

The Application and Development of Total Quality Management in Scientific Research Management

Dongqing Niu

College of Business Administration, University of the Cordilleras, Baguio 2600, Philippines.

Abstract: In recent years, the construction and development of modern society has been gradually accelerated, which has promoted the progress of different industries. Among them, the field of scientific research has also attracted much attention, and the importance of scientific research management has gradually become prominent. From a practical point of view, the production and development process of different industries will involve the integration of disciplines and technologies, which also increases the difficulty of scientific research management to a certain extent. In the face of this situation, in order to improve the efficiency and effectiveness of scientific research work, it is necessary to increase management efforts, rationally apply total quality management method(TQM) methods in scientific research management, and formulate TQM plans according to the actual situation. Improve the effectiveness of scientific research management and ensure the quality of scientific research.

Keywords: Total Quality Management(TQM); Scientific Research Management; Application Development

Introduction

In the stage of rapid economic development, if various industries want to maintain a good development state, they must carry out scientific research and innovation to improve production efficiency and quality. However, in the process of scientific research, there are many influencing factors. If they are not managed, the scientific research effect will be reduced. Therefore, it is necessary to increase the management of the scientific research process, reduce the adverse effects of different factors, and promote the smooth progress of scientific research. In specific scientific research management, total quality management should be achieved, so as to reduce various problems in scientific research and improve the quality of scientific research work. In this process, it is necessary to clarify the specific content of total quality management, and conduct refined management of the entire scientific research process, so that the quality of scientific research results can meet expectations.

1. Analysis of the implementation of total quality management in scientific research management in China

1.1 Lack of rich management experience

Compared with other developed countries, the application of total quality management in scientific research management in China is not mature enough, and it is in the process of It is in the growth stage, and in the actual application process, it lacks rich practical experience and does not take into account the specific characteristics of scientific research management, resulting in the application of total quality management not achieving the expected results.

Some scientific research management teams will learn from foreign experience and application methods when carrying out total quality management work, but when applying total quality management, they do not take into account the specific conditions and actual characteristics of domestic scientific research management, and directly use foreign application methods. It is mechanically applied to domestic scientific research management, so that the actual effectiveness of total quality management cannot be fully

utilized, and at the same time it reduces the effectiveness of scientific research management [1].

1.2 The lack of organic combination of quality management system and scientific research management

In scientific research management, when applying total quality management, a perfect quality management system is needed, so as to scientifically guide and standardize total quality management, so that it can be used in scientific research management play an important role in improving the quality of scientific research. However, as far as the actual situation is concerned, many scientific research teams pay too much attention to work efficiency when conducting scientific research work, and will continue to speed up the progress in the scientific research process, thinking that after completing a certain scientific research work, the scientific research results they participated in will be able to reach further heights. However, many scientific research works can be published before they meet the corresponding quality requirements. It can be seen that the scientific research works that can be published do not mean that the scientific research results are mature, which is also caused by the lack of implementation of total quality management. Phenomenon. Therefore, in the actual scientific research process, scientific research quality management should be strengthened, and the original scientific research quality management system should be improved, so as to improve the actual effect of total quality management.

2. Analysis of the application of total quality management in scientific research management

2.1 Reasonably improve the management system, give reasonable guidance to the total quality management, and exert the effectiveness of management work

First of all, we should improve the scientific research management methods. Traditional scientific research management is based on discipline. In the implementation of the integrated management method, we should take into account all aspects and pay attention to internal relations. The second is to optimize the design of the original quality management system according to the current scientific research management situation and actual needs. Establish a new quality management mechanism, make it adapt to the total quality management, so as to improve the effectiveness of management work. Third, establish a variety of scientific research management norms and regulations, specifying scientific research management processes, standards, etc., so as to standardize scientific research management, so that total quality management can be carried out smoothly. Objective evaluation, and at the same time establish corresponding archives, carry out archives management, and promote scientific research projects to move towards higher quality goals through objective and comprehensive evaluations and effective archives management [2].

2.2 Strengthen the supervision of the scientific research process

Effective supervision can improve the application effect of total quality management in scientific research management, which also helps to play its functional role. Therefore, relevant scientific research management departments should pay attention to scientific research supervision, and through supervision, control the quality of scientific research. In the actual supervision process, it can also find the specific application problems of TQM, and then take appropriate solutions to the problems in the first time. In addition, in order to ensure the reliability of supervision, the method of irregular supervision can be implemented, that is, when supervising scientific research projects, there is no advance notice and surprise supervision is carried out. This can prevent individual selfish people from knowing the supervision time. To make preparations in advance, so as to prevent the scientific research managers from being passive and sabotage, which also helps to improve the enthusiasm of the managers.

2.3 Strengthen the construction of scientific research management team

First , increase capital investment, set reasonable and generous salary packages, so as to attract more high-quality talents, and increase the strength of scientific research management team through introduction and recruitment. Second, strengthen the training of existing scientific research management personnel, regularly carry out professional training work, hire authoritative experts, teach scientific research management personnel, and provide systematic learning resources, so that scientific research management

personnel can gradually improve their work through continuous learning level. Experts can also be invited to give lectures, so that they can understand more scientific research management methods, correctly understand the importance of total quality management, pay more attention to it, and actively carry out total quality management work.

3. Analysis of the development trend of total quality management in scientific research management

3.1 Theoretical system is more perfect

In practice, the theoretical system of total quality management application is not perfect, and therefore, there are still some problems when it is applied in scientific research management. This requires continuous improvement. In the development process of scientific research management, the theoretical system of total quality management will receive more attention. At this stage, scientific research management pays more attention to the quality management process. However, the management methods still lack a certain amount of research. As time goes by, the total quality management theoretical system will not only become more and more perfect, but the quality model will also get higher. At the same time, new quality management methods and means will gradually emerge in the research process [3].

3.2 Richer practical experience When carrying out total quality management

In scientific research management, continuous practice is required to gain more application experience and provide reliable reference for the effective implementation of total quality management. With the development of scientific research management, the practice of total quality management will become more and more intensive. In this process, many challenges and difficulties will be faced. In the process of solving these difficulties and challenges, total quality management It will also make greater progress, and its application experience and methods are increasing, which can not only enhance the application effect of total quality management, but also improve the level of scientific research management.

Summary

Carrying out effective total quality management for scientific research can reduce many problems in scientific research, realize effective control of various factors in the scientific research process, prevent scientific research from being adversely affected, and thus ensure the quality of scientific research results. Relevant organizations should realize the important role of total quality management, and should combine the actual situation of scientific research and specific management needs, and use appropriate methods to rationally apply total quality management.

References

- [1] Li X. Analysis on the Application and Development of Total Quality Management in Scientific Research Management [J]. Business 2.0 (Economic Management), 2021, 000(008):P.1-1.
- [2] Liu Y. Total Quality The development and application of management in scientific research management [J]. New West: Mid-term Theory, 2018 (1): 2.
- [3] Gusang Deji Dorje Drolma. Discussion on the application of total quality management in scientific research management [J] . Friends of Humanities, 2020, 000(022):43.