



# Eight principles to increase quality commitment

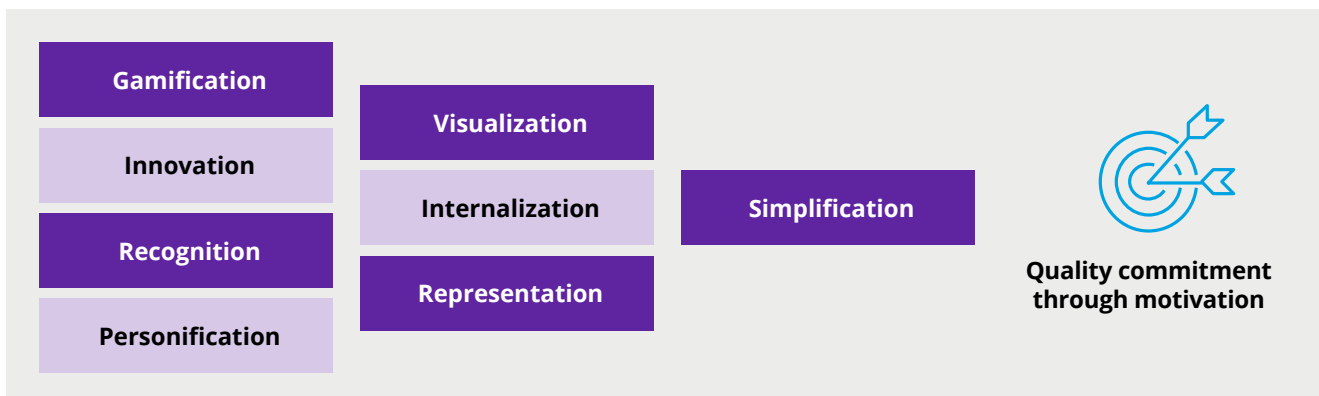
by Balaji Venkatramani, Solution Lead, Engineering Processes

Software developers' commitment to prescribed quality processes and standards has always been incredibly important.

However, commitment doesn't come easily, particularly when modern agile workforces value people and interactions over processes and tools. Consequently, we

need to build a bridge from obligation to motivation to help teams commit to quality.

Luxoft has developed eight core principles to help software development firms adopt this new motivational route to quality commitment.



## 1. Gamification

Applying gaming techniques and associated rewards can help the team achieve desired business outcomes. It's an increasingly popular way of motivating teams and enhancing output in many aspects of software development. Here are a couple of examples:

### "You know best" contest

- A quiz with spot prizes based on practical knowledge of quality standards, principles, objectives, processes and related topics for real-life project scenarios

### "Shortest commitment route first" contest

- Gaming events and hackathons which aim to identify the fewest mandatory quality steps needed to solve a specific software development goal. Helps encourage healthy competition amongst teams and significantly motivates them to commit to quality

## 2. Innovation

Using innovative techniques to modernize quality processes is another great motivator. Innovations like:

### Chatbots as quality consultants

- Teams chat with bots in real time to get instant, accurate and practical answers to queries related to quality processes

### Mobile apps and tools for quality

- Implement mobile applications for common quality tasks and tools such as software life cycle management, or defect and document management
- Convenient on-the-go, they enhance team productivity and appeal to modern Agile workforces

#### AI apps for quality

- Application of AI techniques in key software practices such as project estimation, defect prediction, and risk and change prediction
- Enable proactive management of software deliverables and quality

#### Automation of quality processes

- Establishes a continuous integration culture and DevOps
- Automates document generation using reverse engineering tools

## 3. Recognition

Recognizing and rewarding teams for commitment to quality processes is a great motivator. Best practices include:

#### Set the bar high

- Reward teams who go beyond basic quality commitment (e.g., implementing LEAN quality processes, and embracing the latest technologies)

#### Quality best practices event

- Organize events with trophies and incentives to showcase best practice

#### Quality performance index

- Evaluate projects for their quality commitment and innovation
- Display live scores on the floor or internal websites to create healthy competition
- Reward best projects

## 4. Personification

Being shown the impact of improved software quality on real-life personas is an excellent way to increase team commitment:

#### Personal identification

- Identify the most relevant personas for the product: “Trader” for a trading app, “Patient” for a healthcare app and so on
- Explore the possibility of team engagement with real people, or introduce role play

#### Real-life scenario presentation

- Live or on-demand video sessions, audio testimonials or documents that explain the relationship of selected personas with their product: Beneficial trades with good quality products, or loss-making trades due to poor quality
- A personification approach connects the teams, emotionally, with the product user, motivating team members to develop their quality consciousness

## 5. Visualization

By enhancing the visual appeal of enterprise quality systems such as internal quality portals, and process descriptions and templates, teams can be motivated to maintain a greater commitment to quality. Key best practices:

### Internal surveys

- Conduct employee surveys to identify patterns of visual appeal (e.g., the best brand color, preferred organization of internal quality websites, easy use of quality products, etc.)

### Interactive help guides

- Implement guides in the quality portals, employing AI techniques to enhance convenience

### Democratic design

- Arrange workshops to gather employee ideas on quality design for tools like quality portals or templates
- Incorporate the most popular designs into quality systems

## 6. Internalization

Quality assurance is generally regarded as a series of distinct steps in the software development process, and the sole responsibility of the quality assurance team. But quality should be a way of life for everyone and quality principles should be embedded into every step of software delivery. To lodge this idea:

### Integrate quality with delivery

- Eliminate the “distinct steps” of quality assurance
- Make quality excellence a reflex action for everyone

### Implement motivational levers

- Implementation of all eight motivational levers will help teams increase quality consciousness and become a truly modern workforce

### Cross-functional teams

- Encourage teams to be more cross-functional and agile, eliminating role barriers and boosting the production of high-quality deliverables



## 7. Representation

Performing roles like representative FDA auditor, representative CMMI auditor, quality manager and others, helps team members appreciate the value of quality. Key best practices:

- Incentivize individual training for roles like auditor or quality manager
- Establish an audit culture of “checking quality commitment” rather than “non-compliance”
- Enable trained team members to audit projects other than their own
- Give these members an opportunity to present audit findings to senior managers

This approach enables team members to recognize the bigger picture of quality commitment and accept personal responsibility for quality consciousness.

## 8. Simplification

Quality commitment can be achieved by applying basic enablers before adopting more innovative methods. Enablers help simplify the process of quality commitment and encourage higher adoption throughout the team:

- Develop a practical guide to delivery maturity — a few simple tips covering the entire project life cycle
- Implement automated reporting. Project-status reporting for stakeholders can occupy significant bandwidth. An automation initiative is considered a major enabler
- Circulate quick-start guides for software engineering tools. An extensive set of enabling tools — stand-alone or multiple — might exist, but engineers dislike big instruction manuals

## Summary

We need to look beyond the basic human aspects of commitment to quality. Quality commitment needs to be a product of motivation, rather than the result of team discipline.

## About **the author**



### **Balaji Venkatramani**

Solution Lead, Engineering Processes

Balaji is a senior director with Luxoft India. He leads engineering process solutions, globally, across lines of business and is responsible for delivery strategy for the APAC region. During his 22 years in the IT industry, Balaji has driven large-scale technology solutions and transformation initiatives in Silicon Valley technology companies, as well as service partnerships with global financial clients. He has extensive experience in knowledge transitions, transformations, Agile, DevOps, big data and analytics, cloud and program management.

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