

**The impact of using the virtual reality technology on improving  
production performance in garment factories Egyptian**

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**Abstract**

This research presents a model for solving the problem of designing production lines in ready-made garment factories where a program using modern technology and the programming language JAVA to achieve an ideal program that designs the production lines. The design of production lines in the garment factories needs a lot of time and time The clothing industry means money where the less time the less the cost and in this research we solve this problem through the use of modern technology in terms of drawing the production line in reality reality and knowledge of the efficiency of the line before implementation in real reality Also in this research we mention the forms of production systems in ready-made garment factories and look forward to the modern systems of manufacturing and the modern methods in drawing production lines and training the workers on the production stages so that we can raise their performance and design and arrange the production lines is a basic factor as it helps to reduce the time used in the production process And increase in the quantity of production, and in this research we study the case of Vai factory production of men's shirt, we do this as the factory arranges the production line by traditional methods, where the model changes, the factory needs to rearrange and design the production line to suit the requirements of the model In the traditional ways, time will take place and the cost will increase. The design may be inappropriate for the current situation, but with the use of modern technology, the "virtual reality" in the design and arrangement of the production line and the consideration of indicators that lead to increased efficiency and the use of productivity standards that balance

production lines The efficiency of the workers' performance is increased through training in a variety of production stages. Modern manufacturing systems are used, including the use of automated handling systems and the production line in the virtual reality to see the efficiency of the line before starting the production process The purpose of the program is to have a balanced production line with no problems and to have less production time, high efficiency and low cost.

**Keywords:** Virtual Reality–Production Performance- Production hall planning–Work study.