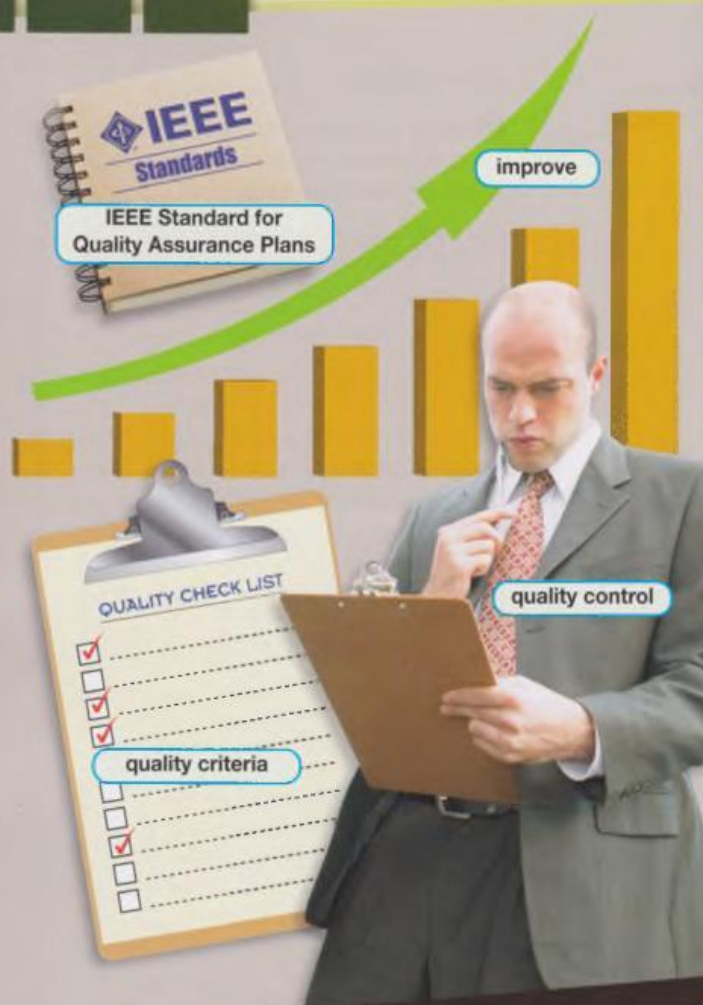


10 Software Quality Control



Quality Control Report

Company: ShorSoft Software Engineering and Development

Assessor: Jason Edwards, Quality Control Analyst

I completed an audit of ShorSoft's **quality control** during the week of April 10. The company attempts to **conform to** the **IEEE Standard for Quality Assurance Plans**. However, I identified many areas in which their system is lacking.

Employees at the company are following the directions in the **CMM**. Nonetheless, there are still some problems with the implementation of the system. In most cases, the **key process areas** are well defined. However, the **key practices** aren't as useful as they should be. Employees need to assess the efficiency of their actions carefully.

Another way to **improve** the system is to focus less on **quality factors**. The emphasis should be on **quality criteria** instead. This will allow employees to measure their successes more easily. I also recommend that employees review **common features**. The audit found that the **maturity levels** of the projects were not clearly defined. A better understanding of common features would prevent this problem.

Currently, ShorSoft meets almost none of the standards listed in the **ISO 9001**. However, the company should meet those standards fairly easily. I recommend restructuring quality control practices to support renewed commitment to **TQM**.

Get ready!

1 Before you read the passage, talk about these questions.

- How do software companies maintain quality control?
- What are some different sets of guidelines for software quality control?

Reading

2 Read the report. Then, mark the following statements as true (T) or false (F).

- ☐ The company's key process areas were clearly defined.
- ☐ The review recommends that the company focus on quality factors.
- ☐ The company already meets most of the industry standards for quality.

Vocabulary

2 Write a word that is similar in meaning to the underlined part.

1 The set of procedures for maintaining quality in software systems ensures that software is all up to the same standard.

l _ _ _ a _ _ r _ _ _
_ u _ _ t _ _ s _ r _ c _ _ a _ s

2 A system of maintaining standards is important for every stage of the development process.

_ _ _ i _ y c _ _ t _ _ _

3 It is important that engineers pay attention to each activity that aids the implementation of a key process area in order to create quality software.

_ _ y _ _ a _ _ i c _

4 Managers should encourage their employees to practice the pursuit of excellence in every step of a process.

_ Q _

5 Engineers must be aware of the list of issues that must be addressed at each maturity level.

k _ _ r _ _ e _ _ a _ e _

4 Read the sentence pairs. Choose where the words best fit the blanks.

1 Quality factors / Quality criteria

A _____ cannot be measured directly.

B _____ can be measured subjectively or objectively.

2 CMM / ISO 9001

A The _____ states the general requirements for a system.

B The _____ is aimed at improving the development process.

3 conform to / improve

A Companies need to _____ regulations to assure customers of software quality.

B Managers should encourage their engineers to continually _____ their development techniques.

4 common feature / maturity level

A A _____ makes up the key practices.

B A _____ measures whether a software process achieves a particular standard.

5 Listen and read the review again. How can the company improve its quality control?

Listening

6 Listen to a conversation between two engineers. Choose the correct answers.

1 What problem have the engineers noticed?

- A inconsistencies creating mature software
- B violations of the ISO 9001 standards
- C problems meeting the key practices
- D misunderstandings about the CMM

2 What does the woman think is the benefit of quality criteria?

- A They allow engineers to measure their improvement.
- B They are easier to understand than quality factors.
- C They are more likely to produce mature software.
- D They are more cost effective to analyze than other features.

7 Listen again and complete the conversation.

Engineer 1: I know. I was really surprised! I felt we did a good job 1 _____.

Engineer 2: Really? I expected them to 2 _____. My department's having trouble meeting key practices.

Engineer 1: Now that you mention it, I guess that's a problem in my department too. I think we'll be okay 3 _____ the key process areas.

Engineer 1: But I didn't 4 _____ problems. Did you?

Engineer 2: A few. I think the company needs to stop focusing so much on 5 _____.

Engineer 1: Really? Why?

Engineer 2: Because it's hard for a lot of engineers to work that way. It's better to think 6 _____.

Speaking

8 With a partner, act out the roles below based on Task 7. Then, switch roles.

USE LANGUAGE SUCH AS:

I was surprised because ...

Now that you mention it ...

It's better to ...

Student A: You are an engineer. Talk to Student B about:

- the result of a quality control audit
- changes you think the company should make
- changes you expect management to make

Student B: You are an engineer. Talk to Student A about quality control at your company.

Writing

9 Use the report and conversation from Task 8 to write suggestions for improving a company's quality control. Include: tasks employees should perform, methods the company can use, and guidelines the company should follow.