WORLD QUALITY CONSULTING: DEVELOPING A CONTEXT

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SUMMARY

Quality has many dimensions. It can be discussed in terms of quality of goods, quality of services, quality of actions, quality of encounters, and quality of life. Likewise, quality can have many definitions based on what needs to be emphasized in a given situation. For example, quality can be defined as conformance to requirements from a product control viewpoint, as fitness for use from the marketing viewpoint, or uniformity around target from the producer's viewpoint.

In providing quality consulting advice to a specific company in a specific country, one must develop a context by combining the necessary dimension and the appropriate definitions to generate a working model. This model, in turn, becomes a foundation for the effective application of quality science and strategies. It is possible that a single model may not be adequate for the purpose. In that case, we can develop multiple models.

In this forum, we explore the methods in developing quality context for different scenarios through multiple choice questions. Participants will answer the questions. Discussion will follow.

KEY WORDS

problem-solving, quality consulting

INTRODUCTION

Quality efforts around the world follow two distinct scenarios. The first scenario is that any country or company develops an interest in quality because of the literature they encounter. Once a company's interest is sparked in the subject matter, it further investigates the topic. Most likely, it will pursue the original source and initially obtain advice from that authority. The second scenario has a different sequence. A specific company in a specific country develops a context of what is needed by the company or the country. This company will also research the quality ideas around the world. They are then able to put forth a context-based question to this newly assimilated information. The question would be How can this new quality information help us solve our problems? The ultimate result is a need-based operational quality model.

The first scenario is more prevalent, whereas the second is less common. In the first scenario, what we are saying is what is good for the goose must be good for the gander. The second scenario is more strategic in nature, because what is good for one company or country may not work as well in another company or country. It is often argued that quality is universal, and therefore there is no need to make a distinction between the two scenarios. The author wishes to differ from this widely held viewpoint and establish the clear case for the latter scenario. The first scenario is *horizontal* implying that the same idea applies anywhere. This school of thought is often titled—QUALITY IDEAS UNIVER-SALLY APPLY. The second scenario termed *vertical* meaning ideas must be selected and sequenced. It can be labeled as UNIVERSALITY OF QUALITY IDEAS MUST BE APPLIED TO THE CONTEXT. World quality advisors need to learn how to develop the context for any company or any country.

WHY ARGUE THE TWO SCENARIOS OF QUALITY ADVICE?

The first and foremost purpose of this interactive forum is to improve the quality of advice about quality; resulting in the avoidance of wasteful quality programs and initiatives.

The second objective is to increase the competence and credibility of the quality advice process itself.

To achieve these two purposes, we must learn to develop a context for any given company, country, or situation. Using this context, the quality advice will achieve intended results. Quality as a profession will benefit by the challenges of developing a context.

HOW DO WE DEVELOP A CONTEXT?

To develop a context, we need to determine what quality elements are less than adequate or missing altogether. This is done through a series of hierarchical topics in a question format. Each topic is broken down into many quality elements. Table 1 identifies the structure of this format with key topics and corresponding quality elements. The answers to these topical questions help us generate the context.

Once we identify the answers to these topics, we are in the position to advance the context for the given scenario. To develop the context and corresponding working model successfully, the world quality advisor must understand two things: (1) What does each quality element mean? and (2) How does it fit into the big picture?

This session is designed to entertain questions on the meaning of various quality elements and their place in the big picture. This interactive session will proceed as follows: 1) Participants take a multiple choice test on a topic, 2) Most appropriate answers are presented, 3) Participants self-score the test, 4) Incorrect responses are discussed, 5) Summary comments for the topic are presented, and 6) Participants move onto the next topic. At the end of the discussion, examples will be covered for typical scenarios.

Table 1. Quality elements that determine the context.

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Topic	Topical Questions	Quality Elements
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Topic	Topical Questions	Quality Elements
1	What is happening now?	InfrastructureEnvironmentHierarchy of employee needsCurrent quality attempts
2	What is their need with respect to quality?	Perceived qualityDelivered qualityProduced qualityGrade of quality
3	What should we emphasize?	 Quality system Quality improvement Quality planning Quality control
4	Which strategy must be used?	Black box versus focus on problemsSystem versus real problemsShort-hop versus long-hop
5	What results are we likely to alter at micro level?	 Quality (delivered, produced, grade, or perceived) Productivity (speed, people) Waste (material, time) Cost (material, people, space)
6	What results are we likely to alter at macro level?	 Profitability Environmental quality Quality of life

No.	Is market share a problem?	Is profit a problem?	Is customer satisfaction a problem?	Is image a problem?	Improve
1	No	No	Yes	Yes	Delivered quality
2	No	No	Yes	No	Delivered quality
3	No	No	No	Yes	Competitive analysis and publicizing of quality attributes
4	No	No	No	No	Continue doing what you are doing
5	No	Yes	Yes	Yes	Produced quality
6	No	Yes	Yes	No	Produced quality
					Delivered quality
7	No	Yes	No	Yes	Produced quality
8	No	Yes	No	No	Produced quality
9	Yes	No	Yes	Yes	Grade of quality
10	Yes	No	Yes	No	Grade of quality
11	Yes	No	No	Yes	Grade of quality, competitive analysis, and publicizing of quality attributes
12	Yes	No	No	No	Grade of quality
13	Yes	Yes	Yes	Yes	Create error-proof systems
14	Yes	Yes	Yes	No	Grade of quality
					Produced quality
					Delivered quality
15	Yes	Yes	No	Yes	Grade of quality
16	Yes	Yes	No	No	Grade of quality
					Produced quality

Table 2. Quality improvement working models.

