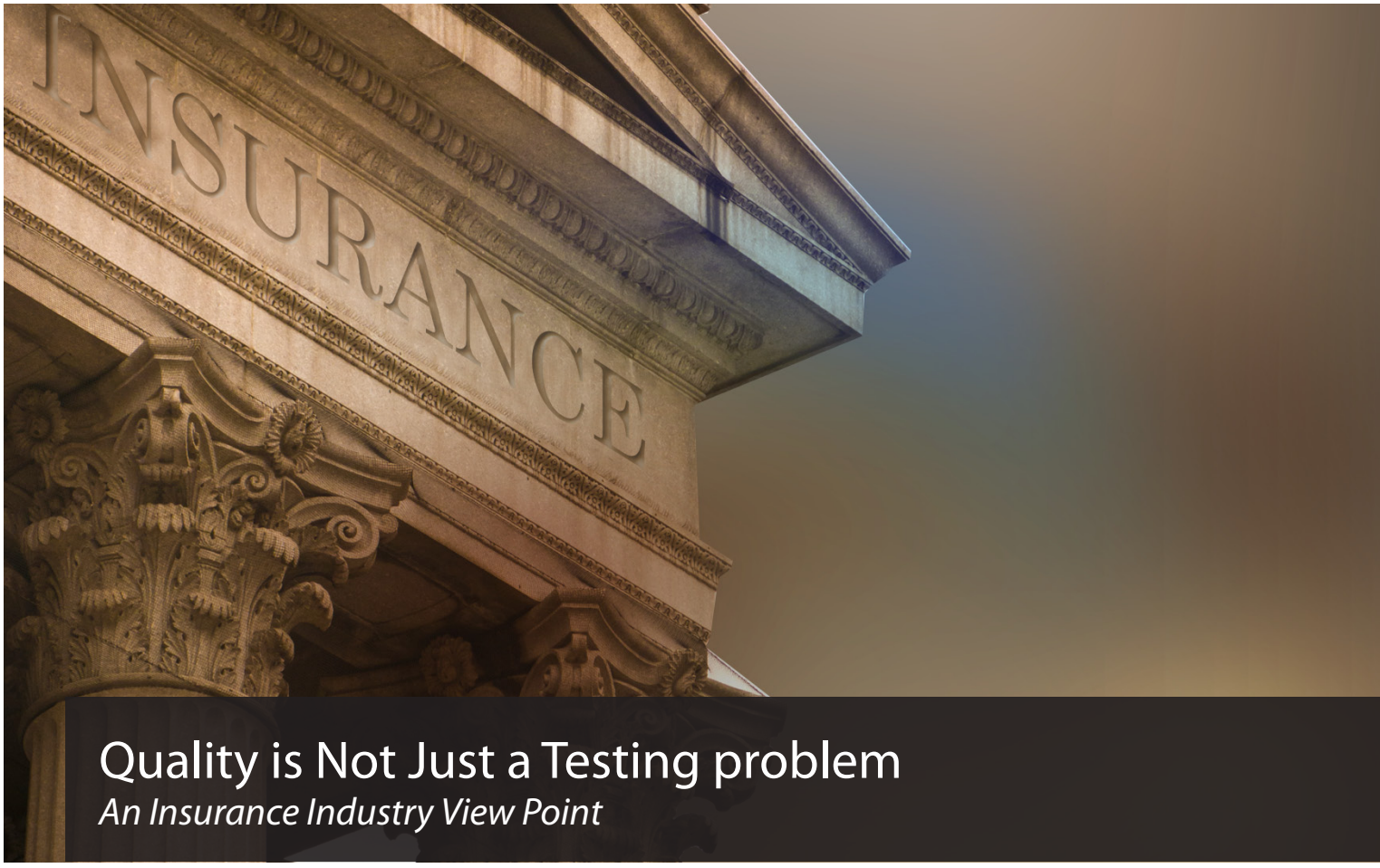

Quality is Not Just a Testing problem

An Insurance Industry View Point

- Vasudeva Naidu, Rahul Bhattad

Abstract

The insurance industry is undergoing rapid changes due to the volatile economy, changing customer expectations and the advent of new communications channels. The industry is highly dependent on IT to reduce its operational expenses. These factors have led the insurance sector to embark on a major technology modernization journey, to develop and enhance its IT capabilities that deliver high quality products, which in turn have a profound effect on their business outcomes.

