Using databases in designing an integrated system to apply ISO 9001/2015 in garment factories

Dr. Fatma A. Metwally
Professor, Spinning, Weaving and Knitting Dept., Faculty of Applied Arts, Helwan University
Dr. Shereen S. Osman
Lecturer, Spinning, Weaving and Knitting Dept., Faculty of Applied Arts, Dumyat University

ABSTRACT
Garment industry is considered one of the industries that attract the workforce, it constitutes a major factor in solving the problem of unemployment, in addition to the low of the invested capital in this industry, which makes an urgent need to work on developing and advancing it. The aim of this research is designing a program based on applying ISO 9001 by using some improvement tools which are suitable for the nature of this industry, this program is based on using the database system process basic information, where preparing and proceeding automatically an integrated quality system, in addition to issuing, documenting, and using the quality system which belongs to the ISO 9001/2015 allowing the possibility of improving the system easily which serving the production plans in the foundation. **Research Problem:** After studying the reality of the garment industry, we noticed that there are no programs can deal with the ISO 9001 to include all specifications items, specially the item of improving the system, which is considered as one of the most important items that for all foundations, also, the existing programs have not been put specially to suit the garment industry, and its specific nature, also, it does not include the quality system and improving system and its tools. **Objective:** This research aims to design a program in which the development and application of ISO 9001/2015 integrated with the use of improvement tools which suit the garment industry automatically, through knowing the reality of the method in activating the system in this industry, working on improving the performance of the quality system, and applying it in production processes. As well as working to improve the system easily and conveniently to serve the production plans and quality plans and achieve substantial improvements in cost, time and effort.**Methodology:** The research follows a descriptive approach and analytical when it comes to theoretical studies, and the experimental method when it comes to practical applications. **Conclusions:** The research proved that: Having an integrated automatic program which is handling and processing main information for the quality system, and mainly reliance on computers in publishing, documenting, applying and using the ISO 9001/ 2015 quality system, also working on developing this system could help production and quality plans in foundations. It is easier, more accurate and faster to process . formation with the proposed system in comparison with the old traditional system. We found that the program can collect, preserve and updating data easily, with the possibility of recovering any information. Reliance on computers to guarantee the speed and the accuracy of the quality system improvement, which is one of the most important conditions to activate any quality system. This system helped decision-makers to be faster and more accurate when it comes to taking a decision, that's under the provision of information with the use of technology in the new system. The program has achieved substantial improvements in the performance standards such as the cost, the quality, the time and the effort.
Keywords:
Data Bases, Integrated System , ISO 9001/2008 , Garment Factory