The working models are dynamic. They must be revised periodically in light of the progress made and the technological advances that have occurred. However, the process of developing a context suggested in this paper will remain robust.

The raw data gathered on quality elements should be synthesized to answer the four basic questions in a *yes* or *no* format: 1) Is market share a problem? 2) Is profit a problem? 3) Is customer satisfaction a problem? and 4) Is image a problem? There are 16 possible working models resulting from these answers. They are enumerated in Table 2.

We will look at some examples to illustrate how to develop the context and corresponding quality improvement working models.

Example 1

Our scenario begins with an engine manufacturer in a developing nation. The company is enjoying a large market share but would like to increase the market share by becoming global. The company turns out good profit. The delivered quality is reasonably good. It has a large service network to attend to field problems. The company's national image is good but the international image has never been tested. The company's product is marginal by international standards. The engine noise and emission do not meet the world standards. The company's response to the four questions is tabulated in Table 3.

According to working model 11, the company should primarily improve grade of quality.

Table 3. Engine manufacturer's response to four basic questions.

No.	Four basic questions	Yes/No
1	Is market share a problem?	Globally yes. Locally no.
2	Is profit a problem?	No
3	Is customer satisfaction a problem?	No
4	Is image a problem?	Globally yes. Locally no.

No.	Four basic questions	Yes/No
1	Is market share a problem?	No
2	Is profit a problem?	Yes
3	Is customer satisfaction a problem?	No
4	Is image a problem?	No

Table 4. Electronic company's response to four basic questions.

Example 2

Let us take an electronic giant company in a developed nation. The company is enjoying a large market locally and globally. The company would like to expand the manufacturing facilities in other countries. The general feeling exists that profitability improvement needs focus. The delivered quality is reasonably good. The company is internationally reputable. The company's response to the four questions is tabulated in Table 4.

According to working model 8, the company should be improving produced quality.

Example 3

The government in a developing nation shows an interest in quality. The country has inadequate infrastructure. Pollution levels are cause for alarms. The government-run services are expensive because of waste. A select few take advantage of the loopholes. The services have many delays and the public, in general, is not satisfied. There is a tremendous disparity in income levels. The country's response to four questions is analyzed in Table 5.

According to working model 13, the country should be creating error-proof systems and investing in methods of reducing the disparity of income.

No.	Four basic questions	Yes/No
1	Is market share a problem?	Yes, in the sense that a large number of people do not enjoy the quality of life.
2	Is profit a problem?	Yes, government-offered services can run efficiently and cost less.
3	Is customer satisfaction a problem?	Yes, most of the time is spent in waiting for the services rather than enjoying the services.
4	Is image a problem?	Yes, with the exception of a few isolated successes.

Table 5. Government's response to four basic questions.

Table 6. Automotive company's response to four basic questions.

No.	Four basic questions	Yes/No
1	Is market share a problem?	No, it has been steady in past few years.
2	Is profit a problem?	Yes, because downsizing and supplier control is not the desired way of making money.
3	Is customer satisfaction a problem?	Yes, but not at a very high level.
4	Is image a problem?	Yes, in the sense that the advertising budget is too high.

No.	Four basic questions	Yes/No
1	Is market share a problem?	Yes, in spite of excellent reputation of services.
2	Is profit a problem?	No. It is a very competent and lean operation.
3	Is customer satisfaction a problem?	No. Repeat business serves as evidence.
4	Is image a problem?	Yes. Because the rest of the market is not aware in spite of excellent performance.

Table 7. Consulting company's response to four basic questions.

Example 4

A large automotive company enjoys a steady market. Profitability is high because of a downsized workforce and not necessarily due to price and cost difference. Delivered quality is reasonably satisfactory but the warranty programs are rising in costs. Suppliers are feeling price pressures. Lots of advertising money is spent in maintaining the high image. The company's background is arranged as responses to four questions in Table 6.

According to working model 5, the auto company should be improving produced quality.

Example 5

A small consulting company provides management services. The company's market share is small in spite of a good reputation among its own customers, The company wants to increase the market share. Profitability is very high because of the competency of its operations. Delivered quality is excellent as evidenced by the repeat business. The company's image is excellent but only among its own customers. The consulting company's background is arranged as responses to four questions in Table 7.

According to working model 11, the consulting company should be primarily performing competitive analysis and publicizing quality attributes.

CONCLUSION

Quality ideas are universal. However, when they are horizontally applied without a context, their usefulness is limited. In fact, the horizontal implementation of a quality idea can be wasteful. On the other hand, when quality ideas are applied vertically within a context, they can produce dramatic results.

To develop the context for any given company, a country, or a situation, the quality advisors must understand the quality elements themselves. In addition, the quality advisors must also comprehend the way in which the quality ideas fit into the big picture. Through interactions with the audience, we explore many quality elements that help us create a working quality improvement model. Ultimately, we reduce the model development to four basic questions that relate to grade of quality, produced quality, delivered quality, and perceived quality. To facilitate learning, we simplify the answers to these four questions as a simple *yes* or *no*. This results in sixteen different quality improvement models. Through examples, we create different scenarios to show how to develop the context and corresponding improvement models.

This paper makes two significant contributions: 1) A departure from the prevalent model of applying quality ideas horizontally worldwide and 2) A proposal for a model that builds on the knowledge of and interaction with a specific audience.