This rapid IT overhaul is leading to quality challenges that the testing organizations alone are unable to overcome. This paper attempts to capture these challenges and suggests relevant QA strategies to overcome them. It would also help understand how the perception of quality needs a paradigm shift from being solely a testing issue to being a larger quality issue that has an impact on business, which the testing organization and insurance carrier need to collectively address, for the successful implementation of the QA strategies.

Introduction

The insurance industry is making significant investments in technology modernization for enhancing their IT capability, so that they can improve their operational efficiency and address competitive threat. In the past five years, most insurance carriers have embarked on this journey primarily to achieve the following business objectives:

- Reduce total cost of ownership of the IT infrastructure: e.g., application rationalization, data center migration
- Simplify IT infrastructure e.g., producer management, channel simplification, etc.,
- Increase agility with flexible delivery mechanisms: e.g., mobility as a channel, simpler underwriting systems etc.,
- Optimize existing investments in IT
- Brand Building

Changing customer expectations, buying patterns, advent of new communication channels and the prevailing volatile and dynamic market conditions are driving these business objectives. These business drivers also influence the insurance carrier's customer loyalty index. Other factors that contribute to an insurance carrier's customer retention or loss are price, policy option, after sales service and brand image. Technology plays a critical role in influencing some of these factors which makes the delivery of high quality products by an IT organization even more critical. To demonstrate the same let us consider a situation where an insurance carrier's online system is not available or is not delivering the expected experience to a customer. In all probability, this customer would most likely not return and switch to another insurance carrier immediately.

The rapid transformation of insurance IT organizations is resulting in major quality challenges. This has led to an increase in the cost of quality, which has become one of the top challenges for a CIO to address. Insurance carriers are implementing several quality improvement initiatives and are primarily relying on testing organizations to be their quality custodians. While these testing organizations have been successful in reducing the cost of quality, they haven't been able to overcome all Quality related challenges. This paper will identify these challenges; understand why these challenges are beyond the scope of a testing organization and suggest QA strategies to successfully overcome them. Also, it would help understand why quality is not just a testing problem.

QA Challenges Associated with the Rapid Technology Transformation

The Insurance IT organization encounters quite a few unique quality challenges which increase the cost of quality. Some of them are:

a. Lack of an end to end insurance business process view, which is a result of domain complexity
b. State specific regulations, compliance and frequent changes in the insurance regulations
c. Testing organization's maturity is unable to keep pace with current IT modernization level

The quality challenges result in production issues that have a direct impact on the insurance carrier's operational efficiency, their agencies, system availability and compliance. This eventually impacts the insurance carrier's ability to:

a. Improve the customer loyalty index
b. Improve customer retention
c. Agility in launching new competitive products

The below table describes a few scenarios that result in quality issues which have a serious impact on the insurance carriers business and operational efficiencies.

Scenarios	Impact on Quality	Impact on Business
Customer Acquisition		
• System fails to generate a premium from the rating system • Credit information is not retrieved because of a system/link downtime • While converting the quote to bind for issuing a policy, the systems fails to retrieve the underwriting information • Failure to print the temporary insurance	• Inability to replicate the entire business process in a production like environment with sufficient test data • Lack of a robust end to end business focused master test strategy • Non execution of use cases covering end to end business process that include failed production scenarios	• Business loss • Unpleasant customer experience • Reduced efficiency of the channel
New Product Introduction		
• Ambiguity in understanding the business terminology from the libraries of rules and rates. For e.g.: • Principal operator vs. operator selection • Primary residence vs. residence • Definition of point of sale • Gaps in business rules implementation (rating, billing…)and validation • Multiple implementations of rules(e.g. discount) in multiple applications	• Compliance issues are not evaluated & documented in end to end test strategy • Processes to capture testing requirements and early validation methods are not followed • Absence of root cause analysis of compliance issues and feedback mechanism for continuous improvements	• Unpleasant customer experience • Lost cross selling opportunities • Non-compliance penalties

