

Application of Quality Management Tools to Enhancing Quality Performance Score

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Abstract

School of Industrial Engineering, Institute of Engineering, Suranaree University of Technology, offers a Master of Systems Engineering program to working adults who wish to apply knowledge and skills to real work. Although attention has been paid to enhancing learners' skills, focusing solely on current students in the program may not be sufficient for curriculum development. Therefore, AUN-QA Version 4.0 with 8 key criteria has been adopted since 2020 as a framework for quality assurance at program levels. Areas of improvement were identified after assessment in the first year of AUN-QA implementation (year 2021). Seven criteria with performance score of 3 and only one criterion with performance score of 4 were found. This study especially focused on key criteria with performance scores less than 3. However, addressing all areas of improvement needs time and budget from the university. Priority of different improvement areas must be carried out. Therefore, it is important to consider tools to prioritize areas of improvement which enhance program quality. The objective of this research is to present the utilization of decision matrix and cause and effect diagram as quality management tools to support addressing areas of improvement. To use decision matrix, two criteria most important to success including relevance to university/program, and time requirement were identified. Furthermore, cause and effect diagram was used to identify cause of low performance score. Then, solutions were determined. This method results in higher performance in year 2021. Six criteria with performance score of 4 and only two criteria with performance score of 3 were found. It can be concluded that using management tools is beneficial to enhance performance of the program.

Keywords

Decision Matrix, Key Criteria, Performance Score, Area of Improvement, and Cause and Effect Diagram.

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Biographies

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