

## **The role of dynamic programming in the distribution of investment allocations between production lines with an application**

### **ABSTRACT**

At present, the ability to promote national economy by adjusting to political, economic, and technological variables is one of the largest challenges faced by organization productivity. This challenge prompts changes in structure and line productivity, given that cash has not been invested. Thus, the management searches for investment opportunities that have achieved the optimum value of the annual increases in total output value of the production line workers in the laboratory. Therefore, the application of dynamic programming model is adopted in this study by addressing the division of investment expenditures to cope with market-dumping policy and to strive non-stop production at work.

**Keyword:** Decision maker; Linear programming; Production planning; Sensitively analysis