Scenarios	Impact on Quality	Impact on Business
Customer Retention		
• High premium due to miscalculation of the rate • Incorrect communication • The inability of the claim systems to handle large volumes during catastrophic events	• Lack of testing framework to identify key rating parameters, discounts and charges that impact quality • Lack of quality checks at customer touch points and communication channels	• Legal Issues • Customer Loss • IT overhead costs due to compliance issues

The Proposed QA Strategies

While testing organizations can identify many issues discussed above, the QA strategies suggested below can help improve the quality parameters which are currently beyond the scope of testing organizations.

1. End to End Insurance Business Process Maps and Use Cases

   Identify at least twenty percent of the key end to end business processes, build use cases and create an end to end production like test environment. Also while accomplishing the same, ensure that the state specific insurance regulation variance, key compliance requirements, discount rules and rating rules have been taken into account.

2. Enterprise Test Data Management to Maximize Test Coverage

   Develop the ability to generate all types of policy data, time travel, bills, documents, claims scenarios, data to test external interfaces and SOA services.

3. Insurance Regulatory Compliance Impact Assessment

   Significant penalties are paid by insurance carriers due to compliance issues. Every project is advised to assess the compliance impact in order to identify the compliance requirements and the test coverage gaps.

4. CIO Quality Metrics Dashboard

   The CIO quality metrics dashboard would gauge the impact of quality on customer retention, customer acquisition and compliance.

5. Organization Change Management

   The testing function has to transform from being a testing organization to quality organization. The objective is to move the quality upfront, enforce quality accountability and initiate quality initiatives at an organization level. However as the quality custodian, the testing organizations would need empowerment to initiate and implement quality improvement initiatives.

It's imperative that insurance organizations understand and appreciate the importance of the transformation of the testing organization to a QA organization. However to facilitate the same radical changes need to be made to the testing processes, the mindset along with a realignment of the organizational structure to support the successful implementation of the suggested QA strategies.

Conclusion

We can easily conclude that quality is not just a testing problem. While various quality strategies seem straight forward, they require a paradigm shift in thought and approach for their successful implementation. If the insurance carrier fails to isolate the problem specific to the origin of the quality issue, then quality would solely remain a testing problem. However, in order to reduce cost of quality, the insurance carrier will need to realign their organizational structure to address quality challenges which are beyond the control of testing organizations and introduce initiatives that would help them work in tandem with the change in technology, business needs, customer expectations, multi- channel environment and compliance needs.

The new testing organization's structure and goals would also need to be realigned with the insurance carrier's business goals. They would need a strategic metrics in place that would continuously measure quality and introduce improvement programs to make quality course corrections. The sustained and improved high quality systems, supporting the insurance carriers business would eventually have a positive effect on the consumer loyalty index, agency loyalty index, leading to a positive impact on the business outcome.

About the Authors

Vasudeva Naidu

Vasudeva handles sales and client relationships at Infosys for several Insurance and Healthcare clients. With over 14 years of experience, he has helped companies define and implement testing efficiency improvement programs and has successfully deployed TCOEs (Testing Center of Excellence). Vasudeva's key professional achievements include growing and managing large testing teams with team sizes exceeding 400 people. He has implemented several testing thought leadership initiatives over the years.

Rahul Bhattad

Rahul is an engagement manager with Infosys and manages client relationships for several Insurance clients. Rahul has over 15 years of experience and has an in depth understanding of technology; information systems and relationship management which has helped him deliver complex transformation programs and manage strategic accounts for Infosys. He holds a Master's degree in Software Systems from BIT, Pilani. He is always on a look-out for new ideas to better utilize IT assets, process framework and solutions to deliver innovative solutions.

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