

**ANALYSIS OF THE EFFECTIVENESS OF THE EXPERT METHOD FOR ASSESSING
PRODUCT QUALITY LEVEL**

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Annotation: This article highlights the essence, application areas, and advantages of the expert method in assessing product quality levels. The expert method allows evaluation of indicators that are difficult to determine through calculation or experimental means, based on the experience and intuition of specialists. The article analyzes the stages of the expert evaluation process, the competence requirements for experts, the advantages of the delphi method, and its differences from sociological assessment. In addition, it discusses the practical application of the expert method and its impact on product quality and competitiveness. According to the research results, the expert evaluation method is an effective and reliable technique for determining technical, aesthetic, and organoleptic quality indicators.

Keywords: Expert method, product quality, expert evaluation, Delphi method, sociological method, quality indicators, specialist, competence, evaluation criteria, competitiveness.

Introduction

In a market economy, product quality is one of the most important factors determining the competitiveness of an enterprise. Product quality is defined not only by technical indicators but also by the degree to which it satisfies consumer needs. Various methods exist for evaluating quality, among which the expert evaluation method occupies a special place. This method is used in cases where other computational or experimental methods cannot provide an accurate assessment — for example, when evaluating color, odor, taste, or aesthetic characteristics.

Experts and Their Qualifications

An expert participating in the evaluation process must possess four essential qualities:

- Competence – theoretical and practical knowledge, professional training;
- Efficiency – ability to make well-founded decisions in complex situations;
- Interest – intrinsic motivation to solve the problem accurately;
- Objectivity – ability to assess without personal bias.

Experts may include technologists, designers, economists, commodity scientists, and researchers. For optimal results, an expert group of 10–12 people is usually formed.

The Delphi Method

One of the most well-known forms of expert evaluation is the Delphi method, which is characterized by:

- Quantitative questions provided to experts;
- Multiple rounds of surveys;
- After each round, experts review the answers of others;
- Experts may adjust their responses based on the group discussion;
- Results are statistically processed.

This approach ensures that the final group opinion is balanced and well-grounded.

Advantages and Disadvantages

Advantages:

- Enables assessment of qualitative indicators that cannot be determined through calculations or experiments;
- Provides quick results;
- Reduces subjectivity through collective decision-making;
- Combines expertise from various fields.

Disadvantages:

- Subjectivity still exists to some extent;
- Results depend heavily on experts' experience;
- Data collection and analysis can be time-consuming;
- Differences in opinions among experts may occur.

Difference Between Expert and Sociological Methods

In the expert method, evaluators are specialists, while in the sociological method, they are consumers. Therefore, the sociological method is closer to marketing research, as it studies the opinions of real or potential consumers through surveys, interviews, or experimental use.

Conclusion

The expert evaluation method is a reliable, practical, and widely used approach for determining product quality levels. It is especially valuable in assessing subjective indicators such as taste, color, design, and ergonomics. Decisions made by expert groups based on experience and intuition hold legal significance in many countries. Therefore, the expert method serves as an essential tool for achieving objective quality evaluation among manufacturers, experts, and consumers.

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