

Layout Design to Enhance The Working Effectivity : A Case Study Applied in PT XYZ

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Abstract

PT XYZ is an agribusiness company. PT XYZ produces organic vegetables, hydroponic vegetables, and many more. But unfortunately, PT XYZ sometimes can't fulfill customer demands. This is due to one of the reasons for the poor layout of the packaging room facilities so that the productivity level is low. For this reason, it is necessary to change the layout of the packaging room facilities. The stages of the packaging process at PT XYZ are boxes containing vegetables entering the packaging room, sorting vegetables, weighing and putting vegetables into packaging, sealing and stamping the production code, and shipping vegetables. In redesigning the layout of the facility, it is necessary to calculate the number of workers using the Work Sampling method, design a new layout with an Activity Relationship Chart (ARC), then simulate it with ARENA Software. There are two alternative layouts with different calculation of worker needs and processing time. The first alternative with the addition of a worker and a total processing time of 19 minutes 30 seconds is an alternative that is considered feasible by PT XYZ.

Keywords

Layout Redesign, Work Sampling, Activity Relationship Chart, ARENA Software.

Biographies

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